

**A STUDY OF THE LEGAL FRAMEWORK FOR THE
PROTECTION OF MEDICO-SPIRITUAL PRACTICES IN
SIKKIM AS INDIGENOUS KNOWLEDGE UNDER
INTELLECTUAL PROPERTY LAW**

**A THESIS SUBMITTED TO THE UNIVERSITY OF NORTH BENGAL
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DECLARATION

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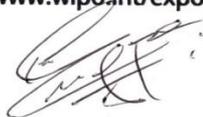
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ABSTRACT

Indigenous knowledge has been used since ages by indigenous and local communities in Sikkim and has been the foundation of their existence specially in the key sectors of health. Western science has lately begun looking at Indigenous Knowledge as a basis of new drugs specially since the expenditure of putting new drugs on the market is sky-scraping. The budding phenomenon of bio-piracy makes it evident the somewhat hypocritical outlook of western science to Indigenous Knowledge. Scavenging it on the one hand and claiming patents on all kinds of goods derived from Indigenous Knowledge (neem, turmeric, etc) yet refusing to acknowledge its economic significance and ownership.

Despite the growing recognition of Indigenous Knowledge as a valuable source of knowledge, Medico-spiritual healing practice in Sikkim is an acronym in terms of health care service that hardly needs to be expanded nowadays. Sikkim doctrines the indigenous spiritual practice, indigenous traditions related with religion and belief based healing treatment and is a natural centre of traditional healing practice. Medico-spiritual healers and occupational traditional healing therapy acts as alchemists. In this pristine virgin and scenic land of blooming orchids, the majority of the State population are directly dependent upon the traditional medications prescribed by the Medico-spiritual healers for their basic health services and facilities. The understanding of medicinal herbs or floras among the healers is part of their indigenous knowledge which has been snowballed from generation since time immemorial. However, lack of legal knowledge and awareness among the Medico-spiritual healers, due to lack of legal frame within the State is creating problems in the implementation of the Medico-spiritual healing practice. The healing practice has not found a place under Traditional Knowledge Digital Library, despite it being on the verge of extinction as the next generation of healers do not want to follow it and the availability of the medicinal flora is on decline.

With a cooperative and positive attitude the concerned authorities of the Government should discharge their respective functions properly in order to curb the problems faced by the Medico-spiritual healers of Sikkim. Much paper work has been done but effective implementation of the same is still at sea. A legal framework for the protection and promotion of Medico-spiritual healing practice is the need of the hour.

PREFACE

The propagation of Indigenous Knowledge through the mechanism of Intellectual property law shows how urgent the need is for a better understanding of the relationship between Medico-spiritual healers and the concerned authorities in Sikkim, and illustrates some of the dilemmas in which the Sikkimese people find themselves as the need to build some measure of understanding between these two is necessary. It also explains the perspectives of the researcher as they embark on writing this thesis. Medico-spiritual healing practice is considered a pivotal health care service for the treatment of patients from various diseases. It is ironical that Medico-spiritual healer's who provides health care service to the needy, at the same time is considered vulnerable to the Sikkimese society. This is primarily due to lack of a legal framework both in terms of State and National level to promote and protect this form of traditional healing practice. Therefore, introduction of a proper balanced legal frame work by the concerned authorities to promote and protect the healers would be the foremost criteria for creating a healthy healing environment. What is required is a positive attitude towards the proper implementation of the rules and guidelines, and then only successful management of Medico-spiritual healing practice would be possible.

Study of Medico-spiritual healing practice in Sikkim as traditional management of human ailments indicates that the study area is rich in its medicinal plants composition and the associated indigenous knowledge possessed by the healers. The extensive uses of these medicinal plants specify that there is good harmony on the efficiency of their medicinal properties. The traditional medicinal floras are fundamental to the rural cultures. The healers are conversant about the plant life, their distribution, application and conservation. This is further promoted and safeguarded by cultural and spiritual practices.

The issues associated with protecting Medico-spiritual healing practice in Sikkim are deeply concerned with the structural inability of State and National law to give the Sikkimese people control of their healing practice, heritage and communities. The absence of legal protection of these healers and there beneficiaries in State and National level is disturbing. As Medico-spiritual healers, they have had more than their share of adversity and tragedy because of the denial of the manifestation of legal protection. The State and National law

should embrace and celebrate this universal healing culture and intellectual diversity for the richness and depth this Medico-spiritual healing practice brings to life on earth from a small State of Sikkim.

The establishment of concrete legislations and appropriate databases of National recognition for addressing the burning concern of the Medico-spiritual healers in Sikkim for protection of their Traditional Knowledge Intellectual Property rights are some of the steps which are yet to be taken. The grant of Traditional Knowledge Digital Library registrations to Medico-spiritual healing practice prevalent in Sikkim, establishment of patent rights and benefit sharing models are stepping stones towards Traditional Knowledge protection. The modalities for protecting Medico-spiritual healing practice are still emerging and evolving and therefore the measures for doing so is at a flexible stage. The Medico-spiritual healers and their beneficiaries in Sikkim should be aware of Intellectual property right issues because traditional healing medication is a national wealth, which prompted the researcher to undertake the research work with a view to understand the present scenario of Medico-spiritual healing practice in Sikkim.

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CHAPTER I

INTRODUCTION

“The cure of many diseases is unknown to physicians.....because they are ignorant of the whole... for the part can never be well unless the whole is well”

Plato

Since inception, the forces of the ecologies in which we survive have taught Indigenous people a proper affiliation order and have equally taught us how to have nourishing relationships with our ecosystems. The natural habitat, in which we live are more to us than settings or places; they are more than homelands or promised homelands. These ecologies do not encircle Indigenous peoples; we are an integral part of them and we inherently belong to them. The ecologies are living with the enduring processes of self creation. Indigenous people invest the ecologies with deep respect, and from them we unfold our structure of Indigenous life and thought.

Ecological insight creates our vision of the animate “natural” world. It informs our communion with the land, our wisdom, and the various dimensions of our faith and our hopes. Indigenous order, consciousness, and heritage are shaped and sustained by ecological forces and by the interrelationship of their changing forms. Ecologies are not static or gentle; they are places of external and often violent change. Indigenous orders are not singular modes of ecologies and their diversity in our oral traditions, in our ceremonies, health care practice and in our art; we unite these mysteries in the structure of our languages and our ways of knowing and practice. The forces and aspects of our ecologies are manifested in our practices today, which are to us what water is to plants.¹

These teachings have defined for Indigenous people the meaning of life, their responsibilities and duties. They have also developed a consciousness, a language, and what others have categorized as cultures. These practices have allowed them to flourish especially in the sectors of health care. They have always been mysterious and sacred processes, emanations of their responsibilities to and solidarity with the particular environments in which they participate. This creates their multilevel of connection with the land called Sikkim.

¹Hogan Linda, Power 227 (W.W. Norton, New York, 1998)

Sikkim is known to Lepchas (Primitive tribes of Sikkim) as Nye-Mael- Liang signifying paradise. It is also called Reu-Jong meaning land of Ancestors. The current name Sikkim is of Nepali origin and has been derived from Sukhim signifying new house or new place. The Himalayan State of Sikkim has joined the Indian union in 1975 and is regarded as the smallest Mountain State, adjacent to Kanchenjunga, the third highest mountain, with a geographical area of 7,096 sq/km.²

I. Evolution of the problem:

In life cycle, sound health is an essential feature without which an individual cannot lead a purposeful life. Lack of sound health hampers potential development of human being which in turn obstructs the development of human society or community. So health is not a subject of individual issue rather a public concern. Thus even with the advancement of science and technology today, Medico-spiritual practices in Sikkim play a pivotal role.

Medico-spiritual practices have been used for centuries in Sikkim by indigenous and local communities and have been the mainstay of their existence especially in the key sectors of healing and health. Western science has in recent times begun viewing Medico-spiritual practices as potential new drugs especially ever since the cost of placing new drugs on the market is turning out to be very expensive.

Medico-spiritual healing practices have played a pivotal role in the daily life of the Sikkimese people even in this 21st century. The three ethnic communities (Lepcha, Bhutia and Nepali) have their own arrangement treatment ethics, believes, and medical ailments though they are more or less similar with one another. Till date many people still in Sikkim have a good faith on medico-spiritual practices rather than other forms and western medicine. Call for technical legalization, invalidate pharmacological and observational studies are necessary for different way of life and treatment of these three communities.

Sikkim is prevalent of traditional healing practice system which is still prevalent today and nurtured by such practice. Here the connection of culture with medicine is very strong because at times ailments are related with beliefs of different super natural forces and deities. Medico-spiritual healing practices are practiced in Sikkim by the three ethnic groups (Lepcha, Bhutia and Nepali) in different ways which are related with Ayurveda and Tibetan system of medicine. Medico-spiritual healing practice in Sikkim and its impact in the form of

²H.H. Risley, The Gazetteer of Sikkim 1 (B.R. Publishing Corporation, Delhi, 2005)

primary health care has been the talk of the town since the last decade of the twentieth century.

Over the time this region has given birth to categories of indigenous knowledge, pertaining to rich medico-spiritual healing practices. These practices have a strong foothold in the region and have been progressing since ages; however, the need to document Medico-spiritual healing practice under Traditional Knowledge Digital Library in terms of primary health care bases in Sikkim is still felt. For instance, there are a plethora of plants varieties that the hill people in the region have been traditionally successfully using for medicinal purposes and such knowledge is the product of a long term evolution within the said vicinity. Further, the spiritual aspect of healing, has also played a pivotal role in supporting medico-spiritual healing practices over the years and have often proved effective in many cases; there are ample examples where epidemics such as Jaundice, fractured bones and snake bites have been healed with the help and amalgamation of the two, also known as medico-spiritual healing.

The spiritual forms of religion and medicine is believed to have been popularised in Sikkim by Guru Padmasambhava or commonly known as Guru Rimpoche. He is considered to be a master in healing. Different kinds of illness are treated with worship and devotion with animal sacrifice. The notion of sacred is prominent exorcism, the magical means of treating diseases. Sacred not only includes Gods and Goddess but also spirits of ancestors and forests, the spirit and demons present everywhere. There is a prevailing supernatural basis of Medico-spiritual healing, even when the chief means of treatment is herbal. The Medico-spiritual healers claim that unless a medicine has been empowered by special benediction, it will have little effect. The medico spiritual healers collect herbs in auspicious time because for better efficacy.³

The Medico-spiritual healers have also evolved rich knowledge with respect to their fauna; for instance a mammal locally called “Dumsi” (Porcupine) is believed to have great medicinal value, there are many such animals with immense medicinal value that are confined to the knowledge of the handful of healers. All these traditional medicinal knowledge bases have not been borrowed by the Medico-spiritual healers of Sikkim hills from other places but have evolved by them through the experiences of several years; hence

³Panda A.K & Misra S, “Health tradition of Sikkim Himalaya” *J Ayur Integr Med* 183 (2010)

they are their original assets. Thus this Medico-spiritual healing practice in Sikkim should be promoted, protected, acknowledged with its economic value and ownership.

II. Statement of Problem

Medico-spiritual healing practices have played such a pivotal role in the daily life of the Sikkimese people even in this 21st century.

The three ethnic communities (Lepcha, Bhutia and Nepali) have their own arrangement treatment ethics, believes, and medical ailments though they are more or less similar with one another. Till date many people still in Sikkim have a good faith on medico-spiritual practices rather than other forms and western medicine. Call for technical legalization, invalidate pharmacological and observational studies are necessary for different way of life and treatment of these three communities.

The greatest challenge in this era is to preserve and promote the Medico-spiritual healing practice and the healers in Sikkim. The knowledge behind this practice requires recognition, respect and understanding in the light of modern medicines. The revitalization of traditional health of Sikkim may promote the health of rural people of this region for their primary health care.

Much traditional knowledge in India, including that of Sikkim Himalaya is not documented and is transmitted orally from generation to generation. This Indigenous knowledge of Medico-spiritual practices is of immense importance and thus the Intellectual Property Rights need to be protected in the context of the globalisation and property rights particularly in the context of the standard and principles as laid down in the General Agreement on Tariffs and Trade of the World Trade Organization.

Intellectual Property Rights is a contraction that barely needs to be extended these days. Everybody, who matters in technical circles, is discussing about intellectual property right, and the significance of defending technical discoveries, with business-related potential, in a firm network of patents. Legality of the international intellectual property right system is in issue for its lack of ability to produce regular opportunities for Indigenous knowledge holders in relation to the healers and beneficiaries in the formal segment. The position accorded to Indigenous knowledge poses meticulous thoughtful moral, legal, social and political inconvenience. Such understanding is not restricted to definable or eloquent sets of predictable elements. Yet, inter-generational equities may well be irrevocably impacted

globally depending on the way solutions to suitable settlement are planned by vesting possession or exercise privileges in such facts because source accessibility and source utilization would both exist impacted.

Till date, not much adequate attention has been given to the significance of protecting the Indigenous Intellectual Property Rights by the decision makers of the region, who's Indigenous Knowledge has often been the sources of products introduced into the international market.

It is high time that the important decision steps of the planners and policy makers in Sikkim in this regard, in the next few years should be Documentation and Codification of all the flora and fauna available and used with full description of their healing potentials across the Sikkim Himalaya. Documentation of Medico-spiritual healers in the region should also be done, along with the extent of their contribution in the health status, their advantages and disadvantages. Action is needed at both the State and national level, in policy and legislation, to protect Indigenous Knowledge.

III. Hypothesis

Medico-spiritual healers generally and of Sikkim particularly are popular healers without formal medical degree, they are not registered as medical practitioners nor are they under licence. The natural resources such as herbs, medicinal plants and other flora and fauna are not adequately protected by the State and do not find a place in Traditional Knowledge Digital Library. Hence, no Intellectual Property Right is protected. The healers do not receive any subsistence except a few that are recognised by the government. In order to preserve their traditional knowledge and Intellectual Property Rights, protect their resources and promote their medical acumen a legal framework customised for their need is required to be created. Further, Statutory laws available in India do not directly address the key issues relating to Medico-spiritual practices in Sikkim; hence a comprehensive legislation is needed to address such issue and there is an urgent need to take steps to extend legal protection to them so that in terms of equity, efficiency, quantity and quality they would significantly improve.

IV. Research Questions

The present research involves various questions:

1. Is there a legal framework to address the issue of Medico-spiritual healers and the beneficiaries in Sikkim?
2. Whether legal set up is adequate enough to address problems relating to Medico-spiritual healing practice in Sikkim.
3. Whether the Intellectual Property Rights of the Medico-spiritual healers are protected and which aspect of medicinal plants must be safeguarded and how?
4. Are the Medico-spiritual healers sensitised and updated regarding various contagious diseases and infections?
5. How could the knowledge and awareness among the Medico-spiritual healers in terms of medical negligence, Bio-Medical Waste etc. improve?
6. What measures could be adopted to minimise the risk of increasing quack healers?
7. What measures could be taken by the concerned authorities to protect, promote and document Medico-spiritual healing practice?

V. Objective of the Study

Medico-spiritual healing practice has been the mainstay in terms of health care in Sikkim for ages. But its multidimensional consequences is not just confined within the health care of individuals in this era of Intellectual Property but is affecting the lives of the healers, the beneficiaries and is extending beyond its boundaries too, causing environmental degradation. Till date no direct legislation is available to address the issues faced by the healers and the beneficiaries. Despite this traditional healing practice being on a verge of extinction, it is the perfect time to take measures for its documentation process. In this background, it is important to examine the existing problem of improper management of Medico-spiritual healers and the beneficiaries, with a view to eradicate to root cause and to ensure proper management of the same. With this objective in view, the researcher has undertaken to study the aspect of the Medico-spiritual healing practice in Sikkim in the light of the situation prevailing in the country within the ambit of existing Intellectual property law and to propose curative measures.

VI. Contribution of the Study

The increasing number of Medico-spiritual healers which speaks for its deteriorating living condition not only because payment is voluntary by the beneficiaries, but also lack of a proper legal framework are posing serious concerns for this type of healing practice. Considering the seriousness and harmful effect of not having a direct legal framework to address the issues relating to Medico-spiritual healers and the beneficiaries, an attempt has been made under this research work to analyse the Medico-spiritual healing practice and to find out the lacunas with suggestive measures to fill up the gap. Further, a comparative study shall be made of different countries to identify and to adopt the measures for promotion and protection of Medico-spiritual healing practice. Further, an empirical study shall also be made to have an idea regarding the present Medico-spiritual healing practices prevailing in Sikkim.

VII. Significance of the study

The research work is not only attempted to raise awareness amongst the Medico-spiritual healers and the beneficiaries about the lack and need of a proper legal framework to address such healing practice and protect their Intellectual Property Rights. It is also significant to find out the way for the strict enforcement of the same because failure to adhere to the legal framework will jeopardize the purpose for which it is framed. Further, no such in-depth study of Medico-spiritual healing practice standard of a place like Sikkim has been undertaken. Study of implementation of health laws in the primary and secondary level in such an important area would certainly add valuable contribution. Moreover there is a great challenge to revitalize the traditional health and to promote the Medico-spiritual healing practice in rural poor people of Sikkim for their primary health care.

VIII. Scope and limitation of the study

Medico-spiritual healing practice has been a crucial issue in the recent years due to its propensity to promote health care. Western science has recently started looking at this form of Traditional healing practice as a source of new drugs, specially to avoid side effect from drugs and the cost of putting new drugs on the market is becoming very expensive. Therefore, in accordance with the existing Intellectual Property Rights Law, the concerned authorities have to initiate a legal framework for the protection and promotion of such healing practice. Each stage in the management of the legal framework is important and decisive in

the sense that the whole management processes being a part of the chain has to be carefully and successfully implemented. The breaking up of any part of the chain would affect the whole chain as a result of which proper implementation of the legal framework would fail. Therefore, the study on the issue relating to the Medico-spiritual healing practice is the study of the whole chain starting from identifying the healers, their rights, their duties, their speciality, healing potentials and success rate. The scope of the study is confined to the study of the whole chain in order to have a clear understanding on the healing aspect. The scope of the study is limited only to some Medico-spiritual healers in Sikkim, which are also subject to other limitations such as difficulty in obtaining permission, unwillingness to co-operate, language barrier, Illiteracy, lack of spontaneity, difficulty in reaching them, unavailability of the proper information etc.

IX. Chapterisation

The present research work has been divided into Seven chapters including introduction and conclusion along with suggestive recommendations. A brief summary of the chapters has been referred below.

CHAPTER I: INTRODUCTION

The introductory chapter highlighted a brief overview of the topic entitled **“A Study of the Legal Framework for the Protection of Medico-Spiritual Practices in Sikkim as Indigenous Knowledge under Intellectual Property Law”** along with the detail synopsis of the research work.

CHAPTER II: INDIGENOUS KNOWLEDGE

Chapter two is an important feature of this research and it goes on straight to deal with “Indigenous Knowledge”. In this backdrop, this chapter aims at providing the meaning and definition of the term Indigenous Knowledge as the knowledge which has been found from the surrounding by certain groups of people or some ancient tribal or indigenous community who has been living with nature since inception. This form of knowledge is sometimes used synonymously and it should be protected. It is generally regarded as holistic knowledge as it can protect mankind from various epidemics. Indications of new avenues of already existing legislations are dwelled upon and the practical approach needed for the objectives in hand is explored.

CHAPTER III: INTERNATIONAL INSTRUMENTS RELATING TO THE PROTECTION OF INDIGENOUS KNOWLEDGE

Under this Chapter attempt shall be made to analyse various International instruments relating to the protection of Indigenous Knowledge held from time to time that has highlighted on the importance for the protection and promotion of Indigenous Knowledge Nationally as well as Internationally. An analysis of the provisions of various International Conventions and Covenants has also been done under this chapter. The significance here is not that the European philosophy of intellectual property is correct, and everyone else in the world is wrong or vice versa. What the foregoing discussion in this chapter shows is more basic: that there are many different historical and cultural assumptions about the ownership of ideas. Well, if not for trade, international law would be least bothered with so many different national regimes for intellectual property because each would be strictly a matter of domestic policy. But the reality is that nations do trade, so the difference matters. Fair participation in the international market depends on rules that bind each nation equally; otherwise market distortions will position some countries at a disadvantage. This Chapter shall further highlight Indigenous Knowledge in some Asian Countries and discusses case studies of International perspectives in countries like Indonesia, Ecuador, Ethiopia and Venezuela.

CHAPTER IV: INDIGENOUS KNOWLEDGE AND RIGHTS OF INDIGENOUS PEOPLE IN INDIA

Chapter four looks at the development of “Indigenous knowledge and rights of indigenous people in India”. Despite the formal legal regime here, unofficial habitual laws and practices, emanating from within the area, having meticulous implications in the framework of safeguarding Indigenous Knowledge in our Country has been discussed. The bond of Indigenous communities with the fundamentals of their surroundings has been highlighted too. In addition it highlights, as to how this connection has helped them build up a healthier understanding of their environment and the resources found therein. This close relationship and the deep appreciation have urbanized into a data system which over the lifetime, has conceded down from one generation to the next, and has aided their livelihood. The admittance and utilization of such understanding in these communities have time and again been governed by an overabundance of unofficial customary mechanisms, which have aided in its conservation. This chapter further lays emphasis on how sustainable application of Indigenous Knowledge is reflected in the majority of the traditions of local and indigenous communities and how understanding of community elders in relation to Indigenous

Knowledge is translated into exercise which includes a judicious use of capital. Gradually this exercise transforms into custom, which accepted over commencing from one age group to the next, draws together the power of law as it gets established as a model.

CHAPTER V: MEDICO SPIRITUAL HEALING PROCESS IN SIKKIM

This Chapter is an attempt to understand the healing process in Sikkim during the two main periods in Sikkim history, one being the Pre merger and the other, Post merger. A historical outline in terms of the land and people of Sikkim are also discussed here. The researcher has attempted to make an honest effort to showcase a variety of medicinal plants available in Sikkim and some healing process which may be useful and objectively possible to meet the demands of maintaining sustainable use of Medico-spiritual healing practice within the State. Chapter five manifests this effort where it has highlighted various species of flowering plants, herbs, ferns etc. used for “Medico-spiritual healing process in Sikkim”. This chapter attempts to highlight the last entity in its many ramifications, emphasizing them under various sub chapters. Further this chapter shall undertake a comparative study of Herbal healing practice prevalent in Sikkim, along with the rest of the country and countries like China, Egypt etc. The chapter is also an attempt to understand, discuss and highlight different types of healing medications practiced in the State.

CHAPTER VI: STATUS OF MEDICO-SPIRITUAL HEALING PRACTICE SCENARIO IN SIKKIM: AN EMPIRICAL STUDY

The chapter focuses on the survey conducted by the researcher in Sikkim to understand the implications of Medico-spiritual healing practice in Sikkim. Everything that is done in this present research boils down to chapter six which relates to the status of “Medico-spiritual healing practice scenario in Sikkim : an empirical study”. An empirical study has been made with reference to the State of Sikkim. The empirical study would reveal the status of Medico-spiritual healing practitioners in the State of Sikkim. The situation has been assessed with the aid of structured interview method and opinion survey in the form of questionnaire framed for the purpose. With this aim in view an empirical study shall be made of this area in order to highlight on the existing practical scenario prevailing in the State.

CHAPTER VII: CONCLUSION AND RECOMMENDATIONS/ SUGGESTIONS

Finally, the last chapter, that is, chapter seven includes the conclusions derived from the research, which not only concludes the study by making an overall evaluation of the

work, but also makes some sincere recommendations which may indeed be helpful for improvising the existing traditional healing practice. Here it unfolds that a few more statutes in the arena of Traditional Medicine can be further explored to curb the menace of Medico-spiritual healing practice and attaining all-round sustainable use of such practices in India, especially Sikkim.

X. Methodology

Owing to its healing potentials and daily increasing beneficiaries in Sikkim and the bordering State, it is proposed that during the course of research work both doctrinal as well as empirical study shall be done to find out the gaps and also to provide suggestive measures to fill up the gap. To achieve such goal an analysis of different books, Rules, Policy Guidelines, Manuals, and Article written by eminent scholars shall be made. To know the Medico-spiritual healing practice position in Sikkim, an empirical study shall also be made by the researcher to throw light on the actual practical implication from different Medico-spiritual healers.

For the empirical research the following methodology is applied:

a) Universe of Study

The universe under the study is a finite universe but large in size containing four (4) districts namely, East district, West district, North district and South district. The population though finite, is of different characteristics. For the purpose of analysis, the ethnic composition was not taken into account because of the remoteness of accessibility. Ten healers from each District have been interviewed, in a snow balling method. This number consists of both Governmental recognised and unrecognised healers.

b) Framing of sample and sampling procedure

The list of the Medico-spiritual healers of Sikkim for the study shall be taken from the recorded data of Culture department, Government of Sikkim. Help of village elders and panchayats from different districts shall be taken to meet and interview various unrecognised healers. Taking into consideration the nature of the units as heterogeneous and the universe is limited to the State of Sikkim, the sampling procedure to be adopted in this research work is simple random procedure. The Medico-spiritual healers from each district too are not small in number and moreover they are reluctant to meet strangers apart from healing purpose. Thus

sampling shall be drawn by taking at least 10 (ten) Medico-spiritual healers from each district, overall (40) forty in total.

c) Tools and techniques for the collection of data

In order to complete the empirical research the tools and techniques adopted by the researcher is the questionnaire and interview method. A set of total of Forty eight questions each to various Medico-spiritual healers residing in different districts shall be given who are the subjects of the study. The data shall also be collected through observation and interview methods. As it is not possible for the researcher to meet and interview each and every Medico-spiritual healers of Sikkim, primary data shall be collected through simple random sampling.

d) Data processing

The response collected from different Medico-spiritual healers by way of questionnaire and interview shall be scrutinised and edited in order to eliminate probable irregularities. After editing, the entire material shall be classified, coded and tabulated according to the need. The tabulation so prepared shall be analysed and the percentage of such responses will be calculated to project the actual figures. The literature of the research shall be prepared accordingly along with the suggestions for the inclusion of a new concept.

XI. Literature Review

The concept of Medico-spiritual healing practice as Indigenous Knowledge has attracted the attention of academic, jurists, and judges under this Intellectual Property Rights regime to a great extent. A number of studies have been done in this area, however many of them concentrate only upon medicinal plants aspects. Though a few academic works in the form of books and articles have been done in this area, there is hardly any work independently dealing with Medico-spiritual healing practice in Sikkim. Nevertheless, there are a good number of works covering single or multiple issues on Medico-spiritual practices as Indigenous Knowledge.

The guiding principles on Medico-spiritual healing practice constitute the basic and primary law for health care which was formulated by Representative of World Health Organization after much deliberation in the international arena. Apart from discussing this principle, the present work has made an analysis of the following international instrument

which has application to this kind of a healing regime. The list is only illustrative and not exhaustive.

- 1) United Nation Charter;
- 2) World Intellectual Property Organization 1970;
- 3) Convention on Biological Diversity;
- 4) TRIPS;
- 5) U.N Conference on Trade and Development 1964;
- 6) FAO 1945;
- 7) Int Treaty on Plant Genetic Resources for food and Agriculture 2001;
- 8) FAO International Code 1993;
- 9) U.N Environment Programme 1972;
- 10) Mataatua Declaration on Cultural and Intellectual Property Rights 1993;
- 11) Rio Declaration on Environment and Development 1992;
- 12) U.N Draft Declaration on the Indigenous Rights 19943;
- 13) Permanent Forum on the Indigenous Issues 2000;
- 14) U.N Declaration on the Rights of Indigenous Peoples 2007;
- 15) Convention Concerning Indigenous Peoples in Independent Countries 1991
- 16) The united nations technical conference on practical experience in the realization of sustainable and environmentally sound self development of indigenous peoples, 1992
- 17) The International convention for the protection of new varieties of plants, 1961

In the Indian context, since there is no particular legislation, the study has inter-alia, analysed other relevant and correlated enactments, such as;

- 1) Biological Diversity Act, 2002;
- 2) The Constitution of India;
- 3) Protection of Plant Varieties and Farmers Rights Act, 2001;
- 4) Indian Forest Act, 1927;
- 5) Wildlife (Protection) Act, 1972;
- 6) Forest (Conservation) Act, 1980;
- 7) Protection of Plant Variety and Farmers' Rights Act, 2001;
- 8) Intellectual Property Law.

In this present work not only the efficacy of the enactments has been examined but they have been critically analyzed as these laws have their own shortcoming and do not prove to be sufficient in terms of Medico-spiritual healing practice.

Apart from the different international instruments, national laws relating to Medico-spiritual healing practice it is also important to review books and literatures to find out the lacunae and to frame out solution which must be the task of every research scholar dealing with particular topic.

a) Marie Battiste and James Youngblood Henderson, Protecting Indigenous Knowledge and Heritage, Purich Publishing Ltd, Saskatoon, Canada, (2012) –

The book is a compilation of how legislative schemes in countries with Indigenous populations along with the work of the United Nations and other international bodies impact on indigenous peoples. It also illustrates why current legal regimes are inadequate to protect Indigenous heritage, language and knowledge. Some of the specific topics covered in this book include: Eurocentric views on what constitutes cultural and intellectual property, what constitutes Indigenous Knowledge and who may use it; the importance of preserving Indigenous languages; the relationship between Indigenous languages and culture; how knowledge is transmitted in Indigenous communities; issues in performing arts and artwork; and proposals for creating a legal regime that will help revive and protect Indigenous Knowledge and require consent for its use.

b) J.K. Das, Human Rights and Indigenous Peoples, APH Publishing Corporation, New Delhi, (2001) –

This book explores the evolution and recognition of law, at both the domestic and international levels, relating to indigenous peoples. It demonstrates that at the international level modern human rights program has been responsive to indigenous people's aspiration to survive as distinct communities in control of their own destinies. It highlights as to how over the last several years the international system, particularly as embodied in United Nations and other international institutions has exhibited a renewed concerns of indigenous people. It discusses the resulting new generation of international treaty and customary norms, while linking the new and emergent norms with previously existing international human standards of general applicability. It further identifies and analyzes institutions and procedures at domestic level in India for realisation of international norms concerning indigenous peoples. In

finding out the contours of Indian law, it explores the evolution and recognition of political processes in realisation of the rights of indigenous peoples in India.

- c) **J.R. Subba, History, Culture and Customs of Sikkim, Gyan Publishing House, New Delhi (2008)** – This book is very informative and quite exhaustive in its survey providing a useful background in understanding the socio-political dynamics of the Sikkim society. The demographic picture of Sikkim presents the picture of a melange of diverse ethnic as well as linguistic elements. It discusses the three main groups of the Sikkim people i.e. Lepchas, Bhutia's and the Nepalis. It further provides a very informative survey of history of Sikkim from the remote past to the present times dealing separately on some of the ethnolinguistic groups. This informative and comprehensive account of the history and people of Sikkim undoubtedly presents a valuable background for the analysis of the currents and cross currents that work in the making of a pluralistic society like that of Sikkim.
- d) **Sushma Sahai, Bio-Medical Waste Management APH Publishing Corporation, (2009)** is a book which reviews critically various social, economic and regulatory policies which address environmental issues. It stresses on the interdisciplinary and inter-related nature of environments, irrational handling of biomedical waste, its impact on disease epidemiology, recycling and commercialization of biomedical waste. Since there has been a paradigm shift from curative to preventive medicine, the foundation has already been laid to encourage research on such themes, like hospital waste management. Critical issues, like lack of awareness of the Rules and risks involved during handling hospital waste and unwanted recycling of contagious waste products need to be addressed in order to develop a full proof biomedical waste management system. Instead of providing an end-of-pipe solution a cradle –to-grave approach would entail a comprehensive analysis of the management of Biomedical Waste. This would be a formal approach to define and evaluate the total environment load (physical and social) associated with the generation and disposal of Biomedical Waste from the word start to finish.
- e) **S.K. Verma, Legal Frame Work for Health Care in India, Indian Legal Institute, Lexis Nexis Butterworth (2002)** – This book is essentially the product of a project undertaken by the Indian Law Institute on behalf of the World Bank entitled “Legal Framework for Health Care in India: Experience and Future directions”. This book presents a detailed account of the liability of health professionals under the law of torts, criminal law, law of contract and consumer law. Besides giving a detailed

picture of the role of medical councils it takes special account of right to health under the constitutional scheme. The book includes an appendix, which contains relevant texts of the various legislations having bearing upon health care, including the code of ethics to be followed by the medical professionals.

- f) **Puroshattam Behera, Medical Law and Ethics, Mittal Publications, New Delhi (2007)** – This book explores moral, ethical and legal issues regarding health care professionals. It makes a comprehensive analysis of legal provisions with respect to medicine, patent and copyright laws. It provides an understanding of medical laws and ethics.
- g) **Nandita Adhikari, Law and Medicine, Central Law Publication, Allahabad (2007)** – This book in short gives a glimpse of various provisions of Indian Penal Code connected to medicine and health. Provisions of Constitution of India having bearing upon right to health have been cited in the work, regulation of medical and paramedical profession and regulation of manufacture, storage and sale of medicine have been discussed in the book.
- h) **R.K. Bag, Law of Medical Negligence and Compensation, Eastern Law House (2001)** – This book attempts to summarise entire law of medical negligence and compensation in England and other common wealth countries with appropriate reference to Indian Jurisdiction. It provides analysis of medical negligence and compensation under general, penal and consumer law. It discusses the concept of reasonable care standard of skill and competence, difference between wrong and negligent diagnosis, criteria for informed consent in treatment, variation of consent in elective and emergency surgery, unwanted child and failure of sterilization, delegation of duty, criteria of consumer, individual and vicarious liability to pay compensation, concept of deficiency in service, standard of proof of negligence in civil court as well as consumer court, mode of assessment of compensation and text of important statutes connected with medical profession.
- i) **Rais Akhter, Healthcare Patterns and Planning, APH Publishing Corporation (2004)**– This book has grown out of numerous studies on varied topics; the spatial organization of health facilities, inequalities, accessibility, location allocation models knowledge about healthcare system in different cultures and illness and health beliefs in different region of India.
- j) **J. Kishore and G.K. Ingle, Biomedical Waste Management in India, Century Publications, New Delhi (2004)** – The book is a compilation of Government

notification and guidelines issue on the subject. The material is updated and well organised in different chapters. The authors have taken care to include legal issues and legislations pertaining to biomedical waste management in a simple and systematised manner. The issues related to the technology of biomedical waste management have been described at length. One section is entirely devoted to the alternative technologies for biomedical waste.

- k) Advancing Rights to Health: The Indian Context, By SAMA- Resource Group for Women and Health.** – This book is published on behalf of the Beyond the Circle project which brings together a small number of academics and representatives of NGOs with the aim to advance the enjoyment of economic and cultural rights in India. This book contains the concept and various issues under right to health etc. It also contains few case studies on various health care related issues, International and National instruments that discuss right to health, people’s health charter and National public hearing on right to healthcare.
- l) Deepa Basu, The Handling of Disposal of Medical Wastes, law & Medicines, Vol.3, (1997)** – drew attention on the burning of biomedical waste through incinerators which produces a dangerous by products of toxic chlorinated compounds called dioxins and furans which carcinogenic and known to suppress immune system and cause fatal and reproductive damage and thus considered as an important source of air pollution. These articles also suggested measures to be taken for the proper incineration of the bio-medical waste.
- m) Mingama Thundu Sherpa, Abhishek Mathur, et.al., “Medicinal Plants and Traditional Medicine System of Sikkim: A Review”, Vol. 4 World Journal of Pharmacy and Pharmaceutical sciences (2015)** – This article on traditional medicinal system lays emphasis on the knowledge of plants which are part of Indigenous Knowledge in Sikkim that has snow balled from generation to generation. It further highlights the different types of medicinal plants used for healing purpose in Sikkim and lays concern over the decline of medicinal flora in the State.
- n) Y.V. Rao, Law Relating to Medical Negligence, Asia Law House (2010)** – The book contains all the possible legal aspects of medical negligence touching the medical professionals and hospitals. It has referred to the authorities of eminent English authors and judges, courts of appeal of U.K. which became the foundation for development of Indian Law of Medicinal negligence. On the issue of medical

negligence case laws as evolved from judgments of Supreme Court of India, various High Courts, National Commission and State Commission has been discussed.

CHAPTER II

INDIGENIOUS KNOWLEDGE

We come from the land, the sky, from love and the body. From matter and creation; We are; life is, an equation we cannot form or shape, a mystery we can't trace in spite of our attempts to follow it back to its origin, to find out where life began, even in all our stories of when the universe came into being, how the first people emerged.⁴

From the beginning, the forces of the ecologies in which we live have taught Indigenous peoples a proper kinship order and have taught us how to have nourishing relationships with our ecosystems. The ecologies in which we live are more to us than settings or places; they are more than homelands or promised homelands. These ecologies do not surround indigenous peoples; we are an integral part of them and we inherently belong to them. The ecologies are alive with the enduring processes of creation itself. As indigenous peoples, we invest the ecologies with deep respect, and from them we unfold our structure of indigenous life and thought.⁵

Indigenous Knowledge have been utilized since ages by Indigenous and local society and has been the basis of their survival particularly in the key segments of foodstuff and wellbeing. Contemporary knowledge has lately begun seeing Indigenous Knowledge as a resource of innovative drugs particularly since the expenditure of putting innovative drugs on the marketplace is sky-scraping. Although, the increasing acknowledgment of Indigenous Knowledge as a precious basis of knowledge, Contemporary intellectual property laws carry on to treat it as an element of “community domain”, generously accessible for use by anybody. Moreover, in a number of cases, various forms of Indigenous Knowledge comprise under intellectual property rights by researchers and mercantile enterprises, lacking damages to the knowledge's originators or possessors.

Indigenous Knowledge, which is referred to as “traditional Knowledge”, “Restricted Knowledge”, “Folk understanding” etc, refers to that body of awareness urbanized by local and indigenous society over period in reaction to the requirements of their precise confined surroundings.

⁴ Hogan, Linda. *Dwellings: A Spiritual History of the Living World* 95-96 (W.W. Norton, New York, 1995).

⁵ Marie Battiste and James Y. Henderson, *Protecting Indigenous Knowledge and Heritage: A Global Challenge* 9(Purich publishing ltd, Purich , 2012) .

In this background, this chapter aims at providing the significance and meaning of the expression Indigenous Knowledge as the knowledge which has been found from the surrounding by certain groups of people or some ancient tribal or indigenous community who has been living with nature since inception. This form of knowledge is sometimes used synonymously and it should be protected. It is usually regarded as holistic understanding as it can protect mankind from various epidemics.

The beauty of Indigenous or traditional knowledge has even been recognized by the developing and some of the developed countries of the globe. The production of Jeevani by Kani tribe of South India, the secret knowledge behind the weaving of Kashmiri Pashmina, the production of Kanchipuram sarees, etc are protected by geographical indications but as a matter of fact, the knowledge behind the creation of this products into fine master piece is a subject of indigenous knowledge protection separately.

Indigenous neighbourhood have pooled a very secure and interdependent bond with their environs since time immemorial. This connection has helped them expand a very peculiar but sound understanding of their environment. as a result this symbiotic perceptive, developed into an information structure which, when passed from one generation to the next, came to be utilised for a immense number of activities like subsistence and conservation.

This unit further highlights the relationship between Indigenous Knowledge and Customary laws in India. The rights of local communities under customary laws lead to the formalization of their existing communal control over Indigenous Knowledge. This system of rights, which enhances the conservation and sustainable use of biological diversity and promotes the use and further development of knowledge and technologies, is access and benefit sharing, essential for the identity of local communities and for the continuation of their irreplaceable role in the conservation and sustainable use of this biodiversity. All these aspects assume an even greater significance at a time when global warming and climate change will necessitate the search for new products and solutions that are likely to emerge from the local communities.

2. I. Concept of Indigenous Knowledge:

- a) Knowledge is:
 - i. Process: because it can never be completed nor is it final
 - ii. Social construction: is based in the social perception or reality, enclosed in cultural categories communicated in a language shared by a group of people, and reproduced by knower or an 'epistemic' community.

Knowledge is “between one’s two ears”, which comes “from the heart”, and a social construction of power.⁶

Knowledge is information and skills gained through experience or education. It is a sum of what is known, awareness, and gain by experience of a fact or situation. Feelings shape ideas, perception, and memories. A good example is the concept of emotional intelligence, which is the newest finding of social psychological and learning theory. It explains what we know is a capacity from within, from our sensitivity to unravel problems emotionally and cognitively.⁷

- b) Knowledge is a social construct:

Although knowledge is a subjective understanding of the world (each person is able to perceive, and think and feel ideas and memories), no one alone possesses the complete meaning of one topic. Knowledge by an 'epistemic' community that is each one of the social group knows something. This has an important research consequence that in order to study Indigenous Knowledge, we have to recognize the existence of different members of a social group or ethnic group who give different 'versions' to a topic. Our task is to identify how these versions are generated, transmitted and used.⁸

- c) Knowledge is power:

This definition refers to the fact that the ultimate goal of knowledge is to orient human action. Each person behaves relying on some ideas, values, perceptions and concepts that he

⁶ Role of Geographical Indications in the field of Traditional Knowledge, available at: <http://www.thefree library.com/role+of+Geographical+indications>. In the field of traditional (last visited on July 12, 2010).

⁷*Ibid.*

⁸ Western science and traditional knowledge, available at: <http://www.ncbi.nlm.nih.gov>articles> (last visited on July 12, 2010).

or she selects. Another related issue to the power dimensions of knowledge is the mobilizing effect of ideas in society.

Knowledge is a subjective understanding, occurring in our minds. It involves ideas, perceptions, values and feelings. The meaning of knowledge is socially constructed and its ultimate goal serves to orient and guide human action.

d) Role of knowledge in traditional societies:

It is common to say that while the modern economy is knowledge-based, earlier and present day traditional societies are purely resource based. But it is not that simple. Knowledge, technology and resources are the basis of all economies including those of traditional societies. Indigenous Knowledge provides the underpinning for successful ways of subsisting in what are often hostile natural environments. Indeed, there is growing recognition that Indigenous Knowledge, technologies and cultural expressions are not just old, obsolete and maladaptive; they can be highly evolutionary, adaptive, creative and even novel. Moreover, as a body of knowledge, customs, beliefs and cultural works and expressions handed down from generation to generation, tradition forms the 'glue' that strengthens social cohesiveness and cultural identity.⁹

Few if any human societies are totally isolated or self-sufficient in all respects. People in traditional societies not only consume knowledge based and other goods that are produced locally, whether by themselves or their neighbours; they give them, receive them, share them, own them and exchange them with others including from different societies.

Benefiting from trade depends not only on the availability of legal rights that are enforceable beyond the locality; but also on the ability of traditional communities to take advantage of national and international law including property and access rights relating to land, natural resources and intellectual property. It also depends on specific capacity-building measures to address problems of lack of information and production and marketing weaknesses. Indeed, capacity building is absolutely vital.

Traditional proprietary systems relating to scarce tangibles such as land, resources and goods, and to valuable intangibles like certain knowledge and cultural expressions, are often highly complex and varied. Generalisations should be made with extreme caution. However,

⁹ Graham Dutfield and Uma Suthersanen, *Global Intellectual Property Law*5, (Edward Elgar publishing Ltd UK, 2008).

it appears frequently to be the case that knowledge and resources are communally held. While individuals and families may hold lands, resources or knowledge for their own use, ownership is often subject to customary law and practice and based on the collective consent of the community.¹⁰

Nonetheless, the idea that traditional property rights are always collective or communal in nature while Western notions of property are inherently individualist is an inaccurate cliché. While this may appear to contradict what we have just stated, specialised knowledge may be held exclusively by males, females, certain lineage groups, or ritual or society specialist to which they have rights of varying levels of exclusivity. But in many cases, this does not necessarily give that group the right to privatise what may be more widely considered to be the communal heritage.

In short, customary laws regulating access and use of local knowledge, resources, cultural products and locally produced manufactured goods do exist. But what can be done when these spread beyond the control of the local administrative or juridical institutions, either through trade or misappropriation, and are commercialised without the consent of the providing communities or any benefits flowing back to them. This problem is what an international traditional knowledge regime should be able to respond to.¹¹

e) Indigenous Knowledge (IK):

The term “Indigenous Knowledge” or Traditional Knowledge” are frequently used interchangeably and does not command a universal agreed definition. Indigenous Knowledge, which is variously referred to as ‘Traditional Knowledge’, ‘restricted Knowledge’, ‘Folk Knowledge’, etc., refers to that body of understanding developed by neighbouring and indigenous communities over period in response to the requirements of their precise restricted environment.¹² It has been distinct and professed differently by different groups of individuals and organizations in diverse times and places. However, regardless of the existence of such disparities, there seem to be certain satisfactory definitions offered by some scholars and organizations. For example, Van Vlaenderen has provided an explanation of Indigenous Knowledge as a collected works of principles and supposition which tends to highlight the knowledge internal to a exacting setting inconsistent from local knowledge

¹⁰*Ibid.*

¹¹*Ibid.*

¹² Indigenous Knowledge and Sustainability, available at: www.unesco.org/tlsf/theme_c/mod11 (last visited on February 5th, 2014).

which focuses on the locality in which the understanding is used and embraces exogenous awareness that has entered the local neighbourhood over time.¹³ Lugeye defines Indigenous Knowledge as the figure of experiences and awareness of a given ethnic assemblage that forms the foundation for resolution making in the face of solving common problems. It is a blend of information created endogenously within the people and that which comes externally but is then incorporated within the society, and this knowledge is constantly shifting and has a natural capacity for captivating relevant new knowledge from outside.¹⁴ Brush and Stabinsky have defined Indigenous Knowledge as "... the organized information that remains in the unofficial segment, usually unrecorded and conserved in oral tradition rather than texts... it is culture specific, whereas proper information is de-cultured".¹⁵ According to Mugabe, Traditional Knowledge is entirety of all knowledge and practices, whether unambiguous or ambiguous, which are used in the supervision of socio-economic and biological facets of life.¹⁶ Grenier defines Traditional Knowledge or Indigenous Knowledge as the exclusive traditional, local knowledge active within and developed around the precise surroundings of women and men in a particular geographical region.¹⁷

Traditional Knowledge is also a term frequently used to signify Indigenous medicinal knowledge, which is defined as a logical system linking social behaviour, supernatural beings; human physiology, and botanical observations.¹⁸ The Dene Cultural institute defines Traditional Knowledge as a body of information built up by a set of people all through generations of existing close to natural world. It includes structure of arrangement, a set of practical study about the local surroundings and an arrangement of self-management that governs use.¹⁹

The CBD, in its Article 8(j) defines Traditional Knowledge as the understanding, innovations and practices of indigenous and local communities embodying conventional lifestyles pertinent for the protection and sustainable use of biological diversity. The W I P O

¹³ Kauzeni, *Local Knowledge* 55 (International Development Research centre, Ottawa, Canada, 1999).

¹⁴ Morogoro, Tanzania; *The role of farmers: Indigenous Knowledge in natural resources management* 2 (Sokoine University of Agriculture, 1994).

¹⁵ Stephen B. Brush, *Valuing local Knowledge. Indigenous peoples. and Intellectual Property Rights* 73 (Island Press, Covelo, California, 1996).

¹⁶ John Mugabe, *Intellectual Property Protection and Traditional Knowledge- An International Policy Discourse*, *Biopolicy International* 3, No.21(1999).

¹⁷ L. Grenier, *Working with Traditional Knowledge: A Guide for Researchers* 9, (International Development Research centre , Ottawa, Canada,. 1998)

¹⁸ Janice Reid, *Sorcerers and Healing Spirits: Continuity and Change in an Aboriginal Medical System* 25 (Australian National University Press, Canberra. Reid,1983)

¹⁹ J. Lore: *Capturing Traditional Environmental Knowledge*98,(Dene Cultural Institute and International Development Research Centre, Ottawa, Canada, 1992).

refers to Traditional Knowledge as tradition-based literary, imaginative or technical works performances, inventions, technical discoveries, designs, marks, name symbols, undisclosed knowledge and all other belief based innovations and creations ensuing from intellectual action in the industrial, scientific or imaginative fields.²⁰ Indigenous Knowledge, on the other hand, is understood by the World Intellectual Property Organization to be the Traditional Knowledge of Indigenous people.²¹ Thus, Indigenous Knowledge is a concept that has several definitions in the context of contemporary theory and praxis related to development and conservation. If we look at the concept from a historical perspective we are confronted with several questions, for instance: what is knowledge? What are the main characteristics of Indigenous Knowledge? What are the differences between scientific knowledge and I K?

Knowledge that is distinctive to a given culture or society is acknowledged as Indigenous Knowledge. Indigenous Knowledge contrasts with the proper knowledge system generated by a variety of universities, research institutions and private firms. It is the base for local-level assessment making in agriculture, health care, food preparation, education, natural resource organization, and a multitude of other activities in rural communities. There are a variety of definitions of Indigenous Knowledge. One way to define Indigenous Knowledge is the unique customary, local knowledge prevalent within and developed around the explicit conditions of women and men indigenous to a particular geographic location. Indigenous Knowledge has lots of aspects. Communities have their personal indigenous methods for imparting awareness, for instance, just as they have indigenous ways of deriving a source of revenue from the environment, Information, insight and techniques such as healing practices, pest management etc, are passed down and enhanced from one generation to the next.

The increasing attention Indigenous is receiving by academia and the development institutions have not yet led to a unanimous perception of the concept of Indigenous Knowledge. None of the definitions are essentially contradictory; they overlap in many aspects.²²

While using similar definitions, the conclusions drawn by various authors are controversial in a number of aspects. The implications of this will be discussed in the section

²⁰ Intellectual Property Needs and Expectations of Traditional Knowledge Holders 25, World Intellectual Property Organization Report on Fact-Finding Missions on IPR and TK, (WIPO, Geneva, Switzerland. 1998-1999).

²¹ *Ibid.*

²² Social Work Education in India: An introduction- Shodhganga, available at: <http://www.shodhganga.inflibnet.ac.in/bitstream> (Last visited and accessed on July 12, 2010).

“Public debate on Indigenous Knowledge”. Most authors explain their perception of Indigenous Knowledge, covering only some aspects of it.²³

The emerging global knowledge economy is a countries ability to build and mobilize knowledge capital. Hence, it is equally essential for sustainable development, as the availability of physical and financial capital has a strong basis back to holistic relation of man with the nature. Indigenous Knowledge is the creation of indigenous communities who has shared a very close and interdependent relationship with their surroundings since time immemorial.

This connection has helped them to build up a very exceptional but sound understanding of their environment. As a result, this symbiotic understanding developed into data system which, when handed down from one age group to the next, came to be used for an enormous number of act like survival and protection. Thus it is non-static in character and energetic and interpenetrating. This system of understanding is today identified as Indigenous Knowledge.

Indigenous Knowledge is locally rooted in the culture of a particular place. Since it is based on the experiences of living peoples, it is always changing, being produced or generated, as well as reproduced, discovered, lost or recreated. Indigenous Knowledge is context-specific; therefore the efforts to transfer that knowledge to other places would mean dislocating it. It is orally transmitted, with the help of collective memory, encoded in stories, myths, legends songs and systems of classification of resources that are decoded by the members of the same “epistemic community”.

Since Indigenous Knowledge is empirical and hypothetical, it is learned by imitation and demonstration. Therefore, documenting Indigenous Knowledge should be done in the codes and classificatory categories of the local language and culture and emphasizing the construction aspects. It uses metaphysical devices and repetition to assist in the retention of ideas. But at the same time new knowledge explained by the actors themselves, which we would otherwise misinterpret, is socially different. There is Indigenous Knowledge shared by the majority of the community, for example, the main period to transplant rice. This is common knowledge.

There is a type of knowledge that is held by individuals with very special experiences. In terms of knowledge generation, there are significant differences in knowledge. Old people

²³*Ibid.*

recall some practices that young people do not know anymore. This is a special knowledge by which some individuals in the local culture achieve a degree of coherence in rituals and other symbolic behaviour and act as intermediates between the material and spiritual world. They are individuals, who possess sacred knowledge like the Bimo in Ahha and Ti societies, or the Dongbu in Nexi society, or the Lama among the Tibetans. We have to pay serious attention to this social differentiation of knowledge in the local communities when we study Indigenous Knowledge. It is holistic, because it perceives the technical as well as the spiritual, the material as well as the symbolic, the real as well as the unreal world. A good example is that of Ying and Yang, a holistic concept that explains metaphorically causes that emphasize the complementarities of opposites. Therefore, Indigenous Knowledge cannot be tested in scientific categories right or wrong, which cannot be measured in any quantities nor can it be separated as only technical or rational. One has to look within the Indigenous Knowledge's own system of explanation for the particular relations of cause and effect.²⁴

Indigenous Knowledge and scientific knowledge are different systems or organization, interpretation and uses of ideas, perceptions, and feelings about reality. But one is not superior to the other. Both are complementary to each other and are equally valuable, it is communicated as experiences gained by the ancestors to the subsequent new generations. This temporal transfer of collective experiences is rooted in the practical activities as well as oral languages, written heritages and other symbolic forms of representation. All members of the community elders, women, men and children are integrated through local practices and languages and share various kinds of knowledge for securing their livelihoods depending upon ones social position. Besides the gender and generational differences due to roles and tasks in society there are levels of specialization according to access, use and types of knowledge.

f) Indigenous Knowledge and the purpose of its protection:

Indigenous Knowledge is a product of a local context and is deeply embedded in the local culture. Any cultural transmissions from Indigenous people to national societies have to involve the free and informed consent of the former and openness of the latter. This requires mutual respect and understanding and cannot occur while feelings of inequality persist between the two. Concepts such as technical and aesthetic, economic and spiritual or

²⁴Indigenous Knowledge and Peoples Network on Capacity Building in MMSEA Basic Concepts of Indigenous Knowledge, available at: <http://www.lib.icimod.org/record/files> (Last visited on July 12, 2010).

landscape, lands, earth and territory are arbitrarily distinguished as separate components for an all embracing notion of territory. In the same way that indigenous territories are extremely diverse, so are the collective relationships that binds people to a territory. Thus knowledge, territory, identity, and people are interrelated. Knowledge therefore cannot be separated from the human and natural environment.

Indigenous Knowledge is not just a fix set of abstract classificatory rules. It has developed from a multiplicity of activities and long-term observation that are largely tacit and which embody a multitude of skills and practicalities. Therefore it cannot be understood according to a set of rigid prescriptions. On the contrary, far from rigid, Indigenous Knowledge is constantly being updated and changed. If these changes take place within a framework grounded in indigenous institution and customary legal systems, they lend to cultural continuity. Even the impact of externally driven change shows the flexibility of Indigenous Knowledge.

Human communities have always generated, refined and passed on knowledge from generation to generation. Such Indigenous Knowledge is often an important part of their identities. Indigenous Knowledge has played, and still plays a vital role in the daily lives of the vast majority of people. Indigenous Knowledge is essential to the food security and health of millions of people in the developing world. In many countries, traditional medicines provide the only affordable treatment available to poor people. In budding Nations too, almost 80% of the populace are depended on traditional medicines to aid their healthcare needs. In addition, knowledge of healing properties of plants has become the source of many modern medicines. The use and continuous development of plant varieties by local farmers and the sharing, diffusion of these varieties, along with the knowledge associated with it play an essential role in agricultural systems in developing countries.

Only recently, however, has the International community sought to recognize and protect traditional knowledge. In 1981, World Intellectual Property Organization and United Nations Educational Scientific and Cultural Organization adopted a model on folklore. In 1991 the concept of Farmers Rights was introduced by the Food and Agriculture Organization into its International Undertaking on Plant Genetic Resources and in 1992 the Convention on Biological Diversity highlighted the need to promote and preserve traditional knowledge. In spite of these efforts which have spanned two decades, final and universally acceptable solutions for the protection and promotion of traditional knowledge have not yet changed.

Since the vast majority of the knowledge is old, it is evident that it has been handed down through the generations. It is continually refined and new knowledge develops, rather as the modern scientific process proceeds by continual incremental improvements rather than by major leaps forward. The groups that hold traditional knowledge are very diverse; individuals, groups, or groups of communities may all be custodians. Such communities might be Indigenous to the land or descendents of later settlers. The nature of the knowledge is also diverse: it covers literacy, artistic or scientific works, songs, dance, medical treatment and practices, agricultural technologies and techniques etc.

Whilst a number of definitions for Indigenous Knowledge and folklore have been put forward, there is no widely acceptable definition for either of them. It is not only the broad scope of Indigenous Knowledge that has confounded the debate so far. There is also some confusion about exactly what is meant by ‘protection’ and its purpose. It should certainly not be equated directly with the use of the word ‘protection’ in its report on a series of fact-finding missions; World Intellectual Property Organization²⁵ sought to summarise the concerns of Indigenous Knowledge as follows:

- i. Concern about the loss of traditional life styles and of traditional knowledge, and the reluctance of the younger members to carry forward such practices.
- ii. Concern about the lack of respect for Indigenous Knowledge and holders of Indigenous Knowledge.
- iii. Concern about the misrepresentation of Indigenous Knowledge including use of Indigenous Knowledge without any benefit sharing, or use in a derogatory manner.
- iv. Lack of recognition of the need to reserve and promote the further use of Indigenous Knowledge.²⁶

Another source more succinctly classified these and other possible reasons for protecting Indigenous Knowledge as:

- i. Equity considerations-the custodians of Indigenous Knowledge should receive fair compensation if the Indigenous Knowledge leads to commercial gain.

²⁵ Intellectual Property Needs and Expectations of traditional Knowledge holders ,World Intellectual Property Organization Report on Fact-Finding Missions, (World Intellectual Property Organization, 1998-1999).

²⁶ Srivastava Nidhi, “*Customary Law and the Protection of Indigenous Knowledge in India*” (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute, 2004).

- ii. Conservation concerns-the protection of Indigenous Knowledge contributes to the wider objectives of conserving the environment, bio-diversity and sustainable agriculture practice.
- iii. Preservation of traditional practices and culture-protection of Indigenous Knowledge would be used to raise the profile of the knowledge and the people entrusted with it both within and outside communities.
- iv. Preservation of appropriation by unauthorized parties or avoiding “bio-piracy”.
- v. Promotion of its use and its importance to development.²⁷

A single solution can hardly be expected to meet such a wide range of concerns and objectives. The type of measures required to prevent misappropriation may not be the same, indeed may not be compatible, with those needed to encourage the wider use of Indigenous Knowledge. A multiplicity of complementary measures will almost certainly be required, many of which will be outside the field of Intellectual property. Indeed, underlying the debate may be a much bigger issue as the position of Indigenous communities within the wider economy and society of the country, in which they reside, and their access to or ownership of land they have traditionally inhabited. In that sense, concerns about the preservation of Indigenous Knowledge, and the continued way of life of those holding such knowledge, may be symptomatic of the underlying problems that face these communities in the face of external pressures.²⁸

However, the consideration is limited as to how the Intellectual Property system might help address these concerns. Much has already been written on this subject and many international organisations, in particularly World Intellectual Property Organization, have started to consider whether the existing system of Intellectual Property has a role to play or whether new forms of protection will be required.

Several arguments on the pros and cons of protecting Indigenous knowledge within the prevailing regime of intellectual property laws have been raised by various authors. The issue of using conventional forms of Intellectual Property Rights for protecting Indigenous knowledge has been the emergence of three sets of views. The first of these views supports the use of forms of Intellectual Property Rights for protecting Indigenous knowledge. The second advances the view that specific forms of Intellectual Property Rights may be more

²⁷C. Correa *Traditional Knowledge and Intellectual Property*98, (Geneva, 2001).

²⁸Traditional knowledge-Commission for Intellectual Property Rights, available at: http://www.iprcommission.org>final_report (last visited on January 19, 2014).

appropriate for the purpose. The third view is that conventional forms of Intellectual Property Rights are inappropriate for protecting Indigenous knowledge.

However, before analyzing question of extending intellectual property protection to indigenous knowledge under the existing Intellectual Property Rights regime, it will be prudent to analyze the scope and nature of both Intellectual Property and Indigenous Knowledge with reference to the issues surrounding the following, which are crucial factors in the determination of ownership. It will help one to determine to what extent Intellectual Property Rights regime can accommodate traditional knowledge protection and to what extent indigenous knowledge is commensurate with intellectual property.

- i. Identification of original inventor: - In the case of indigenous knowledge, the primary/original innovators are the indigenous societies that accumulated the knowledge through several generations. Hence, assigning ownership/ proprietary right to the original innovator is not an easy task. On the other hand, the identification of the 'secondary innovator', i.e., who is refining the indigenous knowledge through the use of sophisticated scientific techniques and procedures and developing new product/result, is comparatively much easy. For example, since natural plants are considered to be global common goods, by bio-prospecting, the scientists can extract plant genetic resources from the primary innovators/traditional users and subsequently, by using modern science, extend and refine the indigenous knowledge, and claim an invention which is eligible for intellectual property protection. Moreover, supporters of secondary innovators argue that all genetic material to which the incentive step of scientific knowledge has been added should be eligible for protection. Internationally, intellectual property rights for plant genetic resources have typically been given for western science inventions by secondary innovators rather than for indigenous discoveries by the primary/original innovators. The identification of original inventor is hence an intricate task in case of indigenous knowledge while in relation to Intellectual Property Rights it is a quite effortless task.
- ii. Identification of Beneficiaries: - The most complex issue in Indigenous knowledge protection is the identification of beneficiaries. The principle of benefit sharing which is an important element in the bargain theory rests upon the pre condition that it is possible to demarcate the community that will be beneficiary of such a bargain. But in regard to indigenous knowledge, identification of beneficiary is an intricate task and in most cases, when the community holds indigenous knowledge collectively, it is

practically not possible to identify the set of beneficiaries who would be entitled to share benefits by way of the right. This drawback hinders meaningful exchange of the intellectual property right, which is the fundamental pre condition for benefit sharing to occur.²⁹ This does not mean that moral justifications cannot be a basis for the grant of an intellectual property right over indigenous knowledge,³⁰ but that it cannot be the sole basis on which the right is based and defended.

- iii. Question of ownership: - Intellectual properties are considered to be the products of one's intellectual labour and thus recognized as the property of its creator who has bestowed labour on it. Since the creations of intellectual labour are given the recognition and status of property, they involve the concept of ownership. In other words, intellectual property rights are exclusive rights: the owners of the intellectual property have the right to exclude others from making or using the products for commercial gains without their permission. All forms of intellectual property are given the same status of property, eligible for commercial exploitation, to the exclusion of all others irrespective of whether the knowledge was produced in a laboratory or in an informal system. The modern Intellectual Property Right regime on the one hand recognizes the intellectual property generated by scientists in the formal system but on the other hand disallows property status for the knowledge generated by local communities in the equally valid informal system. Just like knowledge generated in the laboratory is considered the intellectual property of the innovator, the knowledge generated in fields and forests must be considered the property of the innovator or creator. But this does not happen in case of indigenous knowledge. This constitutes the central and highly unjust discrimination between indigenous knowledge and intellectual property.

Indigenous knowledge systems, indigenous knowledge and innovations cannot be credited to a single inventor. They are community-based and they accumulate over time and generation. Indigenous knowledge systems, indigenous knowledge and innovations are part and parcel of the community life of the people. The motivation of innovations derived from traditional knowledge systems and traditional knowledge is not profit or individual gain but the welfare and common good of the entire

²⁹ Joshua P. Rosenthal, *Equitable Sharing of Biodiversity benefits: Agreements on Genetic Resources, Investing in Biological Diversity: The Claims Conference*, Organization for Economic Co-operation and Development, (Paris, France, 1997).

³⁰ As in the case of copyrights where moral justifications, especially those based on the Lockean theory of creating value, dominate the grant of the right.

community and future generations. This essentially renders intellectual property alien to traditional, indigenous and local communities.

Since indigenous knowledge is generally considered as common property the question of private ownership would never arise in the contemporary realm of intellectual property laws. Traditionally the custodians of intellectual property hold and use the knowledge collectively whereas intellectual property is a private property to the exclusion of all others. The indigenous communities consider indigenous knowledge base as gift of god and not as a private property to be claimed as monopoly. The perception of intellectual property is, however, totally a different one, which has more capitalist orientation and believes in the preservation of intellectual property with the idea that it will benefit the public later. On the contrary, the indigenous and traditional societies that hold indigenous knowledge strongly believe in sharing knowledge and consider it a part of the public domain.³¹ Therefore, the concept of monopoly is a strange concept to the indigenous and local communities who traditionally hold indigenous knowledge.

The question of ownership in connection with Intellectual Property Right became a contentious issue only when the 'secondary innovators' started the practice of converting the traditional knowledge into modern inventions under the relevant Intellectual Property Right statutes. In addition to this, regarding innovations, Intellectual Property Right recognizes property rights only in respect of inventions and not for discoveries.³² Therefore, in the existing mechanism of Intellectual Property Right, there is no room for the custodians of indigenous knowledge or the suppliers of vital information on indigenous knowledge.

iv. Economics Analysis: - Another aspect is that of information economics. Since indigenous knowledge is knowledge that has already been produced, it can be argued that there is no need to protect this right through intellectual property protection. This is because knowledge or information once produced is a public good. The diffusion of the information among the members of the society can be achieved at negligible marginal cost and thus the optimal equilibrium price for such information should be close to zero. The already produced indigenous knowledge is such an information pool, which could and should be made available freely to potential users like

³¹ Naomi Roht-Arriaza, "Of Seeds and Shamans: The Appropriation of the Scientific and Technical Knowledge of Indigenous and Local Communities," 17 *MICH.J.INT'LL* 926 (1996).

³² See, *Diamond v. Chakrabarty*, 447 U.S.303 (1980) wherein it was held that patent can be granted only if there is human intervention.

researchers or firms. This economic analysis would prevail if the knowledge could be provided at negligible costs.³³ Thus Indigenous knowledge fails the set criteria of information economics.

The contrasting characteristics of Intellectual property and indigenous knowledge can thus be summarized as under in the words of Daniel Gervais.

Intellectual property protection, in the form of copyrights, trademarks, designs and patents usually applies to

- a) An identifiable author, inventor or other originator who will be individually rewarded,
- b) An identifiable work, invention or other object; and
- c) Defined restricted acts.

Indigenous knowledge does not fit well within these three characteristics of intellectual property rights. There are rarely well-identified authors or inventors of creations, inventions and knowledge passed on and improved from one generation to the next. The knowledge is sometimes nebulous and hard to circumscribe for the purpose of a patent application or to identify as one or more copyrighted works. Finally, the types of acts that indigenous communities want to prevent are not necessarily those that propitiation provides. For instance, benefit-sharing obligations, which can be based on ethical standards, or national or international legal norms, or a combination thereof, resemble more a liability-type regime, or perhaps a compulsory license, than a full intellectual property right, in large part because they do not include a right to exclude/prohibit.³⁴

g) Limitations in Intellectual Property Laws to Protect Indigenous Knowledge:

The nature of Indigenous Knowledge as expressed in expressions of folklore Indigenous Knowledge art shows that Intellectual Property Rights is inadequate to provide the protection needed for Indigenous Knowledge.³⁵ The copyright law as it exists is meant to reward individual efforts by excluding the use of others.³⁶ Its Origin lies in western roots³⁷ and it

³³Hirschleifer and Riley, *The Economics of Uncertainty and Information* 97 (Cambridge University Press, 1995).

³⁴ Daliel Gervais, "T.K and I.P: A TRIPS Compatible Approach" 139 (Michigan State Law Review-Spring 2005).

³⁵*Ibid.*

³⁶ Juan Andres Fuetes, "Protecting the rights of Indigenous cultures under the current Intellectual Property system: Is it a good idea?", *ICFAI Journal of Intellectual Property Rights*.

³⁷ The first copyright act in the world was passed in 1710, called the Statute of Anne, which arose with the establishment of the printing press.

places emphasis on individual efforts and has requirements as to originality, fixation, limited duration of protection and an economic focus on remedies. However, Indigenous Knowledge like folklore is usually derived from the efforts of the community and passed on from generations. This leads to problems of vesting of rights as the Intellectual Property regime vests rights in the individual and not the community. The Australian case *Yumbulal v. Reserve Bank of Australia*³⁸ showed how individual notion of copyright law is difficult to reconcile with Indigenous interests. In this case, the court stated that the copyright Act did not provide adequate protection to the community to regulate works that were essentially communal in origin.³⁹ The court rejected the claim of the aboriginal artist whose artwork was printed on the currency note, that he had an obligation to the clan to prevent the use of the art work in a culturally abusive manner. The court in arriving at the decision only relied on the terms of the contract between the bank and the individual artist.⁴⁰ Hence, the court expressed the limitations of Intellectual Property Rights to recognise communal ownership to property. In granting such a decision the court had to completely ignore the customary laws of the aboriginal people thus, showing a larger failure of Intellectual Property Rights that is based on western narrative to accommodate or completely ignore other types of narratives.⁴¹ Copyright law requires some degree of originality, which expressions of folklore may lack, as in many cases it is the faithful reproduction of the work of art that is accorded primacy to preserve the culture. The limited duration of protection afforded by copyright law is to ensure a balance between the labour produced by an individual and the competing demands of the public domain.⁴² But folklore is characterized by a process of development over a period of time that is indeterminate and is passed on across generations, thus, preserving the culture of the community. Hence placing a fixed time for its protection actually goes against the very process of development of folklore and against the aspirations of indigenous people. Further, the Intellectual Property Rights assumes that the individual has the means to enforce the protection afforded through the process of litigation, and also emphasizes on economic or commercial value to the work, in the process forgetting that

³⁸ (1991)21 IPR 481.

³⁹ Megan M. Carpenter, "Intellectual Property Law and Indigenous People: Adopting Copyright Law to the needs of a Global community" 7 *Yale Human Rights and Development Journal* 51(2004).

⁴⁰ *Ibid.*

⁴¹ Chidi Oguamanam, "Localizing Intellectual property in the Globalization Epoch: The Integration of Indigenous Knowledge" 11 *Indiana Journal of Global Legal Studies* 135 (2004).

⁴² Robert K. Paterson and Dennis S. Karjala "Looking beyond Intellectual Property in Resolving Protection of the Intangible Culture Heritage of Indigenous Peoples" 11 *Cardozo Journal of International and Comparative Law* 633(2003).

many indigenous people either lack the means or the financial strength to enforce their rights in a Court of law.

This problem of Intellectual Property Rights to accommodate indigenous interests is not limited to copyright law but can also be seen in patent law. Much Indigenous Knowledge, for example with regard to medicinal uses of plants, exists in oral form and cannot be easily transcribed to written form.⁴³ But patent law prescribes various requirements like written form and the ability of the knowledge to be interpreted in a technological or scientific sense.⁴⁴ Intellectual Property Rights is based on a process of knowledge generation which provides for certain criteria and hence does not account for the cultural context in which the knowledge is generated, due to which it fails to protect Indigenous Knowledge.

2. II. Indigenous Knowledge as a source for innovation:

In a strict sense, innovation refers to the creation of new scientific and technical knowledge to successfully commercialize new products (goods, services) or new ways to produce, sell or deliver new products (process, organizational, and marketing innovations). Radically new innovations are more common in high technology manufacturing or knowledge-intensive service sectors. Literature on management and economics of innovation generally adopt this definition to study the dynamics of innovation.⁴⁵ However, we argue that in the context of developing countries, adopting a broader approach allows for a better understanding of innovation in development.⁴⁶

In a wider context, innovations include those that may be new in the particular context, but not necessarily new to the world. They may also not have commercial value, but significantly improve people's livelihoods.⁴⁷ Innovation is an avenue for problem solving. Innovations can be directed to address complex problems such as adaptation to climate change to satisfying the basic needs of the poorer population such as access to food, clean

⁴³ *Ibid.*

⁴⁴ *Ibid.*

⁴⁵ Daniel J Gervais, *Intellectual Property Trade and Development* 49 (CPI Group (UK) Ltd, Croydon, 2nd edn, 2014).

⁴⁶ Development economists and economic historians give a central role to technological change more broadly. See A Gerschenkron, *Economic Backwardness in Historical Perspective :A Book of Essays* 276 (Frederick Praeger Publishers, 1962)

⁴⁷ Some social welfare enhancing innovations don't happen because of market failure-lack of commercial incentives for private R&D investment- yet still merit being promoted. An example is medical products for poverty related diseases. See V Munoz, F Visentin, D Foray and P Gaule, Can Medical Products be Developed on a Non Profit Basis? 443 (Exploring Products Development Partnersh Intellectual Propertys for Neglected Diseases, Science and Public Policy, 2014).

water, and housing. Developing countries should initiate innovations building on their unresolved problems and unfilled needs.⁴⁸

Promoting innovations specifically directed at the needs of the poor is gaining broader attention in the discourse of innovation policy for development.⁴⁹ It responds to a limitation of the conventional approach, whereby innovation is associated to higher productivity and thereby economic growth, irrespective of effects on inequality and poverty. Concepts such as ‘inclusive innovation’, ‘pro-poor innovation’, and ‘grass-roots innovation’ are employed to refer to innovations that meet needs and provide affordable access to the poorer segments of society and may be developed locally.⁵⁰

The sources for innovation are varied, external or internal to the economy or firm. These include science and technology based activities such as research and development (R&D), development of human capital (education, training), and the acquisition, adaptation, and use of external technology.⁵¹ In the context of developing countries, innovation policy usually emphasizes acquisition and mastery of foreign technology. However, assimilating and reproducing complex technology is a difficult process. It requires knowledge-cognitive capabilities—that is not easy to articulate explicitly or to transfer to others.⁵² Moreover, accumulated prior knowledge is necessary to assimilate and use new knowledge-absorptive capacity.⁵³ In this sense, active learning, using and transforming prior existing knowledge, and accumulating experience, are critical components for building capabilities for innovation and relevant to any sector of the economy.⁵⁴ Innovation is a pioneering activity.⁵⁵ Broadly viewed, innovation is rooted in everyday activities in firms and in the competencies and capabilities

⁴⁸ BA Lundvall, B Gregersen, B Johnson, and E Lorenz, *Innovation systems and Economic Development* 63 (Aalborg University, 2011).

⁴⁹ MA Dutz, *Unleashing India’s Innovation: Toward Sustainable and Inclusive Growth* (World Bank, 2007); P Mohnen and M Stare, “The Notion of Inclusive Innovation”, Policy Brief No 15, High Level Economic Policy Expert Group, Innovation for Growth (i4g), (European Commission, Washington: World Bank, 2013)

⁵⁰ Megan M. Carpenter, “Intellectual Property Law and Indigenous Peoples: Adopting Copyright Law to the needs of a Global community” 7 *Yale Human Rights and Development Journal* 51(2004).

⁵¹ *Ibid.*

⁵² P David and P Foray, “*Economic Fundamentals of the Knowledge Society*” 1 (1) *Policy Futures in Education* 20-49 (2003).

⁵³ WM Cohen and DA Levinthal, “Absorptive Capacity: A New Perspective on learning and Innovation” 35(1) *Administrative Science Quarterly* 28-52 (1990).

⁵⁴ On the role of accumulating experience, see C Freeman and L Soete, “Developing Science, Technology and Innovation Indicators: What we can learn from the past” 67 Working paper series, UNU-MERIT, United Nations University, Maastricht, (2007).

⁵⁵ L Kim and R Nelson, ‘Introduction’ in Kim and Nelson (eds), *Technology, Learning and Innovation: Experiences of Newly Industrialized Economies* 55 (Cambridge University Press, 2002).

of ordinary people.⁵⁶ Accordingly, in designing innovation policy, developing countries should draw on, rather than neglect or destroy the existing knowledge base and competences.

Capabilities for innovation in developing countries are rooted in two distinct knowledge systems that are relevant to different types of innovations.⁵⁷ Building scientific, formal knowledge is important to develop capabilities for technical, knowledge-intensive innovation and tapping into global knowledge. Traditional Knowledge, on the other hand, is a source of valuable knowledge on uses of natural resources for health, food and other uses that are important for local livelihoods and rural development, but may as well have modern applications in fields such as pharmaceuticals and biotechnology.⁵⁸

Traditional Knowledge is rarely integrated into innovation policies in developing countries. We advance that the design of innovation policy in developing countries should support Traditional Knowledge-based innovations in two ways. On the one hand, innovation policy should consider how to support innovation within Traditional Knowledge systems for the benefit of the local communities and indigenous peoples that hold and depend on such knowledge. On the other hand, innovation policy should also consider how to promote and build capabilities to use Traditional Knowledge as a source of modern innovation for growth in a way that empowers Traditional Knowledge holders. In both contexts, connections need to be made among related and at times conflicting policies (i.e. development policy, public health policy, industrial policy, trade policy, Intellectual property policy) and institutions (i.e. laws, codes of conduct, governance structures).⁵⁹ Thus, in order to manage the interactions among both Traditional Knowledge holders and the diversity of users of Traditional Knowledge it is necessary to build appropriate institutions to reduce the uncertainties that surround knowledge sharing.

a) Traditional Knowledge Innovation within Traditional Knowledge Systems:

The notion of ‘traditional’ or ‘indigenous’ knowledge systems broadly refers to a body of knowledge that has been build up over time and is held locally by a group of people that

⁵⁶ BA Lundvall, B Johnson, ES Andersen, and B Dalum, “National Systems of Production, Innovation and Competence Building” 31 *Research Policy* 213-31 (2003).

⁵⁷ A Agarwal, “Dismantling the Divide between Indigenous and Scientific Knowledge, Development and Change” 26 *JILI* 413-39 (1995).

⁵⁸ Megan M. Carpenter, “Intellectual Property Law and Indigenous Peoples: Adopting Copyright Law to the needs of a Global community”, 7 *Yale Human Rights and Development Journal* 51. (2004).

⁵⁹ R Nelson and B Sampat, “Making Sense of Institutions as a Factor Shaping Economic Performance” 44 *J of Economic Behaviour and Organization* 31-54 (2000).

informs shared understandings, beliefs, practices, social interactions, etc.⁶⁰ Traditional Knowledge may be explicit (such as expressed in writing, code, or language) or tacit (cannot readily be expressed, know-how). Explicit forms of Traditional Knowledge can be tangible (i.e. products such as medical remedies, or expressions of Traditional Knowledge as art, crafts) or intangibles (i.e. rituals, stories, songs that are not codified and rather passed on). Traditional Knowledge is generally of a collective nature, produced, shared, known and practiced by all members of the Traditional Knowledge community. Some forms of Traditional Knowledge, particularly which is considered sacred (of special spiritual value) may be kept closely guarded within the Traditional Knowledge community, such as a spiritual leader.⁶¹ Traditional Knowledge informs local decision-making and practice in many areas, including health (i.e. medicinal preparations on the basis of plants), and use and management of resources such as land, forest, water, plant, and animals (i.e. farming, grazing, water conservation, woodland, and livestock management)

Knowledge production in Traditional Knowledge systems is not static, but rather evolves over time in the local context. The Traditional Knowledge community is affected by changes in the ecosystem and external factors that may also impact the knowledge base, in particular the need for innovations.⁶² Innovations are built on prior knowledge, practices, and experience. Traditional Knowledge that is tacit is embedded in the members of the community. Therefore, the reproduction of Traditional Knowledge that is tacit depends on the social cohesion of the Traditional Knowledge community.

De-learning and loss of knowledge is associated to accelerated globalization and changing society. Changing lifestyles also render some forms of Traditional Knowledge, such as knowledge in relation to use of natural resources, less relevant to the community when the knowledge can no longer be relied on for livelihood support.⁶³ It would appear then that efforts to promote Traditional Knowledge innovation for the benefit of Traditional Knowledge communities would be best directed at giving means to Traditional Knowledge

⁶⁰ G Dutfield, *Legal and Economic Aspects of Traditional Knowledge* 44 (Cambridge University Press, 2005).

⁶¹ D Gervais, "Spiritual but not Intellectual? The protection of Sacred Intangible Traditional Knowledge" 11 *Cardozo J of International and Comparative Law (JICL)* 467 (2003).

⁶² For example, adaptation to effects of Mutually Agreed Terms change, including soil erosion and degradation, deforestation, and changing patterns of rainfall and droughts.

⁶³ J Briggs, "The use of Indigenous Knowledge in Development: Problems and Challenges" 5(2) *Progress in Development Studies* 99-114 (2005).

communities to preserve their way of life that has increasingly come under pressure from socio-economic perturbations.⁶⁴

Nonetheless, science-based knowledge can be relevant to Traditional Knowledge communities. Modern innovations can be used and adapted by local communities to fit their local needs, such as introducing new technology to increase productivity in traditional farming practices.⁶⁵ However, external interventions to local communities often fail because it is often assumed that introducing innovations is desirable and will be beneficial even if there was no demand or involvement by the expected beneficiaries.⁶⁶ Today, informed by new understandings of the innovation process, it is clear that technology transfer itself is sufficient because of the tacit knowledge and required prior knowledge, and because the innovation may not be accepted in the eyes of the local community. Involving local communities in planning all stages of technology transfer is critical. Legally empowering Traditional Knowledge communities is also important to allow them more generally to make free and informed choices with regards to how they relate to the outside world, i.e. participation with external institutions such as the market economy, and other knowledge systems.⁶⁷

b) Traditional Knowledge Innovation Beyond the Local Context:

Knowledge and innovations produced within Traditional Knowledge systems can also have applications beyond the Traditional Knowledge community for the benefit of broader society. The value of adaptation and innovation processes that take place within Traditional Knowledge systems for biodiversity conservation is recognized in International Law.⁶⁸ Traditional farming practices involving saving and exchange of seeds have historically contributed to the progressive improvement and conservation of plant genetic resources on

⁶⁴ C Correa, *Protection and Promotion of Traditional Medicine: Implications for Public Health in Developing Countries* 98 (South Centre, Geneva, 2002).

⁶⁵ Protecting and promoting Traditional Knowledge, available at: <http://www.mssrf.org>, (last Visited on January 23, 2014)

⁶⁶ Given the history of exploitation and lack of recognition of rights, many indigenous groups and other Traditional Knowledge communities have become highly sceptical of external interventions.

⁶⁷ Rights of Indigenous peoples, including self-determination, are recognized in convention 169 of the International Labour Organization (ILO) to date ratified by twenty countries and the U.N Declaration on the Rights of Indigenous Peoples .

⁶⁸ See Art 8(j) of the Convention of Biological Diversity (CONVENTION ON BIOLOGICAL DIVERSITY) and Art 9 of the UNFAO of the ITPGRFA

farms for food and agriculture.⁶⁹ Traditional medicine also plays an important role in public health, particularly in developing countries where it is often the sole or main source of care.⁷⁰

Traditional Knowledge is also a source of knowledge for innovations that take place outside the Traditional Knowledge community. In particular, knowledge related to the properties and use of biological resources can be used for scientific research or for commercial development of products and services in a number of industries including food, agriculture, forestry, cosmetics, bio-pesticides, pharmaceuticals, nutraceuticals and ecotourism.⁷¹ Many modern medicines have been developed from plant sources and associated knowledge, and it is increasingly possible with biotechnology and synthetic biology.⁷² It is estimated that 20-25% of pharmaceutical products are derived from genetic resources, in a market which is worth US\$640 billion.⁷³

i. Access and benefit-sharing legislation:

The activities of third parties (i.e. academics, scientists, commercial bio prospectors, firms) that access or use Traditional Knowledge as a base for subsequent research or innovation are increasingly subject to regulate at international and national level. This is the case in particular for Traditional Knowledge that is associated to biological resources. Lack of compliance, often due to lack of awareness, can lead to financial and other sanctions, even imprisonment.⁷⁴

At the international level, developing Nations Governments have sought after to institute mechanisms to accumulate a share of the benefits-especially pecuniary derived from the use of natural resources and associated Traditional Knowledge, under influence of equity and fairness. It is apparent that the benefits of bio-prospecting and related activities have accrued

⁶⁹ M Altieri and L Merrich, "In situ Conservation of Crop Genetic Resources through Maintenance of Traditional Farming systems" 41 (1) Economic Botany 86-96 (1987).

⁷⁰ The WHO defines traditional medicine as 'the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, - in the maintenance of health and in the prevention, diagnosis, improvement or treatment of physical and mental illness'. The use of traditional medicine is widespread, including over 100 million Europeans that are using traditional and complementary medicine (WHO document EB134/24).

⁷¹ Traditional knowledge and Intellectual Property – Background Brief – WIPO, available at: <http://www.wipo.int>pressroom>briefs>tk>ip> (last visited on July 29 2013).

⁷² G M Cragg and D Newman, "Natural Products: A Continuing Source of Novel Drug Leads" 1830 (6) Biochimica et Biophysica Acta (BBA) 3670-95 (2013).

⁷³ T Greiber, S Pena, M Ahren, J Nieto, E Kamau, J Cabrera, M Olivia and F Perron, *An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing* 55 (IUCN, Gland, Switzerland, 2012).

⁷⁴ Towards an access and benefit sharing framework agreement for the genetic resources and traditional knowledge of the Hindu kush, available at : <http://www.icimod.org>resource> (last visited on January 24,2014)

mainly to develop Nations, while the natural resources and associated Traditional Knowledge lie mainly in budding Nations.⁷⁵

As a result of the negotiations that led to the Convention on Biological Diversity (CBD) in 1993, it was agreed that the objective of biodiversity conservation was to be achieved through sustainable use of biological resources. The Convention on Biological Diversity established that governments have sovereign rights over their natural resources, including genetic resources found in their territory, and the authority to regulate access to genetic resources whether for commercial or non-commercial purposes.⁷⁶ The Convention on Biological Diversity text does not include obligations on regulating access to Traditional Knowledge associated to genetic resources.

In a case where a government chooses to standardize admission to genetic resources, the C.B.D specifies least requirements, though there can be a multiplicity of approaches and mechanisms for execution.⁷⁷ Users should obtain the prior informed consent of the provider, and the provider and user should agree to mutually agreed terms for access, usually in the form of contracts.⁷⁸ In this context, the provider is usually a designated government authority under national law. However, the provider may rather, or in addition, be a Traditional Knowledge community when national legislation recognizes rights of Traditional Knowledge communities to genetic resources in their territory. It may also be the case when under national law, access and use to Traditional Knowledge associated to genetic resources requires that users obtain prior informed consent from relevant Traditional Knowledge community and establish mutually agreed terms for access. Currently, a number of countries have national legislation in place on access and benefit sharing in accordance to the Convention on Biological Diversity principles.⁷⁹

⁷⁵ Daniel J Gervais, *Intellectual Property Trade and Development* 320 (CPI Group (UK) Ltd, Croydon, 2nd edn, 2014).

⁷⁶ Convention on Biological Diversity, Arts 3 and 15(1). Before the Convention on Biological Diversity, genetic resources could be freely accessed, used and exchanged.

⁷⁷ It is worth noting that a separate international agreement, the International Treaty on Plant Genetic Resources for Food and Agriculture, regulates access and exchange of selected genetic resources that are considered of particular importance for food and agriculture. The multilateral system under the treaty works on the basis of facilitated access in return for benefit-sharing, similar to the CBD objectives. A difference is that benefit sharing in the multilateral system is understood to derive from the open sharing of plant genetic resources through the system. The contribution of Traditional Knowledge (farmer communities) is recognized in the form of 'farmer's rights'. There are no concrete obligations, yet governments are encouraged to promote their exercise in national law.

⁷⁸ See Convention on Biological Diversity, Art 15(4) and (5).

⁷⁹ Biological Diversity Benefits, available at: https://www.Convention.on.Biological.Diversity.int/access_and_benefit_sharing/measures/groups.html; (Last visited on January 24,2014).

The Convention on Biological Diversity does not include obligations of prior informed consent and benefit sharing on mutually agreed terms with respect to Traditional Knowledge associated to genetic resources or genetic resources held by Traditional Knowledge communities. It does, however, impose a general obligation on governments concerning Traditional Knowledge, while not defining the concept and leaving ample flexibility for its implementation in national law.⁸⁰ Interestingly, Article 8(j) is not limited to Traditional Knowledge associated to genetic resources, but uses broader language of knowledge, practices and innovations that are relevant to conservation and sustainable use of biodiversity. This broad scope potentially allows governments in national law to envisage a number of means to fulfil the Article 8(j) objectives, not only limited to the concepts of prior informed consent and mutually agreed terms for benefit sharing. Some have observed that Traditional Knowledge communities were highly sceptical of the Convention on Biological Diversity government-centric and contractual approach, having been marginalized from related processes in the past, if not totally excluded.⁸¹ Nevertheless, soon after the entry into force of the Convention on Biological Diversity, parties agreed to devise a more specific work plan for the implementation of Article 8(j) with input from Traditional Knowledge communities.⁸² This process paved the way for agreement to include Traditional Knowledge associated to genetic resources in the scope of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from the Utilization of Genetic Resources of the Convention on Biological Diversity (Nagoya Protocol) that was adopted in 2010.⁸³ The Nagoya Protocol effectively extends the Convention on Biological Diversity access obligations of prior informed consent and benefit sharing on mutually agreed terms to Traditional Knowledge associated to genetic resources and to genetic resources held by Traditional Knowledge communities, if these rights are recognized in national law (government can choose whether or not to do so). The Nagoya Protocol also creates new

⁸⁰ Article 8(j) specifies that ‘ Each contracting party shall, as far as possible and as appropriate: subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyle relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge innovation and practices’.

⁸¹ D Posey and G Dutsfield, *Beyond Traditional Knowledge, Toward Traditional Resource Rights for Indigenous Peoples and Local Communities* 198 (IDRC, Ottawa, 1996).

⁸² See Convention on Biological Diversity conference of the parties (COP) 4 Decision IV/9

⁸³ See Nagoya Protocol, Article 3.

obligations on governments to put in place measures to track, monitor and ensure compliance with national access and benefit sharing laws or regulations⁸⁴

Importantly, the Nagoya Protocol requires that national access and benefit sharing laws take into account indigenous and local communities, customary laws, community protocols and procedures, as applicable, with respect to Traditional Knowledge associated with genetic resources.⁸⁵ Within Traditional Knowledge communities' access and use of Traditional Knowledge is regulated through distinct customary laws. The problem lies in that these are not legally enforceable against persons outside of the community.⁸⁶ Thus, certain acts or practices of third parties can be contrary to customary law and perceived as unfair, yet effectively they may be lawful, unless national law establishes otherwise. The types of acts referred to may be of very different nature, and concerning various forms of Traditional Knowledge (knowledge, information, practices, and expressions). These include access to Traditional Knowledge associated to genetic resources without prior informed consent; use of Traditional Knowledge associated to genetic resources for commercial purposes without mutually agreed terms for benefit sharing, the granting of patents over inventions derived from Traditional Knowledge and documenting or publishing information on Traditional Knowledge.⁸⁷

The implementation of the Convention on Biological Diversity and Nagoya Protocol access and benefit sharing framework in national law is thus a central mechanism by which governments can empower Traditional Knowledge communities in relation to third parties. However, the Convention on Biological Diversity and Nagoya Protocol do not address the range of concerns of Traditional Knowledge communities.⁸⁸ Moreover, as international instruments, they are necessarily the outcome of compromises made among contrasting positions. User countries sought facilitated access, while provider countries instead aimed at international standards for regulating access and utilization of genetic resources and associated Traditional Knowledge. As products of compromise, the Convention on Biological Diversity and Nagoya Protocol provide considerable leeway for national law to define how

⁸⁴ G Singh, *The Nagoya Protocol on ABS of Genetic Resources: Analysis and Implementation options for Developing Countries* (2011) (Research Papers 36, South Centre, Geneva)

⁸⁵ See Nagoya Protocol, Article 16.

⁸⁶ This is the case unless national law recognizes and extends customary laws to apply to third parties outside the community. For further discussion, see World Intellectual Property Organization, 2013.

⁸⁷ Daniel J Gervais, *Intellectual Property Trade and Development* 322 (CPI Group (UK) Ltd, Croydon, 2nd edn., 2014).

⁸⁸ *Ibid.*

the obligation will be implemented. They also include ambiguous language that is open to competing interpretations. This means that national laws will continue to substantially diverge on whether and how they regulate the activities of users of genetic resources and associated Traditional Knowledge⁸⁹ Thus we again stress the point that further implementation in national access and benefit sharing laws and related laws is necessary, informed by broad consultations with Traditional Knowledge communities and users.

The exchange of knowledge among traditional and science based knowledge systems requires supportive institutions that are perceived to be fair and legitimate among those involved in the exchange. The implementation of the Convention on Biological Diversity and Nagoya Protocol in national laws is Indigenous Knowledge to increase the legal certainty surrounding use of Traditional Knowledge associated to genetic resources for innovation for both providers and users, though not without controversy and tension for some time. National access and benefit sharing legislation is very recent, if any at all, in most provider and user countries. Supportive governance structures are yet to be established to facilitate prior informed consent and mutually agreed terms transactions, as well as mechanisms for greater involvement of and provision of timely information to Traditional Knowledge communities to exercise rights conferred in relation to Prior Informed consent and mutually agreed terms. The contractual approach to mutually agreed terms with respect to Traditional Knowledge is particularly complex for a number of reasons. These include the power imbalances among the contracting parties particularly when Traditional Knowledge communities are directly negotiating mutually agreed terms with users, asymmetric information concerning for example the value of the Traditional Knowledge for the user, and uncertainty concerning whether any innovation will take place at all (for instance in the case of Traditional Knowledge as a source for new pharmaceutical products) that makes it difficult to estimate ex ante the monetary or other benefits to be eventually shared. A key role of government authorities overseeing access and benefit sharing laws is to promote greater awareness and understanding of access and benefit sharing laws, requirements and procedures.⁹⁰

National access and benefit sharing laws also have yet to find their right place in the broader context of government policies and priorities, particularly with regards to building

⁸⁹ For example, a proposed regulation by the European Commission in implementing the Nagoya Protocol has stirred wide debate, particularly on Mutually Agreed Terms on which the protocol arguably remains ambiguous, such as whether utilization of genetic resources extends to derivatives and the temporal nature of the instrument. See Berne Declaration and Natural Justice, 2013.

⁹⁰ D Posey and G Dutsfield, *Beyond Traditional Knowledge, Toward Traditional Resource Rights for Indigenous Peoples and Local Communities* 198 (International Development Research Centre, Ottawa, 1996).

domestic capabilities for technological innovation. There continues to be lack of coherence among access and benefit sharing regulations with other policies and regulations, which may explain the slow pace of implementation of national access and benefit sharing laws in developing countries. For instance, in some developing countries the authority for overseeing access and benefit sharing related matters may fall within the exclusive mandate of a single authority, i.e. Ministry for the Environment, and implemented in a completely independent manner, disconnected from the objectives of and implementation of related policies, laws and regulations in areas such as science and technology, innovation, intellectual property, public health, etc.⁹¹ National access and benefit sharing legislations can support useful innovation from taking place, but require clarity on the policy objectives and how the obligations and procedures are to be implemented so as not to deter innovation. For example, it has been noted that the decline in bio-prospecting activities for drug research has been related to uncertainty in national access and benefit sharing laws.⁹²

c) Intellectual Property Rights and Traditional Knowledge-Based Innovation:

The exercise of Intellectual property rights in respect to Traditional Knowledge-based innovations are one of the most controversial aspects in the interaction of Traditional Knowledge systems and science-based systems.

Intellectual property is a legal instrument that has become an institution within science-based systems, yet remains mostly foreign to Traditional Knowledge systems. Government Intellectual Property policy is aimed at creating incentives to innovation. Intellectual Property protections in the form of time-limited exclusive rights with respect to inventions or works, is widely used by firms and individuals to appropriate returns from innovation and deter imitation.

Amongst the key problems that arise with respect to the granting of Intellectual Property Rights on Traditional Knowledge-based innovations is that third parties can, in some circumstances, gain Intellectual Property Rights on creations and inventions based on Traditional Knowledge, often without the consent of Traditional Knowledge communities, and without any benefit accruing back to the Traditional Knowledge communities or to host

⁹¹ Developing country governments could explore the establishment of an inter-ministerial coordination mechanism, such as that which has been implemented in Brazil with respect to decision making concerning public health.

⁹² P Sampath, *Regulating Bioprospecting: Institutions for Drug Research Access and Benefit-sharing* (New York, United Nations University, 2005).

governments. Moreover, Traditional Knowledge that is disclosed in written, oral, or any form outside the community is often considered within the Intellectual Property system to be in the ‘public domain’, that is, free for anyone to use. The growing number of patents granted over plant biological resources for uses that have long been known and practised in Traditional Knowledge systems, for instance ayahuasca, turmeric, neem and enola bean, to name only a few, increased activism from Traditional Knowledge communities and developing country governments against what is described as ‘biopiracy’. Tackling misappropriation of Traditional Knowledge through the Intellectual Property system is hence one of the main objectives pursued in the ongoing policy debates and international negotiations on the need to ‘protect’ Traditional Knowledge. However, defining legally what effectively constitutes misappropriation is far from straightforward. In this respect, different situations may arise, depending, for example, on whether the Traditional Knowledge has been disclosed outside the local context, whether Intellectual Property Rights have been acquired on the Traditional Knowledge and whether compensation was provided to the Traditional Knowledge communities.⁹³

Each distinct situation requires separate analysis to determine adequate solution. For example, for situations concerning patenting of Traditional Knowledge in the public domain, the problem is directly related to the functioning of the Intellectual Property system, in the sense that proper patent examination should reveal the Traditional Knowledge in the public domain as prior art. When this is not the case, it may be very costly and difficult for Traditional Knowledge communities that do not have knowledge of the Intellectual Property system to challenge a granted patent. To improve prior art searches for Traditional Knowledge in the public domain, developing countries have been producing databases of such knowledge, such as the Indian Traditional Knowledge Digital Library. However, the emphasis on database development places the burden on the country and Traditional Knowledge communities to prove their knowledge is in the public domain, rather than on patent offices to establish the lack of prior art. In addition, such databases raise concerns of access to the database and further dissemination of knowledge.⁹⁴

The implementation of national access and benefit sharing laws could also require some form of benefit sharing or compensation from exploitation of the patent-protected Traditional

⁹³ Daniel J Gervais, *Intellectual Property Trade and Development* 324 (CPI Group (UK) Ltd, Croydon, 2nd edn., 2014).

⁹⁴ *Ibid.*

Knowledge-based innovation, irrespective of whether Traditional Knowledge is in the public domain.⁹⁵In the context of the review of the TRIPS Agreement, Article 27(3) (b) and in ongoing negotiations within the WIPO Intergovernmental Committee on I.P and Genetic Resources, T.K and Folklore, developing countries are seeking to link the ABS framework of the CBD and Nagoya Protocol with the I.P system, for example, by making it mandatory that patent applications disclose the origin and/or source of genetic resources and associated TK, for inventions based on or using genetic resources or knowledge. Many countries thus include a mandatory disclosure requirement with regards to genetic resources and associated Traditional Knowledge in patent or other national Laws (i.e. environment).

i. Use of Intellectual Property Rights for innovations within Traditional Knowledge systems:

Significant policy debate and academic attention has been given to the question of whether the use of Intellectual Property tools should be promoted to protect innovations and creations that stem from within Traditional Knowledge systems.⁹⁶While the role of Intellectual Property Rights tools is mainly to provide incentive to and reward innovation, in the discussion on the role of Intellectual Property Rights for the protection of Traditional Knowledge, various other have been advanced. These include recognizing and compensating the creators and possessors of Traditional Knowledge, to allow Traditional Knowledge holders to gain economic benefits from exploiting their innovations and works, participating Intellectual in global markets for knowledge, and preventing Traditional Knowledge from being considered in the public domain. The use of Intellectual Property tools to promote innovation should however be used in parallel with other initiatives and principles, such as empowering Traditional Knowledge communities to maintain their traditional lifestyles and context in which these innovations have historically taken place, including through the recognition of their rights to self-determination and development.

Traditional Knowledge is a creation of the human mind, and therefore can be protected by Intellectual Property Rights; however, it does not fit easily within the Intellectual Property system. This is because of the specific characteristics of Traditional Knowledge as well as the

⁹⁵ Developing countries sought to explicitly include Traditional Knowledge in the public domain within the scope of the Nagoya Protocol, but agreement was not reached. The Protocol is thus silent on this issue and makes no distinction between Traditional Knowledge in the public domain and Traditional Knowledge that has not been disclosed. Accordingly, national access and benefit sharing laws can define how to address the issue. See Singh ,P. 73.

⁹⁶ T Cottier and M Panizzon, “Legal Perspectives on Traditional Knowledge: The Case for Intellectual Property Protection” 7(2) *J of International Economic Law* 371-99; (2004).

fact that the concept of Intellectual Property Rights is alien to Traditional Knowledge systems and may be inappropriate or incompatible with their beliefs and practices. Moreover, some forms of Traditional Knowledge are considered to be the ‘public domain’ from an Intellectual Property perspective.⁹⁷

Nonetheless, existing Intellectual Property tools to some extent can be useful and are being used in practice to protect Traditional Knowledge-based innovations. For example, patents can be granted to Traditional Knowledge-based innovations provided they meet the patentability requirements of novelty, inventiveness and industrial applicability.⁹⁸ Trademarks, certification, and collective marks, and G.I can be used to market products issued out of T.K-based innovations and to care for the status and concern associated with the Traditional Knowledge.⁹⁹ The law of unfair competition, including passing off, can be used to prevent various forms of misrepresentation¹⁰⁰ as well as false endorsement claims. Finally, trade secrets law can protect undisclosed information.¹⁰¹ In some instances, conventional Intellectual Property laws have also been adapted to provide some form of protection to Traditional Knowledge.

The limitations of Intellectual Property Rights to provide adequate protection to Traditional Knowledge and promote Traditional Knowledge-based innovations have also been extensively reviewed in literature.¹⁰² Difficulties that Traditional Knowledge communities face in practice in obtaining protection of Traditional Knowledge innovations through Intellectual Property Rights include meeting the criteria for Intellectual Property protection and costs of access to the system (i.e. fees). Moreover, in cases where Intellectual Property protection is gained, Traditional Knowledge communities may still face enormous

⁹⁷ Daniel J Gervais, *Intellectual Property Trade and Development* 322 (CPI Group (UK) Ltd, Croydon, 2nd edn., 2014).

⁹⁸ In China, for example, patents of innovations within the field of Traditional Chinese Medicine are common.

⁹⁹ D Zografos, *I.P and Traditional Cultural Expressions* (Edward Elgar, 2010); S Frankel, ‘Trademarks and T.K and Cultural I.P.R’ in GB Dinwoodie and MD Janis (eds), *Trademark law and Theory: A Handbook of Contemporary Research* (Edward Elgar, 2008); International Trade Centre UNCTAD/WTO (ITC) and WIPO, *Marketing Crafts and visual Arts: The Role of I.P: A Practical Guide* (ITC/WIPO, Geneva, 2013).

¹⁰⁰ For example, misrepresentation as to the source, where a defendant’s actions would give rise to a suggestion that their goods or services are those of the claimant’s, or that the goods or services of the claimant and the defendant are related; or misrepresentation as to control or responsibility of the claimant over the goods, where the defendant wrongly claims that there is a business connection between himself and the claimant.

¹⁰¹ See Australian case *Foster v. Mountford* (1976) 29 FLR 233. This case concerned a situation where an anthropologist had collected information, in confidence, from the Pitjantjatjara people in central Australia and published it in a book. The Supreme Court of the Northern Territory found that its publication amounted to breach of confidence.

¹⁰² C Correa, *Protection and Promotion of Traditional Medicine: Implications for Public Health in Developing Countries* (South Centre, Geneva, 2002); WIPO document WIPO/GRTKF/IC/9/INF/5, ‘The Protection of Traditional Knowledge: Revised Outline of Policy Options and Legal Mechanisms’ (2000).

difficulties in the commercialization of their innovations and their enforcement against third parties. Governments would need to support Traditional Knowledge communities to make effective use of Intellectual Property Rights, while ensuring that they are free to choose whether to claim Intellectual Property protection or not.¹⁰³

Shortcomings and limitations in existing and adapted Intellectual Property laws have prompted some countries and regions to set up sui generis systems¹⁰⁴ to cater to the unique character of Traditional Knowledge. At the international level, negotiations are underway within the World Intellectual Property Organization on a legal instrument to provide effective protection to Traditional Knowledge, traditional cultural expression and genetic resources. Sui generis frameworks may be inspired in Intellectual Property concepts that are extended to the particularities of Traditional Knowledge innovations,¹⁰⁵ or aim to offer a more holistic approach to safeguard of T. K, for example building upon customary law. Other approaches have also been advanced, for instance, to develop a compensatory accountability regime that would give T.K innovators compensation for a restricted time period rather than exclusive rights as in the Intellectual Property approach.¹⁰⁶

We have suggested that one of the key issues in the relationship of Intellectual Property and Traditional Knowledge is the use of Traditional Knowledge for innovations outside the Traditional Knowledge community that is done without the consent of communities or the sharing of benefits back to Traditional Knowledge communities derived from the commercialization of the innovations. While negotiations are continuing on defining common elements at the international level for the effective protection of Traditional Knowledge, we suggest that the synergies between the Intellectual Property system and access and benefit sharing frameworks should be further explored.¹⁰⁷

¹⁰³ Daniel J Gervais, *Intellectual Property Trade and Development* 326 (CPI Group (UK) Ltd, Croydon, 2nd edn., 2014).

¹⁰⁴ According to Black's Law Dictionary, Sui generis is defined as of its own kind or class; unique or peculiar.

¹⁰⁵ For a discussion on the problems with this form of sui generis Intellectual Property approach, including the identification of title-holders particularly where Traditional Knowledge is shared among the Traditional Knowledge community or among several Traditional Knowledge communities, the subject Matter of protection, criteria for eligibility and mores of acquisition, duration of protection, see C Correa, *Traditional Knowledge and Intellectual Property* (Quakers United Nations Office, Geneva, 2001) P.576

¹⁰⁶ J Reichman and T Lewis, *Using Liability Rules to Stimulate Local Innovation in Developing Countries. Application to Traditional Knowledge* in J Maskus and J Reichman (eds), *International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime* 453 (Cambridge University Press, 2005).

¹⁰⁷ Daniel J Gervais, *Intellectual Property Trade and Development* 322 (CPI Group (UK) Ltd, Croydon, 2nd edn., 2014).

There continue to be tensions in the interaction of science-based systems and Traditional Knowledge based systems that inhibit useful knowledge transfers from taking place in a manner considered legitimate. Governments are in the middle-as the responsible agents for introducing institutions that can effectively manage these tensions. One of the main sources of tension is the operation of Intellectual Property systems, used routinely in science-based system, which can come into conflict with the operation of customary law within Traditional Knowledge systems. Many measures are currently under exploration or implementation by governments though national experience is still recent. International policy discussions are also ongoing. One of the approaches studied was regulation on access and benefit sharing in regards to Traditional Knowledge associated to genetic resources. We also discussed the measures being explored from within the Intellectual Property system and the approach of establishing sui generis regimes for the protection of Traditional Knowledge.¹⁰⁸

Finally, two aspects of promoting innovation in the context of development have been highlighted. First, it is useful to understand innovation in a broad sense to include innovations that are new to the country or context and that can respond to particular development and local needs of the country and/or specific groups such as Traditional Knowledge communities. Often the discourse on innovation is disconnected from the realities of development. Secondly, policy discussions surrounding the protection of Traditional Knowledge and gaining a share of the benefits from bio-prospecting and other commercial activities from developing country biological resources are taking place in a disconnected manner from broader policies, and need to be conceptualized and integrated into developing country innovation policies and objectives.¹⁰⁹

¹⁰⁸*Ibid.*
¹⁰⁹*Ibid.*

2. III. Connecting Indigenous Knowledge and Intellectual Property through Biological Resources and Benefit Sharing:

Biological Resources and their exploitation are at the centre of global attention.¹¹⁰ More specifically, concerns over the exploitation of genetic resources have precipitated with the entry of the Convention on Biological Diversity, 1992. This Convention has brought together the concept of benefit sharing, indigenous knowledge and intellectual property.

After defining Indigenous Knowledge and considering international obligations for benefit sharing, this sub-chapter explores the intersection between two important issues: Indigenous Knowledge and Intellectual Property. The concept of Intellectual property has a long legal history with clear defined rules that have gained international acceptability. The numerous international conventions dealing with the various forms of Intellectual Property have culminated in world recognition of the important economic contribution such property makes. This has been achieved through the Agreement on TRIPS as adopted by the World Trade Agreement.¹¹¹

The concept of Indigenous knowledge, on the other hand, has been at the centre of much international debate with various indigenous peoples creating declarations and statements not only on general indigenous rights but specifically on biodiversity rights. The Convention on Biological Diversity recognises the importance of indigenous knowledge, innovations and practices in the processes of conservation, sustainable development and benefit sharing. The investigations of the World Intellectual Property Organisation have reported the level of national recognition of such knowledge throughout the world resulting in the most recent report considering legal protection of Indigenous Knowledge.¹¹²

Before exploring the connection of Indigenous Knowledge and Intellectual Property, it would be appropriate if we first identify the parameters of the inquiry: the definition of the resources in question and the significance of benefit sharing.

a) Defining resources :

¹¹⁰ Consider various international reports and documents, including the World Conservation Strategy (1980), the ASEAN Convention (1985), the Brundtland Commission's Our Common Future (1987), Caring for the Earth (1991) and the Global Biodiversity Strategy (1992), as well as the collaborative efforts among scientists in the Asian region attempting to deal with this very issue.

¹¹¹ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights: A Global vision* 37, (Indian Law Institute, New Delhi, 2004).

¹¹² *Ibid.*

While there are many varying definitions for biological and genetic resources depending on the perspective taken, the definitions here will be limited to those definitions agreed in the Convention on Biological Diversity. Article 2 of the Convention on Biological Diversity provides these definitions as follows:

‘Biological resources’ are defined to include

‘Genetic resources, organisms, parts of organisms, populations and any other biotic component of an ecosystem with genuine or possible utilization or significance for humanity.’

‘Genetic resources’ are defined to comprise

Genetic substance of real or possible value

Genetic material’, in turn, is defined to comprise

Any supplies of flora, fauna, microbial or other source containing practical units of genetics.

In Australia, the Commonwealth State Working Group on Access to Australia’s Resources carefully restricted the definition of ‘biological resources’ to ‘materials, including genetic materials, of plant, animal, microbial or other non-human origin, with actual or potential use or value to humanity’.¹¹³ This is in recognition that biological resources derived from humans form a separate dimension from non-human biological resources and the intent of the Convention on Biological Diversity is to ultimately engage in the conservation and use of ecosystems around the world. However, it should be noted that the Convention on Biological Diversity definition has formally been adopted in Australian legislation in keeping with Australia’s international obligations under the Convention on Biological Diversity.¹¹⁴

Interestingly, though, the definition of ‘genetic resources’ can have a more expansive meaning if we are to accept the definition of the National Strategy for the Conservation of Australia’s Biological Diversity (1996) (‘The National Strategy’).¹¹⁵ This document defined ‘genetic resources’ to include ‘the genes and gene pools of native species...of plant, animal

¹¹³ Commonwealth-State Working Group on Access to Australia’s Biological Resources, *Managing Access to Australia’s biological resources: developing a nationally consistent approach: a discussion paper 12* (The Group, Canberra, 1996).

¹¹⁴ The Environmental Protection and Biodiversity Conservation Act, 1999, s.528.

¹¹⁵ The National Strategy for the Conservation of Australia’s Biological Diversity, (Department of Environment, Sport and Territories, Canberra, 1996), (‘The National Strategy’)

and microbial varieties produced by breeding and genetic manipulation from those genes or gene pools'.¹¹⁶ It is an interesting definition recognising the contribution of scientists, plant and animal breeders, and perhaps indigenous peoples, in the process of expanding the genes and gene pools of native species. Yet again, Australian legislation has ignored the views of its policy committees and adopted a definition which combines the Convention on Biological Diversity definitions of 'genetic resources' and 'genetic material'.¹¹⁷

Why bother considering Australian developments? Australia brings together the issues plaguing the relationship between the 'North' and the 'South'. By this the researcher is referring to the common parlance describing the tension between the predominantly northern hemisphere, industrialised nations and the predominantly southern hemisphere, financially poorer but biologically diverse nations. Australia is a biologically mega-diverse nation that finds itself in the 'South' but is simultaneously a developed nation. It is in this context that Australian examples of policy development, in relation to access and benefit sharing from the use of biological resources and associated Indigenous Knowledge has been referred.

b) The significance of benefit sharing:

The idea of benefit sharing from the utilization of biological resources arises in the context of the third objective of the Convention on Biological Diversity, found in Article 1:

For instance, the fair and reasonable involvement of the benefits arising out of the use of genetic assets, including by suitable access to genetic assets and by appropriate transfer of significant technologies, taking into account all rights over those resources and to technologies, and by suitable funding.

However, this objective must be read in conjunction with those provisions of the Convention on Biological Diversity that enable the Contracting Parties, nations, to take control over the same genetic resources. The Convention on Biological Diversity provides an opportunity for Contracting Parties to assert control over these resources by recognising the supreme rights of States over their natural wealth (Article 3) and the influence of those States to establish access to genetic resources using nationalized legislation. Article 15 paragraph 1 specifically states such recognition:

¹¹⁶ S.K Verma & Raman Mittal (eds.), Intellectual Property Rights :A Global vision 39, Indian Law Institute, New Delhi, 2004).

¹¹⁷ The Environmental Protection and Biodiversity Conservation Act, 1999, s. 528.

‘Recognizing the supreme of States over their natural wealth, the authority to establish admission to genetic resources rests with the nationalized governments and is subject to nationalized legislations’.

In particular, Article 15 paragraph 7 requires that each constricting party “take law-making, administrative or policy process, as appropriate” for the fair and equitable sharing of benefits, “arising from the business and other use of genetic assets with the Contracting party providing such resources”. This paragraph requires co-operation between nations on a variety of fronts but given that the party seeking the resources is likely to be a private organisation, the responsibility of establishing the measures lies with the Contracting Party providing the genetic resources. Accordingly, in order to develop meaningful measures, consideration must be given to who the stakeholders are.¹¹⁸

c) Taking into account all rights:

The third objective of the Convention on Biological Diversity specifically requires that all rights over the genetic resources be taken into account when determining the fair and equitable sharing of benefits arising since the utilization of those assets. Question of ‘all rights’ requires the identification of the stakeholders. Such stakeholders might be the sovereign nations themselves, landowners and indigenous peoples, bio-prospectors, pharmaceutical or biotechnology companies or holders of intellectual property over such resources.¹¹⁹

It is the work of bio-prospectors that often commence the process of developing technologies from biological or genetic resources. These people collect samples of biological material identifying potentially valuable compounds or attributes for scientific, conservation or commercial purposes.¹²⁰ Bio-prospecting is said to be “the systematic search of new sources of chemical compounds, genes, proteins, micro-organisms and other products that have potential economic value present in our biotic resources”.¹²¹ Clearly, the idea of benefit sharing espoused in the Convention on Biological Diversity is relevant when considering this economic value and the commercial purposes of bio-prospecting. Further, as indigenous

¹¹⁸ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights : A Global vision* 40 (Indian Law Institute, New Delhi, 2004).

¹¹⁹ *Ibid.*

¹²⁰ *Ibid.*

¹²¹ Accessing Biological Resources: Complying with the convention on..., available at: <http://books.google.co.in>>books (Last visited on July 1st, 2007).

knowledge often assists the bio-prospecting process it is no wonder the issue of benefit sharing becomes important.

If the development of Australian policy is considered in this regard, there is a clear recognition of the contribution and rights of indigenous peoples over such genetic resources, particularly if traditional knowledge has been used. The National Strategy referred to above notes, in Action item 1.8.2, the need to protect the use of traditional biological knowledge through collaborative agreements and a royalty payment system where there are commercial developments using that traditional knowledge

In the discussion paper,¹²² a nationally consistent approach to access was advocated and a multi-purpose contract system proposed. This contract system would require a bio-prospector to enter into an access and benefit sharing agreement with the owner of the biological resource. The Commonwealth State Working Group Discussion Paper recognised that such an owner could be a community of Indigenous peoples where the resource is located on land or in water owned by the relevant Indigenous peoples.

Some further observations were made in the Commonwealth State Working Group Discussion Paper in relation to the interests of Indigenous peoples, one being access to indigenous knowledge. However, the terms of reference of the Commonwealth State Working Group did not go as far as addressing the issue of indigenous knowledge and intellectual property rights but did attempt to provide alternatives for intellectual property protection for indigenous knowledge.¹²³

Federal legislation soon came into force to deal with the broader issues of the Convention on Biological Diversity: the Environment Protection and Biodiversity Conservation Act, 1999. This legislation enabled the development of regulations for the control of access to biological resources. The Environment Protection and Biodiversity Conservation Act allowed these regulations to provide for the equitable sharing of benefits arising from the utilization of natural resources in Commonwealth areas.¹²⁴ This resulted in an inquiry to determine the

¹²² Commonwealth-State Working Group on Access to Australia's Biological Resources, *Managing Access to Australia's biological resources: developing a nationally consistent approach: a discussion paper 12* (The Group, Canberra, 1996).

¹²³ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights: A Global vision* 41, (Indian Law Institute, New Delhi, 2004).

¹²⁴ The Environment Protection and Biodiversity Conservation Act, 1999, s. 301(2) (a)

nature of those regulations.¹²⁵ In the report of the inquiry, three groups of stakeholders were identified: environmental interests, Indigenous interests, industry interests and research interests. The regulatory scheme proposed in the report of the inquiry dealt with the mechanisms for granting access to biological resources and the development of a benefit sharing contract. To this end, the proposed scheme was to:

- i. Promote a cooperative approach to the protection and management of the environment involving governments, the community, land holders and Indigenous peoples;
- ii. Recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and
- iii. Promote the use of Indigenous people's knowledge of biodiversity with the involvement of, and in cooperation with, the owners of that knowledge.¹²⁶

The draft regulation that followed on 7th of September 2001 was designed to recognise "the special knowledge held by Indigenous people about biological resources".¹²⁷ These draft regulations went so far as to include consideration of traditional knowledge in the assessment process of ensuing benefit sharing agreement. Such agreement would be required to 'provide for reasonable benefit-sharing arrangement, including protection for, recognition of and valuing of any indigenous knowledge given by an access provider'.¹²⁸ Interestingly, these draft regulation were issued despite criticism of the workability of the scheme proposed in the report of the inquiry upon which draft regulations are modelled. The Standing Committee on Primary Industries and Regional Services, in their 2001 report.¹²⁹

Australia is still waiting for the implementation of some form of regulations to the access provision of the Environment Protection and Biodiversity Conservation Act. Meanwhile, the Queensland government has developed a new scheme derived from its Queensland Bio-discovery Policy Discussion Paper (the Bio-discovery Discussion

¹²⁵ Access to Biological Resources in Commonwealth Areas, Commonwealth Public Inquiry, John Voumard, Inquiry Chair, report delivered on July 2000 (Commonwealth of Australia, Environment Australia, Natural Heritage Division, Canberra, July 2000) ('The Voumard Report')

¹²⁶ *Ibid.*

¹²⁷ See, reg.8A.01, Part 8A, Draft Environment Protection and Biodiversity Conservation Amendment Regulations (2001)

¹²⁸ See, reg.8A.08, Part 8A, Draft Environment Protection and Biodiversity Conservation Amendment Regulation (2001)

¹²⁹ Traditional knowledge, Traditional Cultural Expressions, and..., available at: <https://books.google.co.in>books> (last visited on 7th of September 2013).

Paper)¹³⁰ and issued an exposure draft of the Bio-discovery Bill, 2003 with public submissions having closed on 1st of August 2003.¹³¹ This proposed legislation does not include consideration of indigenous knowledge in the provisions concerning benefit sharing. The Bio-discovery Discussion Paper does note that reference is to be made to the Queensland Code of Ethical Practice for Bio-technology, 2001 to guide benefit sharing arrangements with indigenous knowledge holders.¹³² As for the protection of indigenous knowledge, the Bio-discovery Discussion Paper points out that it is the responsibility of the Commonwealth to introduce a regime that recognises such knowledge as a form of intellectual property.¹³³ This brings us to the intersection between indigenous knowledge and intellectual property.

From an Australian perspective there are many commentators on what constitutes Indigenous knowledge. Janke prefers the term ‘Indigenous cultural and intellectual property’ and acknowledges three principles relevant to identifying the nature of such information:

- i. Common ownership and attribution;
- ii. Ongoing positive obligation and rights to use and deal with cultural knowledge; and
- iii. The sharing of Indigenous cultural knowledge through specific consent and decision-making procedures of the relevant group.¹³⁴

Davis proposes four characteristic features of Indigenous knowledge that seem to expand upon the principles acknowledged by Janke:

- i. Combined rights and welfare held by Indigenous peoples in their awareness;
- ii. Secure inter-dependence connecting knowledge, land, and other aspects of culture in Indigenous societies;
- iii. Verbal communication of knowledge in accordance with well understood cultural principles, and
- iv. Regulations regarding confidentiality and sacredness that govern the management of knowledge.¹³⁵

¹³⁰ Queensland Bio-discovery Policy Discussion Paper, 2002

¹³¹ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights: A Global Vision* 42,(Indian Law Institute, New Delhi, 2004)

¹³² *Ibid.*

¹³³ *Ibid.*

¹³⁴ Biological resources and benefit sharing: the Intersection between traditional knowledge and...., available at: 14.139.60.114>jspui>bitstream (last visited on 7th of July 2015).

¹³⁵ *Ibid.*

For the purposes of this work, special consideration is given to an example of indigenous knowledge, namely, medicinal knowledge, which may contribute to the development of pharmaceutical patents, often with no benefit flowing back to the holders of the medicinal knowledge.

d) Medicinal knowledge:

Often knowledge of the healing properties of different plants is restricted to particular members within an Indigenous community. These Indigenous healers are:

A group of individuals known by the community in which they exist as being capable to offer health by using vegetables, animals and mineral substances and other methods based on the societal, cultural and religious backgrounds as well as the awareness, attitudes and beliefs that exist in the community regarding physical, mental and social well-being and causation of ailments and disability.¹³⁶

In 1995, Brown believed it ‘likely that up to 80% of the world’s population’ relied on traditional medicines and remedies for primary health and that this was not just due to poverty of the people.¹³⁷ Rather, such treatments were more culturally acceptable.¹³⁸

While such indigenous knowledge may be considered by the Indigenous community as common heritage, conflict arises when such information is co-modified through patents by scientists and researchers, pharmaceutical companies and the like. Janke points out that:

‘A major concern of Indigenous people is that their cultural knowledge of plants, animals and the environment is being used by scientists, medical researchers, nutritionists and pharmaceutical companies for commercial gain, often without their informed consent and without any benefits flowing back to them.’¹³⁹

The commercialisation of Indigenous knowledge is often through the process of gaining intellectual property protection for inventions derived from such knowledge, more specifically patents. The concern is that without the use of such knowledge of local communities, the bio-prospectors and ultimately bio-technological and pharmaceutical

¹³⁶ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights: A Global Vision* 44 (Indian Law Institute, New Delhi, 2004).

¹³⁷ Swanson, T.M., *Intellectual Property Rights and Bio-diversity Conservation an interdisciplinary analysis of the values of medicinal plants* 201 (Cambridge University Press, Cambridge, 1995).

¹³⁸ *Ibid.*

¹³⁹ Biological resources and benefit sharing: the intersection between traditional knowledge and.....available at: 14.139.60.114/jspui/bitstream/Biol... (last visited on 7th of July 2015).

companies would not have discovered the correct leads for patentable bio-active materials. How is such indigenous knowledge to be protected? Do pharmaceutical companies have to obtain consent for the use of that knowledge in deriving a commercially viable product with the aid of bio-patents? Should there be some form of benefit sharing with the community providing the indigenous knowledge? And if so, how much, or in what form ? Or is this all just bio-piracy

e) Bio-patents or Bio-piracy?

Discoveries and naturally occurring genetic material are not patentable per se as they are not inventions. Article 27 of Trade Related Aspects of Intellectual Property Rights acknowledges the patentability of:

Which-ever inventions, whether commodities or processes, in all fields of expertise, provided they are innovative, involve an inventive step and are capable of developed application.¹⁴⁰

There are two perspectives here. Can indigenous knowledge about biological resources be protected under patent law? In other words, does indigenous knowledge satisfy the international requirements of novelty, inventiveness and industrial applicability? Or does indigenous knowledge prevent patentability on the basis that the information forms part of the prior art base from which the criteria of novelty is judged?

If the indigenous knowledge is secret and complies with the rules of confidentiality then it may not form part of the prior art base and thereby novelty is maintained. If the knowledge also forms significant components of the invention developed from the biological resource then the providers of that knowledge may have a claim as joint owners of the ensuing patent. On the other hand, if the indigenous knowledge is not secret but a common practice, then it will form part of the prior art base against which to purported biological invention is tested. Then it becomes a question of whether such knowledge discloses the invention or whether the invention is more than the indigenous knowledge.¹⁴¹

Despite this, Vandana Shiva has the following view:

¹⁴⁰ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights: A Global Vision* 45 (Indian Law Institute, New Delhi, 2004).

¹⁴¹ *Ibid.*

Bio-piracy refers to the use of I.P systems to legitimise the exclusive possession and control over natural resources and biological products and processes that have been used over centuries in non-industrialized cultures. Patent claims over bio-diversity and indigenous knowledge that are based on the originality, creativeness and genius of the people of the Third World are acts of ‘bio-piracy’.¹⁴²

Here Shiva is analysing the situation from a proprietary perspective arguing that the ‘North’ has created an artificial right, the patent monopoly, resulting in the privatisation of natural resources found predominantly in the ‘South’ in much the same way as Europe engaged in the enclosure of the commons in the seventeenth century.¹⁴³ But the first statement in the quotation above is flawed. If the products and processes have been used for centuries then, under patent law, there would be a lack of novelty and consequently no patent would issue. Something more is required than the mere disclosure of indigenous knowledge. And if this ‘something more’ satisfies the requirement of patentability, the scope of the patent protection needs to be limited to that ‘something more’, and that is an issue of drafting proper claims.

As for the second of Shiva’s statements, again clarification is needed. Perhaps John Locke’s theory of property may be of assistance here. In his Second treatise of Civil Government, Locke states the premise that a man’s body is his own property. Consequently:

The labour of his body and the work of his hands we may say are properly his. Whatsoever, then, he removes out of the state that nature hath provided and left it in, he hath mixed his own labour with and joined to it something that is his own, and thereby makes it his property.¹⁴⁴

Certainly, this is an argument in favour of proprietary rights of Indigenous peoples over their indigenous knowledge. But it doesn’t necessarily exclude the rights of subsequent researchers. If the indigenous knowledge only goes so far as to identify a plant for a particular purpose, it is not the same as identifying the active chemical in the plant, isolating it and synthesising it. The researcher, by identifying the active chemical and synthesising it, has removed the plant from nature and through the labour of the research, made the active chemical his/her own. However, this may not have taken place but for the indigenous

¹⁴² V. Shiva, *Protect or Plunder, Understanding Intellectual Property Rights* 49 (Zed books ltd, London, 2001).

¹⁴³ *Ibid.*

¹⁴⁴ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights: A Global Vision* 46 (Indian Law Institute, New Delhi, 2004).

knowledge used to identify the relevant plant for investigation. How then, can the holders of such indigenous knowledge be compensated?

f) Does the Convention on Biological Diversity provide a way forward?

Article 8(j) of the C.B.D encourages contracting parties, nations, to:

...value, safeguard and uphold knowledge, innovations and practices of indigenous and local communities embodying customary lifestyles relevant for the conservation and sustainable use of biological diversity and encourage their wider application with the authorization and participation of the holders of such knowledge, innovations and practices and support the equitable sharing of the benefits arising from the use of such understanding, innovations and practices.

However, the implementation of Article 8(j) is stated to be subject to national legislation. As for customary uses of biological resources in line with traditional practices, Article 10(c) of the CBD encourages such uses and the protection of such uses. In addition, the CBD recognises the influence of patents and other intellectual property rights and requires ‘that such privileges are caring of and do not run opposing the objectives of the Convention on Biological Diversity.’¹⁴⁵

If the holders of the indigenous knowledge have joint ownership of the patents developed from the biological resources pertaining to the traditional knowledge, the issue is clear. The holders will be able to participate in the exploitation of the patents without question. However, if there is no joint ownership of the patents what are the possibilities?

The prospective for sui generis legislation enabling benefit sharing have been explored in the framework of Australian developments described above. As for sui generis legislation allowing for self-governing safety of indigenous knowledge, Posey and Dutfield have proposed ‘traditional resource rights’,¹⁴⁶ while World Intellectual Property Organisation has considered various models with each being hybrids of recognised intellectual property systems.¹⁴⁷ However, given that the aim is to ensure benefit sharing, it would seem that the more efficient way to compensate the holders of indigenous knowledge is to require that prior

¹⁴⁵ Article. 16(5), Convention on Biological Diversity

¹⁴⁶ Posey, D.A., and Dutfield, G, “Beyond IP, Toward Traditional Resource Rights for Indigenous Peoples and Local Communities” 25*IDRC* 95 (1996).

¹⁴⁷ S.K Verma & Raman Mittal (eds.), *Intellectual Property Rights: A Global Vision* 47 (Indian Law Institute, New Delhi, 2004).

informed consent was obtained and that appropriate benefit-sharing contracts be entered into. That appears to be the intent of the draft regulations to the Environment Protection and Biodiversity Conservation Act, 1999 considered above.

For equitable contractual arrangements to be achieved there needs to be equal bargaining power, equal legal representation, and equal means of enforceability. Perhaps government participation in the negotiation of such arrangements might be helpful.

From the above discussion, it would not be wrong to mention here that the cradle of one of the more mega bio diverse regions of the world¹⁴⁸ that supports ancient as well as relatively recent forms of Indigenous Knowledge, India has a duty towards her traditional communities to ensure their right to live in their natural environment and to earn their livelihood by way of practicing their Indigenous Knowledge. It is imperative for India to establish a viable mechanism to regulate access to Indigenous Knowledge as well as to ensure that there is reasonable and equitable informed consent, regulated access to Indigenous Knowledge resources and establishment of an equitable benefit sharing mechanism.

As mentioned earlier customary practices play an important role in conserving and protecting the biodiversity, thereby providing an indirect protection to Indigenous Knowledge. Customary laws can be great help and advantage in order to recognize and continue these practices. Therefore it became almost essential to strengthen the body of customary laws. To revive customary law the first and the most important step is its recognition by the judicial bodies of the country-at all levels. Recognition can also be given by reading more into the existing provisions of various legislatures as well as being more tolerant to customary law. Once all the existing provisions of the few Acts giving recognition are used optimally, one needs to look at the amendments that can be made to give customary law a place in the legal structure. Another effort should be directed at enabling local bodies to evolve appropriate laws that recognize the customary rights. They should be free from the shackles of bureaucracy and be allowed to function on their own with more participation from the local people. We do not have to make either statutory or customary law subordinate to each other. Instead a realistic and practical approach should attempt to handle the interface between the so called formal and informal laws. A balance has to be struck where customary

¹⁴⁸ India has been declared one of the 17 mega diverse countries in the world by the world conservation monitoring centre, an agency of the United Nations Environment Programme, along with Brazil, Indonesia, South Africa, Mexico, Peru and Colombia, available at: <http://www.environment.gov.au/soe/2001/publication/themes-reports/biodiversity/biodiversity01-3.html>. (Last visited on February 5th, 2014).

laws are not relegated to a position beneath judicial law. They have to be accepted as a law per se not merely as a source of law. As we have noted, one of the constraints of customary law is that it is not always very good from the society's point of view. This is largely because many indigenous communities have vices like caste system, superstitions and unreasonable inequalities. Removal of traditional inequalities can be a step towards solving this problem. Many people believe documentation and codification will help to save customary law to a great extent. However, it is not a very efficacious method. Once we make codification a feature of customary law, it will become very difficult for a lot of customs to be proved, as not all communities will have access to the documentation process.

Through this chapter, the researcher also tries to show that there is scope for protection of indigenous knowledge through recognised intellectual property systems. This is particularly so where the knowledge becomes an integral part of the bio-prospecting and invention development process. Where this is not that case, protection may need to be sui generis in nature. World Intellectual Property Organisation is in the midst of considering which model of protection would be appropriate. When we consider the importance given to indigenous knowledge through the Convention on Biological Diversity, what becomes clear is the need to ensure an equitable sharing of the benefits which occurs from the use of such awareness.

CHAPTER III

INTERNATIONAL INSTRUMENTS RELATING TO THE PROTECTION OF INDIGENOUS KNOWLEDGE

Conscious that, in various situations, indigenous people are unable to enjoy their inalienable human rights and fundamental freedoms, determined to do everything possible to promote the enjoyment of the human rights and fundamental standards must be developed on the basis of the diverse situations and aspirations of the world's indigenous people.

Affirming its recognition of the value and diversity of the cultures and forms of social organization of indigenous people, and that the development of indigenous people within their countries will contribute to the socio-economic, cultural and environmental advancement of all the countries of the world

A civilization which comprises a peculiar knowledge system is perceived as the embodiment of all the community struggles, successes and failures that the community was or is currently engaged in, in order to advance it.

The significance here is not that the European philosophy of intellectual property is correct, and everyone else in the world is wrong or vice versa. What the foregoing discussion shows is more basic: that there are many different historical and cultural assumptions about the ownership of ideas. Well, if not for trade, international law would be least bothered with so many different national regimes for intellectual property because each would be strictly a matter of domestic policy. But the reality is that nations do trade, so the difference matters. Fair participation in the international market depends on rules that bind each nation equally; otherwise market distortions will position some countries at a disadvantage.

3. I. United Nations Human Rights Conventions and Covenants:

In 1976, the Government of Canada ratified four international human rights conventions that have been interpreted as having special implications for Indigenous knowledge and heritage. The conventions exist in federal jurisdiction and thus cover Indians, land reserved for Indians, and territories. The International Convention on the Elimination of All Forms of Racial Discrimination (1965) forbids any discrimination in the "right to own

property alone as well as in association with others” (art. 5(d)).¹⁴⁹The Committee on the Elimination of Racial prejudice, which has a mandate to supervise the convention, has used this clause to challenge state parties, failure to secure collective land rights for Indigenous and tribal peoples.¹⁵⁰ For example, at its thirty-fourth session in 1983, The Committee on the Elimination of Racial Discrimination requested an explanation of Ottawa’s decision to dismiss Mi’Kmaq land claims.¹⁵¹

The ICESCR and the ICCPR are the two main legal instruments dealing with human rights in Canada.¹⁵² They enshrine the right to self-determination and natural wealth and resources (article 1);¹⁵³ the right to equality before courts and tribunals (Article 14);¹⁵⁴ the right to benefit from the protection of interest resulting from any scientific, literary, and artistic production (Article 15(1) (c));¹⁵⁵ the right to recognition as a person before the law (Article 16)¹⁵⁶ and the entitlement without discrimination to the equal protection of the law (Article 26);¹⁵⁷ the right to be protected by law for arbitrary or unlawful interference with privacy (Article 17)¹⁵⁸; and the right to cultural, linguistic, and religious freedoms (Article 27).¹⁵⁹

Canada has adopted the optional protocol to the International Covenant on Civil and Political Rights (1967), which provides that individuals in Canada who claim that any of their human rights have been violated and domestic remedies are not available, may petition the United Nation Commission on Human Rights.¹⁶⁰ The decisions of the commission are relevant to the interpretation of the Canadian Charter of Rights and Freedoms.¹⁶¹ In *Lovelace v. Canada*,¹⁶² an Aboriginal woman was held to have the right of cultural association with her people, despite being married to a non-Indian. This decision caused section 35 of the

¹⁴⁹ Marie Battiste and J. Y Henderson, *Protecting Indigenous Knowledge and Heritage: A Global Challenge* 172 (Purich publishing ltd, Canada, 2012).

¹⁵⁰ Barsh Russell. “The Ethnic Factor in Security and Development: Perceptions of United Nations Human-Rights Bodies” 31 (4) *Acts Sociologica* 333 (1988).

¹⁵¹ *Ibid.*

¹⁵² Hogg, Peter W. *Constitutional law of Canada* 1377 – 86 (Toronto: Carswell,, 3rd edn.1992).

¹⁵³ *Ibid.*

¹⁵⁴ *Ibid.*

¹⁵⁵ *Ibid.*

¹⁵⁶ *Ibid.*

¹⁵⁷ *Ibid.*

¹⁵⁸ *Ibid.*

¹⁵⁹ *Ibid.*

¹⁶⁰ *Id.* at 1387 – 88.

¹⁶¹ *Id.* at 822 – 24.

¹⁶² Human Rights Committee- Selected Decision under the Optional Protocol 1 United Nations(1985).

Constitution Act, 1982¹⁶³ to be amended to guarantee application equally to male and female persons and an amendment to the Indian act. The *Mikmaw People v. Canada*¹⁶⁴ case is an on-going case before the Committee for the Rights of Self-Determination under article 1 of this covenant.

Explicitly included in the International Covenant on Civil and Political rights is the right to self-determination, which is defined as the right of all peoples, “for their own ends, to freely dispose of their natural wealth and resources..... based upon the principle of mutual benefit.”¹⁶⁵ Most Aboriginal peoples in Canada do not regard themselves as the mere “minorities” described within Article 27 of the covenant, nevertheless the United Nations Commission on Human Rights, which supervises the covenant, has ruled that Alberta’s leasing of forest lands notwithstanding, the Lubicon Lake Cree land claims settlement in *Ominayak v. Canada*¹⁶⁶ was a violation of minorities’ rights. The commission has even hinted that this provision obliges Canada to devolve some degree of internal self-determination or self-government to Aboriginal peoples. A paraphrase of Article 27 appears in article 30 of the U.N Convention on the Rights of the Child 1989.¹⁶⁷

Subsistence harvesting and environmental protection arguably find support in the ICESCR, 1967,¹⁶⁸ which recognizes every person’s right to an “adequate standard of living,” including “adequate food,” and to the maximum achievable standard of physical and mental fitness (Article 11-12).¹⁶⁹ Articles 23 and 24 of the Convention on the Rights of the Child recapitulate these principles in the context of child survival and well-being.

Both Article 27(2) of the 1948 UNs UDHR and Art 15(1) of the ICESCR refer to the right of each person to the ethical and material welfare resulting from any technical, literary or artistic making of which he is the creator. These provisions are aimed at the individual and are crucial to many Indigenous people producing such works.

¹⁶³ Schedule B to the Canada Act 1982 (UK),c.11.

¹⁶⁴ (1992) Report of the Human Rights Committee, UN Doc. A/47/40. UN GAOR, 47th Sess., Supp. No.40.

¹⁶⁵ M. Battiste and J. Y. Henderson. *Protecting Indigenous Knowledge and Heritage: A Global Challenge* 173 (Purich publishing ltd, Canada 2012).

¹⁶⁶ 1990 Report of the Human Rights Committee, UN Doc. A/45/40., vol.II, para.32.1,at27; UN GAOR 45th Sess., Supp. No.40

¹⁶⁷ United Nations Treaty Series No. 27531. UN Doc. A/RES/44/25.

¹⁶⁸ United Nations Treaty Series No. 14531; G.A. Res. 2200,21 UN GAOR Supp. No. 16, UN Doc. A/6316 .p-49.

¹⁶⁹ ICESCR, 1967

Art 5(d) of the ICEAFRD, 1965,¹⁷⁰ prohibits discrimination with respect to the ownership of property, individually or collectively. A government's failure to protect Indigenous peoples collective rights to their heritage may be discriminatory, if this failure is justified by the argument that Indigenous peoples have a lesser right than the state or museums and academic institutions.

In his recent report on the right to own property, the special rapporteur of the Sub-Commission on PDDM, Mr. Luis Valencia Rodriguez, concludes that “ the sense of security and dignity gained from being able to own property is an essential prerequisite for the pursuit of happiness and exercise of a variety of other human freedoms”.¹⁷¹ He also draws attention to the growing trend towards international and national acknowledgment of the group rights of Indigenous working class to their territory and other resources as a factor contributing to their economic security and cultural development.¹⁷²

United Nations human-rights mechanisms, such as the Commission on Human Rights, have not thus been utilized to address questions of protecting the heritage of Indigenous peoples.

3. II. The International Intellectual Property Regime:

Intellectual property is a familiar legal concept that is exceedingly difficult to define. The principle reason for this difficulty lies in legal history. Intellectual property rights first developed in European law as a mechanism to protect individual and industrial inventions. In British law, each of the established actions developed independently of the others, but all were eventually organized into the concept of intellectual property (literary and artistic endeavours) and industrial property (patents and trade). Another reason for the nebulous qualities of intellectual property is that it is an umbrella term that covers an array of different rights. Problems arise when trying to determine just what comes under the umbrella. No single theory of protection of intellectual property exists. Until the various intellectual

¹⁷⁰ U.Ns Treaty Series No. 9464; G.A. Res. 2106A (XX), 20 UN GAOR Supp. No. 14, UN Doc. A/6014 (1965) 47.

¹⁷¹ M.Battiste and J. Y. Henderson.*Protecting Indigenous Knowledge and Heritage: A Global Challenge* 174 (Purich publishing ltd, Canada 2012).

¹⁷²*Ibid.*

property regimes are replaced by some general right, intellectual property will remain an evolving collection of rights whose parts are greater than its sum.¹⁷³

The 1967 Convention Establishing the World Intellectual Property Organization does not define intellectual property. World Intellectual Property Organization is one of the sixteen specialized agencies of the United Nations.¹⁷⁴ Article 2 (viii) of the 1967 convention provides a broad enumerated list of all matters that might conceivably fall with the concept of I.P. The list comprises of rights associated to (1) literary, artistic, and scientific works; (2) performances of dramatic artists, phonograms, and broadcasts; (3) inventions in all fields of human undertaking; (4) technical discoveries; (5) industrial designs; (6) trademarks, service marks, and commercial names and designations; (7) protection against unfair competition; and (8) all other rights resulting from intellectual activity in the industrial, scientific, literary, and artistic fields. However, this extended definition excludes rights in trade secrets and know-how. Given the disunity of the emerging rights, structuring the treatment of intellectual property rights is an arbitrary and complex decision. There is no unifying scheme to fill the disturbing gaps in the legal protection of human creativity.

Even if the literature could define intellectual property rights, there are other related transactions and regulations that involve intellectual property rights. These transactions include various plans and agreements between creators and exploiters, such as between authors and publishers or between inventors and manufacturers. They also include issues of licenses and franchises. Other fields of activity and of regulation impinge so strongly on intellectual property rights that they must be considered; for example, international trade with respect to parallel imports of trademarked goods, licensing and requirement related to the transfer of technology in developing countries, competition (antitrust) law, and the full range of potentially anticompetitive effects of intellectual property rights and transactions. Finally, there exists the practical and technical matter of patent and trademark searching.

International intellectual property rights depend significantly on national laws. Despite the existing agreements that attempts to achieve international harmonization of these national regimes; there are significant substantive differences between nations and there is no internationally uniform definition of intellectual property and accruing legal rights.

¹⁷³ Mc Keough, J., & Andrew Stewart, *Intellectual Property in Australia* 3 -4(Butterworths: Sydney, Australia: 1991)

¹⁷⁴ Article. 57 and 63 of the United Nation charter.

a) Copyright of Literary and Artistic Works:

i. The Berne Convention for the Protection of Literary and Artistic Works (1986)

The BCPLAW, originally adopted in 1886, establishes international standards for harmonizing the copyright laws of state parties. Legal protection can be granted for many forms of creative and literary expression for the author's life plus fifty years or longer.

Article 2(2) of the Berne Convention permits each state party to determine whether a work must be "fixed" in some physical form, such as a written document or photograph, before it can be given copyright protection. The requirement of fixation poses a problem for works of oral literature, poetry, and song, which by their nature are repeated and frequently revised from generation to generation.

Article 6 of the Berne Convention regulates moral rights by providing that, independent of their economic rights and even after their transfer, authors retain the right to assert authorship of their workings and to object to any distortions, mutilations, or other adjustment of, or other disparaging actions in relation to their workings, which would be detrimental to their honour or status. Article 6 of the Rome Revision, 2nd June 1928, states:

- 1) Independently of the author's copyright, and even after transfer of the said copyright, the author shall have right to claim authorship of the work, as well as the right to object to any deformation, disfigurement or other alteration of the said work which would be prejudicial to his honour or reputation.
- 2) The determination of the conditions under which these rights shall be exercised is reserved for the national legislation of the countries of the (Berne) Union. The means of redress for safeguarding these rights shall be regulated by the legislation of the country where protection is claimed.

This article seems to recognize two rights: the right to paternity or attribution and the right to integrity in a work. Moral rights, in their ideal form,¹⁷⁵ are perpetual, inalienable, and imprescriptible. Countries of Roman law background have generally incorporated moral rights in their copyright law. Commonly under those laws, moral rights cannot be assigned

¹⁷⁵ For example, in France, where the concept of *droit moral* was born.

and after the death of the author, they are exercised by the author's heirs, irrespective of ownership of the economic rights.

- ii. The Int Con for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention 1961)

Minimum standards for the protection of performers are further elaborated in the Int Con for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention), adopted in 1961.

- iii. The World Intellectual Property Organization (1967)

The World Intellectual Property Organization administers a variety of conventions for the protection of "intellectual property." Some conventions create international mechanisms for the registration and enforcement of property rights; however, most conventions simply establish standards for compatibility and reciprocity of state parties' national legislation. Thus Indigenous people generally cannot obtain protection for their heritage directly through World Intellectual Property Organization machinery, but World Intellectual Property Organization may be used to promote the strengthening of national machinery in the countries concerned.

World Intellectual Property Organization undertakes many activities in the areas of copyright law and industrial property that relate to Indigenous peoples, such as its role as the secretariat of the Int Con for the Protection of New Varieties of Plants, 1961. Many of the issues discussed at this forum were complex and unresolved. In another area of activity, World Intellectual Property Organization recommended that the Draft Principles and Guidelines on Protection of Indigenous Heritage not include statements on certain items, such as folklore. World Intellectual Property Organization then participated in the United Nations Educational, Scientific and Cultural Organization/World Intellectual Property Organization, World Forum on the Protection of Expressions of Folklore in 1997 to develop a means of protecting folklore internationally.¹⁷⁶

- iv. Issues Paper Prepared by the Australian Law Reform Commission (1993)

¹⁷⁶ M. Battiste *Protecting Indigenous Knowledge and Heritage: A Global Challenge* 177 (Purich publishing ltd, Canada 2012).

A 1993 issues paper prepared by the Australian Law Reform Commission succinctly explains the difficulties of using existing laws to protect indigenous people's cultural heritage. Traditional motifs are not the sole property of individual artists to sell or withhold freely as they please, but are subject to layers of group rights at the family, community, and tribal levels. Many different individuals may need to be consulted about the disposition of a design or objects that bear it. Copyright laws do not make such fine distinctions, but only recognize a single owner. Furthermore, copyright and other kinds of intellectual-property protection are of limited duration, while Aboriginal peoples regard cultural rights as perpetual. Hence, applying the usual principles of copyright to Aboriginal heritage fundamentally alters the relationship between the artist and the community and does not provide adequate protection.¹⁷⁷

b) Patent Protection and Scientific Discoveries:

i. The Paris Convention for the Protection of Industrial Property (1884):

The PCPIP, which originally came into force in 1884, is aimed at maintaining some minimum uniformity in national laws relating to patents on technology, industrial designs, trademarks, trade names, appellations of origin, and the prevention of unfair competition. There are three limitations on the usefulness of patents for the protection of Indigenous peoples' heritage: (1) patents only apply to "new" knowledge; (2) rights are ordinarily granted to individuals or corporations rather than to cultures or peoples; and (3) the rights granted are of limited duration. Patents are therefore not useful for protecting traditional knowledge, knowledge that people wish to keep confidential, and knowledge that does not meet relatively high standards of inventiveness nor non-obviousness.

ii. The Int Con for the Protection of New Varieties of Plants (1961):

A special legal regime for the protection of plant breeders was launched by the Int Con for the Protection of New Varieties of Plants, 1961. Canada is one of the member-states that has adopted the convention. It has been amended three times, in 1972, 1978 and 1991. This convention presents one model of a sui generis system of protection for plant breeders developing new plant varieties. The convention provides exclusive rights to plant breeds for fifteen to twenty years. Until the 1978 amendments, states had to

¹⁷⁷*Ibid.*

provide either a sui generis or patent protection for the same botanical genus or species. Under the 1978 and 1991 amendments, states can provide both forms of protection.

To obtain protection, the applicant must deposit a sample of the plant variety for examination. It must be clearly distinguishable from any plant variety, the existence of which is already a matter of common knowledge. It must also be stable and homogeneous- that is, “it must remain true to its description after repeated reproduction or propagation.” There is a presumption of novelty if the variety has never previously been marketed or offered for sale, in which case its distinguishing characteristics may be of either natural or artificial origins. It would, therefore, be possible to obtain protection for traditional cultigens, such as varieties of maize, potatoes, and wild rice, as well as naturally occurring species used for medicine and not previously known by non-indigenous societies. The major obstacles to obtaining plant breeders rights are the costs of depositing samples and demonstrating, through repeated propagation trials, that they are stable and homogenous.

iii. The Budapest Treaty on the Int Recognition of the Deposit of Micro-organisms for the Purpose of Patent Procedure (1977):

There is an exception to these rules of patentability in the case of the isolation and purification of naturally occurring species of micro-organisms. The Budapest Treaty on the Int Recognition of the Deposit of Micro-organisms, 1977, creates a network of international institutions for the deposit of micro-organisms and for the registration of rights to their commercial use. Indigenous peoples could conceivably use this treaty to assert their rights to strains of yeast and other micro-organisms long used for fermentation. They would need laboratory facilities to isolate and purify these organism, however.

iv. The Geneva Treaty on the International Recording of Scientific Discoveries (1978):

Indigenous peoples’ traditional knowledge of ecosystems includes more than the ability to identify useful species. It includes a wide range of scientific insights into basic processes in ecology and animal behaviour. Although scientific discoveries are generally excluded from patent protection, the Geneva Treaty on the International Recording of Scientific Discoveries, 1978, offers a mechanism for recognizing the identity of the discoveries. Article 1 of the treaty defines scientific discovery as “the

recognition of phenomena, properties or laws of the material universe not hitherto recognized and capable of verification.”

v. Protection of Inventions in the Field of Biotechnology (1987):

“Novelty” is a basic requirement of patentability. A product or process is not ordinarily patentable if it is already known elsewhere in the world. It must also be described in such a way that it can be reproduced. Plants and animals are therefore only patentable if they are created by a process that can be described, controlled, and reproduced, such as genetic engineering. Patenting of species and the biological processes of higher life forms is not permitted under the European Patent Convention, 1979. In other countries, it is limited to organisms with forms, qualities, or properties that are not already found in nature.¹⁷⁸

vi. The U.Ns Convention on Biological Diversity (1992):

The 1992 U.Ns Convention on Biological Diversity affirms that biological resources are vital to humanity’s economic and social development. Its overall objectives are the protection of biological diversity, the sustainable use of its mechanism, and the fair and equitable sharing of the benefits arising from the use of genetic assets. The convention identifies that natural resources are of more than commercial value to mankind.

The convention has been widely ratified. The convention contains several express references to Indigenous and local communities, as well as to local populations and to traditional uses of natural resources in accordance with customary cultural practices. In its preamble, the convention recognizes:-

the close and traditional dependence of many Indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing justifiably benefits arising from the utilization of traditional knowledge, improvements and exercises significant to the protection of biological diversity and the sustainable utilization of its mechanism.

This preamble identifies two of the rights of Indigenous peoples: resource use and traditional knowledge. They are addressed separately in paragraphs 10(c) and 8(j) of the convention, respectively. A right to environmental rehabilitation is mentioned in paragraph 10(d) of the convention, which relates logically to the issue of use.

¹⁷⁸ World Intellectual Property Organization, 1987.

Article 8(a) requires each state party to establish a structure of protected areas or areas where special methods necessitate to be taken to safeguard biological diversity. Indigenous people have expressed concern that their territories will be targeted for “protected” status because they are relatively undisturbed and often due to traditional management practices enjoy unusually high levels of biodiversity. They do not oppose protection, but they do oppose restrictive management regimes that are imposed upon them without their consent and that interfere with their ability to maintain their own settlements. An example of such interference is where national parks and refuges have been superimposed on the traditional territories of Indigenous people, mainly in response to pressure from environmental groups. This concern is addressed, albeit obliquely, by article 10(c) of the convention, which directs state parties to defend and support customary utilization of natural resources in accordance with traditional cultural practices that are well-matched with preservation or sustainable use needs. If customary uses of living resources are sustainable, they should not only be respected, but also strengthened. This evokes the rights of Indigenous peoples.

Article 10(d) of the convention directs state parties to support local populations to expand and execute remedial achievement in degraded areas where natural diversity has been reduced. This implies that Indigenous peoples and other local communities have the right to some level of financial, as well as administrative, support from the state when they take initiatives to redress environmental degradation. This is the only provision of the convention that clearly assigns some kind of decision-making or priority setting authority to local communities.

With respect to traditional knowledge, article 8(j)¹⁷⁹ requires that each state party-subject to its State legislation, value, safeguard and sustain knowledge, innovations and practices of Indigenous and local communities embodying traditional lifestyles significant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and persuade the equitable sharing of the benefits arising from the use of such knowledge, innovations and practices.

¹⁷⁹ United Nations Convention on Biological Diversity (1992)

This provision must be read into article 15,¹⁸⁰ which recognizes the sovereignty of each party over the genetic resources within its territory, while requiring the state parties to “facilitate” access to these resources by other state parties. Two questions arise. A state might try to broker commercial rights to traditional cultigens or to the knowledge of plants used in traditional medicine over objections from the Indigenous people concerned. Alternatively, a state might try to limit the right of Indigenous peoples to license the commercial use of their own medicinal and agricultural knowledge, on their own terms, arguing that they must recognize the state as their sole agent.

The “approval and involvement” clause of article 8(j)¹⁸¹ means that a state should only “facilitate” access to Indigenous peoples’ genetic resources after it has obtained the informed consent of the Indigenous people concerned. It is also clear that states should not approve the study or use of Indigenous peoples’ genetic resources without making a provision for the “equitable sharing of the benefits” with the people concerned. It is less clear whether the state can insist on being the sole agent for Indigenous peoples or demand its own share of benefits in the form of super-royalties or taxes on contracts involving traditional Indigenous knowledge or genetic information discovered through the use of this knowledge. Indigenous peoples could presumably exercise their power of approval under article 8(j) to bar access to their genetic resources until the state agrees to allow them to act as their own brokers.

In its decision II/12, the Second Conference of the Parties, held in 1995, requested that the executive secretary explore - the relationship between the objectives of the Convention on Biological Diversity and the TRIPS Agreement in cooperation with the World Trade Organization and in consultation with “all stakeholders, in particular the private sector and indigenous and local communities.” Particular attention should be given to exploring the relationship between intellectual property rights and the safeguarding and maintenance of customary knowledge and practices of indigenous and local communities and the potential role of intellectual property rights in encouraging the equitable sharing of benefits arising from such understanding and practices.

vii. United Nations Food and Agriculture Organization and Farmers’ Rights:

¹⁸⁰ *Ibid.*

¹⁸¹ *Ibid.*

The United Nations Food and Agriculture Organization Intergovernmental Commission on Plant Genetic Resources is concerned with the importance of Indigenous knowledge and practices in agriculture. The basic genetic resources that we use for modern food production were domesticated thousands of years ago; those who develop modern plant varieties draw upon the work and the genetic material in the fields of these farmers. The Food and Agriculture Organization recently established the International Fund for Plant Genetic Resources in accordance with an agreement recognizing farmers' rights. The International Undertaking on Plant Genetic Resources was adopted in 1983 by the Conference of Food and Agriculture Organization. The undertaking was a non-binding instrument whose interpretation was only agreed upon ten years after its adoption. In particular, Food and Agriculture Organization conference resolution 5/89 of 29 November 1989 recognized farmers rights as rights arising from the ancient times, current and upcoming contribution of farmers in conserving, recovering and making accessible plant genetic assets, mainly those in the centres of foundation/ variety.¹⁸²

The conference recognized that there was no mechanism for the implementation of farmers' rights, and in its resolution 3/91 of 25 November 1991, it decided to implement farmers' rights through an international fund for plant genetic resources. Unlike breeders' rights, however, these farmers' rights are not rights of individuals, but the rights of states to benefit from the commercial development of traditional cultigens, such as bananas and rice. When a biotechnology company profits from using genes discovered in traditionally grown varieties of plants, the company is supposed to repay some of this income to the fund, in trust for the countries of origin of the genes. However, there is no mechanism to ensure that farmers or their communities receive any benefits from these payments.

With the entry into force of the 1992 Convention on Biological Diversity, which also recognizes farmers' rights, the Conference of Food and Agriculture Organization, in resolution 7/93 of 22 November 1993, began the process of revising the International Undertaking on Plant Genetic Resources, in harmony with the convention, including the realization of farmers' rights. The meeting of the Commission on Plant Genetic Resources, held in December 1996, was part of these intergovernmental negotiations at which new proposals were made to strengthen the implementation of farmers' rights. In particular, Food and Agriculture Organization drew attention to the proposal of the developing countries,

¹⁸² Food and Agriculture Organization, 1989. Report of the Intergovernmental commission on Plant Genetic Resources, Rome.

which offers a range of protections for Indigenous peoples and ensures full benefits to farmers, Indigenous peoples, and other communities embodying traditional lifestyles.

3. III. Technology Know-how and Trade Secrets:

Many application of Indigenous peoples' traditional knowledge to practical problems, such as harvesting fish, manufacturing pottery, or managing forests, might still be patented as "technology." Technology can include any knowledge that is useful, systematic, organized with a view to solving a specific problem, and capable of being communicated in some way to others.¹⁸³The patentability of traditional technology depends on national legislation, however, and many countries may not consider long-held knowledge to be sufficiently novel and inventive to qualify for patent protection.

Although molecules discovered in naturally occurring species cannot be patented as such, a chemical process used to isolate or purify the molecule, or to synthesize it, can be patented as technology. In addition, naturally occurring molecules often provide what biochemists call "lead" or clues for the synthesis of related molecules that have the same valuable characteristics. Thus, although Indigenous peoples may guide biochemists to valuable molecules, only the work done by the biochemists is treated as proprietary.

It is discriminatory to treat the efforts involved in isolating a chemical compound in the laboratory as more worthy of legal protection and compensation than the effort involved in centuries of observation and experimentation with naturally occurring species. Furthermore, it is clear that using Indigenous peoples' knowledge to select plants for laboratory analysis significantly reduces the cost of discovering new products. Thus, traditional knowledge has economic value and should not be treated as a "free good."

These problems are not unique to Indigenous peoples; many useful ideas in industry do not qualify for patent protection. These include "know-how" (experience in using a particular technique or device) and trade secrets (such as the formulas used to flavour certain processed foods and beverages). Companies generally protect their know-how and trade secrets by refusing to allow outsiders to visit their factories or speak with their employees, unless they agree to a contract setting out conditions for the use of whatever they learn. Indigenous peoples could also withhold their knowledge except under licensing

¹⁸³ World Intellectual Property Organization, 1985. The Elements of Industrial Property. WIPO Doc. WIPO/IP/AR/85/7.

agreements providing for confidentiality, appropriate use, and economic benefits. For the time being, this appears to be the most effective approach for protecting ecological, medicinal, and spiritual knowledge.

a) Trademark and Industrial Design security:

i. The Paris Convention for the Protection of Industrial Property(1884):

Indigenous peoples' traditional artistic motifs might be brought within existing provisions for the protection of industrial designs defined by the Paris Convention as "the ornamental or aesthetic aspect of a useful article." To be eligible for protection, a design must be "original," however, and in most national legal systems, the duration of protection for industrial designs is less than for copyright- often as little as fifteen years. This can be inadequate for designs of special cultural and spiritual significance, where protecting the integrity of the design may be of greater importance than exploiting its commercial value.

Characteristic motifs that serve to identify an Indigenous people or community might also be protected as collective trademarks. Many states already use special certification marks to identify authentic works by Indigenous peoples. Both are governed by article 7 bis of the Paris Convention. Not only designs, but also names or sequences of words can be given trademark protection, so that, for example, clan and tribal names might be included. Unlike copyright and industrial designs, trademark protection is not limited in duration, but usually requires only registration and continued use. There could be problems under some countries' national laws, however, if a mark or design has already been widely copied by others.

Article 10 of the Paris Convention forbids unfair competition in trade, which is defined as "acts of such a nature, as to create confusion by any means whatsoever with the establishment, the goods, or the industrial or commercial activities of a competitor." As well as "indications or allegations the use of which in the course of trade is liable to mislead the public as to the nature, the manufacturing process, the characteristics, the suitability for their purpose, or the quality, of the goods." This could be applied to a wide variety of disputes over the authenticity of products employing the designs or folklore of Indigenous peoples. It only applies to products in trade, however, and not to preserving the privacy or integrity of things that Indigenous peoples wish to keep for their own exclusive use.

- ii. The Lisbon Agreement for the Protection of Appellations of Origin and Their International Registration (1966):

Although indications of geographical origin cannot be registered as trademarks, they can be used to verify the authenticity of products as provided by the Lisbon Agreement for the Protection of Appellations of Origin and Their International Registration. This provides for the registration of a geographic name which serves to assign a product originating therein, the value and character of which are due exclusively or essentially to the geographic surroundings, including natural and individual factors. This registration, in combination with distinctive trademarks, could be used to identify the characteristic products of Indigenous communities.

3. IV. International Trade and Aid Measures:

- a) The Agreement on Trade-Related Intellectual Property (1994):

In 1994, the concluding Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations created the World Trade Organization. The Final Act also included the Agreement on Trade-Related Aspects of Intellectual Property, which set new standards for intellectual property rights. These standards are similar to those existing under other international treaties and conventions on intellectual property, which are administered by the World Intellectual Property Organization. What Trade Related Aspects of Intellectual Property does is create new international machinery to enforce these rights in the course of the Council on Trade Related Aspects of I.P.

Member-state of the WTO may continue to provide more extensive protection than is required by this Agreement in national legislation, provided that such protection does not contravene the provisions of this Agreement.¹⁸⁴ Member-states also retain full authority to make laws they deem essential to care for public health and nourishment, and to endorse the public interest in sectors of fundamental to their socio-economic and technological development.¹⁸⁵ Article 1 and 8 of the Trade Related Aspects of Intellectual Property agreement permit member-states to give greater protection to the heritage of Indigenous peoples under their national legislation than they are required to give to intellectual property generally-provided that they afford the same special protection to Indigenous peoples who are

¹⁸⁴ Article 1.1 of Agreement on Trade-Related Aspects of I.P.. 1994.

¹⁸⁵ Article 8 of Agreement on Trade-Related Aspects of I.P.. 1994.

nationals of other states. Each member-state must accord to the nationals of other members' treatment with respect to the protection of intellectual property that is no less favourable than that it accords to its own nationals.¹⁸⁶

The agreement, moreover, fixes certain minimum levels of protection for patents, industrial designs, and other forms of intellectual property. It provides wide coverage of all areas of technology for patent purposes. The agreement obligates state-parties to provide patents for every innovation, whether goods or processes, in all fields of knowledge, provided they are original, involves a creative step, and are useful. Pharmaceuticals and genetic engineering are included in this coverage, which provides twenty-year duration of patent rights, a regulated regime of compulsory licensing, and strict enforcement provisions. Industrialized countries have pressed for stringent universal respect for the patents issued to developers of biotechnology. A patent may be refused on the grounds of order public or morality, terms that are not defined in the agreement. Additionally, a state-party may also exclude patentability for diagnostic, therapeutic, and surgical methods for the treatment of humans or animals.

This agreement enjoins the state-parties to provide effective protection to plant variety in the course of patents or by an efficient *sui generis* arrangement or by any amalgamation thereof. Previously, plant varieties were not protected under the patent law of many countries. Animal varieties, however, are excluded from patentability if they are achieved by biological processes, but the animals and plants developed by micro-organisms as well as by non-biological and micro-biological processes are patentable.¹⁸⁷ Article 27 appears to permit member-states, if they so wish, to exclude the traditional ecological and medical knowledge of Indigenous peoples from patentability. Varieties produced by traditional means of breeding and screening will become the subject of patent protection of a new *sui generis* system. Article 39.2 of the TRIPS agreement is broader than the existing concepts of trade secrets and *knows how*. It is broad enough to cover most of the teachings, ceremonies, songs, dances, and designs that Indigenous peoples consider sacred and confidential and that are currently threatened by commercial exploitation.

Developing countries are required to adopt meaningful and effective plant variety protection systems consonant with their special conditions. Developing countries,

¹⁸⁶ Article 3 of Agreement on TRIPS, 1994.

¹⁸⁷ Article 27 (3) of Agreement on TRIPS, 1994.

farmers' organization, and grassroots non-governmental organizations opposed this Trade Related Aspects of Intellectual Property agreement, arguing that it will reinforce the ability of transnational corporations to control the medicines and genetically engineered plants they are devising with genetic resources collected in the Southern Hemisphere. Industrialized countries are likewise opposed to any preferences in favour of developing countries with respect to the commercial exploitation of biodiversity. Although the 1992 United Nations Convention on Biological Diversity calls on all state-parties to contribute proportionally to the costs of conserving highly bio-diverse Hemisphere, several states have made declarations interpreting this very narrowly. The interests of most Indigenous peoples are aligned with developing countries and could be seriously undermined by General Agreement on Trade and Tariffs rule that favours the rights of biotechnology companies over those of the states and peoples who manage bio-diverse ecosystems. Developing countries have been urged to adopt a sui generis system, such as the Int Convention for the Protection of New Varieties of Plants, rather than patents.

The World Trade Organization Committee on Trade and Environment and its working paper W/8 reviewed the Trade Related Aspects of Intellectual Property agreement and its relation to the environment.¹⁸⁸ Paragraphs 77 and 78 of the working paper, which include references to Indigenous peoples and local communities, stated that the Trade Related Aspects of Intellectual Property agreement was not an obstacle to enhancing the protection of Indigenous intellectual property rights. It was also pointed out that subparagraph 3(b) of article 27 of the agreement relating to the protection of plant and animal inventions were due to be reviewed four years after the date of entry into force of the World Trade Organization agreement. No concrete proposals have yet been presented.¹⁸⁹

Since the thrust of the Trade Related Aspects of Intellectual Property agreement was to protect intellectual creations in order to promote technological innovation and technology transfer and dissemination, World Trade Organization member-states could resort to existing mechanisms of intellectual property protection in order to cover Indigenous knowledge provided that the provisions of the Trade Related Aspects of Intellectual Property agreement were not contravened. For example, traditional requirement of novelty, inventiveness, and capability of industrial application do not necessarily exclude the

¹⁸⁸ M. Battiste. *Protecting Indigenous Knowledge and Heritage: A Global Challenge* 186 (Purich publishing ltd, Canada 2012).

¹⁸⁹ *Ibid.*

patentability of all Indigenous knowledge on the practical use of genetic resources for pharmaceutical purposes.

b) United States Bills:

Since 1990 there have been several unsuccessful attempts to enact new United States laws that would require respect for the intellectual property of Indigenous peoples. Senate Bill 748, if adopted, would have given priority in United States foreign assistance to the protection of Indigenous peoples, including their proprietorship of the traditional knowledge of plant and animal resources. House Concurrent Resolution 354 would have directed United States diplomats to take account of traditional knowledge in the current round of General Agreement on Trade and Tariffs negotiations. House Bill 1596 would have required that United States foreign policy and foreign aid be consistent with the rights of Indigenous peoples. There may be further efforts to tie United States aid and trade policy to respect for Indigenous peoples lands, knowledge, and heritage.

c) Resolutions of the European Parliament:

A 1989 resolution adopted by the European Parliament called upon the European Commission and Council to insert conditions of respect for Indigenous knowledge in overseas-aid agreements. It would be preferable to agree upon universal standards than leave the question of respect for the rights of Indigenous peoples to unilateral economic policies and bilateral negotiations.

d) United Nations Educational, Scientific, and Cultural Organization Machinery for Recovering Cultural Property:

The United Nations Educational, Scientific, and Cultural Organization declaration on the Principles of International Cultural Co-operation (1996) affirms in article 1 that “each culture has a dignity and value which must be respected and preserved, and furthermore, that “every people has the right and duty to develop its culture.” This suggests that peoples have collective rights to cultural integrity, including a right to define, interpret, and determine the nature of future changes in their cultures. The central role of traditional forms of cultural transmission and education is stressed in the guidelines set out in the annex to this declaration. The drafters of this declaration believe that safeguarding traditional

cultural transmission is the most effective means of ensuring that Indigenous people control the further development of their heritage, as well as its interpretation and use by others¹⁹⁰.

The lead agency within the United Nations system in the field of cultural property and heritage is United Nations Educational, Scientific, and Cultural Organization, and the principal instrument in this field is the United Nations Educational, Scientific, and Cultural Organization Convention on the Means of Prohibiting, and preventing, the Illicit Import, Export, and Transfer of Ownership of Cultural Property (1970), which entered into legal force in 1972. In article 1, this convention defines cultural property as:-

Property which, on religions or secular grounds, is specifically designated by each State as being important for archaeology, prehistory, history, literature, art or science and which belongs to the following categories:

- i. Rare Collections and specimens of fauna, mineral and anatomy, and objects of paleontological interest;
- ii. Property relating to history, including the history of science and technology and military and social history, to the life of national leaders, thinkers, scientists and artists and to events of national importance;
- iii. Products of archaeological excavations or of archaeological discoveries;
- iv. Elements of artistic or historical monuments or archaeological sites which have been dismembered;
- v. Antiquities more than one hundred years old, such as inscriptions, coins and engraved seals;
- vi. Objects of ethnological interests;
- vii. Property of artistic interest;
- viii. Rare manuscripts and incunabula, old books, documents and publications of special interests;
- ix. Postage, revenue and similar stamps, singly or in collection;
- x. Archives, including sound, photographic and cinematographic archives;
- xi. Articles of furniture more than one hundred years old and musical instruments.¹⁹¹

¹⁹⁰ United Nations Educational Scientific and Cultural Organization, Declaration of the Principles of International Cultural Co-operation, 1966.

¹⁹¹ United Nations Educational, Scientific, and Cultural Organization, Convention, on the Means of Prohibiting, and Preventing, the Illicit Import, Export, and Transfer of Ownership, of Cultural Property, 1970.

United Nations Educational, Scientific and Cultural Organization is moving to protect the heritage of Indigenous peoples. It has established an inter-sector task force to deal with matters concerning Indigenous people. In 1966, United Nations Educational, Scientific and Cultural Organization brought the final report of the Principles and Guidelines for the Protection of the Heritage of Indigenous People to the attention of the Ninth Session of the Intergovernmental Committee for the Protection of the Return of Cultural Property to its Countries of origin or its Restitution in case of illicit appropriation. United Nations Educational, Scientific and Cultural Organization is proposing that it would be the appropriate body to undertake the comprehensive annual report described in paragraph 55 of the principles and guidelines. Paragraph 55 provides: “The United Nations should publish a comprehensive annual report, based upon information from all available sources, including indigenous peoples themselves, on the problems experienced and solutions adopted in the protection of indigenous peoples heritage in all countries” United Nations Educational, Scientific and Cultural Organization suggests that this report could be contained in a special chapter of its planned biennial reports on the state of culture¹⁹².

In 1976, Canada ratified the 1972 United Nations Educational, Scientific and Cultural Organization Convention on Protection of the World’s Cultural and Natural Heritage. Anthony Island in the Queen Charlotte Islands is an ancient Haida village that has been declared to be a United Nations Educational, Scientific and Cultural Organization World Heritage Site according to this convention.¹⁹³

The Organization of American States Convention on the Protection of the Archaeological and Artistic Heritage of the American Nations takes the same approach and has the same shortcomings as the United Nations Educational, Scientific and Cultural Organization Conventions.¹⁹⁴

In 1978, United Nations Educational, Scientific and Cultural Organization established the Inter-governmental Committee for Promoting the Return of Cultural Property to its Country of Origin with a mandate to undertake good offices and mediation at the request of states. The committee can also organize projects with such organizations as the International Council of Museums and United Nations Educational, Scientific and Cultural

¹⁹² M. Battiste and *Protecting Indigenous Knowledge and Heritage: A Global Challenge* 189 (Purich publishing ltd, Canada 2012).

¹⁹³ *Ibid.*

¹⁹⁴ *Ibid.*

Organization national committees to conduct inventories of cultural property. Thus far, Indigenous peoples have not been able to participate in the work of the committee. Moreover, the committee has avoided disputes between states and their constituent peoples; for example, it declined to take up Scotland's claim to the Stone of Scone because it was an internal affair of the United Kingdom. State ownership can conflict with the interests of Indigenous peoples. When the Afo-A-Kom statue was returned to Cameroon in 1974, a dispute arose between state authorities and the Kom people over custody. It was eventually agreed to return the statue to its traditional site in Kom territory rather than to the national capital. The government of Australia has returned Aboriginal materials repatriated from other countries to their Aboriginal owners, but in many other countries, repatriated objects are kept by the state and not returned to the peoples who produced them.¹⁹⁵

3. V. Protection of Folklore:

Folklore is the knowledge of the people. The legal position on folklore has been an important issue in International copyright debate for more than two decades. Only a few of the copyright laws in force contain specific provisions on folklore. The position across Europe and other Western countries is that expressions of folklore are generally considered to be long in the public domain.¹⁹⁶ In most of these countries, traditional art and traditional societies are not living entities and thus are considered part of the public domain. As soon as works cease to be protected by copyright, they fall into the public domain and from that moment form part of the common heritage of humankind, without anyone exercising any further monopoly over them. Thenceforth, the use of such works is free. Reproduction, performance, translation, or adaptation of works in the public domain can be made without anyone's consent. However, the copyright laws in these countries give protection to collections or compilations of works of folk art.

The various parties asserting claims to folklore include primarily arrangers and collectors. They, along with their collecting societies, have recently been involved in conflicts with those who maintain that folklore (that is to say, folk songs, folk music, and so on) is strictly in the public domain and that no private property rights exist therein. It should be noted that the compiler is given protection only so far as the writing, selection, or arrangement of the works of folk art reflects the characteristics of an individual and

¹⁹⁵ *Ibid.*

¹⁹⁶ Kamal Puri, "Cultural Ownership and Intellectual Property Rights Post-Mabo: Putting Ideas into Action" *Intellectual Property Journal* 12 (1995).

independent creation.¹⁹⁷ International law has thus to take a role in protecting Indigenous folklore. The Australian Working Party, which prepared a comprehensive report, entitled *Intellectual Property Aspects of Folklore Protection*, 1981, defined Aboriginal folklore as “the body of traditions, observances, customs and beliefs of Aboriginals as expressed in Aboriginal music, dance, craft, sculpture, painting, theatre and literature.” Thus, folklore consists of verbal expressions musical expressions, performing arts expressions, and tangible expressions.

a) The Tunisian literary and Artistic Property Act (1966):

In 1963, World Intellectual Property Organization and United Nations Educational, Scientific and Cultural Organization, under the initiative of the African countries, organized the first international meeting on the legal problems associated with folklore. The Tunisian Literary and Artistic property Act introduced nationwide security for tradition and works encouraged by folklore. Article 6¹⁹⁸ provided that tradition consisted part of the State heritage, and that its use with useful objective by individuals other than those indicating public national organizations required sanction from the Department of Cultural Affairs. The act also provided that copyright in works that had been inspired by folklore¹⁹⁹ could not be assigned without the consent of the ministry.

b) Amendments to the Berne Convention (1971):

The Berne Convention was amended in 1971 to enable state-parties to designate “competent authorities” to control the licensing use, and protection of national folklore. World Intellectual Property Organization interprets this including, in each state, “traditional manifestation of their culture that is the expression of their national identity”.²⁰⁰ However, Indigenous peoples would certainly object to state management of their folklore as a part of national patrimony, with royalties being paid to the state instead of to their own communities. Each state could, consistent with the Berne Convention, delegate responsibilities for the definition, protection, and licensing of folklore to Indigenous peoples themselves, but so far

¹⁹⁷ *Id* at 330.

¹⁹⁸ Tunisian Literary and Artistic Property Act, 1966

¹⁹⁹ That is to say, works composed with the aid of elements borrowed from the cultural heritage of Tunisia and perpetuated by tradition.

²⁰⁰ Protection of Expression of Folklore., 1971. World Intellectual Property Organization Doc. GIC/UK/CNR/VI/12

as could be determined, no state has yet done so. Indeed, only a small number of states, among them Bolivia and Chile, have thus far adopted national folklore laws at all.²⁰¹

c) The Tunis Model Copyright Law and Protection of Folklore (1976):

The 1976 Tunis Model Copyright Law and Protection of Folklore for Developing Countries recognized the need for economic recompense and the need to protect a cultural legacy that is an essential part of the community. The committee of governmental experts was convinced that folklore could fit within the copy right mode. The model law provided for protection of economic and moral rights in folklore without limitation in time. The model law also provided for rights in folklore to be exercised by a “competent authority” and not by Indigenous owners. The competent authority would grant authorizations for any use of folklore made with gainful intent and outside the traditional context. The model law also placed particular emphasis on the fact that copies of national folklore made abroad, and copies of translations, adaptations, arrangements, or other transformations of works of national folklore made abroad, without the authorization of the competent authority, shall be neither imported nor disturbed in the national territory.²⁰² Three special features of the model law deserve special mention: (i) protection of folklore for an indefinite period; (ii) exemption of folklore works from the requirement of fixation; and (iii) introduction of the concept of moral rights to prevent the destruction and desecration of folklore works.

d) Model Provision, for National Laws, on the Protection of Expressions of Folklore, Against Illicit Exploitation, and Other Prejudicial Actions (1982):

In 1982, WIPO drafted its Model requirements for State Laws on the Protection of Expressions, of Folklore, against Illicit Exploitation, and Other Prejudicial Actions. In 1985, the Model Provisions were adopted, establishing a sui generis protection mechanism for the expression of folklore lying outside copyright laws for the works of folklore.²⁰³ It protects against the unauthorized use of expressions of folklore, the misrepresentation of the source of expression of folklore, the wilful distortion of folklore in a way prejudicial to the interests of the relevant community, and it includes a provision for international extension of protection based on reciprocity. This protection includes the

²⁰¹ M. Battiste , *Protecting Indigenous Knowledge and Heritage: A Global Challenge* 191 (Purich publishing Ltd, Canada 2012).

²⁰² Section 6(3) of Tunis Model Copyright Law and Protection of Folklore, 1976

²⁰³ United Nations Educational, Scientific and Cultural Organization & World Intellectual Property Organization, 1985, 5

tangible expressions of culture such as pottery, costumes, jewellery, and basketry. Fixation is not required. The model law forbids any use with profitable intent and outside its established or customary context without approval by a capable influence or the society itself, as well as any kind of publication or use that either fails to identify the ethnic origins of folklore or distorts its contents. Some African states have adopted legislation based on the World Intellectual Property Organization model.

In 1984, UNESCO and WIPO produced a Draft Treaty, for the Protection, of Expressions, of Folklore, against Illicit Exploitation, and Other Prejudicial Actions. Though, It is not yet in force. Both United Nations Educational, Scientific and Cultural Organization – World Intellectual Property Organization models provide for a competent authority to regulate the use of works or expressions of folklore but leave the designation of this authority up to individual national governments on the grounds that the ownership of folklore may be regulated in different ways in different countries. These models provide for respect for Indigenous folklore; however, they do not incorporate Indigenous people’s discretion over important Indigenous issues.

In 1989 the General Conference of United Nations Educational, Scientific and Cultural Organization meeting adopted a recommendation on the importance of intangible heritage in enabling each people to assert its cultural identity and in enabling humankind as a whole to maintain its cultural diversity.²⁰⁴ The recommendation provides the framework for identifying and preserving this form of heritage. It also alerts the public to the problems involved in preserving these heritages through education and access to cultures. It recognizes the importance of protecting the traditional culture and folklore of minorities, and it identifies complex legal problems, including the concept of “intellectual property”. It also raises issues of protecting communicators, collectors, and the material collected. Lastly, it describes the best means of disseminating traditional culture and it encourages the continuing creation of this form of heritage, which is not just more vulnerable but more “alive” than others. Since 1995, using the recommendation as a working tool, United Nations Educational, Scientific and Cultural Organization has been checking around the world, region by region, on the progress being made in safeguarding intangible heritage. It is currently attempting to organize an international conference to bring all these regional surveys together into a global report.

²⁰⁴ United Nations Educational, Scientific and Cultural Organization, 1989

In 1997, United Nations Educational, Scientific and Cultural Organization and World Intellectual Property Organization sponsored the World Forum on the Protection of Expressions of Folklore in Phuket, Thailand, which was attended by 180 participants from fifty countries. The participants noted the lack of an international standard for the protection of folklore and also the inadequacy of the copyright regime to confer such protection and the need to strike a balance between the interests of the communities owning the folklore and the users of the expressions of folklore. The resulting Phuket Plan of Action provides for the establishment of a committee of experts, in cooperation with United Nations Educational, Scientific and Cultural Organization, to look into the conservation and protection of folklore, the holding of regional consultative fora, and the drafting of a new international agreement on the sui generis protection of folklore by the Committee of Experts.²⁰⁵

3. VI. Special International Instruments Concerned with Indigenous Peoples:

Within the last decade, an enormous amount of energy has been spent drafting international standards for protecting Indigenous peoples. This has illustrated the unique place of Indigenous peoples in international law. These special international instruments attempt to apply primitive principles to the context of Indigenous peoples and their rights.

- a) International Labour Organization Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989):

The ILO Convention on Indigenous and Tribal Peoples in Independent Countries provides the strongest statements on Indigenous rights. Convention No. 169 refers to the protection of the whole institutional system of Indigenous land-tenure law and management, and requires Indigenous peoples consent to the protective regime. No government voted against the adoption of Convention No.169 when it was presented to the Seventy-sixth International Labour Conference in 1989. The convention came into force in International law in 1991, but the process of ratification has just begun. Many countries have not ratified this instrument, but Mexico has, making it a potential North American Free Trade Agreement concern. Other state-parties are Bolivia, Colombia, Costa Rica, Paraguay, Peru, and Norway.²⁰⁶

²⁰⁵ Industrial Property and Copy Right 213 – 214 (Monthly Review of World Intellectual Property Organization, 6th June 1997).

²⁰⁶ M. Battiste and J. Y .Henderson, *.Protecting, Indigenous Knowledge ,and Heritage: A Global Challenge* 194 (Purich publishing ltd, Canada 2012).

In addition, the integrity of the values, practices and institutions of these peoples shall be respected. They shall have the right to preserve their own traditions and institutions and the right to control, to the extent possible, their own economic, social and cultural development.²⁰⁷

State parties are directed to respect the special importance for the cultures and spiritual values of the peoples concerned of their relationship with their lands or territories.²⁰⁸ While these provisions do not refer explicitly to cultural or intellectual property, they appear to be broad enough to require measures to protect all the heritage, of the peoples concerned, and to require respect for Indigenous peoples own laws and institutions respecting their heritage. State-parties are also bound to respect the integrity of the values, practices and institutions of these peoples;²⁰⁹ to provide them with means for the full development of their own institutions and initiatives;²¹⁰ to consult with them in good faith and with the objective of achieving agreement or consent, whenever any action is considered which may affect them directly;²¹¹ and to allow them “to exercise control, to the extent possible, over their own economic, social and cultural development.”²¹²

With particular respect to resource use, state parties recognize the rights of ownership and possession of the peoples concerned over the lands which they traditionally occupy, as well as their right to continue to use the resources on lands which they may not occupy, but to which they have traditionally had access for their subsistence and traditional activities.²¹³ Natural-resource rights include management and conservation and the maintenance of traditional land-tenure systems.²¹⁴ Moreover, traditional activities of the peoples concerned, such as hunting, fishing, trapping and gathering, shall be recognized as important factors in the maintenance of their cultures and in their economic self-reliance and development.²¹⁵

²⁰⁷ Articles 5, 7, and 8 of the ILO Convention on Indigenous and Tribal Peoples in Independent Countries (1989)

²⁰⁸ Article 13 of the ILO Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989)

²⁰⁹ Article 5 of the ILO Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989)

²¹⁰ Article 6 of the ILO Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989)

²¹¹ *Ibid.*

²¹² Article 7 of the ILO, Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989)

²¹³ Article 14 of the ILO, Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989)

²¹⁴ Article 15 and 17 of the ILO, Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989)

²¹⁵ Article 23 of the ILO, Convention, on Indigenous, and Tribal Peoples, in Independent Countries (1989)

b) The U.Ns Sub-Commission, on Prevention, of Discrimination, and Protection, of Minorities (1991):

The U.Ns Sub-Commission, on Prevention, of Discrimination, and Protection, of Minorities emphasized, in its resolution 1991/32 of 29 August 1991, that the international trafficking in Indigenous peoples cultural property “undermines the ability of Indigenous peoples to pursue their own political, economic, social, religious and cultural development in conditions of freedom and dignity.”²¹⁶ This applies with equal urgency to all aspects of Indigenous peoples heritage. Further erosion of Indigenous peoples’ knowledge will not only be destructive of these peoples self-determination and development, but will also undermine the development of the countries in which they live. For many developing countries, Indigenous peoples’ knowledge may hold the key to achieving sustainable national development, without greater dependence on imported capital, materials, and technologies. Protecting the heritage of Indigenous peoples will require urgent and effective international action due to the growth of biotechnology industries, the continuing destruction of Indigenous peoples’ lands in many parts of the world, and the popularity of Indigenous peoples’ art and cultures for tourism and export.²¹⁷

c) Principle 22 of the Rio Declaration on Environment and Development (1992):

Indigenous peoples were an integral part of the world mobilization of grassroots movements leading up to the Earth Summit held in Rio de Janeiro, Brazil, in 1992. They were heaped with praise for their ecological wisdom, for their respect for natural processes, and for their sanity in the face of crass consumerism.²¹⁸

The Rio Declaration on Environment and Development, Principle 22, affirms that Indigenous peoples and their communities and other neighbouring communities have a pivotal role in environmental organization and development because of their understanding and traditional practices. States should identify and accordingly maintain their uniqueness, traditions and welfare and facilitate their effective involvement in the accomplishment of sustainable development. This emphasis on the “vital” importance of Indigenous peoples’ traditional knowledge of the ecosystems in which they live provides strong support for national and international measures to protect the heritage of these peoples.

²¹⁶ Marie Battiste and James Youngblood Henderson. *Protecting ,Indigenous Knowledge, and Heritage: A Global Challenge* 195 (Purich publishing ltd, Canada 2012).

²¹⁷ *Ibid.*

²¹⁸ *Ibid.*

- d) The United Nations Technical Conference on Practical Experience in the Realization of Sustainable and Environmentally Sound Self-Development of Indigenous Peoples (1992):

Indigenous peoples have been particularly vulnerable to the loss of their heritage as distinct peoples. Usually viewed as “backward” by governments, they have been the targets of aggressive policies of cultural assimilation. Their arts and knowledge were frequently not regarded as world treasures and were simply destroyed in the course of colonization. Their bodies were often valued more highly than their cultures and were collected by museums. Tourism, a growing consumer demand for “primitive” art, and the development of biotechnology threaten Indigenous peoples’ ability to protect what remains of their heritage.

The United Nations Technical Conference on Practical Experience in the Realization of Sustainable and Environmentally Sound Self- Development of Indigenous Peoples,²¹⁹ recommended that “the United Nations system, with the consent of Indigenous peoples, take measures for the effective protection of property rights (including the intellectual property rights) of Indigenous peoples. These include, inter alia, cultural property, genetic resources, biotechnology and biodiversity.” The experts also stressed the importance of strengthening Indigenous peoples’ own institutions, and of exchanges of information among institution and peoples worldwide. The instruments adopted by the 1992 United Nations Conference on Environment and Development have reinforced these recommendations.

- e) Agenda 21 of the U.Ns Conference, on Environment, and Development (1992):

In 1992, 174 Nations attending the U.Ns Conference, on Environment, and Development, in Rio de Janeiro, Brazil, adopted Agenda 21 without a vote. The agenda was subsequently endorsed by the United Nations General Assembly, also without a vote, in its resolution 47/190 of 22 December 1992. Agenda 21 is not a legally binding convention, but a statement of policy by the international community. The consistency and virtual unanimity of the inter-government support for Agenda 21 provides a sound basis for arguing that it has achieved, or is very close to achieving, the status of customary international law. Its

²¹⁹ Convened at Santiago, Chile, 18-22 May, 1992

customary-law status is continually being reinforced by its role as the basic operating programme for the United Nations Commission on Sustainable Development.

Agenda 21 includes a separate chapter on programs for Indigenous peoples, as well as references to Indigenous peoples in its chapters on biodiversity and biotechnology, deforestation, living marine resources, and freshwater resources. Paragraph 26 of the agenda²²⁰ is devoted entirely to the “role of Indigenous people” and calls upon states, inter alia, to adopt or strengthen appropriate policies and/or legal instruments that will protect Indigenous intellectual and cultural property and the right to preserve customary and administrative systems and practices.²²¹

With respect to the issue of resource use, the most relevant provisions of Agenda 21 are found in paragraph 26.3, which calls on government to take measures in full partnership with Indigenous people and their communities, these measures include

- i. Identification that the lands of Indigenous people and their communities should be safeguarded from actions that are naturally unsound or that the Indigenous people concerned regard it as to be collectively and ethnically unsuitable;
- ii. Identification that traditional and direct reliance on renewable assets and ecosystems, including sustainable harvesting, continues to be necessary to the literary, financial and material well-being of Indigenous people and their communities.

In the same spirit, paragraphs 17.80-17.83²²² call on governments to take account of the “special needs and interests” of Indigenous peoples in the management of fisheries, including their “nutritional and other development needs,” as well as protecting “their right to subsistence” in international fishing treaties. Likewise, paragraph 11.12(e)²²³ calls for the adoption of national forest-management policies that “support the identity, culture and the rights of Indigenous people,” including their right to “adequate levels of livelihood and well-being.”

Agenda 21 foresees the need for direct participation in decision making and management to ensure that the rights of Indigenous peoples are truly respected. Paragraph

²²⁰ Agenda 21, of the United Nations conference on Environment and Development, 1992

²²¹ Para. 26.4 (b) of Agenda 21, of the United Nations conference on Environment and Development, 1992

²²² Agenda 21, of the United Nations conference on Environment and Development, 1992

²²³ *Ibid.*

26.6(a)²²⁴ directs government to develop or strengthen national arrangements to consult with Indigenous people and their communities with a view to reflecting their needs and incorporating their values and traditional and other knowledge and practices in national policies and programme.

With respect to traditional knowledge, paragraph 15.4(g)²²⁵ urges government to recognize and foster the traditional methods and the knowledge of Indigenous people and their communities, emphasizing the particular role of women, significant to the preservation of biological diversity and the use of biological resources sustainable, and ensure the opportunity for the participation of those groups in the economic and commercial benefit derived from the use of such traditional methods and knowledge. This directive is repeated, in nearly the same terms, in the paragraph of Agenda 21 on biotechnology²²⁶ and marine living resources.²²⁷

In summary, then, Agenda 21 recognizes Indigenous peoples rights:

- i. To be protected from environmental degradation and interferences with their sustainable harvesting of living resources;
- ii. To share in the benefits of any traditional knowledge they choose to share with others; and
- iii. To have their values, needs and management practices incorporated into national policies and programmes, through processes of direct consultations and partnership.

These principles were reaffirmed at the International Conference on Population and Development held in Cairo in 1994. Paragraph 6.27 of the programme of action adopted by the conference also refers to the rights of land ownership and environmental restoration.

Governments should respect the cultures of Indigenous peoples. They should enable Indigenous peoples to have tenure and to manage their lands. They should also protect and restore the natural resources and ecosystems on which Indigenous communities depend for their survival and well-being and, in consultation with Indigenous peoples, take these

²²⁴ *Ibid.*

²²⁵ *Ibid.*

²²⁶ Paragraph 16.39(a)

²²⁷ Paragraph 17.82(c)

resources and ecosystems into account in the formulation of national population and development policies.

The Montreal-based Secretariat of the Convention on Biological Diversity was undertaking relevant work in the field of Indigenous heritage. Complementary activities also fell within the United Nations Environmental Programme's mandate, and implementation of the convention at the national level, as called for article 6 of the convention, is facilitated by United Nations Environmental Programme.

Agenda 21 encourages governments and international institutions to co-operate with Indigenous peoples in recognizing and fostering the traditional methods and knowledge of these peoples and applying this knowledge to managing resources.²²⁸ These provisions, adopted by a consensus of all member-states, offer strong support for devising new international measures for the protection of Indigenous peoples' heritage, in partnership with these peoples themselves.

In the 1992, Rio Declaration, on Environment, and Development, the U.Ns Conference on Environment, and Development, stressed the vital role that Indigenous peoples may play in achieving sustainable development because of their knowledge and traditional practices.²²⁹ The conference also called on governments and intergovernmental organizations, in full partnership with Indigenous peoples, to take measures to recognize traditional forms of knowledge and enhance capacity-building for Indigenous communities based on the adaptation and exchange of traditional knowledge.²³⁰ It is our view that these conclusions and recommendations not only apply to Indigenous knowledge that is narrowly biological, botanical, or ecological but-in view of the special relationship that exists between Indigenous peoples and their territories- to all aspects of Indigenous peoples' heritage and knowledge.

f) Maatatua Declaration on Cultural and Intellectual Property of Indigenous Peoples (1993):

Indigenous peoples have also consulted with each other on an international stage to consider safeguarding of their folklore. The preliminary International Conference on

²²⁸ Paragraphs. 15.4(g), 16.7(b), 16.39(a), 17.75(b), and 17.82(c) of Agenda 21, of the United Nations conference on Environment and Development, 1992

²²⁹ Agenda 21, vol. 1, annex I, principle 22

²³⁰ Agenda 21, vol. III, paragraph. 26.3

the Cultural and IPR of Indigenous Peoples, held in Aotearoa, New Zealand, shaped the Maatatua statement, on Cultural, and IPR of Indigenous Peoples, which emphasized the right of Indigenous peoples to self-determination and their status as exclusive owners of their cultural and intellectual property. Included among the key recommendations to Indigenous peoples were that they should define for themselves their own logical and intellectual property; that they should build up a policy of beliefs that external users must monitor when recording their customary and traditional understanding in visual, audio, or written form; and that they should develop and retain their traditional practices and sanctions for the protection, preservation, and revitalization of their traditional intellectual and cultural properties.

The statement called for the organization of an suitable body with suitable mechanisms to safeguard and monitor the commercialism or otherwise of Indigenous cultural properties in the public domain; to generally give advice and encourage Indigenous peoples to take steps to safeguard their cultural heritage; to allow an obligatory consultative procedure with respect to any innovative legislation affecting Indigenous peoples' cultural and IPR; and to set up international Indigenous information centres and networks. States and national and international outfits are asked (1) to identify that Indigenous peoples are the custodian of their customary knowledge and have the right to safeguard and organize the distribution of that knowledge;(2)To note that existing safeguard mechanisms are inadequate for the safety of Indigenous peoples' cultural and IPR;(3)To acknowledge that the cultural and IPR of Indigenous peoples are vested with those who created them;(4)To grow, in full cooperation with Indigenous peoples, an additional cultural and IPR regime incorporating the following: joint as well as individual ownership and source, retroactive reporting of historical as well as con-temporary machinery, defence against debasement of culturally important items in a supportive rather than competitive framework, a standard that the first beneficiaries are to be the direct lineage of the traditional guardians of that knowledge, and a multi-generational treatment cover.

3. VIII. Current International Reforms:

Conscious that, in various situations, indigenous people are unable to enjoy their inalienable human rights and fundamental freedoms, determined to do everything possible to promote the enjoyment of the human rights and fundamental freedoms of indigenous people, and bearing in mind that international standards must be developed on the basis of the diverse situations and aspirations of the world's indigenous people.

Affirming its recognition of the value and diversity of the cultures and forms of social organization of indigenous people, and that the development of indigenous people within their countries will contribute to the socio-economic, cultural and environmental advancement of all the countries of the world.²³¹

Because of the diversity of the legal systems on the planet, the international legal order has been seeking legal reforms to international trade. As a minor part of these reforms, the United Nations is attempting to isolate legal remedies to protect Indigenous knowledge. Specifically the Commission on Human Rights has stated it is important that the relevant agencies, inter-governmental organizations, non-governmental organizations, businesses, media, academics, and nations-states make an effort to harmonize activities that relate to the protection of the heritage of Indigenous people. There is broad agreement that the existing legal frameworks for the protection of Indigenous knowledge and heritage are discriminatory and inadequate. Inter-national lawyers agree some form of sui generis special protection is necessary to encourage Indigenous people to share their knowledge and expertise with the international community; however, they disagree on issues of benefit-sharing between governments and Indigenous peoples. As well, there is disagreement about the extent to which Indigenous communities are entitled to apply their own customary laws to disputes over the disposition of their heritage and knowledge.

- a) U.Ns Economic, and Social Council's Mandate, on the Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples:

Dr. Erinca-Irene Daes was entrusted with the task of preparing a working paper on the ownership and control of the cultural property of Indigenous peoples.²³² This paper was submitted to the Working Group on Indigenous Populations at its ninth session. After considering the conclusion and recommendations contained in the working paper, the sub-commission, in its resolution 1991/32 of 29 August 1991, decided to entrust Dr. Daes with the further task of preparing, for submission at its forty-fifth session in 1993, a study of measures that should be taken by the international community to strengthen respect for the cultural property of Indigenous peoples. At the same session, the sub-commission, in its resolution 1991/31 of August 1991, requested that the secretary-general of the United Nations prepare a concise note on the extent to which Indigenous peoples can utilize existing

²³¹ Commission on Human Rights, Resolution 1997/32 .

²³² Daes, Erica-Irene. 1991. (Special Rapporteur of the Working Group on Indigenous Populations). Working Paper. E/CN.4/Sub. 21/1991/34

international standards and mechanisms to protect their intellectual property, drawing attention to any gaps or obstacles and to possible measures for addressing them.²³³

At its forty-fourth session in 1992, the sub-commission welcomed the concise note of the secretary-general on intellectual property and concluded in its resolution 1992/35 of 27 August 1992 that “there is a relationship, in the laws or philosophies of Indigenous peoples, between cultural property and intellectual property, and that the protection of both is essential to the Indigenous peoples’ cultural and economic survival and development.” The sub-commission recommended that Dr. Daes include a consideration of this relationship in her report and changed the title of this study accordingly.

The Economic and Social Council, in its decision of 20 July 1992, approved the appointment of Dr. Daes as special rapporteur. It requested that Dr. Daes prepare a study on the safety of the literary and intellectual assets of Indigenous peoples,²³⁴ taking into account information made available to her by Indigenous peoples and relevant international standards. Indigenous peoples commented on the report during the eleventh session of the Working Group on Indigenous Populations,²³⁵ and in the light of these comments, the working group recommended that further work on this topic be undertaken.

In preparing her report, the special rapporteur took into account the relationship between this study and the following:

- i. The significant actions of inter-governmental bodies, in particular the intended achievement of the Draft Declaration, on the Rights, of Indigenous, Peoples, by the functioning group;
- ii. The likely execution, by the new U.N.s Commission on Sustained Development, of the requirements of Agenda 21 (1992) relating to Indigenous peoples; and
- iii. The in progress effort by the Inter-American Commission on Human Rights on a possible Inter-American Legal mechanism on the Rights of Indigenous Peoples.

On 26 August 1993, the Sub-Commission, on Prevention, of Discrimination, and protection, of Minorities, endorsed, the wrapping up, and suggestion enclosed in the learning of the exceptional rapporteur. Also they requested that the special rapporteur

²³³ *Ibid.*

²³⁴ Daes, Erica-Irena. 1993. Study on the Protection of the Cultural and IPR of Indigenous, Peoples,. E/CN.4/Sub. 21/1993/28. Sub-Commission, on Prevention, of Discrimination, and Protection of Minorities, Commission on Human Rights, UNESCO.

²³⁵ *Id.* at Paragraph 163-76

expand her study with a view to elaborating draft principles and guidelines for the protection of the heritage of Indigenous peoples, and that she submit a preliminary report containing such principles and guidelines as its forty-sixth session. The Commission on Human Rights endorsed the mandate for an expanded study in its decision 1994/105 of 4 March 1994.²³⁶

In elaborating the principles and guidelines, the special rapporteur relied extensively on various declarations of the Indigenous peoples, such as the Kari-Oca Declaration of the World Conference of Indigenous peoples on Territory, Environment and Development²³⁷ and the Mataatua Declaration of the First Global convention on Cultural and IPR of Indigenous peoples.²³⁸ Their own conception of the nature of their heritage and their own ideas for ensuring the protection of their heritage are central to the “new partnership” with Indigenous peoples’ symbolized by the International Year of the World’s Indigenous People in 1993.

The special rapporteur underscored the fact, emphasized by the Mataatua Declaration, that Indigenous peoples have repeatedly expressed their willingness to share their useful knowledge with all humanity, provided their fundamental rights to define and control this knowledge are protected by the international community. Greater protection of the Indigenous peoples’ control over their own heritage, in the opinion of the special rapporteur, would not decrease the sharing of traditional cultural knowledge, arts and sciences with other peoples. On the contrary, Indigenous peoples indicated that their willingness to share, teach, and interpret their knowledge and heritage would increase.

In developing the principles and guidelines, the special rapporteur found it useful to bear in mind that the heritage of an Indigenous people is not merely a collection of objects, stories, and ceremonies, but a complete knowledge system with its own concepts of epistemology, philosophy, and scientific and logical validity. The diverse elements of an Indigenous people heritage can only be fully learned or understood by means of the pedagogy traditionally employed by these peoples themselves, including apprenticeship, ceremonies, and practice. Simply recording words or images fails to capture the whole context and meaning of songs, rituals, arts, or scientific and medical wisdom. This underscores the central role of Indigenous languages, through which each

²³⁶ *Ibid.*

²³⁷ 1992.

²³⁸ 1993.

peoples heritage has traditionally been recorded and transmitted from generation to generation.

The special rapporteur also considered it fundamental to recognize and renew the central and indispensable role of land as the classroom in which the heritage of each Indigenous people has traditionally been taught. Heritage is learned through a lifetime of personal experience travelling through and conducting ceremonies on the land. Much or all of an Indigenous peoples traditional territory must therefore remain accessible to and under the control of the people themselves, so that they can continue to teach, develop, and renew their knowledge systems fully by their own means of cultural transmission. Indeed, ceremonies and traditional artistic works are regarded as means of renewing human relationships with the land, even as “deeds” to the territory, so that they can never be detached geographically and used elsewhere without completely losing their meaning.

The special rapporteur especially noted that this relationship is not merely with the physical aspects of the land, but is also conceived of as direct and personal kinship with each of the species of animals and plants that co-exist with people in the same territory. Biological, zoological, and botanical knowledge is not simply a matter of learning the names, habits, and uses of species, but of carefully maintaining and periodically renewing ancient social and ceremonial relationships with each species. An Indigenous person does not only harvest medicinal plants, for instance, but visits them, prays with them, and, through ceremonies, helps them. For this reason, Indigenous peoples do not believe that their knowledge of ecology and the uses of plants and animals, rituals, or medicine can ever be alienated completely. Like human family relationships, these forms of knowledge are permanent and collective. They can be shared, however, under the right circumstances, with property initiated persons.

The special rapporteur recommended that the sub-commission request that the secretary-general submit the principles and guidelines to Indigenous peoples’ organizations, governments, specialized agencies, and non-governmental organizations for their comments. On the basis of these comments and those of the sub-commission, the special rapporteur was to be entrusted with presenting her final report to the sub-commission at its forty-seventh session in 1995. If the sub-commission then adopted the principles and guidelines, this would be the first formal step towards committing the United Nations to the protection of Indigenous peoples’ heritage. The principles and

guidelines would then be transmitted to the General Assembly, through the Commission on Human Rights and the Economic and Social Council.

The Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples²³⁹ defined “heritage” as traditional knowledge and provided for the protection of the transmission of Indigenous heritage,²⁴⁰ and the recovery and restitution of Indigenous heritage.²⁴¹ They also regulated the activities of researchers and scholarly institutions,²⁴² business and industry,²⁴³ and artists, writers, and performers²⁴⁴ concerning Indigenous heritage.

In her report, the special rapporteur respectfully recommended that the principles and guidelines be considered by the sub-commission as a matter of the highest priority, with the aim of transmitting them to the Commission on Human Rights as its fifty-second session.²⁴⁵ The special rapporteur hoped that it would be possible for the General Assembly to adopt a declaration of principles and guidelines on the heritage of Indigenous peoples in 1996. She urged that the declaration should constitute a strong message about the commitment of the United Nations to the goals and objectives of the Decade of Indigenous Peoples.²⁴⁶

The special rapporteur further recommended implementing the mandates for interregional technical exchanges and communication networks among Indigenous peoples,²⁴⁷ and convening a United Nations technical meeting to propose mainly practical modalities for the cooperation of relevant United Nations bodies and specialized agencies in protecting the heritage of Indigenous peoples. The participants were to include representatives of governments, relevant United Nations bodies such as the United Nations Environment Programme, the specialized agencies, in particular the International

²³⁹ 1995.

²⁴⁰ Paragraphs 14-18 of the Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples, 1995

²⁴¹ Paragraphs 19-24 of the Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples, 1995

²⁴² Paragraphs 32-38 of the Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples, 1995

²⁴³ Paragraphs 40-45 of the Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples, 1995

²⁴⁴ Paragraphs 46-48 of the Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples, 1995

²⁴⁵ Daes, Erica-Irene. 1995. Final Report of the Special Rapporteur: Protection of the Heritage of Indigenous Peoples. E/CN.4/Sub.2/ 1995/ 26. Sub-commission on prevention of Discrimination and Protection of Minorities, Commission on Human Rights, UNESCO. .Paragraph.31

²⁴⁶ *Id.* at paragraph 32

²⁴⁷ *Id.* at Paragraph 34

Labour Organization and United Nations Educational, Scientific and Cultural Organization, as well as the largest feasible number of representative organizations of Indigenous peoples actively involved in the protection of heritage.²⁴⁸The special rapporteur argued that such initiatives were urgently required to further the global recognition of the value and diversity of the world's Indigenous cultures and forms of social organization. Additionally such urgent initiatives were required to bring the erosion of these irreplaceable cultures to a speedy end.²⁴⁹

In 1997, the Report of the Technical Meeting on the Protection of the Heritage of Indigenous Peoples stressed that the heritage of Indigenous cultures should not be destroyed.²⁵⁰The meeting also recognized that the Final Report and the Draft Principles and Guidelines on the Protection of the Heritage of Indigenous Peoples drawn up by the special rapporteur were valuable.²⁵¹The meeting recommended that the Commission on Human Rights should take action on the principles and guidelines submitted to it by the sub-commission.²⁵²It also recommended that the special rapporteur should be invited before the commission to present and analyze the draft principles and guidelines.²⁵³

Additionally, the meeting concluded that it was important that the relevant agencies and bodies of the United Nations coordinate and harmonize their efforts to protect the heritage of the world's Indigenous peoples.²⁵⁴It was recommended that the special rapporteur should continue her work collecting information about Indigenous heritage from Indigenous peoples²⁵⁵ and from national, regional, and international organizations, and that she should submit this information annually to the sub-commission and the commission.²⁵⁶The meeting suggested that the study of a number of contemporary problems relating to Indigenous heritage should continue.²⁵⁷In particular, the meeting recommended that the study of the relationship between the concepts of "heritage of humankind" and "national sovereignty" should be analyzed and duly considered. Delegates also recommended the adoption of additional means and measures for more effective protection of Indigenous

²⁴⁸*Id.* at Paragraph 33

²⁴⁹*Ibid.*

²⁵⁰*Id.* at Paragraph 32

²⁵¹*Id.* at Paragraph 29

²⁵²*Id.* at Paragraph 34

²⁵³*Id.* at Paragraph 35

²⁵⁴*Id.* at Paragraph 27

²⁵⁵*Id.* at Paragraph 28

²⁵⁶*Id.* at Paragraph 32

²⁵⁷*Id.* at Paragraph 37

heritage,²⁵⁸ as well as the extension of cooperation and assistance to the special rapporteur.²⁵⁹ Furthermore, it recommended the special rapporteur should be entrusted to elaborate the draft mandate and scope of a trust fund to be established by the General Assembly of the United Nations to act, inter alia, as a global agent for the recovery of compensation for Indigenous heritage.²⁶⁰

In 1997, the Sub-commission, on Prevention, of Discrimination, and Protection, of Minorities, in its resolution, 1997/13, requested that the U.N.s high commissioners for human rights organize a seminar on the Draft Principles and guiding principle for the Protection, of the Heritage, of Indigenous Peoples. In resolution 1997/112, the Commission on Human Rights approved decision 1997/287 of the Economic, and Social Council, which suggested that Dr. Erica-Irene Daes be entrusted with a progressing mandate concerning the tradition of Indigenous people, with the intention of facilitating teamwork and management and of promoting the full involvement of Indigenous people in those efforts. Furthermore, the commission requested that the secretary-general offer the special rapporteur with all the aid necessary to carry out her work.

In February-March 2000, the seminar on the Draft Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples convened with Indigenous experts and representatives from inter-governmental and non-governmental organization to consider the draft. The final revisions to the draft and the report of the seminar prepared by Dr. Erica – Irene Daes will be submitted to the Sub-Commission, on the Promotion, and Protection, of Human Rights, (formerly, the Sub-Commission, on the prevention of Discrimination, and Protection of Minorities) for its consideration. If the Draft Principles and Guidelines are accepted, they will then be presented to the Commission on Human Rights for consideration as its General Assembly.

b) United Nations Decade of the World's Indigenous Peoples (1995-2004):

On 21st December 1993, the United Nations General Assembly, in resolution 48/63, proclaimed 1995-2004 to be the Decade of the World's Indigenous People. When developing activities for this decade, governments should encourage practical workshops involving professional, academic, and scientific experts and Indigenous peoples, as

²⁵⁸ *Id.* at Paragraph 32

²⁵⁹ *Id.* at Paragraph 33

²⁶⁰ *Id.* at Paragraph 35

recommended by the Working Group on Indigenous Populations, and the study of the special rapporteur.²⁶¹ Such workshops should increase awareness of and respect for Indigenous peoples' heritage among researchers, scholars, legislators, educators, and representatives of governments, business, and industry, and develop model national legislation.

In 1997, the Commission on Human Rights, in resolution 1997/32, requested that the high commissioner for human rights considered organizing training for research and higher education institutions focusing on Indigenous issues in learning in discussion with Indigenous people and in collaboration with UNESCO and other relevant U.N. bodies. The intention of the intensive course would be to develop the exchange of information between such institutions and to promote future cooperation. The commission also suggested that the high commissioner for human rights, when developing programs within the structure of the International Decade of the World's Indigenous People and the U.N.'s Decade for Human Rights Education, giving due regard to the growth of human rights training for Indigenous people.

c) Draft Declaration, on the Rights, of Indigenous Peoples (1994):

The Draft, Declaration, on the Rights, of Indigenous Peoples, which was being reviewed by an ad hoc working group of the United Nations Commission on Human Rights, is a comprehensive interpretation of how United Nations human rights covenants apply to Indigenous peoples. If it is adopted, the declaration will establish policy for the United Nations system and might evolve into customary international law. The articles in the statement set lowest standards for the continued existence, dignity, and welfare of Indigenous peoples.

The declaration provides that Indigenous peoples have the right to maintain and strengthen their distinct political, economic, social, and cultural characteristics,²⁶² and a right not to be subjected to ethnocide, cultural genocide, or assimilation.²⁶³ Part III of the

²⁶¹ Daes, Erica-Iren, 1993. Study on the Protection of the Cultural and Intellectual Property Rights of Indigenous Peoples. E/CN.4/Sub. 21/1993/28. Sub-Commission on Prevention of Discrimination and Protection of Minorities, Commission on Human Rights, United Nations Educational, Scientific and Cultural Organization. paragraph.181

²⁶² Article 4 of the Draft, Declaration, on the Rights of Indigenous peoples, 1994

²⁶³ Article 6-7 of the Draft, Declaration, on the Rights of Indigenous peoples, 1994

declaration is concerned with culture, religion, and linguistic identity;²⁶⁴ it addresses in general terms the heritage of Indigenous peoples. Article 12 to 14 provides:

12. Indigenous peoples possess the right to exercise and revitalize their traditions and customs. This includes the right to preserve, defend and develop the past, present and future materialization of their cultures, such as archaeological and past sites, artifacts, designs, ceremonies, technologies and visual and performing arts and literature, as well as the right to the restoration of cultures, intellectual, religious and spiritual assets taken without their free and informed consent or in infringement of their laws, customs and traditions.

13. Indigenous peoples have the right to manifest, exercise, expand and educate their spiritual and religious customs, traditions and ceremonies; the right to preserve, safeguard, and have access in privacy to their spiritual and cultural sites; the right to the utilize and manage ceremonial items; and the right to the repatriation of human remains.

States shall take efficient course, in combination with the Indigenous peoples concerned, to ensure that Indigenous holy places, including burial sites, be preserved, valued and protected.

14. Indigenous peoples have the right to revitalize, exercise, expand and pass on to future generations their history, language, oral traditions, philosophy, script systems and fiction, and to assign and preserve their own names for communities, places and individuals.

States shall take efficient measures, particularly whenever any right of Indigenous peoples may be affected, to guarantee this right and also to make sure that they can understand and be understood in political, legal and administrative events, where necessary all the way through the provision of interpretation or by other appropriate means.

Articles 24, 28 and 29 also provide protection of Indigenous Knowledge:

²⁶⁴ Article 12-29 of the Draft Declaration on the Rights of Indigenous peoples, 1994

24. Indigenous individuals have the right to their customary medications and wellbeing practices, including the right to the safeguard of vital medicinal flora, fauna and minerals.

They also have the right to admission, without any unfairness, to all medicinal institution, wellbeing services and check-up care.....

28. Indigenous individuals have the right to the preservation, restitution and safeguard of the total surroundings and the productive capability of their lands, territories and assets, as well as to the aid for this intention from States and through worldwide collaboration....

Nations shall also take efficient measures to make sure, as needed, that programmes for supervising, preserving and reinstating the wellbeing of Indigenous peoples, as developed and implemented by the individuals affected by such materials, are accordingly implemented.

29. Indigenous individuals are permitted to recognise full possession, control and security of their cultural and intellectual property.

They have rights with special measures to manage, grow and safeguard their sciences, technologies and traditional manifestations, including being and other inherent resources, seeds, medicines, understanding of the properties of performing arts, oral tradition, fauna and flora, etc.

These articles reflect general principles that have already been adopted in a number of recent conventions for the protection of the environment. The fundamental right of Indigenous peoples to the protection and enjoyment of their heritage has already been given international recognition in the existing human rights covenants, and in conventions on the environment that makes express references to Indigenous communities.

d) Protecting Traditional Ecological Knowledge:

The 1992 United Nations Conference on Environment and Development recognized the need for development projects to protect the traditional ecological knowledge and conservation practices of Indigenous peoples. This need has now been generally addressed in several major conventions on the protection of the global environment. There exists a strong basis in international conventional law for concrete measures at the international, regional, and

national levels to protect the heritage of Indigenous peoples, in particular the economic, social, cultural, and spiritual relationships that exist between Indigenous peoples and their ancestral territories and resources.

The Convention, on Biological Diversity, was opened for signature at the U.N Conference on Environment, and Development, on 5th June 1992, and entered into force on 29th December 1993. Since then the convention has been ratified by 134 Nations. Execution is entrusted to the administrative secretary of the convention, under the direction of the consultation of the Parties. The administrative secretary is serviced by the UNEP, which has established an office in Montreal for this intention. Articles 8(j) and 10 (c) of the convention provide for value, safety, security, and safeguarding of Indigenous knowledge, innovation, and practices.

The U.N.s Convention, to Combat Desertification, in Those Countries, Experiencing severe famine and/or Desertification, for the most part in Africa was opened for signature on 14th and 15th October 1994. In conditions that are similar to article 8(j) of the CBD, article 17.1 (c) of the convention requires state parties to value, safeguard, and make use of customary and traditional knowledge and preservation practices. In particular, article 18.2 of the Convention on Desertification commits state parties to assemble data on traditional knowledge and usage with the involvement of local populations; to encourage the combination of traditional knowledge with modern technologies; and to make sure that local population benefits directly and fairly from any distribution or business-related development of their understanding.

The Commission on Sustainable Development was established, inter alia, to monitor global progress in the implementation of the principles and program of action adopted by the United Nations Conference on Environment and Development. In its decision 1995/226, the economic and Social Council approved the establishment of an open-ended, ad hoc Inter-governmental Panel on Forests, under the supervision of the Commission on Sustainable Development, to pursue a consensus on the conservation and sustainable development of forests. At its first session, held from 11th to 15th September 1995, Inter-governmental Panel on Forests adopted element 1.3 of its program:

Consistent with the terms of the Convention on Biological Diversity, encourage countries to consider ways and means for the effective protection and use of traditional forest-related knowledge, innovations and practices of forest- dwellers, Indigenous people

and local communities, as well as fair and equitable sharing of benefits arising from such knowledge, innovations and practices.²⁶⁵

In its decision II/9, the Second Conference of the Parties to the Convention on Biological Diversity requested that the executive secretary of the convention provide advice and information pertaining to the relationship between Indigenous and local communities and forests to Inter-governmental Panel on Forests. The executive secretary issued progress report in January 1996 entitled “Indigenous and Local Communities and Forests”, which in paragraph 12 underscores the emergence of scientific evidence that, inter alia:

- i. The language, culture and knowledge of Indigenous and Local communities are disappearing at alarming rates;
- ii. Many presumed “natural” ecosystem or “wilderness” areas are in fact “human or cultural landscapes” resulting from millennial interactions with forest-dwellers;
- iii. Traditional knowledge is complex, sophisticated and critically relevant to understand how to conserve forest ecosystems and to use them sustainably.²⁶⁶

The growth description of the administrative secretary concluded that the security and use of traditional knowledge would depend on the support given to Indigenous individuals to manuscript, assess, and make use of their own systems of knowledge. It also concluded that acknowledgment of the privileges of Indigenous people to their traditional knowledge would facilitate commitments made by Nations under human rights conventions, covenants and agreements to be coordinated at the national level with international commitments on environment, progress, and trade. This report was considered at the second session of Inter-governmental Panel on Forest, held from 11th to 22nd March 1996 in Geneva, together with a background report prepared at the request of Inter-governmental Panel on Forest by the secretary-general of the United Nations. Inter-governmental Panel on Forest decided to pursue a substantive discussion of- ways and means to ensure effective protection of Indigenous rights and payment of royalties on intellectual property rights in the context of national legislation, and to ensure the fair equitable sharing of benefits, involving local communities and forest dwellers, including ways to determine clearly which individuals belonged to which group.²⁶⁷

²⁶⁵ *Ibid.*

²⁶⁶ Inter-governmental Panel on Forest 1996.a

²⁶⁷ Inter-governmental Panel on Forest 1996 . b

The growth statement of the administrative secretary of the conference on Biological Diversity report was measured at the third conference of the parties to the conference.

The Commission, on Genetic Resources, for Food and Agriculture, of the U.N.s FAO is engaged in drafting an international plan of act and a global undertaking regarding the conservation and utilization of plant genetic diversity. The second extraordinary session of the commission, discussed the responsibility of Indigenous individuals and society in the situ management of plant inherited variety. The officially authorized counsel for FAO advised the commission to go with the draft of its international plan with the appropriate provisions of the CBD. The function of Indigenous peoples in safeguarding inherited assets was discussed at the Fourth global Technical Conference on Plant Genetic Resources in Germany.

An exceptional global convention focusing on property rights in Indigenous Knowledge might also be negotiated under the support of WIPO, the U.N.s Environmental Programme, or the United Nations Working Group on Indigenous Peoples. The conference could create a homogeneous criterion for property rights in Indigenous knowledge. On the other hand, the conference could generate standard procedures for negotiating with Indigenous peoples for the right to exercise their knowledge and generate measures for reimbursing it.

Another possibility is that a subsidiary agreement to the Convention on Biological Diversity could be negotiated requiring that the government of a country that has genetic resources and receives technology or royalties from a developed country for access to its genetic resources must pass on some of the benefits to the relevant Indigenous peoples. Article 2 of the convention considers “genetic resources” as a commodity or raw material used in the processes of biotechnology. Canada has not formulated any law and has very little policy dealing with genetic resources. Canadian policy briefly mentions the rights of Indigenous peoples but does not address the specific issue of requiring reimbursement to Indigenous peoples for their traditional knowledge or otherwise requiring protection of that knowledge. The convention requires only that the country itself be compensated.

3. VIII. South Asian Countries and Indigenous Knowledge:

Following India's guide, a quantity of administrative agencies and non-administrative organizations in other South Asian countries have been busy in the records of Indigenous Knowledge, mainly in the course of preparation of biodiversity registers with objectives, related to those of India. By and large, these hard works are in their formative years, and their impact on the safeguard of Indigenous Knowledge has been nominal.²⁶⁸

a) Indigenous Knowledge in Bangladesh and its Documentation:

Some degree of work in Bangladesh is being carried out on the documentation of Indigenous Knowledge; the work mostly is focused on biodiversity and not the related indigenous knowledge. For instance, the Bangladesh Centre for Advanced Studies has approved out a variety of studies to manuscript biodiversity in lowland and jungle areas. The Bangladesh, Agriculture, Research, Institute, and Bangladesh, Institute, for Rice, Research has collected data on agriculture biodiversity. The Bangladesh Environmental Lawyers Association is preparing a document on the state of bio-diversity in a rise district of Bangladesh.²⁶⁹

Information is available only on one project related to Indigenous Knowledge and its documentation in Bangladesh. This is a venture to document wellbeing related indigenous knowledge by the Bangladesh Centre for Advanced Studies.²⁷⁰ The focus of this effort is on the information of indigenous healers, locally known as Kabiraj. The effort is being carried out in the Chanda Beel wetland area. The information enclosed in the findings will be placed and used for community service. There is no information on the process adopted for the business-related use of this information and benefit sharing.²⁷¹

b) Indigenous Knowledge in Nepal and its Documentation:

The Nepalese Ministry of Environment and the Global Union for Conservation of Nature has developed a project for documentation of indigenous knowledge in Nepal.²⁷² A number of other agencies, including the NFEIPN, the NARC, the Ministry of Law and Justice

²⁶⁸ Protection of Indigenous Knowledge of Biodiversity in India, available at: <http://www.Genecampaign.org/WP-content/uploads/2014/07/> (Last visited on 24th of April 2015).

²⁶⁹ Information provided by Syeda Rizwana Hasan, Bangladesh Environmental Lawyers Association, Dhaka, Bangladesh.

²⁷⁰ Information provided by Mr. Tapas Ranjan Chakraborty, Bangladesh Centre for Advanced Studies.

²⁷¹ *Ibid.*

²⁷² Information provided by Mr. Sagendra Tiwari, Programme Coordinator, International Union for Conservation of Nature- The World Conservation Union, Nepal.

and local non-governmental organizations are also occupied in the execution of the project. It is expected that a variety of indigenous communities from different parts of Nepal will be prepared under the project. The objectives of the documentation are to encourage the safeguard the indigenous knowledge, to secure the rights of indigenous individuals over their understanding by following a suspicious publication policy, to avoid misuse of biological resources and related indigenous knowledge, to constitute a mechanism to aid the commercialization of indigenous knowledge and generate situation for benefit sharing among the beneficiaries and providers of biological resources and related indigenous knowledge, to promote sustainable use and conservation of biological and genetic resources and associated indigenous knowledge and further development of indigenous innovation and practices and to circulate selected essentials of the indigenous knowledge already in the public sphere to other communities for public service.²⁷³

The inventory will comprise of dual parts: one part will consist information on bio-resources while the other will consist of documents relating to indigenous knowledge. The first part (with information on bio-resources) will be placed before the government ministry dealing with biodiversity. The part of the inventory consisting indigenous knowledge will be the assets of the concerned communities, and the right to use it by outsiders will solely be at their discretion. However, efforts in preparation of these inventories have been delayed due to uncertain political state of affairs prevailing in Nepal. At present, the effort is focused on building the facility to carry out the indigenous knowledge documentation work. Further, exercise modules and case study methodologies are being set. According to IUCN, it is difficult to say when the documentation work will commence.²⁷⁴

c) Indigenous Knowledge in Pakistan and its Documentation:

Not much information on the documentation of Indigenous knowledge in Pakistan is accessible. There is a need to document indigenous knowledge related to wellbeing care in Northern Pakistan. The records will wrap about sixty plants and will be in electronic arrangement. The information will be for public use and will be located on the internet as a digital library. The main intention of the effort is to avoid the patenting of indigenous knowledge by business-related interests and dispirit bio-piracy. Heavy weight companies with significance in herbal medicine are also functioning on the preservation of

²⁷³ Protection of Indigenous Knowledge of Biodiversity in India, available at: <http://www.Genecampaign.org/WP-content/uploads/2014/07/> (Last visited on 24th of April 2015).

²⁷⁴ *Ibid.*

bio-diversity and indigenous knowledge. These consist of a collaborative effort by Qarash Industry and WWF for Nature-Pakistan.²⁷⁵

d) Indigenous Knowledge in Sri Lanka and its Documentation:

Indigenous healing knowledge in Sri Lanka exists mainly as part of the formalised systems such as Siddha, Ayurveda and Unani. There is little indigenous knowledge existing on non-formalised systems as much of it has already been extinct.²⁷⁶ Whatever remains is being safeguarded as family secrets handed over from one generation to the next. Only a handful of communities maintain separate characteristics. These include the gypsies, Rodiyas and the Veddahs, the Rodiyas who speak their own dialect. While each of these groups has its own indigenous treatments for ailment, there has been slight or no effort to document it.

The certification of formalized indigenous knowledge has been passed out by the Sri Lankan Government's Department of Ayurveda, as branch of an Ayurveda Pharmacopoeia. The Pharmacopoeia documents the raw resources used in the indigenous medicinal system and drug preparation methods. In addition, the following agencies are occupied in the records of indigenous knowledge in Sri Lanka.²⁷⁷ The Ministry of ENR, IUCN, ITDP of Sri Lanka and the National Federation for the Protection of Agri resources of Sri Lanka, efforts on the documentation of biodiversity in Sri Lanka is being accepted out by the Law and Society Trust, which has documented indigenous crop varieties of rice. This effort was made as part of a larger project on Farmers' Rights in collaboration with the SAWTEE, Nepal and the plant Genetic Resources Centre of the Department of Agriculture of the Government of Sri Lanka. PGRC has documented indigenous plant varieties in Sri Lanka.²⁷⁸

Apart from the aforementioned efforts at documentation in the other South Asian countries, some work on ethno-botany has also been attempted. However as compared to India, little work in this regard has been carried out in other South Asian countries. Study of literature suggests that, as in India, the focal point of ethno-biological work in these countries has been on preparing records of plants and their uses by tribal populations for

²⁷⁵ *Ibid.*

²⁷⁶ V Kumar, "Systems and National Experiences for Protecting Indigenous Knowledge, Innovations and Practices-Sri Lanka", Presented at Unctad Expert Meeting On Systems and National Experiences for Protecting Indigenous Knowledge, Innovations and Practices, Geneva 30th October – 1st November 2000.

²⁷⁷ Information provided by Ms. Avanthi Weerasinghe, Law and Trust Society, Sri Lanka

²⁷⁸ *Ibid.*

wellbeing purposes. Again, these studies are not worried with issues relating to ownership of indigenous knowledge, its security and benefit sharing. Adding to work by national researchers, international institutions and agencies have also undertaken ethno-biological studies. Their role in collecting indigenous knowledge related information has been pivotal in the smaller South Asian countries. One of the most important of these was carried out by ICIMD, under a programme called Promotion of Sustainable and Equitable Use of Plant Resources by the Application of Ethno-botany. The three year programme, which began in 1995, was centered in six Hinukush countries, including India, Pakistan, Bangladesh and Nepal. The main objectives of the programme were to advance the management and conservation of plant resources and indigenous knowledge through the use of ethno-botanical studies.²⁷⁹

The U.N.s is funding an international endeavour to put in order an electronic network of ethno-botanical databases of countries in Asia-Pacific region. The Indian component of the network (called the Asian-Pacific online Network for Transfer of Indigenous Medical and Herbal Technology) is being synchronized by the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy, Government of India. The technical aspects of the database are looked after by the NBRI.²⁸⁰

3. IX. International Perspective on Indigenous Knowledge (Case Studies):

Four cases studies have been summarized below. They display a range of research frameworks, objectives, and method.

a) Indonesia:

To keep away from requirement for distant or new approaches to sustainable development, an Indigenous Knowledge research project in Indonesia²⁸¹ used Participatory Rural Appraisal method to draw attention to the role that could be made by use of local approaches that already support sustainable development.

²⁷⁹ A Rastogi, "Applied Ethno-botany for Biodiversity Conservation", International Centre for Integrated Mountain Development Newsletter, 31 Spring 1998, available at:

<http://www.panasia.org.sg/nepalnet/ecology/ethnobot.htm> (Last visited on 24th April 2013).

²⁸⁰ Protection of Indigenous Knowledge of Biodiversity in India, available at:

<http://www.Genecampaign.org/WP-content/uploads/2014/07/> (Last visited on 24th of April 2015).

²⁸¹ T.W Wickham, Farmers aren't no fools: exploring the role of participatory rural appraisal to access indigenous knowledge and enhance sustainable development research and planning - A case study of Dusun, Pausan, Bali, Indonesia 211 (1993) Faculty of Environmental Studies, University of Waterloo, Waterloo, Canada. Master's thesis.

The location was a small, remote Hindu village of ninety households in a highland agricultural area with vertical ridges and inclined terraces, in Bali. The inhabitants had little admission to proper education and agricultural extension services and very limited contact with modern machinery. It received 2,680 mm of rain per year; 97% of the land was dedicated to dry-land cultivation and agro-forestry. survival crops included corn, peanuts, cassava, dry rice, sweet potato, and bananas; cash crops included cloves, vanilla, coffee, salak, durian, oranges, and jackfruits. There was a (small) trend away from manual, subsistence crops to cash crops. Land occupancy was a blend of state lands, lands inhabited and cultivated by inhabitants without title, and personal lands.

The empirical study was conducted over a four month period, in 1991 and 1992. The Canadian beneficiary and his assistant lived with the village head and his family. Thirty villager's nine men, nine women, six boys, and six girls-participated in the exercise. The participants were 10 – 70 years old; some were uneducated, and others were high-school graduates. A number of other individuals contributed their knowledge through casual discussions.

Two main participatory rural assessments were used, mapping and supply collections, with several other methods. The participatory rural appraisal methods created volumns of information. However, much Indigenous Knowledge remained undiscovered and unnoticed. The study composed of information from thirty participants, so the out come cannot be said to replicate the awareness of other persons. Also, some of the data was unproven. The researchers worked with individuals rather than groups to keep away from raising local expectations regarding what it might yield for the neighbourhood. This restricted the quantity of cluster brainstorming and triangulation.

To become well-known with the situation, there has been construction of six maps and one transect before commencement of any other investigation. More about the mapped areas were learnt by using other participatory rural appraisal techniques. Ten village maps were completed by fifteen villagers: five village area maps and five farm sketches. On 1m x 0.5m paper, these locals used felt markers to draw landscape, slope, hydrology, crops, trees, soil types, eroded sites, soil-and water conservation practices, land tenure, social enterprises, roads, houses, and buildings. Just using, simple symbols and local terminologies, had been arranged to aid the mapmakers. Mapping sessions lasted 1-2 hours. This included

instances to take a pre-mapping walk with the contributors, time for the mapmakers to draw, and period to discuss the mapmakers about the contents of the map.

Participatory rural assessment tactic accessed people's philosophy and information about their local surroundings and how they utilize this knowledge to live. Participatory rural assessment methods facilitated and enabled the involvement of men, women, girls, and boys; the methods enabled the participants to elucidate practices, beliefs, concepts, and ideas using their own expressions and examples. In addition, eight village researchers were hired—two men, two women, two girls, and two boys— to assemble three chief village resources: samples of the tree species, bamboo variety, and soil types.

It had been a face up to to maintain a participatory approach. Seldom, it had been difficult to let-go and not directs the procedure. It had also been a face up to to focus on procedure rather than produce. For example, getting the map drawn or the resource compilation done was not the objective. Rather, the intention was to use the map and collections as a means or interviewing tool to study more about direct-matrix ranking and fascinating practices and idea were the techniques used during the post compilation sessions to find out more from the locals about the use, accessibility, and description of the collected samples. The resource records were time-efficient and cost-effective. Each researcher from the village took 1-3 hours to collect the samples. After compilation, 2-3 hours were spent in addition to interview each participant and record the information.

The findings were summarized accordingly— local knowledge, method, philosophy, and exercise. 146 tree types were identified and their various uses for firewood, building, ceremonies, crafts, arts, tools, and medicines. Ten species of bamboo and eight soil types, using local taxonomies were also identified.

To border soil wearing away, farmers used a blend of techniques—they maintained flora cover, cut terraces, practiced strip farming, and planted perennials and annuals jointly. There was use of green manures and mulching for soil richness supervision. Techniques for managing weeds consisted numerous cropping with empty, mulching, and careful weeding. Air guns for animal pests were also used.

Tree resources were managed by a neighbourhood belief system. Numerous supernatural beliefs were linked with sacred areas, cemeteries, and areas near temples. Fear of sacred or pecuniary penalties or community sanctions prohibited those trees from being

cut. Other tradition followed a calendar. For example, according to local practice, timber and cane could only be harvested every sixty days. When a timber was harvested, people complied with the traditional exercise of planting one tree for each cut. The people living in the hamlet were sometimes unable to present an account for their following a custom.

Villager resource knowledge was compared with available scientific data. 146 tree types were recognized; biologists from a close by institution of higher education had recognized 16. Although the village tree record was possibly exaggerated- dissimilar spellings and diverse uses resulted in dissimilar names-by any criteria, villager knowledge of tree types was substantial. Villagers recognized and classified eight soil types; Modern science recognized only single soil group. Local farmers differentiated their soils by shade, consistency, and drifting characteristics. The villagers' narrative understanding for trees, bamboo, and soil assets was, at the very least, comparable to, and likely more comprehensive than, matching data from qualified methodical researchers.

The village farm-management techniques was compared with the ideology of sustainable farming and found the village techniques to be distinctive of low-external input and sustainable cultivation. The locals managed the soil and maintained crop wellbeing by imitating local environmental processes. The indigenous values and practices were examined in relation to people's assets utilization and preservation. The way of life related with the utilization of flora and fauna placed momentary or everlasting limitations on their use. An unofficial method of sacred and spiritual taboos, the local traditions, and the apprehension of community sanctions supported preservation ethnic and were adequate to regulate people's resource use. No formal policing or enforcement mechanism was needed.

b) Ecuador:

Local research has time and again been carried out by outsiders for other outsiders, with the outcome that the substance, languages, and storage space of the data made the study findings out-of-the-way to the local communities. By way of distinction, this study is a description of how local people compiled a manuscript of their oral awareness of medicinal plants.

A Non-governmental organization signifying eighteen communities from the area provided governmental support. Following the arrangement of the assignment objectives, the eighteen communities were officially invited to contribute in the project. Each neighbourhood was asked to choose two learned participants, one female and one male. The project coordinators presented 10 United States Dollar per month, to draw participants; the entire budget was 2,000 United States Dollar. Six of the 18 communities uttered their interest, but at the outset the majority were not capable to find female participants. Elder women did not meet the literacy requisite, but they willingly participated once the literacy requisite was relaxed. Eventually, the plan team consisted of the project coordinators and six men and six women.

A short, bilingual questionnaire was developed to obtain the following information about the medicinal plants and their potentials; symptoms and causes of ill health, the related plant antidote, an account of the plant and its environment, its local names, the process for preparing and administrating the therapy, and the plants non therapeutic uses. Other questions helped to categorize the traditional healers. This presented and improvised the questionnaire. Significantly, it provided the participants with a chance to gain practical know-how with an unusual exercise. Subsequently the training session, the participants selected the interviewees, generally from their own commune, and concluded the questionnaires in their local language.

The participants met once a week to talk about their experiences and to re-examine the finished questionnaires. Vital project decisions, such as addressing human concerns, setting up the course of the project, dealing with fiscal matters, and setting a goal number of questionnaires to be completed per week, were made jointly. At the conclusion of the interviewing phase, the funds were exhausted. In the post-interview stage, the collected information was sorted by plant variety. If there was agreement on a exacting plant remedy, the participants shortened the data. Remedies for which there was no agreement laid out-of-the-way for further examination.

The information is offered in a structured but simple arrangement in books for the villagers in both Spanish and the local language. It presents the groundwork and management of each remedy in in black and white and pictographic form.

c) Ethiopia:

The objectives here is to record the most essential medicinal plants used by three different groups and to ascertain whether the groups use identical plants or persuade one another in the adoption and utilization of certain flora. Inspection was the input approach because many individuals were reluctant at first to reveal which plant life were used for healing means and other ritual purposes. At the outset, information was gathered as part of a generously proportioned, fourteen month project. The second phase concerned recognising and interviewing experts on plant life and plant use and organizing small gathering expeditions to various areas. This was possible with two local assistants. The third stage, during which local people gather flora, give information on their use, and respond a questionnaire, is still in progress. Four local, skilled field assistants were hired for this stage. Since the assistants were formerly skilled and were living among their own people, reliable and detailed information were expected. Supervision of the work was done during brief visits every six months. Trails to evaluate the effects of conventional and modern remedy are being measured.

d) Venezuela:

The objective here is to gain an considerate of and enumerate the value of gathered forest foods and to manuscript the extent to which wild plant and animal foods supply to domestic nutrition. The researcher compared a small rural community with a larger rural community, which had less contact to forest assets, to analyze the effects that permanent settlement, inhabitants growth, and deforestation have on the ease of use, and management of forest foods. Information was collected through express examination, interviews, time-allocation studies, and dimensions of the amount of wild forest products composed and eaten.

The local individuals accepted as edible 131 forest plant variety, 21 mammals, 25 birds, 57 fish, 15 reptiles, 2 amphibians, 13 arthropods, and 2 annelids. Despite the shortage of forest assets and the durability of the resolution, the larger rural community maintained the compilation of forest flora in a manner similar to that of the smaller rural community. In the larger rural community, the sampled households collected 968 kilograms of forest flora products over 71 days of direct examination, whereas in the smaller rural community, the households collected 405 kilograms over 87 days. The residents of the larger rural community spent extra time on average (181 person-minutes) harvesting forest produce than the individuals from the smaller rural community did (86 person-minutes). The profit-

making portion of the village produce had a local value of 2557 United States Dollar. Extrapolated to a complete year, the yearly average worth of the forest foodstuff was about 3300 United States Dollar per household. People from the larger rural community often sold forest produce in the local market, with a day's gathering of palm fruits averaging 9.88 United States Dollar. A day manual worker working the same digit of hours earned 7.62 United States Dollar.

Forest produce provided both villages with dietary nutrients, mainly protein and fats. Seasonal changes authorized one produce to be replaced by another, ensuring that there was something to eat all through the year.

There can be no uncertainty that the safeguard of cultural rights and intellectual property fall within the directives of the Sub-Commission and the Commission on Human Rights in the light of article 27 of the UDHR, article 15 of the ICESCR and, in the observation of the particular Rapporteur, article 17 of the ICCPR. Consequently, it is proper for the Sub-commission to counsel the commission as to how these internationally recognized principles of human rights should best be interpreted and applied in exacting contexts, such as the context of indigenous peoples. The Sub-Commission would as expected be wise to seek the support of other concerned U.N. bodies, as it has in the field of human rights and the environment, but its own pronouncement is not secondary to the opinions of professionals in other areas.

The records of Indigenous Knowledge have made little involvement to safeguard Indigenous Knowledge in South Asian Nations. India understands shows that records alone are not adequate to establish a community's rights over its Indigenous Knowledge and defend it from misuse by others. A number of processes, including the research of searchable databases, engagements with patent offices for the transmit of information on Indigenous Knowledge and contract to use information only for the assessment of patent applications are essential to make records of Indigenous Knowledge more valuable.

Unless a nationwide and global legal framework is developed and adopted, the records efforts are not likely to have much contact, either in terms of giving that protection to Indigenous Knowledge or promoting commercialization of Indigenous Knowledge and benefit sharing. This requires a nationwide unique system in South Asian countries to provide official safeguard to Indigenous Knowledge. Only then will it be feasible to put together full

use of records to establish a community's rights above Indigenous Knowledge and check its misuse by others.

One means to look at inter-grating insiders and outsiders perception on consideration is to analyze failures encountered in technology-transfer task. With reference to the above four case studies the task focal point in the first three cases was on environmental factors, shimmering a scarcely defined concept of sustainable growth that ignored community considerations. The fourth case, also a disappointment, highlights some institutional factors of significance to sustainable progress.

Even though the current focus on Indigenous Knowledge, expansion projects still appear to make little exercise of it. This is because less consideration has been sited on methods for measuring, estimating, and using Indigenous information.

CHAPTER IV

INDIGENOUS KNOWLEDGE AND RIGHTS OF INDIGENOUS PEOPLE IN INDIA

At a distance from the officially authorized regime, unofficial traditional laws and practices, emanating from within the neighbourhood, have scrupulous implication in the framework of protecting Indigenous Knowledge in India. Local communities have since ages shared a secure and mutually supporting connection with the basics of their environment. This connection has helped them grow a healthier perceptive of their adjoining and the assets found therein. This proximity and the thoughtfulness have developed into a understanding system which with the passage of time, has passed down from one generation to the next, has aided their continued existence. The right to use such knowledge in these communities have time and again been governed by overabundance of unofficial customary mechanisms, which have aided in its preservation. Sustainable use of Indigenous Knowledge is reflected in most of the traditions of local and native communities. Understanding of community chiefs in relation to Indigenous Knowledge is translated into tradition which incorporates judicious utilization of assets. Gradually, this tradition takes the shape of a custom, which passes from one generation to the next, gathers the power of law as it gets acknowledged as a model.

4. I. Indigenous Knowledge & Customary Laws in India:

The existence of traditional practices leading the use of organic and likely resources may be experiential in the background of afforest use practices, customary water use and organization, landholding patterns, agricultural practices, fisheries, etc. Communities possess different forms of traditional operative frameworks of rights, powers, concessions and obligations relating to the use and management of the genetic and natural assets in their neighbourhood. With the passage of time, in the Indian context, the through reliance of several communities and families has decreased over these resources as they have established new process and other revenue of livelihoods in their own community and at times as a result of relocation to different places. Yet there are various hamlets even today in all parts of the country that are directly and largely dependent for their sustenance and survival in these resources. Such individual and tradiion have a bet in conserving and by means of the assets in a sustainable approach. For this reason, these people impose a variety of lawful and illegal

rigid mechanisms for fulfilment within the neighbourhood and which also order admiration from the adjacent people. The harshness of the norm and the seriousness of the fines depend on the rival comfort and the ease of use of the capital. There is a profusion of recognized confirmation and knowledge on winning models of usual and neighbourhood based reserve organization practices, which justify the piece of information that usual practices and law are of modern significance in defending biodiversity and the linked original Knowledge. It has been established that usual practices and law have been paramount effective in area where people have the authority to control use of natural and previous natural possessions as per their policy and are doing well including fulfilment to these system from within the neighbourhood.

Sustainable use of natural resources to promote Indigenous Knowledge is amply reflected in the customs of most local communities. For instance, in the Khasi community of Meghalaya state in India, villages own groves, which are the common property of the community. Composed of mainly oak and Rhododendron trees, these are held as sacred. It is treated as an offence for anyone to cut timber in the grove, except for cremation purposes. Similarly, the Todas of the Nilgiri Hills in south India believe that the Goddess Tokissay created them and their unique buffaloes. Many of the peaks and grasslands where they graze their buffaloes are enshrined in their myths and are sacred to them. Thus, the Todas who are vegetarians neither hunt neither animal nor plough the earth for agriculture. Again, though the Nishi tribe of Arunachal Pradesh in Northeast India hunts the hornbill for the use of its beak in their traditional headgear, there is an inbuilt conservation mechanism within their culture to protect the bird, in the form of customary prohibition on the killing of the bird during the breeding season.²⁸²

It is naturally essential that local bodies and customary law be empowered, since by protecting the natural resources they contribute to the protection of Indigenous Knowledge. As a consequence, it needs to be emphasized that the extinction of local customs can thwart any attempt to restore sustainability into the modern development paradigm. National and international laws and policies, even if they do not promote, should at least refrain from adversely affecting customary laws and practices.

²⁸² Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

Most of the Indian communities do not believe in holding their knowledge exclusively to themselves. This is due to two reasons mainly. Firstly, the individuals based right system, not dependent on the community as a whole, is still not very much accepted in a large number of Indigenous communities; Any ownership is generally seen from a community perspective and there is common ownership of land and resources. Secondly, the communities repose faith in the theory that knowledge increases with dissemination. It is against their values to jealously hide any form of knowledge from others who could similarly benefit from it. The emphasis therefore is primarily not one of exploitation for profit or personal aggrandizement.²⁸³

Due to the above-mentioned reasons, we do not find easily either any customary laws or customary practices that give direct protection to Indigenous Knowledge, per se. However, most customary practices tend to conserve and protect biodiversity. Thereby, customary practices provide indirect protection to Indigenous Knowledge. It would be imprudent to take a myopic view and look at Indigenous Knowledge in isolation. Equal attention must be given to factors such as natural resources, livelihood, and education. For this purpose it becomes pertinent that we look at the places that customary law currently enjoys in the Indian legal system.

a) Customary Laws:

To make any effort at understanding customary law, we must begin with looking at what custom is in the first place. Custom is not a term that can be constrained to one definition, though in common parlance it can be understood as uniformity of conduct of people under Indigenous Knowledge circumstances. It is a exercise that by its ordinary acceptance and long steady custom has approach to encompass a power of law. A custom is a usage by virtue of which a class of persons belonging to a defined section in a locality is entitled to exercise specific rights against certain other persons or property in the same locality.²⁸⁴

The concept of rules and regulations developed with the evolution of a community into a society. Most of these principles Intellectual were derived from usage or practices of the community for their subsistence. The long and continuous usage by the community of the natural resources of their locality evolved into localized and varied customary practices. As customs had their origins in the said usage and practices, the needs of the people were kept in

²⁸³ *Ibid.*

²⁸⁴ *State of Bihar v. Subodh Gopal Bose* (AIR. 1968 SC 281)

mind while evolving them. The needs of neighbouring villages were also kept in mind before making any rules regarding the use of forest and forest produce.

b) Locating Legal Customs Within the Indian Legal System:

A legal custom is that custom which operates as a binding rule of law, independent of any agreement on the part of those subject to it. In India, for a custom to have a colour of a rule or law, it is necessary for the party claiming it to prove that such custom is ancient, certain and reasonable. Customs being in derogation of law are to be construed strictly. In India Jurisprudence, custom is an integral constituent of law. However, there has always been a debate whether in reality customary law is recognized as merely a source of law or does it actually form a constituent of Indian Legal System.

In Pre British India there were innumerable overlapping local jurisdictions with many groups enjoying autonomy in administering justice. When British came to India, they tried to find a unified Indian Law as in the west but they could not find a parallel one. As a result the period before 1860 had extremely varied laws including Parliamentary Charters and Acts, Indian Laws, English Common law, Hindu and Muslim Laws and many bodies of customary laws.

It was acknowledged as early as 1773 by the Britishers that Indians have to be presided over by their personal laws, in matters of family, religion and inheritance (It is to be noted here that matter such as natural resource management which had been with the community for long were not left with them any more). Matters other than these continued to be governed by government courts on the common law principle of ‘Justice, equity and good conscience’. This led to a wide importation of English laws, enactment of procedural codes, which showed no fusion with the traditional laws and curtailing of application of customary laws through informal tribunals. For codification of personal laws collections and translations of ancient texts were made. Numerous digests and commentaries also came up on these translations. Subsequently it was realized that lesser bodies of customary laws were not found to be sufficient since the quasi-legislative role of tribunals restricted them and when the customs were recorded there were not enough rules in express terms. This resulted in elevation of textual laws over lesser bodies of customary laws. Although according to Hindu Law where there was a conflict between Shastras and customs, custom overrode

Shastras.²⁸⁵ Strict rules of evidence provided for disappearance of customary laws, as it was very difficult to prove unwritten customs.²⁸⁶ There also emerged a sense of individual right not dependent on community opinion or usage. The concept of common property had little space in the modern legal system. Fields Indigenous Knowledge natural resource management and conservation activities, which facilitate development of knowledge especially of conservational and medicinal value, were for long occupied concern of by the people in agreement with their traditions. Even though the Britishers regretted the significance of local and restricted laws in those substances which are normally acknowledged as private laws, they mistreated the position that community had been in performance in environmentally friendly performance. The overabundance of legality that came up in family member to plant and irrigate did not slot in usual practice and rule.

c) A Valid Custom:

Customary law, by definition, is a non-state legal system that parallels the substantive and procedural functions of the state made laws. Unlike State laws, these emerge from within the community and command social acceptance and observance. Statutory law is uniform whereas customary law is an adaptive, flexible, evolving body of norms and rules governing the behaviour of communities. While the former is for community, latter is in the community.²⁸⁷

The following tests or essentials have been laid down, which a custom must satisfy for its judicial recognition:

- i. Antiquity-A custom to be recognized as law must be proven to have been in existence from time immemorial. The English common law rule of the immemorial user is not required to establish a custom in India, and it has been thought that it is adequate if the justice delivering system is content of its rationality and undoubtedly and that the exercise on which the tradition is established is not practiced for such a stealth or power and that the precise act had been enjoyed for such a duration that by conformity or or else the practice has become the traditional law of the neighbourhood.

²⁸⁵ *Collector of Madurai v. Mootoo Ramalinga* (1868) 12 MIA.397

²⁸⁶ Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

²⁸⁷ A.K. Gupta, S.S Nair, and S. Singh, "Environment Legislation for Disaster Risk Management". (training module). EkDRM-IGEP, GIZ Germany, (India Office) and NIDM New Delhi, (2012).

- ii.** Continuance-If a tradition has been intermittent for a significant instance then a assumption arise against it. It is due to discontinuance of the privileged and not ownership that a highlight to a custom is deserted.
- iii.** Peaceful enjoyment- The tradition must have been benefit from peaceably. If the tradition has been in argument or in the justice delivery sysetem for a long time it negatives the supposition that it had established by approval as most traditions logically might have started off.
- iv.** Obligatory Force-The tradition must have an mandatory power and must have been benefit from as a subject of exact without furtiveness or might.
- v.** Certainty-A tradition, which is indistinct or imprecise, cannot be documented. The court has to be content by clear evidence that tradition exists as a matter of truth, or as a legal conjecture of information.
- vi.** Reasonableness-This examination gives a extensive carefulness to the judges in the substance of gratitude of the conduct. It is for the bench to make a decision whether the supposed tradition is sensible or not. It has been supposed that a right being critical of the theme substance itself would be difficult. If there is no constraint of any variety, then a traditional right, which might create such right, must be deem to be irrational.
- vii.** Conformity with statutory laws-Statute prepared laws is known preference over traditional laws. Consequently, even anywhere the traditions meet the needs of being antique, convinced and sensible; they individual in derogation with universal law are to be construe stringently. This hierarchy makes the position of customary laws very vulnerable in the legal system. Even though the foundation of India recognizes traditional bylaw, in realism it is topic to life form in consonance with the bill made laws. The Apex Court has emphasized ahead this condition point in time and yet again. Therefore it is of prime importance that when any legislation is passed, due consideration should be shown towards existing customary laws. An effort to this effect has been lacking. The objectives of the enactment should not such as to ignore the existence and need of customary laws. The effect of this would be invalidating the customary laws. A fine balance has to be struck between the statutes and customary laws so that effects of certain

statutes may not be so overriding that laws developed by the people for themselves as per their requirements lose their justifiability.²⁸⁸

d) Customary and Statutory Law:

What position customary law enjoys in the Indian legal system today- whether it is recognized as a law or is a mere source of law? Ever since the codification and formalization of Indian law started, there has been a lopsided conflict between the statutory and the customary law. A set of statutory laws largely based on principles of English Common Law with little reference to or influence from local laws emerged supreme. In the structure of this so-called formal legal system, customary law has almost always been a loser in terms of recognition and acceptance. Before making any analysis as to which is more advantageous and people friendly let us look at the provisions in the Constitution of India and other Indian statutory laws which deal with custom and customary law directly or indirectly.²⁸⁹

i. Evidence:

Although rules of evidence make it difficult to prove customs, Indian Evidence Act, 1872 is the earliest legislation to formally recognize customs. After any accurate or tradition is in query, instance and connections from side to side which the tradition is created, claim, assert, or deprived of are to be engaged into description, for instance, if the fact that certain fishing right were exercised as a matter of customary right then a *wajib ul arz*²⁹⁰ stating to that effect can be taken into account. Since traditions are by huge oral it becomes tricky to manufacture entry permit. As well, sometimes pass could be insufficient due to previous factor such as lack of education and small financial position. Sadly the Apex Court in its decision²⁹¹ has not taken note of this factor and this was one of the reasons for denial of a customary right to obtain fishing rights for Dhimars of Parshioni.

ii. Forest Legislation:

In compact forest communities, there has been a close intermingling and overlapping between the vast repository of INDIGENOUS KNOWLEDGE and customary use of natural

²⁸⁸ Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

²⁸⁹ *Ibid.*

²⁹⁰ Village administration paper that became a settlement record and statutory presumption and correctness is attached to it- Central Provinces of Land Revenue Code, 1920.

²⁹¹ *Ramchandra Wahiwatdar v Narayan and others*, 2003 (7) SCALE 7

resources enabling them to use these in a more judicious manner. Self imposed limitations on forest clearance, restriction on hunting certain species, protection of sacred groves for religious purposes, rotational use of catchment and traditional practices were conducive to conservation and preservation. Agriculture based rural communities are dependent on their neighbouring forests for subsistence and a variety of products and services. These forests were considered to be common property of the locality. However this underwent a change with the forest laws in late nineteenth century and early twentieth century.

The first legislation for the regulation of forests was passed in 1865. It empowered the government to declare any land covered with trees or brushwood as government forests and to make rules to manage them. The act of 1865 was replaced by a more comprehensive legislation of 1878, which was further replaced by the Indian Forest Act of 1927. The Preamble to the 1927 Act suggests that there have been no new laws, but only consolidation of the old ones. Secondly, there is a clear emphasis on the revenue yielding aspect of forests. The free access enjoyed by local communities was suspended. Thereafter forests were used as a matter of privilege not right. Concessions were individualized at the cost of community interests. In short, traditional privileges of individuals over nature and creation were unfinished and distorted into bargains to be enjoyed at the determination of the Environment officials. More importantly, forests became a major source of revenue for the government.²⁹²

The Indian Forest Act 1927 does have a provision²⁹³ under which administration of forest vicinity can be assigned to rural communities. rural community forest is the forest that has been legally transferred to the village community by the state government. The forest in the vicinity of the village can be so transferred even if it is reserved or a protected one. Once a forest has been so declared, the rights of the villagers (some of them customary rights) over grazing, gathering minor forest produce etc become the rights, over the property legally assigned to them. The Act's recognition of rights of the communities, when discussing commutation of rights²⁹⁴ in declaring reserve forests, may not be of much use if the customary rights of the community do not get legal sanction. Moreover, in the light of the powers

²⁹² Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

²⁹³ The Indian Forest Act, 1927, s. 28.

²⁹⁴ The Indian Forest Act, 1927, s. 16.

conferred upon the settlement officers, it is necessary to see that the legal rights of the community are not lost in the cobweb of procedures.²⁹⁵

The Forest Policy of 1988 focuses on requirements of communities but it has failed to give due recognition to the customary practices and Indigenous Knowledge that communities, both rural and tribal, have been using for centuries for natural resource management.²⁹⁶

iii. Easements:

In India, there are three distinct rights of easement- Firstly; there are private rights in the strict sense. Secondly, there are public rights for the benefits of all. Thirdly, there are rights belonging to certain classes of people. Such rights commonly have their origin in customs. Under the Indian Easements Act, 1882, an easement may be acquired in good value of a local tradition. Such easements are described as traditional easements. For example, a customary rights of way, on the part of a certain group of people to use a piece of land, not theirs as a pathway.

iv. Constitution:

The Constitution of India recognises customs and customary practices. It states that all laws time being in force previous to the commencement of this Constitution shall carry on in force therein in anticipation of distorted or repealed or amended.²⁹⁷ The consequence of this proviso is the persistence of the complete body of legality prevailing in the Country prior to the Constitution came into force. Not only legislative laws but also legalities like Torts, Mohammendan laws, and tradition having the vigour of law. According to Article 13²⁹⁸, the term law includes traditions and usage having the sanction of law. A rational and certain antique tradition is obligatory on the courts just like an Act of parliament. However such tradition or usage having force of legality cannot violate any of the subsequent rights bestowed by part III of the Indian Constitution.

²⁹⁵ Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

²⁹⁶ *Ibid.*

²⁹⁷ The Constitution of India, art 372.

²⁹⁸ The Constitution of India.

v. Fundamental Rights:

The Constitution of India nowhere confers specific rights that are related to the right of the indigenous communities to economic and social development. Therefore, one has to read into the provision of Article 21,²⁹⁹ which confers Right to Life, one of the most read into provisions. Right to life does not refer to mere animal existence but life with human dignity.³⁰⁰ Therefore the local communities have a right not to be exiled and disabled by conduct of robbing them of their traditional rights so that they can survive with primary human dignity. A crucial aspect of the legal protection of life envisaged in Article 21 is right to live. It can verify behaviour that put out of place underprivileged people or upset their lifestyle. The condition may not by confirmatory action be under a impulse to provide for resources of livelihood excluding any individual who is underprivileged of his right to life, apart from according to a due procedure of law, can confront the deficiency as offending the right to life, except according to a due course of law, can challenge the deprivation as offending the right to life conferred under Article 21.³⁰¹ In 1987 the Supreme Court took a step further and detailed safeguards to protect tribal's who were being ousted from their forest land by Rihand Thermal project of NTPC. The court in the course of its order observed that the tribal people for generations had been using the jungles around for collecting the requirements for their livelihood, and ousting them from that land would amount to depriving them of their fundamental right to life, implying right to livelihood.³⁰²

vi. Directive Principles and Fundamental Duties:

Article 39 (b)³⁰³ enjoins a sense of duty upon the state to express its guiding principle towards ensuring that the tenure and management of the Material assets of the neighbourhood are so concerned as best to sub serve the general good. The terminology Material asset of the commune as used in the article contains the whole thing that is competent of generating assets for the neighbourhood. The term ownership of community goods to sub serve the common good is not restricted to normal or substantial goods but also variable or fixed property. The state should look into matter of adequate distribution and availability of raw materials, which have the potential to create wealth. Under Article 46,³⁰⁴ the status is under

²⁹⁹ The Constitution of India.

³⁰⁰ *Francis Corallie v Union of India*, 1981 AIR 746, 1981 SCR (2) 516

³⁰¹ *Olga Tellis v Union of India*, AIR, 1986 SC 180

³⁰² *Banwasi Sewa Ashram v. State of Uttar Pradesh*, AIR. 1987, SC 374

³⁰³ The Constitution of India.

³⁰⁴ *Ibid.*

compulsion to see that listed Tribes are not open to mistreatment and dispossessed of their rights in relation of their illiteracy and stumpy position.³⁰⁵

Just as the State is under a duty to take measures embodied in Part IV of the Constitution, Part IV-A imposes a duty on the citizens to value and preserve the rich heritage of our composite culture; and to protect and improve the natural environment including forests, lakes, and rivers, which are great reservoirs of Indigenous Knowledge.³⁰⁶ But these duties can at best be ‘regarded as directories’. These can be used to read ambiguous statutes and can be promoted through constitutional means.³⁰⁷

vii. Panchayat (Extension to scheduled Areas) Act, 1996 (PESA):

The institution of governance at local level needs to be strengthened so as to empower them for recognition revival of customary laws. Under Article 40,³⁰⁸ the state is expected to take necessary steps and endow powers with the panchayats. The constitution also provides that a Gram Sabha may implement such command and execute such functions as the government of state may by law grant.³⁰⁹

With the ratification of the necessities of the Panchayat (Extension to Scheduled Areas) Act, 1996, the requirements of the Panchayat have been extensive to the programmed Areas with exceptions and improvisation as prescribed in the conservatory Act.

An important feature of PESA is that it recognizes the ability of Gram Sabha, the official expression of a village society, to protect and preserve the customs and traditions of the people, their intellectual identity, neighbourhood resources and the traditional mode of dispute resolutions’.³¹⁰ Under PESA, Gram Sabha enjoys a superior position in the hierarchy of self governance by virtue of this section. The reason this provision has earned the

³⁰⁵ Srivastava Nidhi, “Customary Law and the Protection of Indigenous Knowledge in India” (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

³⁰⁶ The Constitution Of India, art. 51A

³⁰⁷ Srivastava Nidhi, “Customary Law and the Protection of Indigenous Knowledge in India” (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

³⁰⁸ The Constitution of India

³⁰⁹ The Constitution of India, art. 243A

³¹⁰ The Panchayats Extension to Scheduled Areas Act, 1996, s. 4(d).

appreciation of the people is that Gram Sabha comprises of the same people whom they represent.³¹¹

Under the new Act, the State and its organs are not absolved of their Constitutional obligations, but the community, which so far had not been formally recognized, stands empowered in the form of Gram Sabha to meet the challenges from within and without.³¹²

According to this act, a State elected representatives shall make sure that the panchayats at the suitable level and the Gram Sabha are capable specially with powers like possession of negligible forest produce, authority to avoid alienation of land in planned areas and to act to reinstate any officially disturbed land of a Scheduled Tribe, command to manage rural community markets, supremacy to control over local flora and fauna.

Generally significant result of this PESA, it was expected, would be the exclusion of disagreement between tribal belief of independence and contemporary legal establishment. Nevertheless, this Act though a welcome move has not been used to its optimum potential. The steps taken by the states for the purposes of this Act have not been successful in strengthening the concept of self-governance as envisaged by this legislation. Thus the potential of PESA has not been put to the possible use of recognizing the customary practices and laws through the institution of Gram Sabha.³¹³

viii. Legal Pluralism:

Another expression of decentralized governance can be seen in the legal pluralist regions of the country. The North Eastern states of India, comprising of the eight states of Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim and, are the legal pluralist region where the indigenous folk laws govern different spheres of life within the society and formal law enacted at the Centre and State are also extended to this region.³¹⁴

The 5th Schedule deals with administration and control of scheduled Areas and Scheduled tribes in any state other than Assam, Meghalaya, Tripura and Mizoram. The Vth Schedule, from time to time is described as a instrument of government within the

³¹¹ Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

³¹² *Ibid.*

³¹³ Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

³¹⁴ *Ibid.*

establishment, is the mainly inclusive proviso for the safeguard of the ethnic people living in Scheduled Areas, beside the State and other unusual forces.³¹⁵ As per Para 2 and 3 of the schedule and Article 60 and 159, it is the sense of duty of the president and the concerned governors to conserve, defend and preserve both the instrument of government, as well as this special attribute relating to the Scheduled Areas, and the law including the customs and usage of tribal people. Subject to only one condition, that it does not influence the fundamental feature of the constitution. The governor is bestowed with discretionary powers on application of any Act to the Scheduled Areas, and is to formulate policy for harmony and fine control of any neighbourhood of the state, which is a programmed area, for the point in time.

The 6th Schedule provides provisions for Administration of tribal areas. In these areas, there are Formal Modern Central Laws, Traditional Customary Laws from within the community, and laws by Autonomous District Councils. There are three institutions for justice administration-Traditional Institutions dealing with customary and folk laws, Formal Administrative Bodies like the Deputy Commissioner, and Autonomous District Councils.³¹⁶

Non-6th Scheduled Areas are governed by rules of Administration of Justice (State wise rules). VI Schedule areas bar application of Acts of Parliament and State Legislature to areas in the subject matter where self-governing commission is allowed to formulate and expand legalities. This is the major distinction between the Sixth Schedule states and non-sixth Schedule states. This entails that the IFA, 1927, the FCA 1980 and the WPA 1972 would be extensive to the self-governing District Council Areas only to the degree of Reserve Forests therein, while these Acts would pertain to the North East states of India.

ix. BDA, 2002:

The BDA was enacted in 2002 with a view to provide legal protection to the biodiversity for the first time in the country's history. The Act elicited a mixed response of both hopes and apprehensions. The Act provides for establishment of bodies at different levels- national, state and local institution of self governance are to constitute Biodiversity Management Committees for protection and documentation of biodiversity and chronicling of

³¹⁵ Sharma, B.D, Tribal Affairs in India: The Crucial Transition 514(Sahyog Pustak Kuteer Trust, New Delhi 2001).

³¹⁶ Srivastava Nidhi, "Customary Law and the Protection of Indigenous Knowledge in India" (2004) (Research project on protection of Indigenous knowledge, Gene Campaign briefing paper, The Energy and Resources Institute).

knowledge related thereto. The Biodiversity Management Committees at the local level could have been very useful if only their role was more expansive. They have no powers vis a vis giving recognition to the customary rights of the local people over the biodiversity as per the rules of 2004.

e) Advantages of Customary Law:

The biggest advantage of customary law is it is community oriented and is therefore simple and easy to understand. Moreover, it is friendlier to the locality or community from where it has emerged. Hence, it receives better compliance from the local people. It is hassle free and is speedier and compared to formal courts of law, is less expensive. Traditional institutions take less time to solve disputes as compared to formal courts. Many Indigenous communities till date have little exposure to contemporary system of judicial redress. As against this, people find it comfortable and are more aware of their own customary laws; therefore it is easier for them to approach their traditional institutions for the administration of justice. Besides, cases are decided keeping in mind the needs of the society and the victim and the capacity of the accused to withstand justice.³¹⁷

f) Disadvantages of customary law:

The biggest problem that customary law faces is that it is region specific and so there exist multiple laws that might overlap. There may be a customary law in one community, which could be dissimilar from that of another neighbourhood in the same or neighbouring locality. In such a case, how is one to decide as to which law would prevail?

It is not necessary that all customary laws be friendly to individuals and civilization or even biodiversity. Though they have an natural arrangement to blow hot and cold and to preserve their rich natural habitat, there may also be laws prevalent which may not be practical. Customary law is a law by the people, the very same people also decides the disputes (most of the time). Although this may have its own advantages, there is always the danger of partiality.³¹⁸

³¹⁷*Ibid.*

³¹⁸*Ibid.*

Majority of Customary law is oral and the lack of its documentation, especially precedents, often makes it difficult to decide cases in a fair manner. With the concept of individual right as against the community right seeping in with the times, people have stopped relying on customary law. With education and its role, people have learned that customary law has little recognition in the legal system. Moreover, the present day youths neither are aware about the value of their customary laws nor are sufficient efforts being made at their revival.³¹⁹

4. II. Evolution of political processes in realization of the rights of Indigenous peoples (regarded as tribal's) in India:

In the preceding chapters an attempt had been made to discuss the meaning of the words “Indigenous” and “Knowledge”, evolution of certain rights of Indigenous Peoples which have received recognition within the human rights framework at international level. These rights are related to land and resources or culture, language and education or development. But the right of internal self-determination in the form of autonomy or self-government is the possible form/ process for the realisation of the rights of Indigenous peoples. It has also emerged that at the international level the term “Indigenous Peoples” has been well recognised and this term can be attributed to the “Scheduled Tribes” in India.

At the national level, two types of political processes have been recognised under the Constitution for the realisation of the rights of tribal's in India, one is under the Fifth Schedule and another is under the Sixth schedule. The Sixth Schedule is applicable to four states of North-East India, viz. Assam, Meghalaya, Tripura and Mizoram, and the Fifth Schedule is applicable to the rest of India.³²⁰ Therefore, before a detailed study is undertaken to examine the process of realisation of the rights of Indigenous peoples (regarded as tribal's), it is necessary to examine in detail both political processes recognised under the constitution of India.

In this part, the researcher has tried to throw light on the evolution of political processes for administration of tribal's and realisation of their rights during Pre-British, British and Post-Independent India. The present administrative system in India was, by and large, evolved during the British days. Although, there have been changes, modifications and expansions in the system the basis structure has more or less remained intact. Therefore, no

³¹⁹ *Ibid.*

³²⁰ Das. J.K, Human Rights and Indigenous Peoples 129 (A.P.H. publishing Corporation, New Delhi, 2000).

study in Post-Independence era can be completed without reference to the Pre-British and British Rule.

a) Governance and Administration of Tribal's in Pre-British India:

Before we examine the tribal situation in the British period, it may be mentioned that the tribal people were never fully conquered or subjugated by the Muslim rulers who preferred to make settlements with the local non-tribal princes or if expedient, with the tribal chieftains instead of dealing with the tribal people directly.³²¹ In many areas, they had their own princelings who ruled independently or as vassals of Delhi based Kings or local princes. Even where there was no tribal chieftain, the non-tribal rulers found it expedient, to deal with their tribal subjects through their chiefs and confined themselves to the collection of their share of levy. They did not interfere with customary laws, tribal life-styles and economics. The result was that tribal life was not subjected to or influenced by political vicissitudes and changes in Delhi. Till the British made their debut, the tribal's were literally masters of all they surveyed.³²²

b) Governance and Administration of Tribal's in British India:

For obvious reasons, the administration of tribal areas and its inhabitants was not on the priority list of the East India Company in the early period of British rule in India. Most of the British officials were completely ignorant of tribal customs or of the existence of many tribes in late eighteenth or early nineteenth century. Their contact with the tribal people became rather difficult because the tribal's lived in inaccessible areas in remote hills, marshy and materials forests and in hospitable tracts. Thus, while the British succeeded in isolating the tribal people from rest of the country, they did not bother to save them from the clutches of money lenders, landholders and contractors and from the influence of the missionaries who followed a policy, along with welfare activities among the tribal people.³²³ The effect of this policy was summarised by J.H Hutton as follows:

Far from being of immediate benefit to the primitive tribes, the establishment of British Rule in India did some of them much more harm than good..... It may be said that the early days of British Administration did very great detriment to the economic position of tribes through ignorance and neglect of their rights and customs..... Many changes have been caused

³²¹ Amir Hasan, Tribal Administration in India 21 (B.R. Publishing, Delhi, 1988).

³²² *Id.* at 25

³²³ Harsh R. Trivedi, The Evaluation of National policy for Tribal Development 11 (Indian Institute of Public Administration, New Delhi, 1982).

incidentally by the penetration of the tribal country, the opening up of communications, the protection of forests and establishments of schools, to say nothing of the opening given in this way to Christian Missions. Many of the results of these changes have caused acute discomfort to the tribes.³²⁴

It can be said that the British followed a policy of expediency in which tribal interests were subordinated to larger British interests. The tribal people were segregated from the rest of the population excepting the undesirable segments. The vested interests were shrewd “enough to benefit from every act of commission or omission of their foreign rulers.”³²⁵ No wonder, this attitude led to considerable discontent and revolts among the tribal people.³²⁶ The earlier revolts and all round discontent among the tribes, forced the British to revise their policy of isolation and adopt a policy of limited isolation. The British decided to intervene only to maintain law and order and to minimise exploitation by taking legal, protective and executive measures. With these ends in view the British Parliament enacted a number of Acts, Regulations, etc.³²⁷ Until the commencement of the Constitution of India and the special provisions were made therein for the administration and development of tribal areas of all parts in India. These developments can be examined under the following heads:

- i. Development up to 1873
- ii. Constitution of Scheduled Districts
- iii. Declaration of Backward Tracts
- iv. Creation of Excluded and Partially Excluded Areas

- i. Development up to 1873 :

The first important legislation, which recognised that administration in advanced areas of Bengal and Bihar was not suited to tribal areas, was the Regulation XIII of 1833. The Regulation had declared Chhota Nagpur a “non-regulated” area. However, the reform and administrative measures contemplated under the Regulations were not implemented. Special

³²⁴ Quoted in U.N. Dhebar, Report of the Scheduled Areas and Scheduled Tribes Commissions, 1961.

³²⁵ *Id.* at 28.

³²⁶ It found expression in the Kol Resurrection of 1831-32 against forcible dispossession of their land, enhancement of rent and forced labour. Then there were several tribal revolts against the British, such as Santal Revolt of 1885, Bastra Rising of 1911, Civil Disobedience by Kond Maliahs of Orissa and Tana Bhagats in 1920

³²⁷ The regulation X of 1822, the Government of India Acts, 1833 and 1835; the Bengal Regulation XIII of 1833; the Regulation of 1855; the Indian Councils Act, 1861; the Garo Hills Act, 1869; the Government of India Act, 1870; the Scheduled Districts Act, 1874; the Assam Frontier Tracts Regulation, 1880; the Montagu Chelmsfords reforms, 1918; the Government of India Acts, 1919 and 1935.

laws were enacted for other tribal areas also. The main feature of these laws was a simple and elastic form of judicial and administrative procedure. The Government of India Act, 1835 allowed laws to be made directly for tribal areas under the Government of East India Company. The administration of these areas was taken over by the British Sovereign in 1858. The Indian Councils Act, 1861, validated the laws made under the Government of India Act, 1835 for peace and good government.³²⁸ The Garo Hills Act, 1869, provided for exclusion of Garo Hills areas from the general administrative set up and vesting of the administration of these areas in such officers as the lieutenant Governor might, from time to time, appoint. The Act further provided for extension of provisions of the Act to Jaintia Hills, Naga Hills and such portion of Khasi Hills as for the time being formed part of British India. In fact the Garo Hills Act, 1869, prescribed a separate system of administration of justice in these areas.³²⁹ For sometimes, the power to make laws by the executive authorities was withdrawn. However, it was again conferred by the Government of India Act, 1870, which was extended to the Assam valley, Hill Districts and Cachar in 1873.³³⁰

ii. Constitution of scheduled districts:

The enactment of the Scheduled Districts Act, 1874, may be called the first significant measure taken to deal with all tribal areas in the country which declared tribal areas as Scheduled Districts. By this Act uniform law was promulgated by the Government of India to embrace all tribal concentrations throughout the country. The word “District” in this enactment corresponded to a specified area and not to the present revenue division. The Scheduled Districts were identified from “those remote and backward tracts of provinces of British India which had never been brought within or which had from time to time been removed from the operation of the general Acts and Regulations and jurisdiction of ordinary courts or in which that operation was not complete, and officers were supposed to be guided by the spirit of indispensable laws, or were actually guided by such laws as had somehow or other been considered to be in force”.³³¹ The Act provided for appointment of officers called Agents to decide civil and criminal cases, to undertake settlement and collection of public revenues and conduct administration within the Scheduled Districts. The areas under the control of Agents were described as Agency Areas. The Act also allowed modification of

³²⁸ Abdul Hamid, *A Chronicle of British Indian Legal History 175* (RBSA Publishers, Jaipur, 1991).

³²⁹ J.K. Das, *Human Rights and Indigenous Peoples 132* (A.P.H. Publishing Corporation, New Delhi, 2001).

³³⁰ S.K. Agnihotri, “District Councils under Sixth Schedule” 36:1 *JILI* 85 (1994).

³³¹ *Id.* at 86.

laws in force in other parts of India to suit a particular Scheduled Districts. This enabled the executive to legislate, through to a limited extent, in tribal areas.³³²

iii. Declaration of backward tracts:

The Scheduled Districts Act, 1874, was repealed when the Sections 52A and 52B of the Government of India Act, 1919, came into force. The Act designated the tribal areas as Backward Tracts. Section 52 A(2) of the Act provided that the Governor-General in Council could declare any territory in British India to be a Backward Tracts. On such a declaration being made, the Governor-General in Council could direct that any Act of the Indian Legislature would not apply to the territory in question or would apply subject to such exceptions or modifications as was thought fit. The Sub-section (2) of section 52A was as follows:

The Governor-General in Council may declare any territory in British India to be a “backward tract” and may, by notification, with such sanction as aforesaid, direct that this Act shall apply to that territory subject to such exceptions and modifications as may be prescribed in the notification. Where the Governor-General in Council has, by notification, directed as aforesaid, he may, by the same or subsequent notification, direct that any Act of the Indian Legislature shall not apply to the territory in question or any part thereof, or shall apply to the territory or any part thereof subject to such exceptions or modifications as the Governor-General thinks fit, or may authorise the Governor in council to give similar directions as respects any Act of the local legislature.

The Backward Tracts were determined from time to time³³³ and the laws were applied with such restrictions and modifications as was deemed fit. The Section 52B of the Government of India Act, 1919 empowered the Provincial Legislature to vote necessary expenditure. The Act also allowed consideration of local convention in administering the Backward Tracts. The Administrators at the district and taluka levels could take final decisions in matters related to law and order and land rights and had greater freedom in inaccessible tribal areas. This allowed considerable freedom to local subordinate officials of police, revenue and forest departments to perform their functions according to their protective or exploitive tendencies. Thus, the Act did not change the policy of isolation towards tribals but it tried to define and determine limits and extent of isolation

³³² *State of Nagaland v. Ratan Singh*, AIR 1957. SC 213

³³³ J.K.Das, Human Rights and Indigenous People 134 (A.P.H. Publishing Corporation, New Delhi, 2001).

iv. Creation of excluded and partially excluded areas:

The Indian Statutory Commission as appointed by the British Government in 1927, *inter alia*, examined the policy adopted by the the areas inhabited by the tribal's, and came to conclusion that their backwardness precluded them from any kind of representative Government. They did not ask for self-determination but for security of land tenure, freedom in the pursuit of their traditional methods of livelihood and reasonable exercise of their ancestral customs. In 1930, the Report of the Indian Statutory Commission was submitted.³³⁴ The Report had proposed a number of modifications regarding the Backward Tracts. These proposals were reflected into the Government of India Act, 1935.³³⁵ The Act divided Backward Tracts into Excluded Areas and Partially Excluded Areas. Section 91 and 92 dealt with these Areas. Section 91 defined the expression Excluded and Partially Excluded Areas, and prescribed the principle in selection of these areas. Section 91(1) defined Excluded Areas and Partially Excluded Areas as under:

In this Act the expression “excluded area” and “Partially excluded area” mean respectively such areas as His Majesty may by Order in Council declare to be excluded areas or partially excluded areas. The Secretary of State shall lay the draft of the order which it is proposed to recommend to His Majesty to make under this sub-section before Parliament within six months from the passing of this Act.

Under Section 91(2), the power was vested to His Majesty by Order in Council to declare an area to be Excluded Area or Partially Excluded Area.³³⁶ The principle adopted in the selection of these areas was that where there was an enclave or a definite tract of country inhabited by a compact tribal population, it was classified as an Excluded Area. Where, however, the tribal population was mixed up with the rest of the Communities and the tribal's were substantial enough in numbers, the area was classified as Partially Excluded. The point of distinction between an Excluded Area and a Partially Excluded Area was that while both classes of areas were excluded from the competence of the Provincial and Federal Legislatures, the administration of Excluded Areas was vested in the Governor acting in his discretion while administration of the Partially Excluded Areas was vested in the Council of Ministers subject, however, to the Governor exercising his individual judgement.

³³⁴ A detailed account of Backward Tracts is to be found in the Report of the Indian Statutory Commission, Vol.I (Survey) 1930 in Part-I, Chapter-8, Paras 75,80,86, 88,and 99.

³³⁵ For the Government of India Act, 1935, see, The Law Reports: The Public General Acts, The Council of Law Reporting, 569-1001, (London,1935).

³³⁶J.K Das, Human Rights and Indigenous Peoples 135 (A.P.H. Publishing Corporation, New Delhi, 2001).

With respect to the administration of Excluded Areas and Partially Excluded Areas, Section 92 of the Government of India Act, 1935, provided thus:

- i. The executive authority of a Province extends to excluded and partially excluded areas therein, but, no Act of the Federal Legislature or of the provincial Legislature, shall apply to an exclude area or a partially excluded area, unless the Governor by public notification so directs, and the Governor in giving such a direction with respect to any Act may direct that the Act shall in its application to the area, or to any specified part thereof, have effect subject to such exceptions or modifications as he thinks fit.
- ii. The Governor may make regulations for the peace and good government of any area in a province which is for the time being an excluded area, or a partially excluded area, and any regulations so made may repeal or amend any Act of the Federal Legislature or of the Provincial Legislature, or any existing Indian Law, which is for the time being applicable to the area in question.
Regulations shall be submitted forth with to the Governor-General and until assented to by him in his discretion shall have no effect, and the provisions of this part of this Act with respect to the power of His Majesty to disallow Acts shall apply in relation to any such regulations assented to by the Governor-General as they apply in relation to Acts of a Provincial Legislature assented to by him.
- iii. The Governor shall, as respects any area in a province which is for the time being an excluded area, exercise his functions in his discretion.

The provisions of the Government of India Act, 1935 were based on the principle that legislation which was passed by the Federal or Provincial Legislature was often likely to be unsuitable for application to the Hill Districts. The mechanism provided for “filtering” the legislation was therefore to empower the Governor of the province to apply or not apply such legislation. The main features of the provisions were that:

- i. Certain areas had been scheduled as excluded or partially excluded.
- ii. It was possible to transfer the areas, form the category of excluded to the category of partially excluded by the Order-in-Council and, similarly, from the category of partially excluded to the category of non-excluded.

- iii. Legislation would not apply automatically to any such Scheduled area even if it was a partially excluded area, but would have to be notified by the Governor who, if he applied them at all, could make alterations.
- iv. The revenues for excluded areas were charged to the revenues of the province and special regulations, which were not applicable to the rest of the Province, could be made by the Governor in his discretion of excluded and partially excluded areas.

From the above brief description, it emerges that during the British period, the problems of administration of tribal areas were recognised and a number of protective mechanisms had been introduced for the administration of these areas. For this end, the Scheduled Districts Act, 1874 declared that the tribal areas as Scheduled Districts, the Government of India Act, 1919 designed the tribal areas as Backward Tracts and the Government of India Act, 1935 again declared these areas as Excluded and Partially Excluded areas, but what was common to all measures was the provision of filtering the applicability of the Federal or Provincial Legislations. Therefore, the Cabinet Mission's statement of 16th May, 1946, mentioned the tribal areas as requiring the special attention of the Constituent Assembly. Paragraph 20 of the Cabinet Mission's Statement provided thus:

The Advisory Committee on the rights of Citizens, Minorities and Tribal and Excluded Areas will contain due representation of the interests affected and their functions will be to report to the Union Constituent Assembly upon the list of the fundamental rights, clauses for protecting Minorities, and a Scheme for the administration of Tribal and Excluded Areas, and to advise whether these rights should be incorporated in the provincial, the group or the Union Constitution.³³⁷

c) Development of Political Processes for Tribal's during Constitution making:

Although the Constituent Assembly had appointed a number of important Committees and Sub-Committees, besides the Drafting Committee for the purpose of framing the Constitution, in the light of the views expressed by the Cabinet Mission, earlier quoted, the Constituent Assembly had special attention to the matter concerning the governance and administration of tribal areas. In its endeavour the Constituent Assembly set up an Advisory Committee on Fundamental Rights, Minorities, Tribal Areas, etc. The motion adopted by the

³³⁷ Statement by the Cabinet Mission to India and His Excellency the Viceroy, 16 May 1946. See, Sir Maurice Gwyer and A. Appadorai (collected) *Speeches and Documents on the Indian Constitution, 1921-47* (Vol.II. Oxford University Press, London, 1957).

Constituent Assembly setting up the Advisory Committee laid down that this Committee should appoint Sub-committees to prepare schemes for the administration of the Tribal and Excluded Areas. Consequently, the Advisory Committee with a view to examine the matter in detail, appointed two Sub-Committees,³³⁸ namely:

- a) The North-East Frontier (Assam) Tribal and excluded Areas Sub-Committee (hereinafter referred to as Sub-Committee on Assam).³³⁹
- b) The Excluded and Partially Excluded Areas (other than Assam) Sub-Committee (hereinafter referred to as Sub-Committee on other than Assam).³⁴⁰

These two Sub-Committees undertook extensive tours of concerned provinces, examined witnesses and representatives of the people concerned, collected views of the different political organisation and provincial governments. The Sub-Committee on Assam submitted its report on July 28, 1947 to the chairman of the Advisory Committee. The Sub-Committee on the other than Assam submitted its report in two instalments. The interim report submitted on 18 August, 1947, related to the areas in the Provinces of Madras, Bombay, Bengal, the Central Provinces and Orissa. The final report relating to the areas in Bihar, the United Provinces and Punjab was submitted in September, 1947. In the meanwhile it was held, at the suggestion of the Chairman of the Advisory Committee, a joint meeting of the two Sub-Committees. The recommendations of this joint meeting were submitted on August 25, 1947. These two Sub-Committees ultimately recommended separate schemes of administration for their respective tribal areas.³⁴¹

i. Report of the Sub-Committee on Assam:

In its report, the Sub Committee on Assam had recommended a separate framework of the scheme of administration for the tribes of Assam and also underlined various factors which necessitated a separate treatment for the tribal people of Assam. These factors were dealt with the political experience, fear of exploitation, control of immigration, future policy, etc.

³³⁸ Initially three sub-committees were appointed by the Advisory Committee. As a result of political partition of India the North-West Frontier Province and Baluchistan Sub-Committee became a concern of the Dominion of Pakistan.

³³⁹ The sub-committee on Assam was formed with Gopinath Bordoloi (Chairman) and J.J.M. Nichols Roy, Rup Nath Brahma, A.V. Thakkar (as members)

³⁴⁰ The sub-committee on other than Assam was formed with A.V. Thakkar (Chairman); and D.N. Samanta, Thakur Phul Bhan Shah, Raj Krushna Bose, Jaipal Singh, P.C. Ghose (as members)

³⁴¹ For the Report of the Committee and Sub-Committees on tribal and excluded areas, see, B. Shiva Rao, *The Framing of India's Constitution: A Study* 681-782 (N.M. Tripathi, Bombay, 1968).

a) Factors justifying separate treatment:

1) Political experience:

About the political experience of the tribes of Assam, the Sub-Committee on Assam had the view that the tribal's of Assam were all highly democratic in the sense that their village councils were created by general assent or election although there were no statutory local self-governing bodies in any hill districts except shilling. The tribal's could be able to manage a large measure of local autonomy. Dealing with the political experience of the tribal people the Sub-Committee on Assam stated that:

Except for the Municipality of Shillong, there are no statutory local self-governing bodies in any of the Hill Districts. The partially excluded areas have elected representatives in the Provincial Legislature but in Garo Hills the franchise is limited to the Nokmas and in the Mikir Hills to the Headmen. Generally, however, the tribes are all highly democratic in the sense that their village councils are created by the general assent or election. Chiefship among certain tribes like the Lushai is hereditary (although certain chiefs have been appointed by the superintendent) but among other tribes appointment of headmen is by common consent or by election or, in some cases, selection from particular families. Disputes are usually settled by the chief or headman or Council of elders. In the Naga Hills what is aimed at is general agreement in settling disputes. Allotment of land for jhum is generally the function of the chiefs or headmen (except in the Khasi and Jaintia Hills) and there are doubtless many other matters pertaining to the life of the village which are dealt with by the chiefs or elders, but while this may form a suitable background for local self-government the tribes altogether lack experience of modern self-governing institutions. The "District Conference" of the Lushai Hills, the tribal Council of the North Cachar Hills and the Naga National Council are very recent essays in organizing representative bodies for the districts as a whole and have no statutory sanction. While there is no doubt that the Naga, Lushai and Garo will be able to manage a large measures of local autonomy, the North Cachar tribes and the Mikir may yet want a period of supervision and guidance.³⁴²

2) Hill people's land:

The sub-Committee on Assam had pointed out the fear of exploitation of hills people by the people of the plains on account of their superior organisation and experience of business.

³⁴²*Id.* at 691-692, Para .5.

The hill people feared that if suitable provisions were not made to prevent the people of the plains from acquiring land in the hill areas, large numbers of them could settle down and not only occupy land belonging to the hill people but could also exploit them in the non-agricultural professions. The Sub-committee on Assam stated that:

The anxiety of the hill people about their land and their fear of exploitation are undoubtedly matters for making special provisions; it has been the experience in other parts of India and in other countries, that unless protection is given, land is taken up by people from the more advanced and crowded areas. The question has already acquired serious proportions in the plains portions of Assam and the pressure of population from outside has brought it up as a serious problem which in the next few years may be expected to become very much more acute. There seems to be no doubt whatever therefore that the hill people should have the largest possible measures of protection for their land and provisions for the control of immigration into their areas for agricultural or non-agricultural purposes. It seems also clear that the hill people will not have sufficient confidence if the control on such matters is kept in the hands of the Provincial Government which may only be too amenable to the pressure of its supporters. Even the Head of the State under the new Constitution will probably be an elected head, and even though he may be elected also by the votes of the hill people, they may still have the fear that he will give way to the pressure of the plains people on whose votes he may be largely dependent. The atmosphere of fear and suspicion which now prevails, even if it is argued that it is unjustified, is nevertheless one which must be recognized and in order to allay these suspicions and fears, it would appear necessary to provide as far as possible such constitutional provisions and safeguards as would give no room for them. Moreover, in the areas where no right of private property or proprietary right of the chiefs is recognised the land is regarded as the property of the clan, including the forests. Boundaries between the area of one hill or tribe are recognised and violation may result in fighting. Large areas of land are required for jhum and this explains in part the fear of the tribesman that his availability will be reduced if incursions by outsiders are permitted. In all the hill areas visited by us, there was an emphatic unanimity of opinion among the hill people that there should be control of immigration and allocation of land to outsiders, and that such control should be vested in the hands of the hill people themselves. Accepting this then as a fundamental feature of the administration of the hills, we recommend that the Hill Districts should have powers of legislation over occupation or use of land other than land comprising reserved forest under the Assam Forest regulation of 1891 or other law applicable. The only limitation we would place upon this is to provide that the local councils

should not require payment for the occupation of vacant land by the Provincial Government for public purposes or prevent the acquisition of private land, also required for public purposes, on payment of compensation.³⁴³

3) Control of immigration:

About the problem of immigration the Sub-Committee on Assam had stated that the hill people were extremely nervous of outsiders, particularly non-tribal's, and felt that they were greatly in need of protection against their encroachment. It was on account of this fear that they attach considerable value to regulations like the Chin Hills Regulation under which an outsider could be required to possess a pass to enter the hill territory beyond the Inner Line and an undesirable person could be expelled. The hill people felt that with the disappearance of exclusion they should have powers similar to those conferred by the Chin Hills Regulation. The Provincial Government, in their view, was not the proper custodian of such powers since they would be susceptible to the influence of plains people. With respect to the control of immigration the Sub-Committee on Assam stated that:

Experience in areas inhabited by other tribes shows that even where provincial laws conferred protection on the land they have still been subjected to expropriation at the hands of money lenders and others. We consider therefore that the fears of the hill people regarding unrestrained liberty to outsiders to carry on money lending or other non-agricultural professions is not without justification and we recognize also the depth of their feeling. We recommend accordingly that if the local councils so decide by a majority of three-fourths of their members, they introduce a system of licensing for money lenders and traders. They should not of course refuse licences to existing money lenders and dealers and any regulations framed by them should be restricting to regulating interest, prices or profit and the maintenance of accounts and inspection.³⁴⁴

4) Future policy:

In regard to the future policy of the hills of Assam, the sub-committee on Assam had stated the fact that the hill people of Assam had not yet been assimilated with the people of the plains of Assam had to be taken into account though a great proportion of hill people had classed as plains tribal's had gone a long way towards such assimilation. The distinct features of their way of life had to be taken into account and assimilation could not take place by the

³⁴³*Id.* at 694-695, Para.9.

³⁴⁴*Id.* at 701 Para. 15.

sudden breaking up of tribal institutions. About the future policy of Assam hills in Sub-Committee mentioned:

.....It is the advice of anthropologists.....that assimilation cannot take place by sudden breaking up of tribal institutions and what is required is evolution or growth on the old foundations. This means that the evolution should come as far as possible from the tribe itself but it is equally clear that contact with outside influences is necessary though not in a compelling way. The distinct features of their way of life have at any rate to be taken into account. Some of the tribal system, such as the system of the tribal's council for the decision of dispute affords by far the simplest and the best way of dispensation of justice for the rural areas without the costly system of courts and codified laws. Until there is a change in the way of life brought about by the hill people themselves, it would not be desirable to permit any different system to be imposed from outside. The future of these hills now does not seem to lie in absorption, in that the hill people will become indistinguishable from non-hill people but in political and social amalgamation.³⁴⁵

Besides the above factors, there were another three factors which necessitated the Sub-Committee on Assam to recommend a separate framework of scheme of administration for the tribal people of Assam as under:

- a) The distinct social customs and tribal organisation of the different peoples as well as their religious beliefs.
- b) The fear of exploitation by the people of the plains on account of their superior organisation and experience of business.
- c) In making suitable financial provisions it was feared that unless suitable provisions were made or powers were conferred upon the local councils themselves the Provincial government might not, due to the pressure of the plains people, set apart adequate funds for the development of the tribal areas.³⁴⁶

b) Recommendation of the Sub-Committee on Assam:

The Sub-committee on Assam had recommended, as mentioned earlier, a separate scheme of administration for the hill districts of Assam. The summary recommendations of the Sub-Committee on Assam are as follows:

- a) Autonomous District Councils could be set up in hill districts with powers of legislation and administration over land, village, forest, agriculture and village and

³⁴⁵ *Id.* at 693-694, Para. 8.

³⁴⁶ *Id.* at 692-693, Para. 6.

town management in general, in addition to the administration of tribal or local laws and primary education and of management of local institution which normally come under the scope of local self-governing institution in the plains.

- b) All social law and custom was left to be controlled or regulated by the tribes.
- c) Certain taxes and financial powers could be allocated to the councils. They should have all powers which local bodies in regulation districts enjoy and in addition they should have powers to impose house tax or poll tax, land revenue and levies arising out of the powers of management of village forest.
- d) The management of mineral resources could be centralised in the hands of the provincial Government but the right of the district councils to a fair share of the revenue is recognised

ii. Report of the Sub-Committee on other than Assam:

In its interim report,³⁴⁷ the Sub-Committee on other than Assam made recommendations of vital importance regarding the provisions to be made for the protection and advancement of the tribal people in India other than Assam. The terms of references of the Sub-Committee required it to draw up a separate scheme for the administration of the Excluded and Partially Excluded Areas in India other than Assam. The Sub-Committee also underlined various factors which necessitated drawing up a separate treatment. No any major change was made in the final report of the Sub-Committee.

a) Factors justifying separate treatment:

As the Sub-Committee on other than Assam proceeded with its labours, it found that the excluded and partially excluded areas were well defined areas populated either predominantly or to a considerable extent by aboriginals, but the problem of the tribal population was much more pervasive than the problem of delimiting certain areas and prescribing a scheme for their administration. The Sub-Committee recognised that from the beginning the objectives of the government's policy in regard to the tribes and tribal areas were primarily directed to the preservation of their social customs from sudden erosion and to safeguarding their traditional vocations without the danger of their being pauperized by exploitation by the more

³⁴⁷ B. Shiva Rao, *The Framing of India's Constitution: A Study* 733-770 (N.M.Tripathi, Bombay, 1968).

sophisticated elements of the population.³⁴⁸ At the same time it was recognised that this stage of isolation could not last indefinitely, a second and major objective was, therefore, laid down, that their educational level and standard of living should be raised in order that they might in course of time be assimilated with the rest of the population. From this point of view the Sub-Committee was of the opinion that the policy of exclusion and partial exclusion had not yielded much tangible result in progress of the aboriginal areas towards the removal of their backward condition or in their economic and educational betterment. The Sub-Committee did not therefore find it advisable to abolish the administrative distinction between the backward areas and the rest of the country, and it recommended that while certain areas like Sambalpur in Bihar and Angola in Orissa need no longer be treated differently from the regularly administered areas, there were other areas which needed a simplified type of administration to protect the aboriginal people from exposure to the complicated machinery of the ordinary law courts and save them from the clutches of the moneylender who took advantage of their simplicity and illiteracy, deprived them of their agricultural land and reduced them to a state of virtual serfdom. For these reasons the Sub-Committee had recommended a separate scheme of administration for tribal population in India other than Assam.³⁴⁹

b) Recommendation of the Sub-Committee on other than Assam:

The summary of the recommendation of the Sub-Committee on other than Assam are as follows:

- I. That the areas predominantly inhabited by tribal people could be known as Scheduled Areas and special administrative arrangement made in regard to them.
- II. That the Constitution could provide for the setting up in each Province of a body which would keep the Provincial Government constantly in touch with the needs of the aboriginal tracts in particular and with the welfare of the tribes in general. This body was to be known as Tribes Advisory Council, which could have a strong representation of the tribal element. The Tribes Advisory Council could primarily advise the government in regard to the application of laws to the Scheduled Areas.³⁵⁰

³⁴⁸ *Id.* at 734.

³⁴⁹ J.K. Das, Human Rights and Indigenous peoples 145 (A.P.H. Publishing corporation, New Delhi, 2001)

³⁵⁰ B. Shiva Rao, The Framing of India's Constitution: A Study 759 (N.M.Tripathi, Bombay, 1968).

iii. Joint report of the two Sub-Committees:

As noted earlier, the Sub-Committee on Assam and the Sub-Committee on other than Assam had recommended separate schemes of both Sub-Committees had the same view. The Joint Report of the two Sub-Committees had explained the common features of both the tribal areas of Assam and the tribal areas of rest of India and the special features of the tribal areas of Assam. The Joint Report, therefore, had recommended some common policy, except the scheme of administration, for the protection of tribal's either in Assam or other parts of India.

a) Factors justifying separate and common treatment:

1) Social and economic life of tribal's in India:

Dealing with the social and economic life of the tribal people, either in Assam or other parts of India, the Joint Report of the two Sub-Committees had stated that the tribal inhabited areas were highly malarial and infested by other diseases and lacking of civilization facilities. The tribal's were very simple people who could be exploited by money-lenders. The sudden disruption of tribal custom and way of life could be harmful for tribal's. Therefore the statutory safeguards were required for the protection of the land which was the mainstay of the tribal's social and economic life. The Joint Report of the two Sub-Committees had stated thus:

The areas inhabited by the tribes, whether in Assam or elsewhere, are difficult of access, highly malarial and infested also in some cases by other diseases like yaws and venereal disease and lacking in such civilizing facilities as roads, schools, dispensaries and water supply. The tribes themselves are for the most part extremely simple people who can be and are exploited with ease by plains folk resulting in the passage of land formerly cultivated by them to money-lenders and other erstwhile non-agriculturists. While a good number of superstitions and even harmful practices are prevalent among them, the tribes have their own customs and way of life with institutions like tribal and village panchayats or councils which are very effective in smoothing village administration. The sudden disruption of the tribal's customs and ways by exposure to the impact of a more complicated and sophisticated manner of life is capable of doing great harm. Considering past experience and the strong temptation to take advantage of the tribal's simplicity and weaknesses it is essential to provide statutory safeguards for the protection of the land which is the mainstay of the aboriginal's economic life and for his customs and institutions which, apart from being his own, contain elements of

value. In making provisions however allowance could be made for the fact that in the non-excluded areas the tribal's have assimilated themselves in considerable degree to the life of the people with whom they live and the special provisions concerning legislation in particular are therefore proposed largely for the Scheduled Areas in Provinces other than Assam.....and the autonomous districts (Assam).³⁵¹

2) Special features of the Tribal Areas of Assam:

The Joint Report of the two Sub-Committees had explained the special features of tribal areas of Assam. The special features of the Assam tribal areas, as compared with other tribal areas, were that these tribal areas were divided into large districts inhabited by single tribes or fairly homogeneous groups of tribes with highly democratic and mutually exclusive tribal organisations who had not assimilated much with the life and ways of other people in the provinces. These areas had hitherto been anthropological specimens and the Tribes living therein had their roots in their own culture, custom and civilization. Therefore, special constitutional safeguards were required for the Tribal People of Assam. In this regard the Joint Report of the two Sub-Committees said thus:

.....although certain features are common to all these areas, yet the circumstances of the Assam Hill Districts are so different that radically different proposals have to be made for the areas of this province. The distinguishing feature of the Assam Hills and Frontiers Tracts is the fact that they are divided into fairly large districts inhabited by single tribes or fairly homogeneous groups of tribes with highly democratic and mutually exclusive tribal organization and with very little of the plains leaven which is so common a feature of the corresponding areas, particularly the partially excluded areas of other provinces. The Assam hill districts contain, as a rule, upwards of 90 percent of tribal population whereas, unless we isolate small areas, this is generally not the case in the other Provinces. The tribal population in the other Provinces has moreover assimilated to a considerable extent the life and ways of the plains people and tribal organizations have in many places completely disintegrated. Another feature is that some of the areas in Assam like the Khasi Hills or Lushai Hills, show greater potentialities for quick progress than tribes in the other Provinces. They may also be distinguished by their greater eagerness for reform in which they have a dominant share than the apathy shown by the tribal's of some other Provinces. Having been excluded totally from ministerial jurisdiction and secluded also from the rest of the Province by the Inner Line

³⁵¹*Id.* at 774.

system, a parallel to which is not to be found in any other part of India, the excluded areas have been mostly anthropological specimens; and these circumstances together with the policy of officials who have hitherto been in charge of the tracts have produced an atmosphere which is not to be found elsewhere. It is in these conditions that proposals have been made for the establishment of special local councils which in their separate hill domains will carry on the administration of tribal law and control the utilization of the village land and forest. As regards the features common to tribal areas in other provinces, the Assam Hillman is as much in need of protection for his land as his brother in other Provinces. He shares the backwardness of his tract and in some parts the degree of illiteracy and lack of facilities for education, medical aid and communications. Provision is necessary for the development of the hill tracts in all these matters and we have found it necessary to recommend Constitutional safeguards of various kinds.³⁵²

b) Joint Recommendations of the two Sub-Committees:

The joint report of the two Sub-Committees had stated that the future of the tribal areas lay in development and not in isolation. They recommended that the responsibility of these areas either in Assam or in other parts of India could be vested on the Government of India and the schemes of development were to be implemented by the State Governments. Their recommendations, in essence were as under:

- 1) Provincial Governments could be advised to take such action as the establishment of District Councils and Tribal Advisory Councils as may be possible immediately to give effect to the policy recommended by the Sub-Committees on Assam and other than Assam.³⁵³
- 2) Protection of tribal land and the social organisation of the tribal's was an indispensable need. To facilitate the proper administration of the tribal's, a Tribes Advisory Council with statutory functions was recommended for the Provinces of Madras, Bombay, the Central Provinces, West-Bengal, Bihar and Orissa.³⁵⁴
- 3) The common proposals for Assam and other Provinces were that the inclusion of provisions of funds by the Centre and a separate financial statement in the budget for

³⁵²*Id.* at 771-772, Para 2.

³⁵³*Id.* at 771.

³⁵⁴*Id.* at 772.

the Hill districts and the Scheduled areas. The inclusion of provisions for the control of moneylenders was another common feature of the joint recommendations.³⁵⁵

IV. Constituent Assembly Debates:

Unlike the main provisions of the Constitution, the recommendations of the two Sub-Committees (Sub-Committees on Assam and other than Assam) were not considered by the Constituent Assembly in its session of July 1947, when the broad principles of the Constitution were settled, since, as explained by principles of the Constitution were settled, since, as explained by Ambedkar, they were received too late. On the suggestion of the Advisory Committee, the Drafting Committee itself considered these proposals at the stage of drafting, and suitable provisions were included in the Draft Constitution of February 1948 on the basis of the reports of the two Sub-Committees. Advisory Committees had accepted all these recommendations and the Drafting Committee had incorporated the recommendations of the Sub-Committee on other than Assam in the Fifth Schedule and the recommendation of the Sub-Committee on Assam in the Sixth Schedule to the Draft Constitution. The report of the two Sub-Committees, which had already been circulated to members of the Constituent Assembly, was formally placed before it on September 5th – 6th and November 4th, 1948 for debate.³⁵⁶ Adopting the recommendations of the Sub-Committees, the scheme of the Draft Constitution as proposed by Ambedkar, was in brief as follows:

Draft Article 190:

- a) That the provisions of the Fifth-Schedule would apply to the administration and control of the Schedule Areas and Scheduled Tribes in the States other than Assam;
- b) That the provisions of the Sixth Schedule would apply to the administration of tribal areas in Assam.
- a) Constituent Assembly Debates on the Recommendation of the Sub- Committee on other than Assam:

In the Constituent Assembly Debates,³⁵⁷ there were considerable discussion on the scheme of administration proposed by the Sub-Committee on other than Assam which was, as mentioned earlier, incorporated in the Fifth Schedule to the Draft Constitution. Jaipal Singh (from Bihar), was the principal critic of the Fifth Schedule. He moved several amendments,

³⁵⁵ *Id.* at 773.

³⁵⁶ J.K. Das, *Human Rights and Indigenous peoples* 150 (A.P.H. Publishing corporation, New Delhi, 2001).

³⁵⁷ For the Constituent Assembly Debates on Fifth Schedule, see, Constituent Assembly Debates, Vol. IX, PP.965-1001

but two of his main points were that the scheduled should provide not only for the administration of the scheduled Areas but also for the administration and control of the Scheduled Tribes; and that the Tribes Advisory Council should be given an effective voice in the decisions of the State Government in the application of laws to Scheduled Areas and in the promulgation of regulations.³⁵⁸ Yudhishtri Misra (from Orissa) moved a separate set of amendments having more or less the same objective as the amendments suggested by Jaipal Singh. Brajeshwar Prasad was in favour of the centre assuming full responsibility for the administration of these areas. He argued:

What the tribal's was is not a council but a guarantee by the Constitution that means of livelihood, free education and free medical facilities shall be provided for all the tribes.....Since the States were weak in economic resources they would not be in a position to shoulder this responsibility and the Centre should therefore take command of the areas.³⁵⁹

Biswanath Das (from Orissa) took an altogether different line. While fully recognising the need for doing everything possible for the betterment of the backward section of the people, he was totally opposed to the whole concept of Scheduled Tribes and Scheduled Areas as separate entities. He characterised this as nothing short of creating racial issues in the place of the communal issues which had resulted the partition of the country.³⁶⁰

Munshi (from Bombay) replied to these criticisms. He pointed out that the Adivasis or tribes were many in number belonging to different ethnic, religious and social groups. He defined the object of the Drafting Committee's proposals as under:

We want that the Scheduled Tribes in the whole country should be protected from the destructive impact of races possessing a higher and more aggressive culture and should be encouraged to develop their own autonomous life, at the same time we want them to take larger part in the life of the country adopted. They should not be isolated communities or little republics to be perpetuated forever. The amendments which Mr. Jaipal Singh has moved will show that his object is to maintain them as little unconnected communities which might develop into different groups from the rest of the country. The result would be exactly to frustrate the common aim Mr. Jaipal Singh and we have that these tribes should be absorbed in the national life of the country.³⁶¹

Munshi turned down as an utter absurdity the proposal that the "Tribes Advisory Councils should be miniature senates with power to aid and advise the Governor in matters falling

³⁵⁸*Id.* at 976.

³⁵⁹*Id.* at 977.

³⁶⁰*Id.* at 981.

³⁶¹*Id.* at 997.

within the purview of the schedule”.³⁶² It would not be possible, he said, for each Tribes Advisory Committee of small tribes to come to a common conclusion with regard to an elaborate Act of Parliament as to what provisions should or should not apply. Therefore, he said, the word “consulted” had been put in purposely in place of “advise”.

After this explanation the amendments moved were rejected or withdrawn and the draft of the Fifth Schedule as proposed by Ambedkar was passed.

b) Constituent Assembly Debates on the Recommendations of the Sub-Committee on Assam:

The recommendations of the Sub-Committee on Assam were, as mentioned earlier, incorporated in the Sixth Schedule to the Draft Constitution. The Scheme suggested by the Sub-Committee on Assam was more detailed and designed to confer a considerable extent of autonomy, by establishing Autonomous District Councils, on the tribal population through their elected representatives. In the Constituent Assembly Debates two views were emerged for the protection of tribal interests in Assam. The first view supported the recommendations of the Sub-Committee on Assam for the adoption of a separate scheme with the model of Autonomous District Councils for the administration of tribal areas, and the second view preferred the assimilation of tribal people into culture of plainsmen and they suggested for introducing local self-government. On the question of the adoption of Autonomous District Councils, it was argued that this Autonomous District could be a weapon whereby steps were taken to keep the tribal people perpetually away from the non-tribal’s and the bond of friendship could be torn as under. During the British days, non-tribal was not allowed to introduce their culture among these people, because the British wanted to keep the people of these areas as primitive as possible.....³⁶³

Some members of the Constituent Assembly wanted to assimilate the tribal people into culture of plainsmen and they suggested for introducing Local Self-government rather than Autonomous Districts in the tribal areas. Because in the Autonomous Districts, Shri Kuladhar Chaliha said, an Act of Parliament could not be imposed on them unless they consented to it. Such a thing is impossible.³⁶⁴ Supporting this view, Shri Brajeshwar Prasad confronted with the question “what will you say to tribals if they come and tell you that they want political

³⁶²*Ibid.*

³⁶³*Id.* at 1014.

³⁶⁴*Id.* at 1008.

autonomy and all the powers that have been vested in the District and Regional Councils?”³⁶⁵

Shri Rohini Kumar Chaudhuri stated that:

We want to assimilate the tribal people. We were not given that opportunity so far. The tribal people however much they liked, had not the opportunity of assimilation.....Here comes our friend Mr. Nichols Roy pleading for autonomous districts. Why do you want autonomous districts? My honourable Friend Mr. Bordoloi says that he wants autonomous districts in order to educate the tribal people in the art of self-Government. Why not give them local self-government itself...In none of these hills there is a municipality except in the Shillong administered areas. This Municipalities Act of Assam is not in force in any of the tribal areas. The local Self-Government Act by virtue of which District Boards and Local Boards are formed is not in force in the tribal areas. If you really want to educate the people of the tribal areas in the art of self-government, why do you introduce this act in those areas? Why do you want autonomous districts for these Municipal purposes? Why not introduce the Municipalities Act? Then, they will themselves know the art of self-government. Why do you want to dissociate them from us by creating these autonomous districts which will remain autonomous? Do you want an assimilation of the tribal and non-tribal people, or do you want to keep them separate? If you want to keep them separate, they will combine with Tibet, they will combine with Burma, they will never combine with the rest of India.....”³⁶⁶

In reply of the proposal of assimilation that the hill tribes had to be brought to the culture of plainsmen, Mr.J.J.M. Nichols Roy said that the people of hills had their own culture which was sharply differentiated from that of plains. The social organisation was that of the village, the clan and the tribe and the outlook and structure were generally strongly democratic. India had to rise to that feeling or idea of equality and real democracy which tribal people had.³⁶⁷ He further stated that:

It is said by one honourable gentlemen that the hill tribes have to be brought to the culture which he said “our culture” meaning the culture of the plainsmen. But what is culture? Does it mean dress or eating and drinking? If it means eating and drinking or ways of living, the hill tribes can claim that they have a better system than some of the people of the plains. I think the letter must rise up to their standard. Among the tribesmen there is no difference between caste and class. Even the Rajas and Chiefs work in the fields together with their labourers. They eat together. Is that practiced in the plains? The whole of India has not

³⁶⁵*Id.* at 1009.

³⁶⁶*Id.* at 1015.

³⁶⁷*Id.* at 1022.

reached that level of equality. Do you want to abolish that system? Do you want to crush them and this, their culture must be swallowed by the culture which says one man is lower and another higher. You say, "I am educated and you are uneducated and because of that you must sit at my feet". That is not the principle among the hill tribes. When they come together they all sit together whether educated, or uneducated, high or low. There is that feeling of equality among the hill tribes in Assam which you do not find among the plains people.³⁶⁸

Mr.J.J.M. Nichols Ray further added:

I would like very much if Parliament will appoint a committee to see these tribal areas. Perhaps they will see that in some places they are so advanced that the whole of India must follow their example. In those areas there is no difference between man and women; the women does work, goes to the bazaars and does all kinds of trade. And she is free. In the plains the women is just beginning to be free now, and is not free yet. But in some of the hills districts the women is the head of the family; she holds the purse in her hands, and she goes to the fields along with the man. Women and men are not ashamed of any kind of labour there. In the plains of Assam there are some people who feel ashamed to dig earth. But the Hillman is not so. Will you want that kind of culture to be imposed upon the Hillman and ruin the feeling of equality and the dignity of labour which is existing among them? Why talk of culture. There is some kind of culture in the hill areas which is far better than what is obtaining in the plains. Therefore the Sub-committee on the tribes of Assam has decided that this would be the best method of allowing these people to grow according to their culture and according to their genius and at the same time to become unified with the whole of India.³⁶⁹

Dr. B.R. Ambedkar, in support of the creation of the Autonomous District Councils in Assam, said that the position of the tribal's in Assam stood on a somewhat different footing from the position of the tribal's in other parts of India and stood on a somewhat analogous to the position of the Red Indians in the United States as against the white emigrants there. The creations of Autonomous District Councils were to some extent on the lines which were adopted by the United States for the purpose of the Red Indians. Those who had based their criticism over the creation of the District Councils had altogether failed to understand the binding factors which the members of the Drafting Committee had introduced in this Constitution. Dr. Ambedkar mentioned that:

³⁶⁸*Id.* at 1021.

³⁶⁹*Id.* at 1023.

.....the tribal people in areas other than Assam are more or less Hinduised, more or less assimilated with the civilization and culture of the majority of the people in whose midst they live. With regards to the tribal's in Assam that is not the case. Their roots are still in their own civilization and their own culture. They have not adopted, mainly or in a large part, either the modes or the manners of the Hindus who surround them. Their laws of inheritance, their laws of marriage, customs and so on are quite different from that of the Hindus. I think that is the main distinction which influenced us to have a different sort of scheme for Assam from the one we have provided for other territories. In other words, the position of the tribal's of Assam, whatever may be the reason for it, is somewhat analogous to the position of the Red Indians in the United States as against the white emigrants there. Now, what did the United States do with regard to the Red Indians? So far as I am aware, what they did was to create what are called Reservations or Boundaries within which the Red Indians lived. They are a republic by themselves. No doubt, by the law of the United States they are citizens of the United States. But that is only a nominal allegiance to the Constitution of the United States. Factually they are separate, independent people. It was felt by the United States that their laws and modes of living, their habits and manners of life were so distinct that it would be dangerous to bring them at one shot, so to say, within the range of the laws made by the white people for white persons and for the purpose of the civilization.³⁷⁰

After this explanation the draft of the Sixth Schedule eventually adopted with some amendments moved by Ambedkar.

It emerges from the foregoing discussion that during Constitution making two types of political processes have been recommended for the governance and administration of tribes in India: one was to establish Tribes Advisory Councils under the draft Fifth Schedule to the Constitution and another was to establish Autonomous District Councils under the draft Sixth Schedule to the Constitution. The responsibility of tribal's either in Assam or in other parts of India was vested on the Government of India and the scheme of developments was to be implemented by the State Governments.

³⁷⁰ J.K. Das, *Human Rights and Indigenous peoples* 157 (A.P.H. Publishing corporation, New Delhi, 2001).

4. III. Recognition of Political Processes in Realization of the Rights of Indigenous peoples (regarded as Tribal's) in India:

The Constitution of India, paid special attention for the tribal's. It went into the subject in an elaborate and somewhat complicated way. For the protection and recognition of separate administrative processes for tribals, a part in the Constitution, viz., Part X was included. The draft Article 190 was numbered as Article 244 in the Part X of the Constitution. The original Article 244 was as follows:

- 1) The provisions of the Fifth Schedule shall apply to the administration and control of the Schedule Areas and scheduled Tribes in any States specified in Part A and B of the First Schedule other than the State of Assam.
- 2) The provisions of the Sixth Schedule shall apply to the administration of the tribal areas in the State of Assam.

Thus, the original Article 244 had provided that the provisions of the Fifth Schedule were applicable in any States other than the State of Assam and the provisions of the Sixth Schedule were applicable in the State of Assam. Subsequently, the Article 244 had undergone many changes through Constitutional amendment and Parliamentary legislations. The State of "Meghalaya" was incorporated to the Article 244 by the North- Eastern Areas (Reorganisation) Act, 1971. The States of "Tripura" and "Mizoram" were incorporated to the Article 244 through the Constitution (Forty-ninth Amendment) Act, 1984 and the State of Mizoram Act, 1986 respectively. The present Article 244 reads as under:

244. Administration of Schedule Areas and Tribal Areas –

- 1) The provisions of the Fifth Schedule shall apply to the administration and control of the Schedule Areas and Schedule Tribes in any State other than the States of Assam, Meghalaya³⁷¹, Tripura³⁷² and Mizoram.³⁷³
- 2) The provisions of the Sixth Schedule shall be applicable to the management of ethnic areas in the State of Assam, Meghalaya, Tripura and Mizoram.

³⁷¹ Initially the Sixth Schedule was only applicable in the tribal areas in the State of Assam and after reorganisation of North Eastern Areas, its scope was extended to the State of Meghalaya through the North-Eastern Areas (Reorganisation) Act, 1971 (81 of 1971), (w.e.f. 21.1.1972).

³⁷² The provisions of the Sixth Schedule were extended to the tribal areas in the States of Tripura in 1984. Ins. By the Constitution (Forty-ninth Amendment) Act, 1984. (w.e.f. 1.4.1985).

³⁷³ Subs. For "Union Territory" by the State of Mizoram Act, 1986 (w.e.f. 20.2.1987).

According to the joint recommendations of the Sub-Committee on Assam and the Sub-Committee on other than Assam separate financial provisions were adopted to the Constitution. Article 275(1) provides for grants-in-aid from the Union of India (both capital and recurring) to meet the costs of schemes of development as may be undertaken by the State with the approval of the Government of India for the purpose of promoting the welfare of the Schedule Tribes in that State or raising the level of administration of the Scheduled Areas therein to that of the administration of the rest of the areas of that State. A special provision to the Article 275(1) refers to Assam, Meghalaya, Tripura and Mizoram and provides for grants-in-aid (both capital and recurring) equal to the excess of expenditure over the revenues during the two years immediately preceding the commencement of this Constitution in respect of the administration of tribal areas..... the cost of such schemes of development as may be undertaken by the State with the approval of the Government of India for purpose of raising the level of administration, etc.

Thus two types of political processes for the administration of tribal's have been recognised with separate financial provisions under the Constitution of India, one is under the Fifth Schedule and another is under the Sixth Schedule. The Fifth Schedule is applicable to any State other than the States of Assam, Meghalaya, Tripura and Mizoram and the Sixth Schedule is applicable to the States of Assam, Meghalaya, Tripura and Mizoram. Some light is thrown on these two political processes incorporated under the Fifth and Sixth Schedule to the Constitution.

A. Fifth Schedule to the Constitution:

The Fifth Schedule to the Constitution deals with the provisions as to the administration and control of Schedule Areas and Scheduled Tribes. The Fifth Schedule contains seven paragraphs. Paragraph one deals with the interpretation of the expression "State" used in this schedule, Paragraph two relates to the Executive power of a State in Scheduled Areas and Paragraph three prescribes the Governor to report the President regarding the administration of Schedule Areas. Paragraph four deals with the Tribes Advisory Council, Paragraph five deals with applicability of law to Scheduled Areas, Paragraph six with the meaning of the expression "Scheduled Areas" and Paragraph seven prescribes the procedure for the amendment of the Schedule.³⁷⁴

³⁷⁴ J.K. Das, *Human Rights and Indigenous peoples* 159 (A.P.H. Publishing corporation, New Delhi, 2001).

i. Scheduled Areas:

According to Paragraph six of the Fifth Schedule, the phrase Scheduled Areas connotes such vicinity as the President may by power conferred upon him declare to be Schedule Areas.³⁷⁵ The President may at any time by Order direct that the whole or any specialised part of a Scheduled Area shall cease to be a Scheduled Areas³⁷⁶ or a part of such an area, increase the area of any Schedule Area, alter any Schedule Area, rescind any order or orders made under this Paragraph and make fresh orders redefining the areas which are to be Scheduled Areas.

ii. Executive power of the State and Union:

Paragraph two of the Fifth Schedule provides that the executive power of a State extends to the Schedule Areas therein. But a limitation is imposed on this executive power of the State by Paragraph three which provides that the executive power of the Union shall extend to giving directions to the State regarding the administration of Scheduled Areas.

iii. Tribes Advisory Council:

According to Paragraph four of the Fifth Schedule, Tribes Advisory Councils are to be established in each State having Scheduled Areas and, if the president directs, also in any State having Scheduled Tribes but not Scheduled Areas. A Tribes Advisory Council is to be consistent with not more than twenty members of whom three-fourths shall be the representatives of the Scheduled Tribes in the Legislative Assembly of the State. If the number of representatives of the Scheduled tribes in the Legislative Assembly of the State is less than the number of seats in the Tribes Advisory Council to be filled by such representatives, the remaining seats shall be filled by other members of those tribes. The duty of the Tribes Advisory Council is to advice on such matters pertaining to the welfare and advancement of the Scheduled Tribes in the State. The Governor is to make rules with respect to the following matters:

1. The number of members of the Council, the mode of their appointments and the appointment of the Chairman of the Council and of the officers and servants.

³⁷⁵ See, the Scheduled Areas (Part A States) Order, 1950 (C.0.9), the Scheduled Areas (Part B States) Order, 1950 (C.0.26), the Scheduled Areas (Himachal Pradesh) Order, 1975 (C.0.102) and the Schedule Areas (States of Bihar, Gujarat, Madhya Pradesh and Orissa) Order, 1977 (C.0.109)

³⁷⁶ See, the Madras Scheduled Areas, Order, 1950 (C.0.30) and the Andhra Scheduled Areas , Order, 1955 (C.0.50)

2. The conduct of its meetings and its procedure, and
3. All other incidental matter.

iv. Law applicable to Scheduled Areas:

Under Paragraph five of the Fifth Schedule, the Governor is authorised to direct that any particular Act of Parliament or of the Legislature of the State shall not apply to a Scheduled Area or shall apply only subject to exceptions or modifications. The Governor is also authorised to make regulations to prohibit or restrict the transfer of land by, or among members of, the Scheduled Tribes, regulate the allotment of land, and regulate the business of money-lending. All such regulations by the Governor or Ruler must have the assent of the President. The Governor makes Regulations after consulting the Tribes Advisory Council and submits them to the President for assent.

v. Amendment of the Fifth Schedule:

Paragraph seven of the Fifth Schedule provides that Parliament may from time to time by law amend by way of addition, variation or repeal any of the provisions of this Schedule. This amendment shall not be deemed to an amendment of the Constitution for the purposes of Article 369.³⁷⁷

Thus the Fifth Schedule provides a political process for the authority and management of programmed Areas and Scheduled tribes in whichever States other than Assam, Meghalaya, Tripura and Mizoram. The Scheduled provides for the establishment of Tribes Advisory Council in each States having Scheduled Areas or having Scheduled Tribes.

B. Sixth Schedule to the Constitution:

i. Scheme of the Sixth Schedule:

Sixth Schedule to the Constitution provides a detailed scheme of administration for tribal areas in the States of Assam, Meghalaya, Tripura and Mizoram. The Schedule contains twenty-one Paragraphs. By Paragraphs one and twenty the whole tribal area is divided into autonomous districts and autonomous district in turn be divided into autonomous regions. Paragraphs two to seventeen, provides for administration of autonomous districts and autonomous regions. District Councils and Regional Councils are to be constituted under Paragraph two. Paragraph three gives power to the District and Regional Councils to make

³⁷⁷ The Constitution of India

laws with respect to matters specified therein. Paragraph four and five lays emphasis with the administration of justice. Paragraph six gives powers to the District Council to establish, construct or manage primary schools, dispensaries, markets, cattle pounds, ferries, fisheries, roads and water ways. Paragraph seven, eight, and nine relates with financial matters. Paragraph ten gives power to the District Councils to make regulations for the control of money lending and trading by non-tribal. Paragraph eleven provides for publication of laws, rules and regulations made under the Schedule. Paragraph twelve provides with the application of Acts of Parliament and the Legislature of the State to autonomous districts and autonomous regions. Paragraph thirteen relates with the budget while Paragraph fourteen provides for the appointment of a commission by the Governor at any time to inquire into and report on the administration of autonomous districts and autonomous regions. Paragraph fifteen provides power to the Governor to annul or suspends any Act or Regulation of District and Regional Councils under certain contingencies and also gives him power to suspend the Council and assume all or any of its powers to himself subject to such order being placed before the State Legislature. Paragraph sixteen provides power to the Governor to dissolve a District or Regional council on the recommendation of the commission appointed under Paragraph fourteen and order a fresh election and in the meantime to assume the administration of the area to himself subject to the previous approval of the State Legislature. Paragraph seventeen lays down provisions for forming of Constituencies for the State Legislative Assembly. Paragraph nineteen provides transitional provisions and Paragraph twenty-one with the amendment of the Schedule.

a) Tribal Areas:

There are nine tribal areas mentioned in the tables appended in the Paragraph twenty of the Sixth Schedule within States of Assam, Meghalaya, Tripura and Mizoram. In Assam there are two tribal areas (1. The North Chachar Hills District, 2. The Karbi Anglong District); in Meghalaya three, (1. Khasi Hills District, 2. Jaintia Hills District, 3. The Garo Hills District); in Tripura only one (1. Tripura tribal areas District); and in Mizoram three (1. The Chakma District, 2. The Mara District, 3. The Lai and District) tribal areas.³⁷⁸

b) Autonomous District and Regional Councils:

The tribal areas (mentioned in the table to the Sixth Schedule) are to be autonomous districts. If there are different Scheduled Tribes in an autonomous district, the Governor may

³⁷⁸J.K. Das, *Human Rights and Indigenous peoples* 162 (A.P.H. Publishing corporation, New Delhi, 2001).

divide the district into autonomous regions.³⁷⁹ , For the administration of an autonomous district there is to be a District Council and for the administration of an autonomous region, there is to be a Regional Council. Both the Councils (District and Regional) are incorporated bodies, having a perpetual succession. In an autonomous district with a Regional Council, the District Council shall have only such powers as may be delegated to it by the Regional Council, in addition to the powers specifically conferred by the Sixth Schedule with respect to the area within its jurisdiction. The District Council is to consist of not more than thirty members, out of whom not more than four shall be nominated by the Governor and the rest to be elected on the basis of adult suffrage. The term of elected members of the District Council is five years, while the term of nominated members is at the pleasure of the Governor.³⁸⁰

c) Legislative Powers of the District and Regional Councils:

The District Council for an autonomous district and the Regional Council for an autonomous region are given powers to make laws with respect to the following matters:

- a) The allotment, occupation or use, or the setting apart of land;
- b) The organization of any forest which is not a reserved forest;
- c) The utilization of any channel or water-course for the function of agriculture;
- d) The directive of the exercise of jhum or other aspects of shifting cultivation;
- e) The establishment of village or town committees or councils and their powers;
- f) Any other matter relating to village or town administration, including village or town police and public health and sanitation;
- g) The appointment or succession of chiefs or headmen;
- h) The inheritance of property;
- i) Marriage and divorce;
- j) Social customs³⁸¹

All laws made by the Regional Council or District Council shall, however, have no effect unless assented to by the Governor.³⁸² If any law or regulation made by the District Council or by the Regional Council is repugnant to any law made by the State Legislature; it will be void to the extent of repugnancy and the law made by the legislature of the State shall prevail. The President of India may direct that any Act of Parliament shall not apply to an autonomous district or region. These provisions were inserted in the Schedule by the North-

³⁷⁹ Sixth Schedule, Paragraph 1

³⁸⁰ *Id.* at Paragraph 2

³⁸¹ *Id.* at Sub-Paragraph 1 of Paragraph 3

³⁸² *Id.* at Sub-Paragraph 3 of Paragraph 3

Eastern Areas (Reorganisation) Act, 1971. Prior to that, an Act of the Legislature of the State of Assam with respect to matters on which the District Council or the Regional Council had the power to make law did not apply to an autonomous district or region, unless the District Council or the Regional Council so directed. Further, the Governor of the State could exclude the operation of any Act of Parliament or of the State Legislature in these areas.

d) Power to make Regulations:

i. Regulations for Control of Money-lending

The District Council of an autonomous district is given powers to make regulations for the control of money-lending or trading within the district by person other than Schedule Tribes resident in the district. Such regulations may prescribe who can carry on the business of money-lending, the maximum rate of interest which may be charged by money-lender, maintenance of accounts by money-lenders, inspection of such accounts by officers appointed on behalf of District Council. All regulations made by the District Council, however, require to pass by a majority of not less than three-fourths of the total membership of the District Council and all such regulations shall have no effect unless assented by the Governor.³⁸³

ii. Regulations for managing Primary Schools, etc.:

The District Council for an autonomous district may establish, construct or manage primary schools, dispensaries, markets, cattle pounds, ferries, fisheries, roads, road transport and waterways in the district. The council with the previous approval of the Governor, make regulations for regulation and control thereof and, in particular may prescribe the language and the manner in which primary education shall be imparted in the primary schools in the district.

e) Administration of Justice:

i. Village Councils or Courts:

The Regional Council and the District Council may constitute village councils or courts for the trial of suits and cases between the parties all of whom belong to Scheduled Tribes within the areas of their jurisdiction. The Regional Council or any court constituted on that behalf or the District Council or any court constituted on that behalf, shall exercise the

³⁸³*Id.* at Paragraph 10

powers of a court of appeal in respect of all suits and cases tri-able by a village council or court.³⁸⁴

The Regional Council and District Council, may with the previous approval of the Governor make rules, regulating the Constitution of village Councils and Courts and their powers, procedure to be followed by, the enforcement of the decisions or orders and all other ancillary matters for carrying out the administration of justice.³⁸⁵ In suits and cases decided by the village councils or courts the provisions of the Code of Civil Procedure, 1908 and the Code of Criminal Procedure, 1973, do not apply.³⁸⁶ These courts do not try cases arising out of special laws or cases relating to offences of a serious nature. The Governor may, however, extend the jurisdiction of these courts to decide such cases by conferring the powers under the Civil Procedure Code and the Criminal Procedure Code for these cases.³⁸⁷

ii. Jurisdiction of the High Court and Supreme Court:

The jurisdictions of Supreme Court and High Court have been retained as in other cases and no other court except the High Court and Supreme Court shall have jurisdiction over such suits or cases.³⁸⁸ The High Court also exercises such jurisdiction over the suits and cases as may be specified by the Governor.³⁸⁹

f) Power of Taxation, Share of Royalties and Funds:

The District and Regional Councils have been given certain powers of taxation also. These councils have powers to assess and collect revenue in respect of such lands within their respective areas. These councils have also power to levy and collect taxes on lands, buildings and tolls on person resident within such areas. Besides these powers, the District Council have the powers to levy and collect taxes on professions, trades, callings and employments; on animals, vehicle and boats; on the entry of goods into a market for sale therein, and tolls on passengers and goods carried in ferries; and taxes for maintenance of schools, dispensaries or roads.³⁹⁰

The royalties accruing each year from licences or leases for the purpose of prospecting for, or the extraction of minerals are to be shared between State Government and District

³⁸⁴*Id.* at Sub-Paragraphs 1 and 2 of Paragraph 4

³⁸⁵*Id.* at Sub-Paragraph 4 of Paragraph 4

³⁸⁶*Id.* at Sub-Paragraph 3 of Paragraph 5

³⁸⁷*Id.* at Sub-Paragraph 1 of Paragraph 5

³⁸⁸*Id.* at Sub-Paragraph 1 of Paragraph 4

³⁸⁹*Id.* at Sub-Paragraph 2 of Paragraph 4

³⁹⁰*Id.* at Paragraph 8

Council. If any dispute arises as to the share of such royalties, it shall be referred to the Governor for determination and the amount determined by the Governor in his discretion shall be final.³⁹¹

There shall be constituted a District Fund and a Regional Fund to which shall be credited all moneys received respectively by the District and Regional Councils. The Comptroller and Auditor-General shall audit the accounts of the District and Regional Councils and the reports of such accounts shall be submitted to the Governor. The Governor may make rules for the management of funds.³⁹²

g) Annulment or Suspension and Dissolution:

The Governor may annul or suspend an Act or resolution of a District or Regional Council, if he is satisfied that such Act or resolution is likely to endanger the safety of India or likely to be prejudicial to public order. He may also take necessary steps including the suspension of the council and assume himself all or any of the power of the council.³⁹³

On the recommendation of a Commission appointed to examine and report on any matter relating to administration of autonomous districts and regions, the Governor may dissolve a District or Regional council and direct that:

- a) A fresh election shall be held, or
- b) Assume himself the administration of such area or place for a period not exceeding twelve months.³⁹⁴

Besides the abovementioned grounds, if at any time Governor is satisfied that a situation has arisen in which the administration of an autonomous district or region cannot be carried on in accordance with the provisions of the Sixth Schedule, he may, by public notification, assume to himself all or any of the functions or powers of the District Council or Regional Council for a period not exceeding six months. The Governor may declare that such functions or powers shall be exercisable by such person or authority as he may specify in this behalf.

Thus the Sixth Schedule sought to protect the autonomy of tribal areas in four basic ways:

³⁹¹*Id.* at Paragraph 9

³⁹²*Id.* at Paragraph 7

³⁹³*Id.* at Paragraph 15

³⁹⁴*Id.* at Paragraph 16, For the commentaries on the Sixth Schedule, see, V.R. Manohar and W.W. Chitaley. The AIR Manual 801-821, AIR Ltd.Nagpur, Vol. 13, 1989; Durga Das Basu, Commentary on the Constitution of India: Vol.P., Art. 369-6th Sch 219-247, Kamal Law House, Calcutta. 7th ed. (1996); M.P. Jain, Indian Constitution Law (4th ed.) N.M. Tripathi, Bombay (1984) 236-38, D.K. Singh (ed.). V.N. Shukla, the Constitution of India, Eastern Book Co., Lucknow (1996)

- a) By creating district councils for autonomous tribal districts;
- b) By giving administrative and legislative powers in specified matters to district councils;
- c) By providing for the non-application of the laws of the concerned State of these areas unless the district council decided to apply an Act; and
- d) By empowering the Governor not to apply any Act of Parliament or an Act of the Legislature of the State to an autonomous district. Thus, the idea is that in certain important matters the autonomy of the tribal's should be maintained.

It emerges from the scheme of the Sixth Schedule that it provides another political process for the governance and management of ethnic areas in the States of Assam, Meghalaya, Tripura and Mizoram. The distinction between two political processes recognised under the Fifth and Sixth Schedules are, while under the Fifth Schedule, Tribes Advisory Council is to be established which is an advisory body to advise Governor on such matters pertaining to the welfare and advancement of the Scheduled Tribes; and under the Sixth Schedule, Autonomous District Council is to be established which is an administrative as well as legislative body.

ii. Judicial Innovations on Sixth Schedule:

The enactment of special provisions under the Sixth Schedule to the Constitution for the governance of the tribal areas of North-East India necessarily raised some problems and the problems are inherent in the Sixth Schedule which was dealt with by the Supreme Court and High Court. Although a few number of cases came before the courts, the kind of cases are necessarily varied. In these cases, however, the courts have evolved various principles with respect to the nature of District Council, scope of its law making power, power of the Governor, applicability of State or Central legislations, etc.

a) Nature of the District Council:

The Supreme Court determined the nature and scope of the power of the District Council in *T. Cajee v. U. Jormanik Siem*.³⁹⁵ The facts of the case were that the respondent, U. Jormanik Siem, was Siem of Myllem siemship (chief) in the United Kasi and Jaintia Hills District and was elected as such by the Myntries and the people according to the custom in

³⁹⁵ AIR 1961. SC 176

1951. Subsequently, in June 1952, the autonomous District Council was constituted for the said District under the Sixth Schedule to the Constitution. Hence, the Siemship was brought under the District Council, but the respondent continued to discharge the administrative and judicial functions. In July 1959, the respondent was suspended by the Executive Committee of the District Council.

In the High Court the respondent contended that he could not be removed from his office or be suspended by the Executive Committee of the District Council, as the Siem once appointed could not be removed from his office except through a referendum of the people according to custom. Therefore, until such custom was changed by legislation passed by the District Council with the concurrence of the Governor; The High Court passed an order staying the operation of the order of suspension on the ground that there could be no appointment or removal by the District Council without a law having been passed on that behalf.

The Supreme Court reversed the High Court Order and held that the executive committee of the District Council could remove respondent even in absence of the law framed on that behalf. Because the District Council is both administrative as well as a legislative body³⁹⁶ and the respondent no more than administrative officer appointed by the District Council and working under its control. Besides this, the administrative powers of the chiefs as they existed before January 26, 1950, came to an end with the coming into force of the constitution, Wanchoo, J.(with Sinha, Kapur, Gajendragadkar, JJ.) observed as under:

The Sixth Schedule vested the administration of the autonomous districts in the Governor during the transitional period and thereafter in the District Council. The administration could only be carried on by officers like the Sime or Chief and others below to him, and it seems to us quite clear, if the administration was to be carried on, as it must, that the Governor in the first instance and the District Councils after they came into existence, would have power by virtue of the administration being vested in them to appoint officers and others to carry on the administration. Further once the power of appointment falls within the power of administration of the district the power of removal of officers and others so appointed would necessarily follow as a corollary. The constitution could not have intended that all administration in the autonomous districts should come to a stop till the Governor made

³⁹⁶ J.K Das, *Human Rights and Indigenous peoples* 168 (A.P.H. Publishing corporation, New Delhi, 2001).

regulations under Paragraph 19(1) (b) or till the District Council passed laws under Para 3(1) (g).³⁹⁷

Subba Rao, J., however, had considerable and serious doubts on the question “whether, when the constitution confers, on an authority, power to make laws in respect of a specific subject matter, the said authority can deal with the same subject matter without making such a law in its administrative capacity”.³⁹⁸ Although he agreed with conclusion of the majority, he, however, did not express any opinion on this question. Even one can conclude that the majority was in right direction as immediately after the suspension of the respondent, the United on October 16, 1959, an Act known as United Khasi-Jaintia Hills Autonomous District (Appointment and Succession of Chiefs and Headmen) Act was passed and, therefore, there was a valid law empowering the District Council to remove a Siem, and, as the enquiry in question was only at its initial stage, it can hereafter be validly conducted under the provisions of the said Act. However, the principle evolved in this case was that the District Council is both an administrative as well as a Legislative body.

b) Limits and Scope of the Legislative Power:

The limits and scope of the law making power conferred on the District Council was examined by the Supreme Court in *District Council of U.K. & J.H. v. Sitimon*.³⁹⁹ In this case the constitutional validity of Section 3 the United Khasi-Jaintia Hills District (Transfer of Land) Act (4 of 1953) was challenged on the ground that the said Section 3 disallowed transfer of land from a tribal to non-tribal or between two non-tribals within District Council Area.

In the High Court respondent had raised the point that the impugned Act is Ultra Vires in so far as it is an enactment on the subject of transfer of land which is beyond the scope of law making power conferred on District Council. Paragraph 3(1) (a) of the Sixth Schedule does not empower the District Council to legislate with respect to transfer of land. The expression “allotment, occupation, or use, or setting part of land”⁴⁰⁰ in paragraph 3 (1) (a) is clearly indicative of restrictive power of the District Council only to make laws with respect to actual use or occupation. But its preamble shows that impugned Act was enacted because it was considered “necessary to make provisions in the Autonomous District....with respect to the

³⁹⁷ *Id.* at 169.

³⁹⁸ *Ibid.*

³⁹⁹ AIR 1972 SC 787

⁴⁰⁰ J.K. Das, *Human Rights and Indigenous peoples* 170 (A.P.H. Publishing corporation, New Delhi, 2001).

transfer....of land.....”⁴⁰¹ Section 3 therefore, provided that “No land within the District shall be sold mortgaged, leased, bartered, gifted or otherwise transferred by tribal to a non-tribal or by a non-tribal to another non-tribal....”⁴⁰² The argument of the Attorney General was based on the legislative history of the Sixth Schedule where he emphasised that the real object of protection of tribal areas is out of fear of exploitation of tribal’s by non-tribal’s. His argument, however, did not find acceptance, the High Court struck down Section 3 as it was beyond the competence of the District Council and also offending Article 14 of the Constitution.

Affirming the view of the High Court,⁴⁰³ the Supreme Court (through Dua, J, with Sikri, Mitter Vaidailingam, Reddy, JJ.) determined the limits of law making power of the District Council under Paragraph 3(1) (a) of the Sixth Schedule and held that the words “ allotment, occupation or use, or setting apart of land” in Para. 3(1) (a) for the purposes mentioned therein without using words like “transfer” or “alienation” is clearly indicative of the Constitution makers intention to restrict power of the District Council only to make laws with respect of actual use or occupation of the land allotted or set apart from the purposes stated therein. It was not intended to extend to “transfer of land”. There is no cogent ground as to why such expression could not be used in Para. (3)(1) (a) also, if power to make laws with respect to transfer of land was intended to be conferred on the District Council.

About the scope of the law making power of the District Council, the Supreme Court further held that the District Council unlike the Parliament and the State Legislature are not intended to be clothed with plenary power of legislation. Their power to make laws is expressly limited by the provisions of the Sixth Schedule which has created them and they can do nothing beyond the limits which circumscribe their power. It is beyond the domain of the Courts to enlarge constructively their power to make laws.⁴⁰⁴

It may be submitted that the decision of the Court has gone against to the entire history and purpose of the Sixth Schedule. The main object of the protection was to protect the lands from non-tribal with the self-rule or autonomy which is ultimately frustrated.

c) Competency of the District Council to Impose Royalty:

⁴⁰¹ *Ibid.*

⁴⁰² *Ibid.*

⁴⁰³ AIR 1968 Assam and Nagaland 43

⁴⁰⁴ J.K Das, *Human Rights and Indigenous peoples* 170 (A.P.H. Publishing corporation, New Delhi, 2001).

The question whether the Autonomous District Council is competent to impose royalty and levy fees was examined in *District Council of the Jowai v. Dwet Singh*.⁴⁰⁵ The facts of the case were that the Appellant, the Jowai District Council, issued a notification to the respondent, Dwet Singh, levying royalty in exercise of its power under the United Khasi and Jaintia Hills Autonomous District (Management and Control of Forests) Act, 1958, on red pine, white pine and long pine timber grown in the private forests situated within the jurisdiction of the District Council. The respondent challenged the competence of the District Council to levy the royalty on the timber that came from private forests.⁴⁰⁶

The respondent contended that the royalty in question, which was in the nature of tax, was not leviable by the District Council since it had no authority under the Constitution. On behalf of the District Council it was contended that since the private forests were also under the management and control of the District Council under the provisions of law in force in that area, it was open to it to levy the royalty even though it may be in the nature of tax.⁴⁰⁷

The court held that the royalty on timber brought from private forests imposed by the District Council is in the nature of tax, which the District Council not competent to impose. Although there is no express provision to levy such fees, the District Council can levy fees. In absence of any evidence showing the expenses incurred by the District Council towards the services rendered and the total amount of royalty realised by it, the levy cannot also be held to be fees. The court observed:

What was sought to be recovered by District Council by the notification issued under the 1958 Act was not royalty, since the forest did not belong to the District Council and was a private forest. The levy in question was a compulsory exaction of money by a public authority for public purposes enforceable by law and is not a payment for services rendered. In pith and substance it is a tax on forest produce grown on private lands. The District Council has no power to levy such a tax on forest produce under paragraph 8 of the Sixth Schedule to the Constitution. The levy was not covered by either of the two kinds of taxes mentioned in clauses (a) and (c) of paragraph 8(3). It also did not come within sub-paragraph (1) and (2) of paragraph 8 of the Sixth Schedule to the Constitution which authorised levy of tax on lands on the ground that the trees were growing on the land. It was act in the nature of land

⁴⁰⁵ 1986 SCC (Tax) 768

⁴⁰⁶ *Id.* at Para 2

⁴⁰⁷ *Ibid.*

revenue. It cannot be sustained as any other kind of tax on land since the royalty payable has no reference to the extent of the land and the nature of the land and its potentialities.⁴⁰⁸

d) Power of the Governor:

The extend and scope of the power of Governor under Sixth Schedule was challenged in *Edwingson v. State of Assam*.⁴⁰⁹ The facts of the case were that the Governor of Assam appointed a commission under Paragraph 14(1) of the Sixth Schedule on the 26th of August 1963. The Commission was entrusted “to examine and report in the matter of (1) creation of a new autonomous district for the people of Jowai Sub-Division of the United Khasi-Jaintia Hills Autonomous District, and (2) exclusion of the area from the United Khasi-Jaintia Hills Autonomous District”. The commission submitted its report on the 20th of January 1964 and recommended “the creation of a new Autonomous District Council for the Jowai Sub-Division of the United Khasi-Jaintia Hills Autonomous District by excluding the areas comprising the area of the said Sub-Division from the United Khasi-Jaintia Hills Autonomous District”.⁴¹⁰ The report was placed on 25th of September 1964 by the Minister of the Tribal Areas and Welfare of the Backward classes before the Assam Legislative Assembly along with an explanatory memorandum. The Assembly passed a resolution, approving of the action proposed to be taken. Therefore, a notification was issued by the Governor of Assam on the 23rd of November 1964, by which he pleased “to create a new Autonomous District to be called the Jowai District”.⁴¹¹

In the High Court, the appellant challenged the Constitutional validity of this notification for the following two grounds: (1) that the notification was invalid and ultra vires to powers of the Governor, and (2) that in exercising his power, the Governor has contravened the mandatory requirement prescribed by Para.14 of the Sixth Schedule. Even if it was assumed that the Governor had the power to issue the impugned notification, in as much as the mandatory provisions of the Para.14 had not been complied with, the notification was invalid. The respondent, State of Assam, disputed both contentions of the appellant and argued that the notification had been issued by the Governor in exercise of the powers conferred on him by Para.1(3) of the Sixth Schedule and that all relevant requirements of Para.14 had been complied with.

⁴⁰⁸ J.K Das, *Human Rights and Indigenous peoples* 172 (A.P.H. Publishing corporation, New Delhi, 2001). The Court followed the Principle evolved in *K.T. Moopil Nair v. State of Kerala*, AIR 1961, SCC 552

⁴⁰⁹ AIR 1966 SC 1220

⁴¹⁰ J.K. Das, *Human Rights and Indigenous peoples* 173 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴¹¹ *Ibid.*

Affirming the High Court decision, the majority of the Supreme Court, speaking through Chief Justice Gajendragadkar, held that in this case no legislation was necessary to supplement the power of the Governor to rearrange the boundaries within the “autonomous area” defined in the table to Paragraph 20. If it wishes to do so, Parliament is free to pass an amendment under Paragraph 21 curtailing the Governor’s power under Paragraph 1, but until that time both the Governor and Parliament may exercise concurrent power. Splitting an autonomous district into two new autonomous districts will not add or subtract from the total area described in part A of the table appended to Paragraph 20. Any change in Paragraph 20(2) is a logical outcome of the exercise of the powers allotted to the Governor by Paragraph 1(3). The court also held that Governor is not prohibited by Paragraph 14(2) from giving the report on creation of an autonomous district to his council of ministers for their advice before sending his own recommendations to the state legislature.

Justice Hidayatullah, however, dissented on two main grounds: (1) the Governor does not possess power under Clauses (c),(d) and (e) of Paragraph 1(3) to amend Paragraph 20. No agency other than Parliament can repeal or amend any part of the Constitution of India. In regard to creation of “a new autonomous Jowai District”, the Governor’s notification is no doubt one of the means of achieving the change, but valid change can be effected only by supplemental legislation, (2) the facts of the case do not show that there was a recommendation by the Governor as required under Sixth Schedule and therefore, he had failed to exercise his own responsibility. The crucial point, Hidayatullah, J., described thus:

The Governor of Assam drew up its proposals which were sent to the Governor who merely noted on the file “seen, thanks” and returned the papers which were then placed before the Legislature of the State and Legislature of the State approved the proposals by a resolution.⁴¹²

The judgment and the dissenting opinion raised questions as: (1) Is parliamentary legislation essential to make effective the public notification issued by the Governor in compliance with Paragraph 1(3) of the Sixth Schedule? The preferred view, to not only the words but also the values of the Constitution, is to require that the Union Parliament should amend the Sixth Schedule under Paragraph 21 whenever any change is to be made in the terms of Paragraph 20. For the welfare of the inhabitants of the tribal areas, there should be careful consideration by the legislative branch of the Union Government before any changes is effected in the literal provision of the Constitution, and (2) Are the requirements of

⁴¹² M.Hidayatullah. The Fifth and Sixth Schedule to the Constitution of India. 1979

Paragraph 14(2) a necessary prerequisite to the issuing of a notification by the Governor under Paragraph 1(3)? And if so, is the Governor's recommendation and his message "seen, thanks" written on the report sufficient to discharge his responsibility under Paragraph 14(2) of the Sixth Schedule? Does it amount to a recommendation of the Governor?⁴¹³

In *State of Assam v. K.B. Kurkalang*,⁴¹⁴ the question of the scope and extent of the power of Governor under Paragraph 19(1)(b) of the Sixth Schedule was raised. In this case the respondents challenged the validity of the United Khasi- Jaintia Hills Districts (Application of laws) Regulation, V of 1952 promulgated by the Governor of Assam under Paragraph 19(1) (b) of the Sixth Schedule on the ground that the Governor had issued the said Regulation through the notification dated September 8th, 1961, under the said provision 19(1)(b) of the Sixth Schedule which are transitional, that is, until a District Council for the area was constituted, which was done in June 1952 and hence the notification was void as it was done in June 1952 and hence the notification was void as it was issued by one who had no authority to issue it.

The High Court held that once such a council was set up, the Governor could not exercise the power under Paragraph 19, that any regulation made there under could remain effective up to that period only, and that therefore, the notification had no effect.⁴¹⁵

Following the principles laid down in earlier decisions,⁴¹⁶ the Supreme Court reversed the decision of the High Court. Shelat, J. (with Sikri, Dua and Mitter, JJ.) speaking for the court observed that the Regulation promulgated by the Governor does not automatically cease to have effect, even the Regulation brought into force after the District Council is constituted and the power of the Governor to bring into force the laws set out in the schedule will cease to have effect only when the Regulation is removed from the statute. So far as the nature and scope of the power conferred on the Governor under Paragraph 19(1)(a) of the Sixth Schedule, the court held that, it is manifestly a legislative power and is without any limitations even in regard to matters in respect of which he can promulgate a Resolution. The only limitation to that power is the requirement of the presidential assent without which the regulation would have no effect. The Supreme Court further interpreted Paragraph 19 of the Sixth Schedule with the following words:

⁴¹³ Rajendra Nayak, "Power of the Governor under the Sixth Schedule to the Indian Constitution", 9 *JILI* 236-246 (1967).

⁴¹⁴ AIR 1972 SC 223

⁴¹⁵ J.K. Das, *Human Rights and Indigenous peoples* 175 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴¹⁶ *Ram Kripal v. State of Bihar*, AIR 1970 SC 951, *J.K. Gas Plant Manufacturing Co. Ltd v. U.Jormanik Siem*, AIR 1961, SC 276

It is true that the power is to be exercised “until a District Council is so constituted for an autonomous district”. But that only places a limit to the period until which it is exercisable and not any limitation upon the extent of the power or the period during which a regulation made by him would be in force once it is validly made. Further, there is no provision either in Paragraph 19 or Paragraph 12 suggesting that such regulation is to remain in force and have effect only until a District Council is constituted. In the absence of any such limitation, there is no warrant for saying that a regulation ceases to have effect once the District Council is constituted. The words “such a District Council is so constituted” have reference to the period during which the legislative power of the Governor is to ensure and not to the period up to which the regulation which is made during the time that the power ensures is to remain in force. Like every other piece of legislation, the regulation contains to operate and remain effective until it is either annulled or repealed under some legislative power.⁴¹⁷

In *Satyewar v. Government of Assam*,⁴¹⁸ the High Court examined the nature of power of the Governor conferred under Para. 2(6-A) of the Sixth Schedule is to be exercised. The facts of the case were that four nominated members of the Mikir Hills District Council were terminated by the notification of the Government of Assam dated 6th of December 1972. The notification was challenged on the following grounds: (1) Before issuing this notification, it was never placed before the Governor, (2) As a nominated member of the District Council holds office at the pleasure of the Governor under Para. 2(6-A) of the Sixth Schedule, such pleasure is to be exercised by the Governor himself and cannot be delegated by him to any other person or be exercised by anyone else on his behalf, and (3) The power to remove a nominated member under Para. 2(6A) is vested not in the State Government, but in the Governor in his discretion and accordingly if the matter is not submitted to the Governor, such order will not be a valid one. All these contentions, as aforesaid, were decided by the High Court by examining the question whether the power of the Governor under Para. 2(6A) of the Sixth Schedule is to be exercised in his discretion or has to be exercised by him as a Constitutional head of the State of Assam, acting with the aid and advice of his council of ministers. The court dismissed all contentions.

So far as the question of nature of power of the Governor, the High Court held that, such power is guided with the aid advice of the council of ministers and it is not the discretionary power of the Governor. Mr. D.M. Sen., J. (with Mr. P.K. Goswami, C.J.) held that “the power of the Governor under Para. 2(6.A) is to be exercised by him not in his discretion but as a

⁴¹⁷ J.K. Das, Human Rights and Indigenous peoples 176 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴¹⁸ AIR1974, Gau. 20

constitutional head of the State acting with the aid and advice of his council of ministers”.⁴¹⁹ With respect to the relation between the State legislative authority, executive authority and the district council, the court observed:

The scheme of the Sixth Schedule shows that the State Legislature has a sort of overall superintendence over the District Councils and that the executive authority of the State extends to the autonomous districts and regions. Consequently, the Governor exercises his functions under the Sixth Schedule, as respects these areas with the aid and advice of his Council of Ministers, unless he is expressly or by necessary implication required to act in his discretion. There is no implied discretionary power of the Governor in the Schedule with regard to the exercise of his functions in relation to autonomous districts or regions, except possibly in the making of his recommendation under Para. 14(2), Para. 9(2), of course, provides expressly for exercise of the Governor’s discretion there under.⁴²⁰

It cannot be said, the , Court further observed, that the executive power of the State of Assam does not extend to the autonomous districts or regions with regard to the matters specified in paragraphs 2(6) and (7) and 3(1) on the ground that State Legislature has no competence to make laws on those matters. No doubt, under paragraph 3(1) of the Schedule, the Regional Council or the District Council, as the case may be, has been vested with the competence to make laws with regard to matters specified therein. But from this, it does not follow that the State Legislature is debarred from making laws on those matters as regards any autonomous areas within the State of Assam. The legislative powers of the State Legislature under Articles 245 and 246 of the Constitution are not taken away by paragraph 3(1) of the Schedule with regard to the matters specified therein; if that were the intention of the Constitution makers, the word “exclusive” would have been used in paragraph 3(1), as in Article 246(1) and (3) of the Constitution.⁴²¹ Merely because there is no provision in the Sixth Schedule on the lines of paragraph 2 of the Fifth Schedule, which extends the executive power of the State to the Scheduled area it cannot be said that the executive power of the State is not intended to extend to the autonomous districts and regions. The fathers of the Constitution most probably thought that since under paragraph 3 of the Fifth Schedule, the executive power of the Union has been extended to the giving of directions to a State as to the administration of the Scheduled areas therein, a provision in clear terms, saving the executive power of the State with regard to the Scheduled areas therein should be incorporated and that

⁴¹⁹J.K. Das, *Human Rights and Indigenous peoples* 177 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴²⁰*Ibid.*

⁴²¹*Id.* at 178

is possibly why paragraph 2 was required to be inserted in the Fifth Schedule. In the Sixth Schedule, there is no provision whereby the executive power of the Union has been extended to the administration of the autonomous districts specified in Part I of the Table appended thereto, and there was thus no need to have a paragraph on the same lines on in paragraph 2 of the Fifth Schedule.⁴²²

Again the Court viewed, about the question whether the Governor acts with his personal capacity, that paragraph 2(6-A) of the Schedule certainly does not empower the Governor to act in his personal capacity simply because the expression “Governor” occurs therein. If the Governor has to act in his personal capacity whenever in any Article or provisions of the Constitution, the expression Governor occurs, it will upset the whole Constitutional structure envisaged at the time when the Constitution was passed and will make the Governor a kind of a director. To read every Article of the Constitution in which the expression Governor occurs on conferring powers upon the Governor in his personal capacity without reference to the cabinet would be constitutionally incorrect.⁴²³

The power of the Governor to take over administration of the District Council was examined by the High Court in *Holiram Terang v. State of Assam*.⁴²⁴ In this case the main grievance of the writ petitioner was that the Governor by invoking powers under the paragraph 16(2) of the Sixth Schedule to the Constitution took over the administration of the District Council on number of occasions which was whimsical, arbitrary and for political purpose. Hence the writ petitioner had challenged the Constitutional validity of the above provision of the Sixth Schedule to the Constitution. The writ petitioner challenged the paragraph 16(2) on the following four grounds:

1. That, power given to Governor under the paragraph 16(2) is unguided. Though in Article 356⁴²⁵ of the Constitution the President can invoke powers on receipt of the report from Governor, but in case of paragraph 16(2) there is no such provision for getting a report before invoking the power by the Governor.
2. That, if the administration is taken over by the Governor by invoking powers under paragraph 16(2) there is no provision for delegating such legislative power to any elected representative of the people, such as State Assembly. While the President exercising powers under Article 356 of the Constitution, the legislative functions of State Assembly is performed by the Parliament.

⁴²² *Ibid.*

⁴²³ *Ibid.*

⁴²⁴ AIR 1995 Gau. 15

⁴²⁵ The Constitution of India

3. That, by invoking paragraph 16(2) even judicial powers can be taken over by the Governor.
4. That, on dissolution of State Assembly, speaker continues to hold office but this is not so in case of Chairman of District Council.

The High Court dismissed the above stated contentions and held that paragraph 16(2) of the Sixth Schedule is constitutionally valid. Phukam, C.J. (Actg.) observed reasons in unequivocal terms, in respect to unguided power:

.....this cannot be said to be unguided powers in as much as Governor has to act with aid and advice of the Council of Ministers and the Council of Ministers will tender advice only on the basis of some reports.⁴²⁶

In respect to Legislative functions:

Even in respect of Legislative function during the period under which administration is taken over by the Governor by invoking powers under sub-paragraph (2) of paragraph 16 there is a check in making any law including regulation in as much as the Governor shall have the control before such law or regulation can be enforced. Even if such powers are exercised by any other authority under sub-paragraph (3) of paragraph 3 of the Sixth Schedule any law made by such authority has to be submitted to the Governor for his assent. This is a check for performing legislative function by any other authority.

In respect to judicial powers:

..... Under paragraph 4 of the Sixth Schedule the District Council can only establish Courts within the limitations prescribed in the said paragraph. Once Courts are established, they perform judicial functions independently under the supervision of the High Court under Article 227.⁴²⁷ That apart in paragraph 4, itself sufficient provisions have been made regarding the control of the Courts established by District Council by the High Court and the Supreme Court.

⁴²⁶ J.K. Das, *Human Rights and Indigenous peoples* 180 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴²⁷ The Constitution of India

In respect to the Chairman of District Council:

Regarding speaker there is specific provision in Article 94⁴²⁸ and he continues to hold the office by virtue of this Constitutional provision. Therefore, his position cannot be compared with the position of the Chairman of a District Council.

Thus the Court held that the Governor have the power to take over the administration of the District Council, but he has to act with the aid and advice of the Council of Ministers. Therefore, his power is not unguided power.

e) Rights of Non-tribal to carry on business:

The right of non-tribal to carry on business in tribal areas was examined in *Hari Chand Sardar v. Mizo District Coucil*.⁴²⁹ The facts of the case were that, the appellant, a non-tribal, started trading at Aijal, Mizo District, in 1957 under a temporary licence issued by the Mizo District Council where he invested about Rupees Fifty thousand. The temporary licence could be issued at a time for a year only and therefore he applied for and obtained its renewal from time to time up to May 31st, 1960. He applied for further renewal whereupon the Executive Committee of the District Council passed an order dated July 11th, 1960 refusing any further renewal and directing him to remove his properties from the District by the end of July 1960 and imposed a fine of Rupees Five hundred in case he failed to comply with it.

In the High Court the appellant had raised the following two points: First, the order was malafide in the sense that it directed him to remove his properties from the District which imposed fine. Secondly, the order was based on an invalid provision of law. Section 3 of the Lushai Hills District (Trading by non-tribal) Regulation, 2 of 1954 gives the District Council an arbitrary power of issuing or withholding licences to non-tribal and is repugnant to Article 14⁴³⁰ and 19(1) (g).⁴³¹ The order infringed the fundamental right to carry on business amounted to an unreasonable restriction. The High Court struck down that part of the said order which directed him to remove his properties from the district and which imposed fine, but dismissed the rest of the petition, firstly, on the ground that of delay, and secondly on the ground that the said order was a valid order and was not discriminatory.⁴³²

In the Supreme Court, the respondent, Mizo District Council, contended that the order was made under Section 3 of the Regulation of 1953 which was passed for the avowed object

⁴²⁸ *Ibid.*

⁴²⁹ AIR 1967 SC 829

⁴³⁰ The Constitution of India

⁴³¹ *Ibid.*

⁴³² J.K.Das, *Human Rights and Indigenous peoples* 181 (A.P.H. Publishing corporation, New Delhi, 2001).

set out in Para.10 of the Sixth Schedule and reason for order was that the number of non-tribal traders had reached the maximum. The majority of the Supreme Court, speaking through Shelat, J. (with Subba Rao, C.J.), reversed the High Court decision and struck down Section 3 of the Regulation of 1953. The majority declared that Section 3 of the Regulation leaves to licensing authority an unrestricted power in the matter of granting or refusing licence or its renewal to non-tribal traders. The rule also does not lay down any standards on basis of which authority has to decide whether antecedents or character of application are such that application should be rejected. Even if Sixth Schedule can be said to contain policy to safeguard tribal's from exploitation by non-tribal and regulation may be said to have been enacted in pursuance of such policy that cannot save Section 3 from vice of being unreasonable.⁴³³

Justice Bachawat, J., however, dissented from the decision of the majority. He viewed that the Sixth Schedule to the Constitution lays down the policy of administration of the tribal areas and paragraph 10(2)(d) of the Schedule specifically empowers the District Council to make regulations prescribing that a non-tribal resident of the District shall not carry on business unless a licence is issued by the District Council which is an integral part of this Schedule. This paragraph is not violative of Article 14 and 19(1)(g), nor it so contended. Section 3 of the Regulation is in strict conformity with this paragraph. If paragraph 10 of Sixth Schedule cannot be regarded as violative of any provision in the Constitution, Section 3 of Regulation which is in strict conformity with paragraph 10 cannot also be regarded as violative of Article 14 and 19(1) (g).

It may be respectfully submitted that the majority was in error as entire scheme of protection of tribal's was ignored which were very adequately set down in dissenting opinion.

f) Applicability of the Central and State Legislations:

In *Regional Provident Fund Commissioner v. Shillong City Bus Syndicate*,⁴³⁴ the question of the interrelationship between the Constitution and the Sixth Schedule was raised and applicability of Acts of Parliament to the Khasi Hills Autonomous District was challenged. The facts of the case were that a notice issued to the respondent, Shillong City Bus Syndicate, by the appellant, Regional Provident Fund Commissioner, under Section 7-A of the Employees provident Funds and Miscellaneous Provisions Act, 1952, (hereinafter referred to as the Act) an Act of Parliament, alleging non-payment of Employees Provident Fund

⁴³³ *Ibid.*

⁴³⁴ AIR 1996 SCC 741

contributing for the period from January to September 1972. The notice was challenged by the Bus Syndicate on the Ground that the Act was not applicable to the Autonomous district of Khasi Hills within which the syndicate plied its buses.

There were three aspects of the matter which came before the Supreme Court. The first aspect was that if the Presidential notification is required for the application of a Parliamentary Act or Act of the concerned State to the Autonomous District established under Sixth Schedule and if there is no any such notification, whether the Act is applicable? M. Hidayatulla C.J. has stated this problem as under:

The Sixth Schedule is a very elaborate piece of legislation and it has undergone many changes since it was first enacted. This was done from time to time through Constitutional amendments, through Parliamentary legislation, through Presidential orders and Central Government notifications. The Constitutional amendments are political in nature, the Acts of Parliament effect reorganisation and the presidential orders either remove difficulties or are promulgated in the performance of duties laid on the President by the Sixth Schedule itself.⁴³⁵

Paragraph 12(1) (b) lays down that any Act of Parliament or of the Legislature of the State of Assam not covered by special provisions will be applied with such exceptions and modifications as the Governor may specify in the notification.

The second aspect of the problem was that whether an Act of parliament or concerned State legislature would apply *Proprio vigour* if there is no notification prohibiting its application. This problem was stated by B.L. Hansari,J., thus:

In so far as the Acts or (sic) Parliament are concerned the provisions in respect of tribal areas broadly speaking in that the Governor, in case of tribal areas in Assam, and the President in respect of the two other tribal areas, may notify that the Act shall not apply to an autonomous district or region, or shall apply subject to such exceptions or modifications as may be specified. A question arises whether an Act of Parliament would apply *proprio vigour* if there be no notification prohibiting its application.⁴³⁶

The third aspect of the problem dealt with the automatic applicability of the Act that whether an Act made by Parliament or concerned State Legislature will automatically apply to the District Council, unless the President or Governor thinks that they ought not to apply. Dr. Ambedkar, during the debates in the Constituent Assembly stated that:

⁴³⁵ J.K. Das, *Human Rights and Indigenous peoples* 183 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴³⁶ B.L. Hansari, *Sixth Schedule to the Constitution of India: A Study* 45 (Ashok Publishing House, Gauhati, 1983).

.....the other binding force is this that the laws made by parliament and laws made by the Legislature of Assam will automatically apply to the District Councils. Unless the Governor thinks that they ought not to apply, in other words, the burden is upon the Governor to show why the law which is made by the Legislature of Assam or by Parliament, should not apply. Generally, the laws made by Parliament will also be applicable to these areas.⁴³⁷

The learned counsel for the respondents, contended that the Constitution intended to protect the autonomy of the administration, operation of law and administration of justice in the Autonomous District or Region suited to their environment to the exclusion of any law made by Parliament or the State Legislature unless the Governor or the President, as the case may be, by a public notification, makes the Act applicability with or without such modifications or exceptions in relation to the Autonomous District or Regions as may be specified in the notification. The Act was not made applicability by the President in relation to Khasi Hills Autonomous District by a public notification.⁴³⁸ Against this line of argument, learned counsel for the appellant, contended that the Sixth Schedule have been incorporated to protect the autonomy of the tribals and have evolved a separated scheme for the administration of tribal areas. The District or Regional Councils have been constituted therein with a view to vest in them the legislative power on specified subject allotted in relevant paragraphs of the Schedule with a power of taxation and setting up of administration and system of justice to maintain administration and welfare services in respect to the subjects enumerated in the respective paragraphs. Article 245⁴³⁹ empowers Parliament and the Legislatures of the States, subject to the provisions of the Constitution, to make laws for the whole or any part of the territory of India. The Act was made to implement welfare schemes to provide medical facilities and health care to the workmen of the industries or establishments covered or notified under the Act. On Constitution of the Autonomous District or Regional Council, by operation of paragraph 12(1) (b) in relation to State of Assam and Paragraph 12-A(b) in relation to Meghalaya, all Acts of Parliament shall apply to the Autonomous District, unless the Governor or President, as the case may be, by notification directs that the particular Act of Parliament shall not apply to an Autonomous District or Region or a part thereof in the respective State or shall apply to such district or region or part thereof subject to such exceptions or modifications as may be specified in that behalf in the notification. Autonomous District Council was constituted w. e. f. 27.6.1952, proprio vigore;

⁴³⁷ Constituent Assembly Debates. Vol. IX.

⁴³⁸ J.K.Das, *Human Rights and Indigenous peoples* 184 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴³⁹ The Constitution of India

the Act stands applicable to the Khasi Hills Autonomous District. The notice issued by the appellant is valid.⁴⁴⁰

The court held that all Acts of Parliament or State Legislature which are not occupied by the provisions contained in paragraph three of the Sixth Schedule shall proprio vigore become operative in the area of the Autonomous Regions or District and, therefore, the Employees Provident Funds and Miscellaneous Provisions Act, 1952, is applicable to the area of Khasi Autonomous District.⁴⁴¹

g) Applicability of the Procedural Law:

The question, whether framing of issues are necessary when the courts are governed by the United Khasi and Jaintia Autonomous District (Administration of Justice) Rules, 1953, was raised in *U. Stoling Nonglang v. Ka Klin Lyngdoh*.⁴⁴² The High Court examined the extent of applicability of procedural law to the District Council Courts established under the Sixth Schedule to the Constitution. Justice K. Lahiri observed as under:

Failure to frame issues by Court governed by United Khasi and Jaintia Autonomous District (Administration of Justice) Rules results in failure of justice. In such a case it could not be said that framing of issues is not necessary as such Courts are not governed by provisions of Civil Procedure Code, but one guided by Principles of justice, equality and good conscience.....The formulation of the points or the issues have their origin from time immemorial and all courts and Tribunals governed by the norms of Justice or 'the known principles of law', settle issues and determine the disputes on the basis of the issues. It is essential in all adversary system of trial where parties are called upon to produce their evidence..... Issues help Courts to decide the precise questions required to be determined. When issues are framed a civil court cannot go beyond them and formulate a new case for the parties. This rule is of universal application in all trials or proceedings where evidence need be recorded..... All rules contained in procedural laws need be applied in trial of suits or cases by the courts governed by the Rules of the Administration of Justice, which are beneficial in nature and bear up the cause of justice. But, the principles of law, which are of universal application and those rules which accord with the principles of justice, equality and good conscience should be applicable in trials by the Courts concerned.⁴⁴³

⁴⁴⁰J.K. Das, *Human Rights and Indigenous peoples* 185 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴⁴¹*Ibid.*

⁴⁴²AIR 1982 Gau. 82

⁴⁴³J.K. Das, *Human Rights and Indigenous peoples* 186 (A.P.H. Publishing corporation, New Delhi, 2001).

Thus, the Court held that framing of issues are necessary even the Courts is governed by the autonomous district council. All principles of law, which are of universal application, should be applicable in trials by the Courts governed by the autonomous district councils.

h) High Court Jurisdiction over District Council Courts:

In *Pachhunga v. Zokhumi*⁴⁴⁴ the jurisdiction of the High Court over District Council Courts was discussed. The High Court observed that under Sixth Schedule to the Constitution, the District Council courts are constituted for the trial of disputes, where both parties are tribal and according to the Assam High Court (Jurisdiction over District Council Courts) Order, 1954, the High Court exercise jurisdiction over the District Council Courts in the following manners:

1. An appeal against a final order or decision of the District Council Courts in a civil suit where the valuation of the suit is Rs 1000 or more shall lie to the High Court.⁴⁴⁵
2. High Court may, on application or otherwise, call for the proceedings of any civil or criminal case decided by or pending in any court in the Autonomous District constituted under the provisions of sub-paragraphs (1) and (2) of paragraph 4 of the Sixth Schedule to the Constitution and pass such orders as it may deem fit.⁴⁴⁶

Thus, the High Court held that the Gauhati High Court exercise jurisdiction over any Autonomous District Council Court established under the Sixth Schedule to the Constitution.

i) Territorial Jurisdiction of the District Council:

In *District Council U.K.J. Hills v. K.D.Iyngdeh*,⁴⁴⁷ the question was whether the jurisdiction of the District Council of the United Khasi-Jaintia Hills, extended to the area called Bara Bazar in village Mawkhar in shillong or the said village was a part of Shillong Municipality. The High Court had held that the village Mawkhar which comprises Bara Bazar was a part of the Municipality of Shillong and the District Council had no jurisdiction, administrative or otherwise, over this area:

The Supreme Court reversed the decision of the High Court as the material on which the court relied was not justified and held that jurisdiction of the District Council extends to Bara

⁴⁴⁴ AIR 1990 Gau. 87

⁴⁴⁵ Assam High Court (Jurisdiction over District Council Courts) Order, 1954. Paragraph 3.

⁴⁴⁶ *Ibid.*

⁴⁴⁷ AIR 1975 SC1022

Bazar in village Mawhar in Shillong. Justice A.C. Gupta (with K.K. Mathew, V.R. Krishna Iyer, JJ.) observed:

We do not think that the material on which the High Court relied justifies the finding that village Mawkhar which includes Bara Bazar was part of the Shillong Municipality. The notification dated in 16th January, 1935 makes it clear beyond doubt that the Siem of Mylliem ceded the villages for the specified purpose of municipality administration only. It was also clear that though the provisions of the Assam Municipal Act, 1923 were made applicable to the ceded villages, the villages were never included within the territorial jurisdiction of the Shillong Municipality. The notification itself directed that these villages were to be deemed as a distinct municipality designed the Shillong (Administered Areas) Municipality which shows that they were not intended to be merged in the Municipality of Shillong..... There is also no evidence that these territories were subsequently merged in the Municipality of Shillong.....⁴⁴⁸

It may, however, be submitted that the finding of the High Court was more logical than the Supreme Court. The Administered area done away with and there was no room for another Municipality and no Municipality functioned as such in this area apart from Shillong Municipality. This area thus fell outside the jurisdiction of the District Council and within the Shillong Municipality.

j) Jurisdiction of the District Council Court:

The question of the jurisdiction of the Khasi Hills District Council Court has been placed before the High Court as a matter of reference in *I.C. Chakrabarty v. Khasi Hills District Council*.⁴⁴⁹ The facts of the case were that in view of the judgement of the Supreme Court in *K.D. Iyngdeh*⁴⁵⁰ case a confusion was arisen with regard to jurisdiction of the Court of Assistant Deputy Commissioner, Shillong municipality, over the place of Mawkhar. In this case the core question was whether the trial of cases in the area falling within Mawkhar including Barabazar in the town of Shillong are to be tried under the rules of Administration of Justice and Police in Autonomous District (Administration of Justice) Rules, 1953 by the District Council Court.

The major argument in this case was that the Court of Asstt. To D.C., Shillong Municipality, got no jurisdiction as both the parties are Tribals and place Mawkhar is outside

⁴⁴⁸J.K. Das, *Human Rights and Indigenous peoples* 188 (A.P.H. Publishing corporation, New Delhi, 2001)

⁴⁴⁹ AIR 1984 Gau 92

⁴⁵⁰ *District Council U.K.J. Hills v. K.D. Iyngdeh*, AIR 1975 SC 1022

the Shillong Municipality according to the judgement of the Supreme Court in K.D.Iyngdeh case.⁴⁵¹ Against this line of argument it was stated that this Supreme Court judgement only determined the administrative control of District Council in those areas and hence in view of the provision of Para.20, of the Sixth Schedule, the Asstt. To D.C. of Shillong has got the jurisdiction in the matter of administration of justice in those areas even if both the parties are Tribal's. In this connection, Para. 6 of the aforesaid judgment of the Supreme Court⁴⁵² was referred where it was admitted that the place Mawkhar have been ceded with the Shillong Municipality Authority, vide notification No. 44-1, dated 16th January, 1934.

The majority of the High Court, speaking through Mr. K.D. Pathak C.J., held that the District Council Courts only will have jurisdiction for the administration of justice in Mawkhar including Barabazar area. In respect of matters pertaining to paragraphs enumerated in the proviso to para. 20(2), the District Council only will have full jurisdiction in the Mawkhar area. Thus paragraph 4 and 5 of the Sixth Schedule which are also mentioned in the proviso to Para. 20(2) of the Sixth Schedule will not come within the exception engrafted to the aforesaid proviso so far Mawkhar including Barabazar area is concerned. Therefore, the District Council will have jurisdiction in all matters except the Municipal administration, arising out of these areas.⁴⁵³

Mr.K. Lahiri, J. In his concurring judgement referred some cases⁴⁵⁴ and observed that by virtue of the notification issued in 1934, Mawkhar was included within the Municipality of Shillong; although it continued to remain within the Municipality of Shillong as part and parcel thereof, yet the jurisdiction of the District Council extends over Mawkhar or southeast Mawkhar including Barabazar area. As such the District Council Courts have jurisdiction to try suits, the cause of action of which arise within the said area.

The territorial jurisdiction of the District Council Court was questioned before Special Bench of the High Court in *U. Owing Singh v. Ka Nosibon Jyrwu*.⁴⁵⁵ In this case the question was whether the Siem of Myliem and his Durbar had jurisdiction to entertain and decide civil litigation between the tribal's living in a territory which forms part of the United Khasi and Jaintia Hills, but is an area within the Labon, Municipality of Shillong.

Tracing the historical background, Chief Justice, Sarjoo Prasad has held that in respect of civil litigation arising within the Shillong (Administrative Areas) Municipality, the Deputy

⁴⁵¹ *Ibid.*

⁴⁵² *Ibid.*

⁴⁵³ J.K. Das, *Human Rights and Indigenous peoples* 189 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴⁵⁴ *U. Owing Singh v. K.A. Nosibal*, AIR 1956 Assam 129. *Hordeo Das Jagannath v. State of Assam*, AIR 1970 SC 724.

⁴⁵⁵ AIR 1956 Assam 129

Commissioner and his Assistants have exclusive jurisdiction to try the suits under the Rules of the Administration of Justice and Police in Khasi and Jaintia Hills, 1937, though territorially and for other limited purposes the area falls within the Tribal Area styled as the United Khasi and Jaintia Hills District. This was concurred and supplemented by Justice Ramlabhya with the reasoning that the law was so settled that the suits are being tried by the Deputy Commissioner and his Assistants under the Rules of 1937. On consideration of all the relevant legal position, the learned Chief Justice Mr. Sarjoo Prasad observed as follows:

The provisions make it clear even in the Siemship are appertaining to the Shillong Municipal area, the District Council has no power to administer justice. It may be pointed out that the District Council has been constituted in respect to the United Khasi and Jaintia Hills District and the District Council has framed rules for the administration of justice in the autonomous district. Under these rules the village Court is composed of the Dolai, Sardar, Siem, Rynjah, Lyngdoh, etc. And these Courts are vested with powers to try suits of a civil nature..... the rules are dated the 8th December, 1953, and were promulgated with the assent of the Governor. These rules, under the proviso Para 20 Sub-Para 2 of the Sixth Schedule have no application to the 'Administered Area' or the area of the State of Myllem falling within the Shillong Municipality. Thus the Court of the Siem and his Durbar even if functioning under these rules had no jurisdiction to try civil cases in the 'Administered area'.⁴⁵⁶

A careful analysis of the legal position, as quoted above, reveals that the Siem and his Durbar have no jurisdiction to entertain suits of civil nature in the area of dispute even between the tribal's. Because the power of the Siem after the Constitution were continued to the Siemship order or the Rules framed by the District Council Constituting the Siem as a village court. Thus the High Court was in right direction.

k) Removal of Chief and Chairman:

The question whether the Executive Committee can suspend and remove Dollai (headman) if he has lost confidence of majority of electors in his Elaka was asked in *U.S. Suchiang v. J.A. Dist. Council*.⁴⁵⁷ The facts of the case were that the petitioner, U. Span Suchiang, was the Dolloi of Raliang. The executive Committee of the Jowai Autonomous District Council decided for a referendum of the electors with regard to the petitioner's Dolloiship as the general allegations were brought against him. The petitioner challenged the

⁴⁵⁶J.K. Das, *Human Rights and Indigenous peoples* 190 (A.P.H. Publishing corporation, New Delhi, 2001).

⁴⁵⁷ AIR 1971 Assam and Nagaland 109

order of the Executive Committee on the ground that the Executive Committee has no jurisdiction to order for a referendum without previously giving the petitioner a reasonable opportunity to show cause against such a step.

Relied on the earlier cases,⁴⁵⁸ the High Court held that Executive Committee can suspend and remove Dollai if he has lost confidence of majority of electors in his Elaka. To ascertain loss of confidence a referendum is permissible by custom or practice. When Dollai concerned is informed of the proposal for such a step and he is himself present in the public meeting in which majority of the electors were in favour of referendum, there is no failure of any rules of natural justice.

In *U. Doley Singh v. District Council*,⁴⁵⁹ the validity of the removal of chief was examined. The facts of the case were that the petitioner U. Doley Singh was nominated as Syiem (Chief) of the Langrin Syiemship. Subsequently he was removed by the order of the Executive Committee of the Khasi Hills District Councils, approved by the District council, on the ground of 'losing Confidence of majority of electors'.⁴⁶⁰ The petitioner challenged the aforesaid order where learned counsel submitted that the petitioner had not lost the confidence of the majority of the electors or of the people of Elaka and the impugned order was against to the Section 6(1) of the United Khasi-Jaintia Hills Autonomous District (Appointment and Succession of Chiefs and Headmen) Act, 1959. He further submitted that in the referendum 282 persons voted against the petitioner for his removal, but the total numbers of electors were 645. Hence, 282 votes did not represent the majority of the total votes numbering 645.

The High Court, following its earlier decisions,⁴⁶¹ held that the opinion of the Executive Committee is without jurisdiction and liable to be quashed. The expression 'losing of the confidence of the majority of the electors or of the people of the Elaka' in Section 6(1) means losing of the confidence of the majority of the total electors or the total people of the Elaka entitled to vote and does not mean losing confidence of the majority of the electors present in the meeting or Durbar called for the purpose. In the absence of rules under Section 3, the electors of Langrin Syiemship are by customary law the adult males of the Langrin State and following that custom an electoral roll has been prepared by the Executive Committee itself

⁴⁵⁸*U. Nodri Majau v. U. Kendromanli Rai*, Civil Rule No. 407 of 1961 (Assam) (Unreported decision), *U. Doley Singh v. Executive Member* (1962) ILR 14 Assam 139

⁴⁵⁹ AIR 1976 Gau 76

⁴⁶⁰ Advocate General had referred to an unreported decision of the Gauhati High Court: (1961) Civil R. No. 407 of 1961 D/-18-5-1962 (Assam)

⁴⁶¹*Edwingson Barch v. Henry Cotton*, AIR 1965 Assam and Nagaland 49, *U.S. Suchiang v. J.A. District Council*, AIR 1971 Assam and Nagaland 109

including all the adult males of the Langrin State. The subjective opinion of the Executive Committee and the action in pursuance thereof for removal and suspension of a chief must be formed and taken on the basis of the provisions laid down in Section 6 itself. If the subjective opinion cannot be said to have been formed on the basis of the provisions of Section 6, such a subjective opinion will be without jurisdiction and as such invalid and liable to be quashed in an application under Article 226.⁴⁶² Where the Executive Committee had prepared a list of eligible voters and the number was 645, the petitioner, who was the Syiem cannot be said to have lost the confidence of the majority of the total electors when 282 voters only had cast their votes expressing lack of confidence in the petitioner. So, the order passed by the Executive Committee, which had been approved by the District Council, removing the petitioner from the office of Syiem of Langrin Syiemship was not in conformity with Section 6(1) and cannot be sustained.⁴⁶³

Luvezo Venuh v. State of Nagaland,⁴⁶⁴ the question was whether in absence of the provisions of Rules and Regulations, the Chairman of the Town Committee can be removed by a no confidence motion by members of the Town Committee. The facts of the case were that following the resignation of Sri Nusucho, an elected member, the petitioner Sri Luvezo Venuh was appointed by the Governor of Nagaland as Chairman of the Phek Town Committee constituted under the Assam Tribal Areas (Administration of Town Committees) Regulations, 1950. Subsequently a no confidence motion was moved against the petitioner by members of the Town Committee.⁴⁶⁵

In the High Court, the petitioner had raised the following points:

- i. There is no provision in the Regulation either for removal of the Chairman or for a no-confidence motion by the members and the Town Committee being the creation of the Statute, all its functioning is governed by the Statute and in the absence of a specific provision of law, members have no right to move a no-confidence motion against the Chairman.
- ii. The petitioner having been appointed by the Governor to be the Chairman in exercise of the powers conferred upon him by a Regulation, the appointment of the petitioner as Chairman cannot be revoked nor nullified by the members of the Committee by no-confidence motion.

⁴⁶² The Constitution of India

⁴⁶³ The court followed the principle evolved in earlier cases: AIR 1965 Assam and Nagaland 49; AIR 1971 Assam and Nagaland 109

⁴⁶⁴ AIR 1994 Gau. 81

⁴⁶⁵ J.K. Das, *Human Rights and Indigenous peoples* 193 (A.P.H. Publishing corporation, New Delhi, 2001)

- iii. The members of the Town Committee under the Regulation are not democratic bodies and as such they are not allowed to resort to democratic rights by mode of no-confidence motion.

The court held that the removal of Chairman by no-confidence motion is inherent right of members, though there is no such express provision. The Court observed as under:

The members of the Town Committee elected under regulation are through democratic process and the conducts of the business of the members of the Town Committee are democratic in nature and therefore, it cannot be said that the Town Committee is not a democratic institution. Consequently there can be no distinction whether the Chairman is elected or nominated; he is amenable to democratic process. Once it is held that the Constitution of the Town Committee is a democratic institution, and the Chairman and members are democratic bodies, the removal of the Chairman whether elected or appointed by a no-confidence motion is inherent. There can be no distinction between Chairmen elected or Chairman appointed because once he is appointed or elected, he acts as a Chairman. The fact that the Chairman shall have casting vote in addition to his ordinary vote in case if a tie as visualised under Rule 53 of the Rules, would clearly so to show that once he is elected or appointed as Chairman, he is amenable to democratic process. In such a case, it would be incongruous to suggest that the members have no right to remove the Chairman by a vote of no-confidence merely because there is no provision for it. Further, merely because the discretionary power has been given to Governor to mould his decision for appointing the Chairman according to the exigency of circumstances, the democratic institution like Town Committee does not cease to be democratic body. Therefore, no distinction is permissible between the Chairman appointed or elected.⁴⁶⁶

Regarding the question of absence of express provision or written law, the Court, following the Supreme Court ruling,⁴⁶⁷ stated as under:

From the reading of the Regulation and the Rules, the intention of the law makers are quite clear that it is intended for simple people and instead of more written law more discretionary power has been granted to Governor and the Deputy Commissioner. These types of laws are made with an eye to simplicity. People in tribal area are less sophisticated and are not expected to make them aware of technicalities of complex law. It is with this background that simple law are made so that justice may not fail because of some

⁴⁶⁶*Ibid.*

⁴⁶⁷*State of Nagaland v. Ratan Singh*, AIR 1967 SC 212; 1967 Cri LJ 265

technicalities. Written law is nothing more than a control of discretion. The more there is of law the less there is of discretion. In the tribal area it is considered necessary that discretion should have together play than the technical rules. It is, therefore, necessary to leave the judge free so that he may mould his proceeding to suit the situation and may be able to apply the essential rules on which our administration of justice is based untrammelled by any technical Rule unless that Rules is essential to further the cause of justice.

1) Status of the Employees:

The question whether village surveyor under Garo Hills District Council is a member of civil service under the State of Assam, was asked in *Abdul Motaleb v. Garo Hills District Council*.⁴⁶⁸ The facts of the case were that the petitioner, Abdul Motaleb, was appointed temporarily as a Mandal (village surveyor) and was placed in charge of Lot, No. VIII-2; under the management and control of the District Council. Subsequently the petitioner was served an order terminating his appointment. Against this order the petitioner had challenged the validity thereof under Article 311.⁴⁶⁹ In the High Court the important point in this case was decided by whether the petitioner could at all avail of the provisions of Article 311.

The High Court held that a person appointed as a Mandal (village surveyor) under the Garo Hills District Council is not a member of the Civil Service of the State of Assam inasmuch as the State Government had nothing to do either with his appointment or dismissal or had any control over his duties and activities. Therefore, Article 311 has no application and he cannot invoke the aid of Article 311. Though a District Council is a body corporate by virtue of Para 2(3) of the Sixth Schedule to the Constitution, it does not disclose a part from what is stated that it forms a part of the State machinery or that it could be considered to an adjunct of the same.⁴⁷⁰ Hence, persons appointed by the District Council are not employees under the State.

It emerges from the foregoing discussion that in India, the rights of Indigenous Peoples (i.e., of Tribal's) have not been recognised in the form and manner as they have been recognised at international level. However, efforts have been made to protect the rights of tribal's. The Constitution of India provides two types of political processes for the realisation of the rights of tribal's under the Fifth and Sixth Schedules to the Constitution. Even though separate political processes have been recognised under the Fifth and Sixth Schedule to the

⁴⁶⁸ AIR 1961 Assam 69

⁴⁶⁹ The Constitution of India

⁴⁷⁰ Applied the principle laid down in *Mohammad Ahmad v. Chairman Improvement Trust*, AIR 1958 All 358

Constitution for tribals, the problems of administration of tribal areas were recognised much earlier. During Pre-British period, the tribal people were never fully conquered or subjugated by the Muslim rulers who preferred to make settlement with local non-tribal princes or if expedient, with the tribal chieftains instead of dealing with the tribal people directly. In many areas, they had their own prince-lings who ruled independently or as vassals of Delhi based Kings or Local princes. Even where there was no tribal chieftain, the non-tribal rulers found it expedient to deal with their tribal subjects through their chiefs and confined themselves to the collection of their share of levy. They did not interfere with customary laws, tribal life-styles and economic fabrics.

The British government succeeded in isolating the tribal people from rest of the country; on the other hand, they did not save them from the clutches of money lenders, landholders and contractors. This attitude of British government led to considerable discontent and revolts amongst the tribal people. Hence, the British government revised its isolation policy and adopted a policy of limited isolation and decided to intervene only to maintain law and order and to take legal, protective and executive measures for minimising the exploitation. With these ends in view, the British Parliament enacted a number of Acts, Regulations, etc, and special provision were made therein for the administration and development of tribal areas. The first important legislation, which recognised that administration in advanced areas of Bengal and Bihar was not suited to tribal areas, was the Regulation XIII of 1833. The Government of India Act of 1835, Indian Councils Act of 1861, Garo Hills Act of 1869 and Government of India Act of 1870 allowed special laws to be enacted for tribal areas. The main feature of these laws was a simple and elastic form of judicial and administrative procedure. The Scheduled District Act, 1874 declared tribal areas as Schedule Districts. The word District in this enactment corresponded to a specific area and not to the present revenue division. The Act allowed modification of laws in force in other parts of India to suit a particular Scheduled District. By this Act, a uniform law was promulgated by the Government of India to embrace all tribal concentrations throughout the country. The Government of India Act, 1919 declared the tribal areas as Backward Tracts. Under this Act, the Backward Tracts were determined from time to time and the laws were applied with such restrictions and modifications as were deemed fit. The administrators at the district and taluka levels could take final decisions in matters related to law and order and land rights. The Government of India Act, 1935 divided tribal areas into “Excluded Areas” and “Partially Excluded Areas”. The point of distinction between the two was that while both classes of areas were excluded from the competence of the Provincial and Federal Legislations, the

administration of Excluded Areas was vested in the Governor acting in his discretion, while administration of the Partially Excluded Areas was vested in the Council of Ministers subject, however, to the authority of the Governor exercising his individual judgement. Thus, during the British period, the problems of administration of tribal areas were recognised and a number of protective measures had been introduced for the administration of these areas; common to all these measures was the provision of filtering applicability of Federal or Provincial Legislations.

Two types of political processes have been recognised under the Fifth and Sixth Schedule to the Constitution of India for the governance and administration of tribal's in India. The Fifth Schedule provides for the establishment of Tribes Advisory Councils and the Sixth Schedule provides for the establishment of District Councils. The District Councils are autonomous body established to implement the right of self-government.⁴⁷¹ The District Council is both an administrative as well as a legislative body. But its law making power is expressly limited by the provisions of the Sixth Schedule, because it is unlike the Parliament and the State Legislatures is not intended to be clothed with plenary power of legislation. The State Legislature has a sort of overall superintendence over the District Councils and that the executive authority of the State extends to the autonomous districts and regions. Consequently, the Governor exercises his functions with the aid and advice of the Council of Ministers under the Sixth Schedule. The District Council Courts are performing judicial functions under the supervision of the High Court. The council enjoys the powers of taxation and have their own funds. As regards the applicability of the Parliamentary law or law enactment by the State Legislature is concerned, all such laws which are not occupied by the provisions contained in paragraph three of the Sixth Schedule shall proprio vigor became operative in the tribal areas. All rules contained in procedural laws which are of universal application and accord with the principles of justice, equity and good conscience are applicable in the trial suits in the District Council Courts. The District Council is not, however, a part of the government machinery of the State. Hence, persons appointed by the District Councils are not employees under the State Government. Some actions of the District Councils are capable of being annulled by the Governor and the Governor may even dissolve the Councils. There is complete autonomy as far as the powers of jurisdiction of the Councils go. A check is supplied by the Governor and the Legislature of the State comes into picture

⁴⁷¹*Edwingson v. State of Assam*, AIR 1966 SC 1220

only when the Governor takes action against the Councils to revoke their acts or resolutions or dissolves them and takes over the administration himself.

Thus, two types of political processes have been recognised under the Fifth and Sixth Schedule to the Constitution with regard to the protection of Indigenous Peoples in India (tribals) for maintaining their autonomy implementing their right to self-governance, and overall realisation of their other rights. The Fifth Schedule applies to any State other than States of Assam, Meghalaya, Tripura and Mizoram, and the Sixth Schedule applies to the States of Assam, Meghalaya, Tripura and Mizoram.

Chapter-5

MEDICO SPIRITUAL HEALING PROCESS IN SIKKIM

Sikkim is located in the Eastern Himalayas and is globally renowned for its biological diversity and traditional knowledge associated with it. It is a part of the global biodiversity hotspot. Sikkim Himalaya, a name quite synonymous with Himalayan floral bounty, is in reality just a small nook in the Himalayan coliseum. Bordered on its three geographical boundaries by the towering massifs and ridges it is, to a large part, a land-locked upland terrain. This natural configuration is also responsible for its bowl-like appearance and the resulting unique climate. Also, owing to this bowl-like physical depression or gap along the 2500 kms of Himalayan sway the region is also known sometimes as the 'Sikkim Gap'. Some unique flora and fauna characterize this natural isolation. At present the Sikkim Himalayan region stands out as one of the very few remaining area throughout the Hindukush Himalaya where environmental degradations has yet to reach alarming dimensions, though there are found some definite signs of its gradual coming.

The place remained for a considerable period in history as an unknown pocket of landform due to its geographical impasse but from the middle of 1800 AD a series of visits by naturalists and explorers started towards the then mountain kingdom of Sikkim Himalaya. The natural attraction provided by the flora, fauna and the enchanting landform was enough to usher in a cascade of visitors to the region during the late part of the 18th century and out of their various books, notes and travelogues, the earliest situation for the region could be understood. For reasons practical, these dossiers now remain as the most important ones when we delve into the past of Sikkim Himalaya.⁴⁷²

There are two main periods in Sikkim history- one as a Country and the other as a State. The Country Sikkim was without doubt diverse from present day Sikkim. There was tough spiritual and intellectual influence of Tibet on Sikkim. Nonetheless, it cannot be assumed that Tibetan structure was transformed on to Sikkim. Lepchas, the genuine inhabitants were animists. The Bhutias who came from Tibet were followers of Lamaist Mahayana Buddhism diffused with Bon animists' spiritualistic character. Lamaism, Hinduism and spiritual worship are practiced by diverse cultural groups living in State;

⁴⁷² Lalit Kumar Rai and Eklabya Sharma, *Medicinal Plants of the Sikkim Himalaya: Status, Usage and Potential* 2 (Bishen Singh Mahendra Pal Singh, Dehradun, 1994).

nevertheless it is not easy to categorize them accurately. Sikkim includes gompas⁴⁷³ of three chief sects of Lamaist Buddhism Nyingmapa, Kargyupa and Gelugpa. The monasteries as a regulation are simply temples with one or more lamas occupied in ministering the faith and belief.⁴⁷⁴

There are useful local physical condition customs in trend in various parts of Sikkim. Regardless of the fact that North Sikkim is custom ardent, explicit areas like Lachung, Lachen and Dzongu in and approximately the Kanchenjunga Biosphere Reserve are more conservative. In other adjacent villages also, many individuals are knowledgeable about medicinal plants and their potential use in curing different ailments. Sikkimese people, by tradition have modified themselves to the vagaries of natural world by evolving complicated societal and intellectual mechanisms. Their medicinal practices too were wicker inside these mechanisms. The earlier residents practiced shamanism, which was rampant under the given name bon. With passage of time, the amchi under the persuasion of the Buddhism recognized them in Sikkim, as the genuine inhabitants (Lepchas) had converted to Buddhism. Since the amchi were also spiritual individuals, they established easily. The tantric outline of religious conviction and benediction as popularised by Guru Padamasambhava blended with Tibetan form of Buddhism.⁴⁷⁵

At present, for the record, we have about 4000 species of flowering plants and some equally respectable proportions of conifers, ferns and its allies, and the lower plants.⁴⁷⁶ From the various literatures the best known ones of the floral assemblage may be considered the genera of orchids, primulas, rhododendrons, and the medicinal plant groups, which are used in various healing process in Sikkim. This chapter attempts to highlight the last entity in its many ramifications, emphasizing them under various sub chapters.

5. I. Historical outline:

The great drainage basin of river Tista which constitute the hills of Sikkim and Darjeeling is the present picture of Sikkim Himalaya. This landform which was inhabited by the Lepchas from time immemorial was a virtual terra incognita for a greater part of history. The accession of King Phuntshog Namgyal in 1641 AD was a landmark event in the

⁴⁷³ Monasteries.

⁴⁷⁴ Bhasin Veena, “*Medicinal Anthropology – healing practice in contemporary Sikkim*” 3 Anthropology 63 (2007).

⁴⁷⁵ *Ibid.*

⁴⁷⁶ Lalit Kumar Rai and Eklabya Sharma, *Medicinal Plants of the Sikkim Himalaya: Status, Usage and Potential* 2 (Bishen Singh Mahendra Pal Singh, Dehradun, 1994).

Sikkimese history and a starting point of the reign of Bhutia kings in Sikkim and the advent of Buddhism. Sikkim as a kingdom then, extended from the Arun river on the west (now in Nepal) to the Tagonla range on the east, which included the Tambur and Monchu valleys. More Nepalese as settlers arrived later.⁴⁷⁷

Due to the ravages of war which was almost a regular activity during the 17th century Sikkim the above landform witnessed a repeated transformation over its boundaries. We shall focus our attention towards the date and effects of changes only as these are more important to understand the locus standi of Sikkim Himalaya for the present.

1817: The Terai, or the level tract between Mechi and Tista was restored to Sikkim by British India after the Gorkha War of 1817. The Gorkha invasions that came repeatedly in 1788 to 1814, had earlier wrested this lowland tract from Sikkim.

1835: The cessation of hills of Darjeeling from Sikkim by British India

1850: British India intervention and annexation of Sikkim Terai (the Morung Terai) and also the area of the Sikkim hills bound by the Ramman river on the north, the Great Rangit and the Tista river on the east and Nepal frontier on the west.

1860-61: British India occupation of the territory lying to the north of Ramman River and to the west of the Great Rangit.

1865: The territory of Sikkim which was occupied by Bhutan aggression at the early part of seventeenth century (the present Dooars in Jalpaiguri district, West Bengal, or the foothills of Sikkim) was annexed by British India after the close of Bhutan War (1865)⁴⁷⁸

After Independence and the birth of Indian Republic the hills of Darjeeling was converted into the Darjeeling district of the State of West Bengal and Sikkim was merged with the Indian Union as the 22nd State in the year 1975.

Thus within a time span of a little over three centuries a sea-change was effected. This highly metamorphosed form of the previous kingdom of Sikkim is now geographically recognised as the Tista basin. In regard to the various observations that will be made in the pages that follow it is believed that this short sketch would help to locate proper bearings

⁴⁷⁷*Id. at 13.*

⁴⁷⁸*Id. at 14.*

under context. The vernacular names of many plants which grow around Terai and places which still bear Lepcha names are instances where a reason can be traced only in history.

Dwelling on the floristic realm of the Sikkim Himalaya it may be pertinent to say that the earliest records come from the works of persons in service to India under the British crown. The pioneering and most outstanding contributions have come from Sir J.D. Hooker, in his book.⁴⁷⁹ Others were, Sir George King and Robert Pantling,⁴⁸⁰ Peter Bruhl,⁴⁸¹ etc. Works of Gammie, Smith and Hara on the vegetation of Sikkim and of Biswas on the Darjeeling plants are also worth mentioning. A general account on the Sikkim of last century may be obtained from the exhaustive volume of Risely⁴⁸² and similar materials on Darjeeling is to be referred to Dash⁴⁸³

a) The Land:

Sikkim is located in the Eastern Himalayas and is globally renowned for its biological diversity and traditional knowledge associated with it. It is a part of the global biodiversity hotspot. The unique terrain climate and biogeography of the state have resulted in the sustenance of varied eco-zones in close proximity. Also the harmonious presence of several ethnic groups having their distinct identity and practising their traditional livelihood adds to the treasure house of knowledge related to this biodiversity. Biogeographically it is enriched by both the east Himalayan bio-geographic provinces. It has close proximity to both the Tibetan Plateau in the north and Bay of Bengal towards the South, thereby having affinities with tropical moist forests in the south and cold desert in the north within a short distance. In a landmass of just 7,096 square kilometres, it houses elevations ranging between 300 to 8,598 meters. The diverse forest types include deciduous Sal, wet hill forest, dense Oak forests, extensive conifer forests and unique Rhododendron thickets giving way to rolling alpine meadows. Ecosystems range from humid tropical valleys to temperate montane habitat, alpine meadows and trans-himalayan cold desert. It is a veritable nature's Noah's Arc teeming with biodiversity, housing enormous healing plants, nearly half of the wild trees, orchid and Rhododendron wealth and one third of the country's flowering plants. Nearly 165 plant species have been named after the State, as they were first collected from here. It

⁴⁷⁹ Reeve and Benham, The rhododendrons of Sikkim Himalaya (London, 1849).

⁴⁸⁰ Orchids of the Sikkim Himalaya, 1898

⁴⁸¹ Orchids of Sikkim, 1926.

⁴⁸² The Gazetteer of Sikkim, 1891.

⁴⁸³ Bengal District Gazetteers: Darjeeling District, 1907.

possesses about 43% of the mammals, 45% of the birds, 50% of the butterflies of the country and a plethora of medicinal plants⁴⁸⁴.

b) The People:

The Sikkim Himalaya is a cornucopia of ethnicity. It is, apart from the three major ethnics Lepcha, Bhutia, and Nepalese, a conglomerate of over 20 ethnic tribes and a still more number of sub-tribes. The range of language and dialectical spectrum is enormous.

The Lepchas are the earliest aboriginal inhabitants of the present area of Sikkim. The next aboriginal inhabitant tribes are the Limboos. They are living in this part of Sikkim from time immemorial. After the Blood Brotherhood treaty between Khye- Bumsa and Thekong-Tek in 1275 AD the Bhutias also slowly migrated to the present area of Sikkim.⁴⁸⁵ The Maharaja's History⁴⁸⁶ the only available source of the ancient people of present Sikkim, has described the ancient people of Sikkim as follows:

i. The Lepchas (Monrees, Mon-pas or Rongs):

The Maharaja's book reveals that "...amongst the three above mentioned races of people inhabiting Sikkim, the origin and history of the Lepcha race as far as can be ascertained runs thus: The foremost tribe of Lepchas who are known to have existed in Sikkim, was called "Nahangs" who were a race of barbarians who dwelt in a place called Lunghem near Dallam, but this tribe soon died out and there are none of them now in Sikkim. In reality there appear to be twelve different castes among Lepchas. They are: (1) The Sengdeng-mo, (2) Lingsim-mo, (3) Hee-mo (which comprises) (4) Karthok-mo, (5) and the descendants of Thekong Salung. The rest are named after the places they inhabit...."⁴⁸⁷

ii. The Bhutias (Lhorees or Lhopos or Lhopas):

"From a long time ago, Sikkim has been occupied by Bhutia (Lhorees), Lepchas (Monrees) and Limbus (Tsongrees). The Bhutias, according to one authority, are said to have descended from the followers which are said to have consisted of twelve tribes known as Tong-du-ruzhis (four tribes, the close descendants of Khe-Bumsa), and Beb-tsan-Gyat (the

⁴⁸⁴ Biodiversity of Sikkim: Exploring and Conserving a Global Hotspot, (Information and Public Relations Department, Government of Sikkim, 2011).

⁴⁸⁵ Note: many claim that the Treaty was written down in both Tibetan and Lepcha script but both have been lost now while others say that there was no script either of Tibetan or of Lepcha at that time and hence there is no written evidence available of this treaty so far. No historical evidence is yet available so far of this event.

⁴⁸⁶ Namgyal and Dolma translated by Dawa Samdup in 1908.

⁴⁸⁷ *Id.* at 19.

eight tribes of the great other ancestors of Khye-Bumsa), a prince or chief from Idong clan migrated to Kham Minyag of Tibet, and then who further migrated to Sikkim while others say that it was from Khye-Bumsa's three sons that they have descended and multiplied.....⁴⁸⁸

iii. The Limboos (Tsongs or Tsongrees):

About the Limboos the Maharaja's book states "As stated in detail in the Sikkim Gazetteer the most authentic account we can have of them is only through the annals and traditions related by old men. According to their own traditions, which they call Mundhum it is said, that when the pioneer Lamas of Tibet, visited Sikkim, for the first time, a tribe who revered the Katog Lama as their Guru, followed him from Tsang, and settled with him in Sikkim. The word "Tsong" has been derived from Tsong Province of Tibet (China). But the Gorkhas call them Limbus. They first settled down in the banks of the Arun River, right down to Kangkai. Their headman used to be called Subahs. They have ten sub-divisions, called Thars, and they call themselves the ten Limbus. Again mode of differentiating is by grouping themselves into local blocks called "Thums". Of this too there are ten, called the ten Thums, and another group of seventeen Thums. These have all been absorbed under the Gorkhas. They are: (1) Yangrup, (2) Mewa, (3) Mahikhola, (4) Phedap, (5) Tamborkhola etc. Sikkim contains almost fifty per cent of settlers both old (U-Tsong) and new (Khar-Tsong), from those places. Amongst themselves again half would be descendants of old settlers, while half would be new."⁴⁸⁹

c) Herbal Practices:

Man has been attached, rather fast, with his plants since antiquity and this bond of man-plant has crossed a considerable time-frame in history. Thus far, the bond grows still more intimate. Apart from providing us with our daily bread, clothing and shelter, an array of plants are there to look after our health conditions and, more importantly, at times saving our lives too. With the combined industry, dextrousness and in generosity of human mind the different types of medicinal herbs were discovered one by one through the ages and the trend still continues. Along the history of herbal medicine we find many instances to prove that the experience was the precursor of the written word and many have accepted the view that the study of medicinal plants and its properties gradually paved the way for the science of

⁴⁸⁸ *Id.* at 10. (the details of this have been described in ethnology of Bhutias.

⁴⁸⁹ *Id.* at 30

botany. To illustrate its understanding and development, the herbals' influence on man, and what we know about it so far, a short account on it is outlined here.

The history of medicinal plants is so ancient that it is sometimes referred to as pre-historic and more often simply as a story with its roots in deep antiquity. Nevertheless, from the different thread-end information's gathered on these herbs over a protracted and tenacious search we now are in a better position to look at to a more or less complete picture, and if we believe in the dinosaurs, we have now more than enough supports to believe in the herbal history.

It is acknowledged that the primitive man found out the therapeutic potentials of herbs by observing the animals around him who went on to pick certain grasses during a certain ailment. By way of trial-and error he found the exercise working well on him too. Many herbs of ancient origin, such as species of Geum,⁴⁹⁰ certain grasses used by cats to act as emetic, and use of hartworts by does to ease parturition, were obtained by actual observation and experimentation. There must have followed some instances of accidental poisoning or occurrence of psychological drug effect by use of plants too which started inquiry into it. After this, and for a good many centuries, the 'Doctrine of Signature' prevailed. Many plants which resembled human torso or any of its parts were marked singularly for use against problems coming out of that organ. Thus, the hepatics⁴⁹¹ and other plants with leaves resembling that of human liver were assigned the job of relieving liver trouble; tubers with shape of human heart, lung or testicles went on to cure those specific organs and many more were 'invented' likewise. The realisation of the existence of 'active principles,' in plants⁴⁹² during the 14th century was a great step towards understanding of the herbs in a better perspective. The idea of extraction of these active principles through different techniques was a still greater stride taken in the development of herbals. At present, the closely organised study of herbs under pharmacology and biochemistry, aided by a long range of very efficient electronic and mechanical instruments, has opened up a wholly new horizon under phytotherapy. The growing awareness and inclination to use vegetable products by a considerable section of people in the West have added still more impetus on this science. Drugs of herbal origin have more impact on human body as because it is biologically more compatible than synthetic drugs is a theory widely subscribed now-a-days by a good many.

⁴⁹⁰ Used by deer's against injury.

⁴⁹¹ The liverwort group of plants

⁴⁹² Termed as 'quintessence' by Paracelsus.

There definitely are signs which show the herbal system growing in popularity and becoming a strong contender for the 'pill popping' culture. By the curious process of history repeating itself we shall be witnessing a back-to-front reversal in herbal history.

Out of the few places which witnessed the rise and development of herbals the names of China, Egypt, India, Greece and Mesopotamia stands out prominently.⁴⁹³

i. China:

The oldest documented record so far is the Chinese pharmacopoeia, the Pun-Tsao.⁴⁹⁴ The medicinal plants mentioned in the Pun-Tsao include the Indian hemp, aconite, opium poppy, and croton. The use of Ephedra⁴⁹⁵ and ginseng⁴⁹⁶ can be traced back to ancient Chinese folk medicine. Surprisingly enough, this very plant Ephedra pachyclade is believed by some authorities as the 'Soma ras' the divine brew of Indo Aryans, who made a liquor brew out of it. This Ephedra pachyclade brew was considered as 'water of life', providing a sharper intellect, health and immortality. In China, this plant was used against bronchial asthma and in later years the active principle Ephedrine was isolated from it.

For a large part in history the Chinese herbals remained oral, i.e., passing from one generation to another by word of mouth. It must have been documented after the discovery of paper, which marks another great event that originated from China.

ii. Egypt:

The two papyrus scrolls of ancient Egypt, namely, the Hearst and Ebers Papyrus, provide a substantial amount of information of the herbal practised in the Nile basin. More might have been prepared by the host of physician/priest of the time but only the two above survives which were written around 1500 BC. A large number of plants were identified by ancient Egyptians including the medicinal property of garlic, onions and crocuses. The use of garlic⁴⁹⁷ towards problems on blood circulation was discovered by Egyptians. This is now proved by modern researchers that some significant anticoagulant and antithrombotic action is inherent in the plant. Similarly, the crocus⁴⁹⁸ was used to cure gouty arthritis by the

⁴⁹³ Lalit Kumar Rai and Eklabya Sharma, *Medicinal Plants of the Sikkim Himalaya: Status, Usage and Potential* 5 (Bishen Singh Mahendra Pal Singh, Dehradun, 1994).

⁴⁹⁴ Written at some time prior to 2500 BC and published in 1600 AD by Li Shi Chin.

⁴⁹⁵ A gymnospermous plant having antihistamine property.

⁴⁹⁶ *Panax ginseng*.

⁴⁹⁷ *Allium sativum*

⁴⁹⁸ Autumn crocus, *Colchicum autumnale*.

Egyptians and at present the drug Colchicine is applied to this same ailment. The folk medicine of Egypt was so rich that the Eber Papyrus alone contained about 800 prescriptions. Another instance of herbal power knowledge of ancient Egypt is evident in the mummification technique.

iii. Greece and Rome:

Between the years 450 to 300 BC the Greek civilization flourished to its peak which is also recognized as the Golden Age of Greece. The father of medicine, Hippocrates of the Island of Cos, brought up more than 200 plants in connection with drugs and medicine and many Hippocratean drugs still find use in modern herbal practice. The work of Theophrastus, *De Historia Plantarum*,⁴⁹⁹ though in all essence a pure botanical treatise, nevertheless is considered the first ever attempt towards a scientific order in the field. His mention of ferns as being used as an anthelmintic was quite a novel thing for the day.

Out of the few well-known personalities from the Roman medical botany the name of Pednious Dioscorides⁵⁰⁰ shines brightest. His work *De Materia Medica*, regardless of shortcomings, is still considered by far the most important and original work on medicinal botany coming from the antiquity. For a time span of fifteen centuries this standard work on pharmacology stood its ground. This tour de force of Dioscorides contains an account of more than 600 species of plants of herbal character, with illustrations, and most importantly, the medicinal preparations of the plants are given. This is further supplemented by the various effects of plants on human body – beneficial as well as possible side-effects. As to these pioneering efforts in drug preparation from the plants Dioscorides is often regarded as the founder of pharmacognosy. The names of some herbs, such as, Anemone and Aloe, can be traced back to him.

iv. India:

Coming on to India, the most ancient and celebrated treatise on Hindu Medicine is no doubt the Ayurveda. The authoritative works of Charaka⁵⁰¹ and Shushruta⁵⁰² marks the early phase of herbal science in India. Contemporarily, the various contributions of Bag Bhatta, Vab Misra and Madan Pal enriched the subjects more i terms of herbal discoveries as well as

⁴⁹⁹ History of plants.

⁵⁰⁰ Honoured with the medicinal plant genus, *Dioscorea*.

⁵⁰¹ Charak-Samhita 100 – 500 AD.

⁵⁰² Shushrut-Samhita 200 – 500 AD.

to its pharmacognostical properties. One of the ancient herb Sarpagandha⁵⁰³ still finds use today. It is one of the sources of Reserpine. For centuries the herb was used in India against lunacy and different forms of mental illness. Similarly, the use of Chalmogra oil⁵⁰⁴ to cure leprosy is legend. In the middle of 19th century the plant was brought to Hawaiian island where the disease was in its heyday. A fourteen month trial of intravenous injection of Chalmogra oil resulted in half of the patients recovering. In India the oil is used for massage.

From the 16th century onwards foreign workers took a firm rein in active herbal study. Thomas Rives, Odardo Verbosa, Cristobal da Costa and Garcia da Orta are the names which are most prominent at these early stages. After this, the 18th and 19th centuries heralded some of the most outstanding contributions based on researchers on modern lines which practically forged a strong foundation for later year's investigations. Out of the many, some of the major works may be accredited to Ainslie⁵⁰⁵ and O'Shaughnessy & Wallich.⁵⁰⁶

The close of 18th century saw two major works by Indian investigators, namely, Hindu Materia Medica⁵⁰⁷ by Dutt and Indigenous Drugs of India⁵⁰⁸ by Dey. Also, the works of Dymock⁵⁰⁹ and Atkinson's⁵¹⁰ may be mentioned at this point. The last outstanding work of the century came in the form of Sir George Watt's Dictionary of the Economic Products of India⁵¹¹ in-between 1889-96. Many short communiqués on the Indian medicinal plants are also found interspersed within this time-block.

The best-known treatise to come up at the beginning of this century is the four-volume magnum opus of Kirtikar & Basu, Indian Medicinal Plants.⁵¹² Nadkarni's work Indian Materia Medica which came up in 1926 brings up an exhaustive treatment on the properties of medicinal plants of the sub-continent. A few major works followed after this and finally The Indian Pharmacopoeia was scored in 1955.

⁵⁰³ Rauvolfia serpentine.

⁵⁰⁴ From Hydnocarpus Kurzi (king) Warb.

⁵⁰⁵ Materia Medica of the Hindus, 1813.

⁵⁰⁶ The Bengal Dispensatory and Pharmacopoeia, 1844.

⁵⁰⁷ 1870.

⁵⁰⁸ 1883.

⁵⁰⁹ Vegetable Materia Medica of India, 1883, and Pharmacographia Indica, 1890-93, co-authored with Warden and Hooper.

⁵¹⁰ Economic Products of North-Western Frontier Provinces, 1882.

⁵¹¹ Seven volumes.

⁵¹² 1918.

v. Sikkim:

The use of plants as a means to cure/abate certain ailments and disease is an age old practice throughout the world and the hills of Sikkim. From time immemorial the package of herbal medicine has been gradually nurtured and brought up to present with still more additions. Located far from civilization and almost land-locked, the life-saving herbs from the wild provided the only refuge during emergency and trauma. Out of the primitive peoples diligent trial and error a string of plants having potent remedial action have come up identified and are still faithfully prescribed after several centuries.

After the exhaustive floristic work on the Sikkim Himalaya was made by Sir J.D. Hooker during 1871-97 a shatteringly few minor works followed in its wake. The most comprehensive work had to wait for many years which came in the form of Common Medicinal Plants of Darjeeling and Sikkim Himalaya by Biswas.⁵¹³ Writings mostly in short communicated papers was found in the scene after this and at present a full-scale lull reigns and it continues. Between the pages of these a good amount of information has been incorporated minor literature mostly in the form of ethno-medical data. However, in terms of plantation of medicinal plants much work has been affected and Taxus, ginseng and various other medicinal plants are going through repeated trial that come up highlighted separately.

The Directorate of Cinchona and Other Medicinal Plants which was established about 130 years ago conducts researches on different types of commercial medicinal plants. Different establishments, governmental or otherwise, are now found taking a keen interest in the study and growing of various herbs of local origin. This definitely is a fair indication of a new horizon opening up for the regional herbal culture. Over 400 plants possessing therapeutic properties have been recorded from the region.⁵¹⁴ However, the 'actively' used plants are quite limited in numbers which are brought to the markets in different quantities. The group of lichens which are of medicinal values are also available in the region⁵¹⁵ but the local usage is not known. Almost all the herbs that are in vogue at present are enumerated in this work, with adequate screening as to its occurrence, growth range, pharmacology and usage.

⁵¹³ 1956.

⁵¹⁴ Plant Genetic Resources Newsletter-Impact of cultivation on active constituents of the medicinal plants *Podophyllum hexandrum* and *Aconitum heterophyllum* in Sikkim, available at: <https://www.biodiversityinternational.org>>...(last visited on July 3, 2015).

⁵¹⁵ Example species of *Parmelia*, *Usnea* and *Ramalina*.

Over the medicinal plants of the region, it is learnt that many persons and organisations are working from the past several years but so far comprehensive writings have seldom appeared over the regional medicinal plants. This small reportage was brought up to meet this gap in communication and it is believed that the same will act as a workhorse for serious users as well. Various spheres still remain un-tapped; rather these stand untouched so far. We hope that this compendium will, to some extent activate/accelerate the various on-going projects as well as works on the plants which are on the anvil, from this part of the sub-continent.

5. II. Traditional Medicinal Plants of Sikkim:

Sikkim doctrines the aboriginal religious practices, culminates indigenous traditions associated with religion and faith based healing therapies and is a natural hub of traditional medicine. Faith healers and occupational folk medicine therapists acts as alchemists. In this unfathomed virgin and picturesque state of pulchritudinous blooming orchids, rural population are directly depended upon the traditional medicines prescribed by the faith healers and the traditional medicines prescribed by the faith healers and the traditional occupational folk medicine doctors for their basic health issues and amenities. The knowledge of herbs or plant based panacea is a part of indigenous knowledge which has been snowballed from generation and ages since primordial origin. On the basis of proper signs and symptoms of the diseases, these herbal medicines are chosen. Their choice of medicine also depends upon the availability, particular geography; faith associated beliefs and cost effectiveness. This practice is on the verge of extinction as The Himalayan belt is prone to natural catastrophes like earthquake, flash-floods, incessant rainfall, landslides etc and the availability of the medicinal flora is on decline. It is the precise time to amalgamate the documentation process of the traditional medicine of Sikkim for future references. Here, a total of 123 medicinal plants have been discussed which are prescribed or used by the traditional medicine system of Sikkim.⁵¹⁶

Sikkim is unique in several ways-most importantly; its close proximity to both the Tibetan plateau, Bay of Bengal and Nepal on the west thereby having affinities with tropical forest in the south and cold desert in the north within a short distance of just 100 kilometres. Heavy precipitation throughout winter as well as summer season has given rise to lush green

⁵¹⁶ Mingma Thundu Sherpa, Abhishek Mathur, et. al., "Medicinal plants and traditional medicine system of Sikkim: A Review" 4 *WJPPS* 161 (2015).

vegetation. The state is gifted with rich flora and fauna diversity. Species wise, the state harbours over 4500 Flowering plants, 550 Orchids, 36 Rhododendrons, 16 Conifers, 28 Bamboos, 362 Ferns and its allies, 9 Tree ferns, 30 Primulas, 11 Oaks, over 424 Medicinal plants, 144 mammals, 550 Birds, 48 Fishes, over 600 Butterflies, 28 Glaciers, 227 high altitude lakes and over 104 rivers and streams.⁵¹⁷

The rural communities of Sikkim have a long tradition of using plant resources for their daily needs such as food, fodder, medicine, firewood, timber and agriculture tools. Plants are collected from various habitats, such as scrub, grassland, forest and cultivated fields, and are used as crude drugs. In the last few decades there has been a phenomenal rise in the field of traditional medicine and these drugs are gaining popularity worldwide due to its lesser amount of side effects.

The World Health Organization has listed 21,000 plants, which are used for medicinal purposes around the world.⁵¹⁸ Among these 2500 species are found in India, out of which 150 species are used commercially. India is the largest producer of herbal medicine and is referred as Botanical garden of the world.⁵¹⁹ Out of its total population, 80% of Sikkim's population resides in rural areas where access to governmental health care facilities is rare. Sikkim is indeed a natural store of precious medicinal plants.

The Himalayan plant diversity plays a pivotal role to fulfil the needs and demands of medicinal plant of Sikkim. The earliest record of medicinal plant used in Himalayas is found during 4500 BC and 1600 BC (The Rig Veda) which is considered to be the oldest human knowledge and describes 67 medicinal plants.⁵²⁰ After the Rig Veda, Ayurveda described the utilization of 1200 important medicinal plants.⁵²¹ The knowledge of using this system was accessed to local healers⁵²² in Sikkim. It has been estimated that the Himalayan region harbour over 10,000 species of medicinal and aromatic plants, out of which more than 490

⁵¹⁷ Panda AK, Misra S., "Health traditions of Sikkim Himalaya" 3 *JAIM* 183-189 (2010).

⁵¹⁸ Modak M, Dixit P, et. al., "Indian herbs and herbal drugs used for the treatment of diabetes" 40 *JCBN* 163-173 (2007).

⁵¹⁹ Seth SD, Sharma B. "Medicinal plants of India" 12 *IJMR* 9-11 (2004).

⁵²⁰ Gewali MB, Aspect of traditional medicine in Nepal 1-2 (Institute of Natural medicine, University of Toyama, 2008).

⁵²¹ *Ibid.*

⁵²² Jhankri, Bijuwa and Phedangpa etc).

species of medicinal plants finds their habitat in Sikkim.⁵²³ The researcher here focuses the amalgamation of documented traditionally important medicinal plants of Sikkim.

Table 5.1

Documented Traditional Medicine of Sikkim:

Sl. No	Plants (Family)	Vernacular Name (Nepali)	Gender Specific Treatment (Male/Female/Both)	Parts of the plants used	Treatment/Diagnosis	Habitat range	Location
1.	Abroma augusta (Malvaceae)	Kapsi	Female	Barks	Menstrual disorder ^[524]	7000-4000 ft.	Throughout Sikkim.
2.	Aconitum bisma (Ranunculaceae)	Bikhma/Bikh	Both	Tubers and roots	Food poisoning, asthma, cough, bronchitis, antidiabetic, malaria, diarrhea, body pain, diaphoretic, diuretic, expectorant, febrifuge, dyspepsia, debility, leprosy, paralysis, rheumatism, spermatorrhoea and typhoid. ^[525]	14000-16000 ft	Chewabanjang (West Sikkim); Yumthang, Yume Samdong and Thangu (North Sikkim).
3.	Acorus calamus (Acoraceae)	Bojho	Both	Rhizomes	Bronchitis, rheumatism, diarrhea, dyspepsia, epilepsy, asthma and colic pain. ^[526]	4000-7000 ft	Throughout Sikkim.

⁵²³ State of Environment report Sikkim 6-12(Forest and Environment Department, Government of Sikkim, Gangtok, 2007).

⁵²⁴ Hussain S, Hore DK, "Collection and conservation of major medicinal plants of Darjeeling and Sikkim Himalayas", 6 *IJTK* 352-357 (2007).

⁵²⁵ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵²⁶ Hussain S, Hore DK, "Collection and conservation of major medicinal plants of Darjeeling and Sikkim Himalayas", 6 *IJTK* 352-357 (2007).

4.	Aesandra butyracea (Sapotaceae)	Chiuri	Both	Fruits	Rheumatism ^[527]	3000 ft	Duga-Pendam (East Sikkim) and Malbasey (Weast Sikkim).
5.	Aeschynanthus Sikkimensis (Gesneriaceae)	Balay Patay	Both	Rhizomes decoction	Fever and throat pain ^[528]	5000-7000 ft	Throughout Sikkim.
6.	Aesculus indicus (Sapindaceae)	Pangra	Both	Fruits and seeds oil	Rheumatism and mumps ^[529]	4000 ft	Sumin forest of Pakyong (East Sikkim).
7.	Agave americana	Hattibar	Both	Leaves and roots	Leaf; Skin ulcer Root; Diuretic, diaphoretic and anti-syphilis ^[530]	2000-4000 ft	Throughout Sikkim.
8.	Agrimonia pilosa	Kunka Pankhi	Both	Roots	Gastric disorder and bloody dysentery ^[531]	2000-4000 ft	Throughout Sikkim.
9.	Allium wallichii (Amaryllidaceae)	Bana Lasuna	Both	Leaves	Viral flue and high altitude sickness ^[532]	10,000-11,000 ft	Barsey (West Sikkim) and Yumthang (North Sikkim).
10.	Aloe barbadensis	Gheukumari	Both	Whole Plants	Stomach disorder, tonic, purgative, anti-helminthic, menstrual suppression, constipation and arthritis ^[533]	6000-8000 ft.	Throughout Sikkim.
11.	Ammomum aromaticum	Ban Elainchi	Both	Seeds and	Seed paste-Stomach trouble, wound and	4000-6000 ft.	Throughout Sikkim.

⁵²⁷ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵²⁸ *Ibid.*

⁵²⁹ *Ibid.*

⁵³⁰ Gurung B, *The medicinal plants of the Sikkim Himalaya* 53 (Maples, Chakung, West Sikkim, 2002).

⁵³¹ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵³² Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵³³ Bharati KA, Sharma BL, "Some ethno-veterinary plant records from Sikkim Himalaya", 9 *IJTK* 344-346 (2010).

	(Zingiberaceae)			roots	small pox, Root paste-hypoglycaemic and anti-helminthic ^[534]		
12.	Ammomum subulatum (Zingiberaceae)	Elainchi	Both	Seeds	Seed paste; Liver tonic, bowel and appetizer ^[535]	4000-6000 ft	Throughout Sikkim.
13.	Angelica Cyclocarpa [Apiaceae]	Chimping	Both	Seeds	Fever, stomach disorder and headache ^[536]	7000-9000 ft	Throughout Sikkim.
14.	Anisomeles indica (Lamiaceae)	Ilamay	Both	Leaves	Asthma ^[537]	4000-7000 ft	Throughout Sikkim.
15.	Artemisia vulgaris (Asteraceae)	Titeypati	Both	Leaves decoction	Blood clotting, measles, fever, antiseptic, asthma, appetizer, blood purifier ^[538]	4000-9000 ft	Throughout Sikkim.
16.	Astilbe rivularis (Saxifragaceae)	Buro Okhati/ Bans upari	Both	Fresh Rhizomes powder	Toothache, diarrhea and dysentery ^[539]	6000-9000 ft	Throughout Sikkim.
17.	Berberis wallichiana (Berberidaceae)	Chitrokanra	Animal	Fruits	Against rabies ^[540]	5000-11,000 ft	Throughout Sikkim.
18.	Bergenia ciliate (Saxifragaceae)	Pakhan bhed	Both	Rhizomes, roots and	Fever, boils, cough, pulmonary affection, anti-scorbic ^[541]	4000-14,000 ft	Throughout Sikkim.

⁵³⁴ *Ibid.*

⁵³⁵ Gurung B, *The medicinal plants of the Sikkim Himalaya* 1-423 (Maples, Chakung, West Sikkim, 2002).

⁵³⁶ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵³⁷ *Ibid.*

⁵³⁸ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵³⁹ *Ibid.*

⁵⁴⁰ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁴¹ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 98 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

)			Barks			
19.	Betula utilis (Betulaceae)	Bhoj patra	Both	Barks	Bone fracture ^[542]	5000- 7000 ft	Throughout Sikkim.
20.	Bischofia javanica (Phyllanthaceae)	Kainjal	Female	Leaves and barks	Irregular menstruation and pain ^[543]	2000- 3000 ft	Throughout Sikkim.
21.	Brugmansia suaveolens (Solanaceae)	Kalo dhathuro	Both	Leaves	Swellings, sprain and rheumatism ^[544]	3000- 4000 ft	Throughout Sikkim.
22.	Buddleja asiatica (Scrophulariaceae)	Bhinsen pati	Both	Leaves and stems	Skin problems and abortificant ^[545]	2000- 3000 ft	Throughout Sikkim.
23.	Caryopteris odorata (Verbenaceae)	Thulasri ful	Both	Flowers	Allergy ^[546]	3000- 5000 ft	Throughout Sikkim.
24.	Centella asiatica (Apiaceae)	Golpat Brahmi	Both	Leaves	Liver disorder ^[547]	3000- 4000 ft	Throughout Sikkim.
25.	Cestrum fasciculatum (Solanaceae)	Ban Baigun/ Kundali ful	Both	Fruits	Measles ^[548]	4000- 6000 ft	Throughout Sikkim.
26.	Cissampelos pareira L. Varhirsuta (Minespermac eae)	Gar- tamarkay	Both	Stems	Stomach problem and liver disorder ^[549]	3000- 9000 ft	Throughout Sikkim.
27.	Clematis buchananiana	Pinsasay Lahara	Both	Roots	Sinusitis and nose block ^[550]	3000- 4000 ft	Throughout Sikkim.

⁵⁴² Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁴³ *Ibid.*

⁵⁴⁴ *Ibid.*

⁵⁴⁵ *Ibid.*

⁵⁴⁶ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya 200-204*, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁴⁷ *Ibid.*

⁵⁴⁸ *Ibid.*

⁵⁴⁹ *Ibid.*

⁵⁵⁰ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

	(Ranunculaceae)						
28.	Clematis Montana (Ranunculaceae)	Simegharh	Animal	Stems	Stomach ache of cattle ^[551]	3000-8000 ft	Throughout Sikkim.
29.	Codonopsis viridis (Campanulaceae)	Aniomukh	Children	Leaves	Infant diarrhea ^[552]	3000-4000 ft	Throughout Sikkim.
30.	Coelogyne fuscescens (Orchidaceae)	Sunakhari	Both	Pseudo bulbs	Stomach ache ^[553]	6000-9000 ft	Throughout Sikkim.
31.	Cordyceps sinensis (Ophiocordycipitaceae)	Yarsa gumba	Both	Whole plant	Rejuvenates liver, heart and immune booster ^[554]	Above 14000 ft	Tso Lhamo plateau and Yume Samdong (North Sikkim) and some parts of West Sikkim.
32.	Costus speciosus (Costaceae)	Betlauree	Both	Tuber extracts	Urinary tract infection and inflammation ^[555]	2000-3000 ft	Throughout Sikkim.
33.	Curcuma aromatic (Zingiberaceae)	Fatcheng	Both	Rhizomes	Appetizer, tonic, carminative, anti-helminthic and oil is used to cure early stage of cervix cancer ^[556]	2000-3000 ft	Padamchey, Rorathang and Rhenock (East Sikkim).
34.	Curculigo orchioides (Hypoxidaceae)	Kalamusalikanda	Both	Rhizomes infusion	Piles and Gastritis ^[557]	4000-5000 ft	Throughout Sikkim.

⁵⁵¹ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya. 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁵² *Ibid.*

⁵⁵³ *Ibid.*

⁵⁵⁴ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁵⁵ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁵⁵⁶ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁵⁷ *Ibid.*

	e)						
35.	Cuscuta reflexa (Convolvulaceae)	Binajari	Women	Stems	Menstrual disorders ^[558]	3000-5000 ft	Throughout Sikkim.
36.	Cyanodon dactylon (Poaceae)	Dhubo	Man	Shoots	Seminal problems ^[559]	6000-8000 ft	Throughout Sikkim.
37.	Cyathula prostrate (Amaranthaceae)	Luga Kara	Both	Shoots	Joint pain	5000-7500 ft	Throughout Sikkim.
38.	Cynoglossum zeylanicum (Boragiaceae)	Selay pati	Both	Roots	Constipation ^[560]	4000-6000 ft	Throughout Sikkim
39.	Dactylorhiza hatagirea (Orchidaceae)	Panch-anguli	Both	Tubers paste	Gastritis, jaundice, bodyache and bone fracture ^[561]	5000-6000 ft	Pakyong and Barapathing (East Sikkim); Dentam and Maneybhanjang (West Sikkim).
40.	Daphne bholua (Thymelaeaceae)	Kagatey	Both	Barks and roots	Fever and intestinal problems ^[562]	4000-8000 ft	Barsey (west Sikkim and Dzongu (north Sikkim).
41.	Dichroa febrifuga (Hydrangeaceae)	Basak	Both	Dried leaves	Fever ^[563]	2000-3000 ft	Throughout Sikkim.
42.	Dioscorea	Ghar Tarul	Women	Roots	Birth control ^[564]	2000-	Throughout

⁵⁵⁸ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁵⁹ Bharati KA, Sharma BL, "Some ethno-veterinary plant records from Sikkim Himalaya", 9 *IJTK* 344-346 (2010).

⁵⁶⁰ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁶¹ *Ibid.*

⁵⁶² Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁶³ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

	bulbifera (Dioscoreaceae)					4000 ft	Sikkim.
43.	Dioscorea deltoidea (Dioscoreaceae)	Kurkur tarual	Both	Tubers	Rheumayoid arthritis, asthma and fever ^[565]	3000-4000 ft	Throughout Sikkim.
44.	Dioscorea Pentaphylla (Dioscoreaceae)	Githey	Women	Tuberous roots	Birth control ^[566]	2000-3000 ft	Throughout Sikkim.
45.	Drymaria cordata (Caryophyllaceae)	Abijalo	Both	Leaves and steams	Sinusitis laxative and anti-febrile epilepsy ^[567]	1000-8000 ft	Throughout Sikkim.
46.	Elatostema sessile (Urticaceae)	Gaglato	Both	Leaves	Gastric disorder ^[568]	6000-7000 ft	Throughout Sikkim.
47.	Engelhardia spicata (Juglandaceae)	Mouwaha	Both	Green bracts	Stomach ailments and throat pain ^[569]	2000-6000 ft	Throughout Sikkim.
48.	Ephedra sikkimensis (Ephedraceae)	Somlata	Both	Whole plants	Against high blood pressure, high fever, gout and arthritis ^[570]	3000-4000 ft	Throughout Sikkim.
49.	Equisetum diffusum (Equisitaceae)	Singera	Both	Shoots	Body pain ^[571]	3000-4000 ft	Throughout Sikkim.
50.	Eupatorium cannabinum	Banmara	Both	Leaves and	Used in wounds and infections ^[572]	1000-7000 ft	Throughout Sikkim.

⁵⁶⁴ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁶⁵ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁶⁶ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁶⁷ Bharati KA, Sharma BL, "Some ethno-veterinary plant records from Sikkim Himalaya", 9 *IJTK* 344-346 (2010).

⁵⁶⁸ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁶⁹ *Ibid.*

⁵⁷⁰ *Ibid.*

⁵⁷¹ *Ibid.*

	(Asteraceae)			stems			
51.	Eurya Japonica (Theaceae)	Jhingoni	Both	Roots	Muscle pain and boils ^[573]	6000-10,000 ft	Barsey (West Sikkim).
52.	Evodia fraxinifolia (Rutaceae)	Khanakpa	Both	Fruits	Body ache and nasal sneezing ^[574]	7000-9000 ft	Barsey (West Sikkim).
53.	Fagopyrum esculentum (Polygonaceae)	Phapar	Both	Leaves	Stomach ache and constipation ^[575]	2000-8000 ft	Throughout Sikkim.
54.	Ficus cunia (Moraceae)	Khasray Khanium	Both	Latex and roots juice	Bladder complaints, boiled, visceral obstruction, leprosy and liver complaints ^[576]	2000-4000 ft	Throughout Sikkim.
55.	Ficus hookeriana (Moraceae)	Nebara	Both	Fruits	Diabetes ^[577]	2000-4500 ft	Throughout Sikkim.
56.	Fragaria indica (Rosaceae)	Bhnui-aisayloo	Both	Fruits	Throat pain ^[578]	3000-8000 ft	Throughout Sikkim.
57.	Fraxinus floribunda (Oleaceae)	Lakuri	Both	Barks	Boils, gout, sprain and fracture ^[579]	4000-5000 ft	Throughout Sikkim.
58.	Geranium nepalense (Geraniaceae)	Gajal ghar	Both	Roots	Stomach disorder ^[580]	3000-5000 ft	Rongli and Sumin forest Pakyong (East

⁵⁷² Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁷³ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya 200-204*, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁷⁴ *Ibid.*

⁵⁷⁵ *Ibid.*

⁵⁷⁶ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁵⁷⁷ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya 200-204*, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁷⁸ *Ibid.*

⁵⁷⁹ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁸⁰ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya 200-204*, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

							Sikkim); Malbasey, Zoom and Dentam (West Sikkim); Borong, Temi and Yangyang (South Sikkim).
59.	Hedyotis scandens (Rubiaceae)	Kalelahara	Both	Roots and Shoots	Jaundice, gastric ^[581]	3000- 4500 ft	Throughout Sikkim.
60.	Helicia nilagirica (Proteaceae)	Bandhary	Both	Fruits	Cough and Cold ^[582]	4000- 7000 ft	Throughout Sikkim.
61.	Heracleum wallichii (Apiaceae)	Chimping	Both	Fruits and roots	Influenza, aphrodisiac ^[583]	7000- 9000 ft	Throughout Sikkim.
62.	Hippophae salicifolia (Elaeagnaceae)	Daale chuk	Both	Berry (fruit), roots nodule	Berry part is used as juice and also for digestion purposes; Root nodule are chewed against vomiting, removes foul smell from mouth ^[584]	8000- 10,000 ft	Lachen (North Sikkim).
63.	Holarrhena antidysenteric a (Apocynaceae)	Aulay Khirra	Both	Barks	Amoebic dysentery ^[585]	4000- 5000 ft	Throughout Sikkim.
64.	Houttuynia cordata (Saururaceae)	Gandhdya	Both	Leaves	Gastric disorders ^[586]	3000- 4500 ft	Throughout Sikkim.

⁵⁸¹ *Ibid.*

⁵⁸² *Ibid.*

⁵⁸³ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁸⁴ *Ibid.*

⁵⁸⁵ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁵⁸⁶ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

65.	Hoya lanceolata (Asclepiadaceae)	Aulay Khari	Both	Roots	Cold sickness ^[587]	4000-6000 ft	Throughout Sikkim.
66.	Hydrocotyle asiatica (Apiaceae)	Golpatta Ghoratapr ay	Both	Stems	Against high blood pressure ^[588]	4000-6000 ft	Pakyong, Mamrig and Rongli (East Sikkim)
67.	Hydrocotyle javanica (Apiaceae)	Batuli paat	Both	Leaves	Liver disorder ^[589]	2000-3000 ft	Throughout Sikkim.
68.	Hymenodictyon excelsum (Rubiaceae)	Latikaram	Both	Barks powder	Hemorrhoids ^[590]	3000-4000 ft	Throughout Sikkim.
69.	Juglans regia (Juglandaceae)	Okhar	Both	Nuts	Rheumatism ^[591]	7000-9000 ft	Sumin forest Pakyong and Padamchey (East Sikkim); Dentam and Soreng (West Sikkim); Dzongu (North Sikkim).
70.	Kaempferia rotunda (Crassulaceae)	Bhuichampa	Both	Tubers	It is used to cure swelling, fracture, bruises and insect bites ^[592]	3000-4000 ft	Throughout Sikkim.
71.	Lantana camara (Verbenaceae)	Box phul	Both	Barks and stems	Toothache ^[593]	3000-6000 ft	Throughout Sikkim.
72.	Lindera	Timbur	Both	Flowers	Excessive night	7000-	Throughout

⁵⁸⁷ *Ibid.*

⁵⁸⁸ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁵⁸⁹ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya* 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁹⁰ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁵⁹¹ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya* 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁹² *Ibid.*

⁵⁹³ *Ibid.*

	neesiana (Lauraceae)			and fruits	seminal discharge and vomiting ^[594]	9000 ft	Sikkim.
73.	Litsea citrate (Lauraceae)	Sil timur/ doom	Both	Fruits	Stomah disorders ^[595]	6000- 8000 ft	Barsey (West Sikkim) and some parts of North and South Sikkim.
74.	Lycopodium phlegmaria (Lycopodiacea e)	Thula Nagbeli	Both	Rhizome s	Constipation ^[596]	6000- 8000 ft	Barsey, Dentam and Yuksom (West Sikkim); Ravangla (South Sikkim); Yumthang (North Sikkim)
75.	Lyonia ovalifolia (Ericaceae)	Angrey	Both	Leaves	Skin disases ^[597]	7000- 9000 ft	Barsey (West Sikkim); Ravangla (South Sikkim); Sumin forest Pakyong (East Sikkim).
76.	Meconopsis simplicifolia (Papaveraceae)	Poppy (Blue poppy)	Both	Rhizome s powder	Tonic in renal diseases ^[598]	1000- 7000 ft	Tsongu (East Sikkim); Thangu and Yume Samdung (North Sikkim); Dzongri and Chewabanjang (West Sikkim).
77.	Melastoma malabathricum (Melastomatac	Lotry	Animal	Flowers	Foot sores of cattle ^[599]	3000- 4000 ft	Throughout Sikkim.

⁵⁹⁴ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁵⁹⁵ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁵⁹⁶ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁵⁹⁷ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁵⁹⁸ *Ibid.*

⁵⁹⁹ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

	ae)						
78.	Mesua ferrea (Calophyllaceae)	Nagesuri	Women	Dried barks	Skin diseases and menstrual disorder ^[600]	2000-5000 ft	Throughout Sikkim.
79.	Michelia velutina (Magnoliaceae)	Sweto champa	Both	Leaves	Worms ^[601]	2000-3000 ft	Throughout Sikkim.
80.	Nardostachys grandiflora (Valerianaceae)	Jatamansi	Both	Rhizome powder	Bronchial, liver complaints and urinary problems ^[602]	6000-8000 ft	Pendam, Rhenock, Rongli and Pakyong (East Sikkim); Sombaria, Soreng, Dentam and Sakyong (West Sikkim).
81.	Nardostachys jatamansi (Caprifoliaceae)	Jatamansi	Both	Rhizome powder	Nervous disorder ^[603]	6000-8000 ft	Pakyong (East Sikkim); Soreng and Dentam (West Sikkim).
82.	Ocimum basilicum (Lamiaceae)	Tulsi	Both	Leaves and seeds	Leaves juice is used against cold and cough; seeds are used in dysentery, gonorrhoea ^[604]	2000-4000 ft	Throughout Sikkim.
83.	Onosma hookeri (Boraginaceae)	Lalijari	Both	Oil	Oil extracted from root are used for hair as anti dandruff agents ^[605]	2000-4000 ft	Throughout Sikkim.
84.	Orchis Latifolia	Panchamala	Both	Tubers	Nutritious and aphrodisiac ^[606]	6000-8000 ft	Throughout Sikkim.

⁶⁰⁰ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶⁰¹ *Ibid.*

⁶⁰² *Ibid.*

⁶⁰³ *Ibid.*

⁶⁰⁴ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶⁰⁵ *Ibid.*

⁶⁰⁶ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

	(Orchidaceae)						
85.	Oroxylum indicum (Bignoniaceae)	Totola	Both	Seeds	Throat complication, hypertension, sore throat and throat infection ^[607]	2000-3000 ft	Throughout Sikkim.
86.	Osbeckia nepalensis (Melastomataceae)	Lattey	Both	Roots decoction	Urinary problems and diabetes ^[608]	4000-5000 ft	Throughout Sikkim.
87.	Oxalis corniculata (Oxalidaceae)	Chari amilo	Both	Leaves juice and roots	Dysentery, anemia and tympanitis ^[609]	2000-3000 ft	Throughout Sikkim.
88.	Paederia foetida (Rubiaceae)	Biri	Both	Dried fruits extracts	Toothache ^[610]	2000-3000 ft	Throughout Sikkim.
89.	Panax pseudoginseng (Araliaceae)	Ginseng	Both	Roots	Reduce fever, indigestion, vomiting, aphrodisiac, diabetes, sexual impotency and gastric ^[611]	8000-10,000 ft	Barsey (West Sikkim); Dzongu and Yumthang (North Sikkim).
90.	Paris polyphylla (Melanthiaceae)	Bako	Both	Roots paste	Skin disease, wounds and in any poisonous bite ^[612]	3000-4000 ft	Throughout Sikkim.
91.	Peperomia reflexa (Piperaceae)	Pipalay pati	Both	Leaves	Fever ^[613]	3000-4000 ft	Throughout Sikkim.
92.	Physalis minima (Solanaceae)	Jangali phakphaka y	Both	Dried fruits	Abate toothache ^[614]	4000-6000 ft	Throughout Sikkim.

⁶⁰⁷ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶⁰⁸ *Ibid.*

⁶⁰⁹ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁶¹⁰ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶¹¹ *Ibid.*

⁶¹² *Ibid.*

⁶¹³ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶¹⁴ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

93.	Phytolacca acinos (Phytolaccace ae)	Jaringa	Both	Fresh leaves	Body ache ^[615]	6000- 8000 ft	Throughout Sikkim.
94.	Picrorhiza kurroa (Scrophulariac eae)	Kutki	Both	Rhizome s powder	Heart complaints, piles, malarial fever, body ache, urinary complaints, anemia, constipation, brain tonic, paralysis, jaundice ^[616]	11,000- 14,000 ft	Chewabanjang (West Sikkim); Thangu and Yumthang valley (North Sikkim).
95.	Pilea microphylla (Urticaceae)	Sanu gagleto	Both	Petals	Pain relief ^[617]	4000- 7000 ft	Throughout Sikkim.
96.	Piper longum (Piperraceae)	Pipla	Both	Fruits and Roots	Bronchitis, asthma, cough, leprosy, appetizer and antidote to snake bites. ^[618]	4000- 5000 ft	Throughout Sikkim.
97.	Plantago erosa (Plantaginacea e)	Quley chiroto	Both	Leaves	Boil ^[619]	5000- 7000 ft	Anden, Rumbuk, Buriakhop ad Singling (West Sikkim); Ravangla (South Sikkim); Dzongu (North Sikkim).
98.	Podophyllum hexandrum (Berberidacea e)	Papari	Both	Whole plants	Wounds and diarrhea ^[620]	4000- 5000 ft	Throughout Sikkim.

⁶¹⁵ *Ibid.*

⁶¹⁶ Hussain S and Hore DK, "Collection and conservation of major medicinal plants of Darjeeling and Sikkim Himalayas" *IJTK* 352-357 (2007).

⁶¹⁷ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya* 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶¹⁸ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶¹⁹ Chauhan AS. *Ethanobotanical Studies in Sikkim Himalaya* 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶²⁰ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", *3 JAIM* 183-189 (2010).

99.	Pteris biaurita (Pteridaceae)	Thaday uniu	Both	Stems	Stops bleeding and infection ^[621]	4000- 5000 ft	Throughout Sikkim.
100	Rheum nobile (Polygonaceae)	Keju	Both	Roots and Rhizome s powder	Rheumatic arthritis and heart tonic ^[622]	2000- 4000 ft	Throughout Sikkim.
101	Rhododendron arboretum (Ericaceae)	Gurans	Both	Petals	Bloody dysentery ^[623]	7000- 9000 ft	Barsey (West Sikkim).
102	Rhus semialata (Anacardiaceae)	Bhakimlo	Both	Fruit extracts	Diarrhea and dysentery ^[624]	2000- 5000 ft	Throughout Sikkim.
103	Rubia cordifolia (Rubiaceae)	Majeto	Both	Roots	Astringent in cut and wound ^[625]	3000- 7000 ft	Throughout Sikkim.
104	Rubia manjith (Rubiaceae)	Majito	Both	Roots decoction	Jaundice, urinary tract infection, liver and general tonic ^[626]	4000- 8000 ft	Throughout Sikkim.
105	Rubia monjita (Rubiaceae)	Manghito	Both	Roots and stems	Skin disease and scorpion sting ^[627]	3000- 8000 ft	Throughout Sikkim.
106	Rubus ellipticus (Rosaceae)	Aiselu	Both	Roots paste	Bone fracture ^[628]	3000- 10,000 ft	Throughout Sikkim.
107	Rumex nepalensis (Polygonaceae)	Halhalay	Both	Roots	Hepatitis, loss of hair, food poisoning, cuts and wounds ^[629]	5000- 9000 ft	Throughout Sikkim.

⁶²¹ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶²² *Ibid.*

⁶²³ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶²⁴ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶²⁵ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶²⁶ *Ibid.*

⁶²⁷ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁶²⁸ *Ibid.*

⁶²⁹ Hussain S and Hore DK, "Collection and conservation of major medicinal plants of Darjeeling and Sikkim Himalayas" 6 *IJTK* 352-357 (2007).

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108	Sapindus mukorossi (Sapindaceae)	Ritha	Both	Fruits, roots and barks	Anti-helminthic, purgative, dandruff and piles ^[630]	2000-3000 ft	Throughout Sikkim.
109	Sarcopyramis nepalensis (Melastomataceae)	Angurkati	Both	Leaves	Constipation ^[631]	3000-4000 ft	Throughout Sikkim.
110	Saussurea gossypiphora (Asteraceae)	Kapisful	Both	Roots	Cuts, cough, asthma, fever, dysentery and influenza used for sexual dysfunction ^[632]	14,000 ft above	Throughout Sikkim.
111	Schima wallichii (Theaceae)	Chilawna	Both	Fruits	Dandruff ^[633]	2500-4000 ft	Throughout Sikkim.
112	Stephania glabra (Menispermaceae)	Gurjagano	Both	Roots	Diabetes, fever, gastric problem, amoebic dysentery, leprosy and anticancer drug ^[634]	2000-4000 ft	Throughout Sikkim.
113	Stephania glabra (Menispermaceae)	Taubarkey	Both	Root bulbs	Diabetes, tuberculosis, asthma and fever ^[635]	4000-10,000 ft	Throughout Sikkim.
114	Swertia chirata (Gentianaceae)	Chiraita	Both	Plants extract	Malaria, fever, liver stimulant, asthma, dyspepsia, debility, febrifuge, laxative, stomachic, anti-helminthic, anti-	6000-9000 ft	Throughout Sikkim.

⁶³⁰ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶³¹ *Ibid.*

⁶³² Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

⁶³³ Chauhan AS. Ethanobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶³⁴ *Ibid.*

⁶³⁵ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", 3 *JAIM* 183-189 (2010).

					diarrhea, constipation ^[636]		
115	<i>Taxus baccata</i> (Taxaceae)	Dhengre salla	Female	Leaves and bark extracts	Breast and throat cancer ^[637]	6000- 9000 ft	Mostly Barsey (West Sikkim)
116	<i>Terminalia belerica</i> (Combretaceae)	Barra	Both	Fruits	Stomach dysfunction ^[638]	2000- 3000 ft	Malbasey and Reshi (West Sikkim); Tinkitam (South Sikkim) and Rorathang (East Sikkim).
117	<i>Terminalia chebula</i> (Combretaceae)	Harra	Both	Fruits	Tonsillitis and pharyngitis ^[639]	2000- 3000 ft	Throughout Sikkim.
118	<i>Thysanolaena maxima</i> (Poaceae)	Kucho/ Amliso	Both	Young roots	Bronchial problem, rheumatic pain and skin swelling ^[640]	2000- 7000 ft	Throughout Sikkim.
119	<i>Tupistra nutans</i> (Liliaceae)	Teeta Nakema	Both	Whole plants	Diabetes ^[641]	3000- 6000 ft	Throughout Sikkim.
120	<i>Urtica dioica</i> (Urticaceae)	Sisnu	Both	Roots	Minor fracture ^[642]	3000- 8000 ft	Throughout Sikkim.
121	<i>Viscum articulatum</i> (Santalaceae)	Har choor	Both	Entire plantts	Minor fracture ^[643]	7000- 9000 ft	Barsey and Manaybung (West Sikkim) and Dzongu (North Sikkim)
122	<i>Vitex negundo</i>	Sewali	Both	Leaves	Rheumatism ^[644]	4000-	Throughout

⁶³⁶ Hussain S and Hore DK, "Collection and conservation of major medicinal plants of Darjeeling and Sikkim Himalayas" *IJTK* 352-357 (2007).

⁶³⁷ Panda AK, Misra S, "Health traditions of Sikkim Himalaya", *3 JAIM* 183-189 (2010).

⁶³⁸ Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶³⁹ *Ibid.*

⁶⁴⁰ *Ibid.*

⁶⁴¹ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶⁴² Rai L, Sharma E, *Medicinal Plants of Sikkim Himalaya: status, uses and potential* 1-152 (Bishen Singh, Mahendra Pal Singh, 23-A New Connaught Place, Dehradun, 1994).

⁶⁴³ *Ibid.*

.	(Lamiaceae)					5000 ft	Sikkim.
123	Zanthoxylum alatum (Rutaceae)	Bokay timbur	Both	Tender branchle ts	Toothache ^[645]	6000- 8000 ft	Mostly Barsey (West Sikkim).

5. III. Healing practices in Sikkim:

A proper and effective health care service is essential for better health care of mankind, and the same is applicable to the people of Sikkim. The system of allopathic hospitals, district hospitals, primary health centres and sub-centres, a medical college, Ayurvedic medicinal centres, Tibetan Herbal medical centres, and Homeopathic medical centres under both private and public sectors scattered throughout the state of Sikkim cater the need of health care of the people. On the other hand, medico spiritual healing practices, practiced by various community health healers also exist side by side for the health care of the people.

a) Some healing practices in Sikkim:

The health care systems existing in the state are described in brief as under:

i. Folk Medicine:

The existence of Folk medicine dates back as long as mankind have existed. In an effort to cope with an environment that was often dangerous, humans, and their ancestors, began to develop ways of lessening pain and treating physical and medical problems. Undoubtedly came through trial and error, using various plants and other methods derived from observation of how animals reacted to and treated illness and injuries. With the passage of time, individuals within ones family and tribal groups became more skilled at helping the sick and injured, and some of these became responsible for carrying out healing ceremonies, religious rituals, and other rites designated to ensure the safety and health of their communities.

⁶⁴⁴ Chauhan AS. Ethnobotanical Studies in Sikkim Himalaya 200-204, Proceedings of national seminar on traditional knowledge based on herbal medicines and plant resources of north-east India. National Institute of Science Communication and information Resources, New Delhi, (2001).

⁶⁴⁵ Joshi V and Joshi RP, "Some plants used in Ayurvedic and Homeopathic medicine" 2 *JPP* 269-275 (2013).

Folk medicine is an unofficial health-related practice that has traditionally existed, and is learned informally by word of mouth, and through observation and demonstration. Long before the discovery and development of modern scientific medicine such as the use of pharmaceutical drugs and doctor's surgery, traditional healing methods had been used and are still being used and practised today. Various types of traditional medicine such as herbs, tree, roots, fruits, insects and food items are used for treatments of any illness ranging from cancer, malaria, impotence, infected wounds, high blood pressure etc.⁶⁴⁶

Many of the methods for treating injuries and diseases have been passed down through families for generations, and some of these have been adopted for use by the medical profession. Those treatments not commonly believed to fit within the framework of modern medical practice are commonly identified as folk medicine. Illnesses whose etiologies are not recognized by Western medical practice are known as folk illnesses. The cultural and ethnic groups from which they emerge shape folk illnesses. They are specific to the cosmology of the cultural and ethnic group to which they belong and they have specific causative, diagnostic, preventive, and healing, curing practices that may vary significantly from how they may be viewed by modern medical practitioners.

In Sikkim a number of religious priests or shamans or herbalists or community healers of different communities inhabiting in the state, are in practice of folk medicines. They are known by different names in different tribes/castes as follows:⁶⁴⁷

Table 5.2

Different Folk Medicinal practitioners of Sikkim

Sl No	Communities/Tribes	Name of Folk medicine healers
1.	Khasas	Dhami, Jhankri
2.	Limboo	Sada Samba
3.	Khambu-Rai	Mangba (Bijuwa), Nakchong, Mabini, Kubimi, Dowang
4.	Sunuwar	Poibo, Natso, Ngyami
5.	Sunuwar	Bhusal, Dhami, Jhakri

⁶⁴⁶ J.R. Subba, *History, culture and customs of Sikkim* 235 (Gyan publishing house, New Delhi, 2008).

⁶⁴⁷ *Id.* at 236.

6.	Thami	Dhami, Jhakri
7.	Gurung	Lama, Pachyu, Ghyabring
8.	Lepcha	Bongthing, Mun
9.	Sherpa, Tamang, Bhutia	Lama
10.	Newar	Bajracharya, lama

These folk medicine healers of different communities exist side by side with modern medical practices especially in the rural areas of Sikkim, and often at odds with them. This is primarily because it very often does not confirm with what is scientifically known about the causes of illness and disease and what are thought to be the most effective medical treatments. These medicine persons have acquired their knowledge from generations of others that have used the treatments. The resources used for treatment includes, herbs and plants for which Sikkim Himalaya is very rich, minerals, animal products and religious mantras/mundhums of the communities. These folk remedies are often learned and passed down from parents to children, and the explanations for illness causation and treatment go hand in hand with this learning process.

Folk medicine practitioners use a variety of methods to treat illnesses. These practitioners go by many names, including shaman, spirit medium, herbalist, native healers, medicine man and other related terms. Each has specific treatment approaches, which may include prayer, dancing, medicinal herbs, massage, sweat baths, coining, cupping, hot and cold foods, and other religious priests or shamans are the first to be consulted when a family member becomes ill. They are easy to access, tend to share the same illness causality beliefs, will come to one's home day or night, and are much cheaper than clinic, hospital or a doctor's visit. Folk medicine practitioners are also often consulted when home remedies fail. If the practitioners also fail, then consultation with the biomedical community may occur.⁶⁴⁸

Folk medicine exists side by side with modern medical practices in Sikkim. Herbal practitioners, prayer, magic, diet, exercise, and proper social relations are all viable tools in the effort to maintain health. For public health practitioners, an awareness of the diversity of health beliefs and practices that may be encountered among those who use more traditional folk medicine approaches, and the ability to suspend judgement about those who use them, is

⁶⁴⁸*Id.* at 237.

an important step in learning to work more effectively with the diverse folk medicine traditions they encounter in their practice.⁶⁴⁹

ii. Ayurveda:

Estimates of the origins of Ayurvedic medicine range as far back as 5,000 years. Texts believed to be more than 12 centuries old are still available today to document the sophisticated knowledge of human anatomy, physiology, health and disease handed down through the millennia to modern times. Ayurvedic medicine may well have been the first complete system of medicine. It is thought to have been the original medical discipline whose traditions were sought out by and disseminated among healers in Asia, Africa and Europe centuries ago when medical knowledge was minimal or absent in other cultures.⁶⁵⁰

The principle philosophy of Ayurveda is based on the theory of Panchmohabhuta (five primary elements) of which all living and non-living bodies are composed of. According to Indian philosophy, there is a complete similarity between the universe and human body. This fact has been also pointed out in the Vedic Literature as “Yeatha panda tatha Brahmanda” meaning whatever is found in panda (purusa) the same thing is noticed in Bramhanda (universe or cosmos). In other words, it can be said that there is a direct relationship with individual and the universe around him. In the universe, air (Vayu), Sun (Surya) and moon (Chandra) are the fundamental things, which control the physical affair likewise Vatta, Pitta and Kapha are found in the body etc. for the biological control. Acharyas may substitute Vata, Pitta and Kapha as functional unit because Tridisa are responsible for all biophysical, biochemical and all transformation in the body. Even though Tridosa are composed of panchamohabhutas, anatomical structure of Tridosa cannot be found in the body. The morphological description of Tridisa also is not found in entire Ayurvedic Literature, while their qualities, character and function has been described. Saptu dhatu (seven primary tissues) are the structural unit of the body, as they are the constituents of various organs in body. By the interaction between dhatus and dosa, Malas are generated as the by products in the body.⁶⁵¹

Mala (impurities) should be extracted from body, as they are liable to be re-absorbed in the channel and they may abstract the path. Generally the body cannot utilize Malas. If on

⁶⁴⁹ C.G. Helman, *Culture, Health and Illness: An introduction for Health Professionals* (Bristol, U.K: Butterworth-Heinmann, 1994).

⁶⁵⁰ J.R. Subba, *History, culture and customs of Sikkim* 238 (Gyan publishing house, New Delhi, 2008).

⁶⁵¹ *Ibid.*

any condition Malas is re-absorbed or obstruct the path then disease occurs. Therefore, dosas, dhatus and malas are three components of living body, which maintain the life, and health of an individual. Ayurveda considers the human being as a combination of the three dosas, panchamahabhutas (five elements), seven body tissues (saptadhatu), five senses (panch indryas), Mindm (Manas), Intellect (budhi) and soul (atma). The doctrine of Ayurveda aims to keep these structural and functional entities in a functional state of equilibrium, which signifies good health. Any imbalance due to internal or external factors results in disease and restoring the equilibrium, through various techniques, procedures, regimen, diet and medicine is the treatment. All the medicinal plant's action is also designed as per the dosa. Rasayana drugs have the property to clear the channels by which it acts as immulomodulators, adaptogenic etc. and delay the aging process.

Ayurveda was first introduced in Sikkim on 9th June 1997 as the Regional Research Institute of Ayurveda, at Gangtok with the following three basic objectives:

- a) To undertake clinical trials for studying the efficacy of Ayurvedic drugs.
- b) To survey and find out the new drug resources available in the state.
- c) To cater out services in Out Patient Door (OPD), In Patient Door (IPD), Mobile Clinical Research Unit (MCRU), and Child Health Check Up (CHCP).

The Survey of Medicinal Plant Unit (SMPU) and Out Patient Door were started since the inception of the centre, the Mobile Clinical Research Unit and Child Health Check Up became functional in March 1981 where as In Patient Door and Pathology was started in March 1984. But unfortunately some unavoidable circumstances forced to close down In Patient Door section. Besides above mentioned activities, data regarding nature, extent incidence of different diseases accruing in these areas, and also of food habits, health related customs and beliefs of the people were collected for providing further strengthen the research work. During the past years, this centre has consolidated the liaison in all its units viz: In Patient Door, Out Patient Door, Mobile Clinical Research Unit, Child Health Check Up, and Survey of Medicinal Plant Unit, but In Patient Door. Mobile Clinical Research Unit, Child Health Check Up and Survey of Medicinal Plant Unit are non functional currently.

More than 400 medicinal plants, 120 animal products and 100 minerals are used as ingredients for Ayurvedic medicines under Ayurveda. As this region comes under the main Himalayan terrain, the medicinal plant available here has enormous value.

The general health cases being treated from this centre in chronology are gastritis, gastric ulcer, acidity, skin disorder, cold and cough, fever, influenza, piles, constipation, running nose, anaemia, sinusitis, menstruation and infertility problem, throat problem, neurological problem, and highest numbers of arthritis.

The research conducted by this centre includes allergic rhinitis, Diarrhea, Skin disorder, goiter, malaria, irritable bowl syndrome, etc.

Ayurveda emphasizes on diet, life style and medicine. The Ayurvedic treatment includes Purgation (vomiting, massages etc), Sadhana (purification therapy e.g. Panchkarma) and Samana or palliatives therapy.⁶⁵²

iii. Tibetan Herbal Medicine:

Tibetan medicine has a rich legacy and is currently practiced not just in Tibet, but also in the adjacent Chinese provinces of Qinghai, Gansu, Sichuan, and Yunnan, and in the neighbouring kingdoms of Bhutan, Nepal, Ladakh, and Sikkim, where communities of Tibetan people have long been established. Many non-Tibetans also seek out treatment by this traditional system because of its good reputation. Tibetan medicine originated with the local folk tradition (known as Bon) that dates back to about 3 B.C. and was formally recorded by Xiepu Chixi, the physician to the Tibetan King Niechi Zanpu, in 126 B.C. Aspects of both the traditional Chinese and Indian (Ayurvedic) medical systems were added latter; Ayurveda has had most profound influence on Tibetan medicine. The medicine of India was introduced to Tibet as early as 254 A.D., with the visit of two Indian physicians. During the following century several physicians from India reinforced the teachings. The greatest influence from India came about when Buddhism was adopted in Tibet as the state religion.

The legend of how Tibetan medicine was introduced to Tibet is relayed in the story “The Life of the Great Physician Yuthog Yonten Gonpo”,⁶⁵³ which has been translated and presented in the book “Tibetan Medicine” by Rechung Rinpoche. Yuthog studied medicine since an early age and was exposed to Buddhism during his teen years. He made three trips to India and studied with the great masters of Buddhist and Ayurvedic medicine there, and he eventually wrote thirty classic medicinal works integrating the local, Indian and Chinese medical traditions. The involvement of Chinese medicine came about in 641 A.D. when a

⁶⁵² *Id.* at 239.

⁶⁵³ 708 – 833 A.D.

Tang Dynasty princess, Wen Cheng, was married to the Tibetan leader Songzan Ganbu. Wen Cheng brought with her many Chinese books, including the medical books, as well as herbal formulas and medicinal instruments. Seventy years later, during Yuthog's life, another Chinese princess, Jin Cheng, brought additional medical books, as well as several Chinese physicians, to Tibet. Yuthog is viewed as the father of Tibetan medicine.⁶⁵⁴

The general methods of diagnosis and therapeutics used by Tibetan doctors follow the Indian tridosha system; that is, being based on three humours- rLung (Vayu or wind) with basic concept of movements, breath, cold; mkrhispa (pitta or bile) with basic concept of metabolism, digestion, fire; and Badkan (Kapha or phlegm) with basic concept of restraint, lubrication, moistness etc.

The imbalances in an individual are revealed by a combination of reported symptoms, pulse diagnosis, tongue diagnosis, and urine analysis.

The overall physical appearance of the person and information about their daily habits, and consideration of seasonal influences also contribute to the analysis. The Tibetan pulse diagnosis appears to be derived from the Chinese system, and is taken at the same artery of each wrist, but the method of feeling the pulse and the interpretations differ. Tongue diagnosis is simplified compared to the Chinese system.⁶⁵⁵ Urine analysis is unique to the Tibetan system and may have been introduced from Persia. Physicians inspect the colour, amount of vapour, sediment, smell, and characteristics of the foam generated upon stirring, relying on the first urine excreted in the morning.

Traditional Tibetan medicine formulas are described mainly in terms of the disease and symptoms that they treat, rather than their properties and influences on the humours. Many of the formulas that are still in use were established many centuries ago. The principles of herbal combining to yield a traditional formula are not clearly defined in the Tibetan system. There are complex methods of analyzing the qualities of medicinal materials: six tastes, eight properties, and seventeen effects, but the precise organizational principles for compounding numerous ingredients into the formulas are lost to history. Tibetan medicine,

⁶⁵⁴ J.R. Subba, *History, culture and customs of Sikkim* 240 (Gyan publishing house, New Delhi, 2008).

⁶⁵⁵ Long disorders are characterized by red and dry tongue; chiba disorders by a yellowish tongue coating; and peigen disorders by a grayish and sticky coating with a smooth and moist texture.

like other traditional medical systems, is highly complex, and represents a comprehensive effort at dealing with health and disease.⁶⁵⁶

In Sikkim, the Tibetan medicine came with the migration of Tibetans who started migration to the present Sikkim area mainly after the blood brotherhood treaty of Khe-Bumsa and The-Kog Tek during 13th century. In a personal interview conducted by J.R. Subba with Dr. Tashi Namgyal Surkhang, a Tibetan Herbal Medicine Specialist, Nam Nang Road, Gangtok on 20th December 2006, it was made known that his father started practicing Tibetan medicine in 1958. After his father's demise, he is practicing it at Gangtok for the last 20 years now. In the early days he used to collect medicinal ingredients from Gangtok itself. Since, the Sikkim Government has banned collection of medicinal herbs from 2002; he is collecting his requirements from Amritsar, Delhi and Siliguri. Most of his clients are Tibetans but people from other communities also use Tibetan medicines. Most of his clients come for treatment of gastritis, gastric ulcer, gout, Neurological disorders, arthritis, diabetics etc. he keeps his medicines in powder form. Earlier he used to treat fifty to sixty patients per day but now he treats only eight to ten patients per day. He uses about fifty to sixty medical ingredients for treatment. He collects and prepares medicines himself.⁶⁵⁷

A Tibetan Herbal Dispensary has also been started in Sir Thutop Namgyal Memorial Hospital, Gangtok, Sikkim in September 1978 with qualified practitioners and nurses. The medicinal requirements of this dispensary are obtained from Tibetan Medical Centre, Dharmasala, Himachal Pradesh. Thus, the health care of most of those who depend on Tibetan medical system are looked after both the private and public sector practitioners in Sikkim.

Dharmasala Tibetan Centre started a Tibetan Herbal Medical Dispensary at Tibetan Centre, Nam Nang in 1987 with a practitioner. All the medical requirements of this centre are obtained from Dharmasala Tibetan Centre. The dispensary uses both powder and pallet form of medicines.⁶⁵⁸

iv. Homeopathy:

⁶⁵⁶ Dharmananda Subbhuti, *Tibetan Herbal Medicine with examples of treating lung disease using Rhodiola and Hippophae*, available at: <http://www.itmonline.org/>. (Last visited on May 12, 2011).

⁶⁵⁷ J.R. Subba, *History, culture and customs of Sikkim* 241 (Gyan publishing house, New Delhi, 2008).

⁶⁵⁸ *Id.* at 242.

Dr. Samuel Hahnemann, a German physician founded Homopathic medicine, in the early 1800. Hahnemann first coined the word ‘Homopathy’⁶⁵⁹ to refer to Homopathy’s first pharmacological principle- “Simila Similibus Curentu” or “The Law of Similars”. This means that a remedy that produces symptoms in a healthy person will cure those same symptoms when manifested by person in a diseased state. Hahnemann theorized that disease is a disruption in the body’s life force, that symptoms of disease are not disease itself and that the body could be stimulated into healing itself. To prove his theory, he developed the “Law of Similars”, a principle that uses substances that can create symptoms of disease to fight disease when given in minute doses.

Today Homopathy is widely prescribed by physicians and are practiced worldwide. It has been effectively treating many of the chronic ailments and conditions that so many of us suffer these days, such as allergies, asthma, learning disorders, emotional disorders, arthritis, and the problematic symptoms of menopause. In Gangtok, Sikkim, Homopathy Clinical Research Unit was established in 1984. Many Homopathic clinical centre followed thereafter.

v. Allopathic or Western Medical practices:

McKay comprehensively reviewed the introduction of Western Medical Health Care in Sikkim in his article published in the Bulletin of Tibetology which is reproduced as it is for the benefit in general.⁶⁶⁰

By the late 19th century, it was established practice in the British Empire for Medical Officers (generally from the Indian Medical Service), to accompany Political Officers touring or stationed in remote areas. Originally this had been to ensure the diplomats good health, but it had become apparent to the imperial policy-makers that the physicians could make a substantial contribution to the diplomatic success of the indigenous peoples, both elites and non-elites. The good-will gained from this was seen as an important part of the political project of obtaining indigenous consent to British rule and this “political” role became the primary reason for the presence of Medical Officers in states such as Sikkim.

When J.C. White first took up his post as Assistant Political Officer, the military medical staff that had served on the 1888-89 Sikkim campaign remained there under the command of Dr. J.K. Close of Indian Medical Service. After his departure, a Surgeon-Captain, Dr. D.G.

⁶⁵⁹ ‘homoios’ in Greek means similar, ‘Pathos’ means suffering.

⁶⁶⁰ Namgyal Institute of Tibetology>>Bulletin of Tibetology, available at :<http://www.tibetology.net>>..(Last visited on November 11, 2015).

Marshall, was posted to Gangtok in 1891 to act as White's Medical Officer, and Surgeon Captain Dr. A.W.T. Buist-Sparks replaced him the following year. In 1893, Surgeon Captain Dr. G.F.W. Ewens replaced him and remained there at Gangtok until 1895.⁶⁶¹

These officers were the first biomedical physicians to reside in Sikkim and given that three of them later reached the rank of lieutenant colonel, and that Marshall had topped the examinations in his intake, they must have been among the better than average physicians in the imperial service. But Western medicine in such outputs did not then represent the scientific advances of the late 19th century as it would a decade later, and there is little evidence of their making any great impact on the medical world of Sikkim. Indeed their services may have been given only to White and his immediate circle; certainly in the absence of the banished Chogyal it was impossible to implement the usual imperial medical strategy of first impressing the ruling elites.⁶⁶²

These early physicians do not appear to have had a proper dispensary, and even the conditions in which they lived were primitive. Describing the later development of Gangtok, White refers to an unnamed Medical Officer and his wife in this early period "who lived in a two-roomed hut built of wattle and dab", where their wooden furniture was liable to sprout in the rainy season.⁶⁶³ A Government medical dispensary was finally opened in Gangtok in the 1896-97 housed in small shed with very basic facilities. The medicine racks and tables for dispensing occupied half of the space. The compounder as his residence was utilizing the remaining half portion of the shed with a partition wall. There is no record of any European physician having replaced Ewens, and it seems likely that an Indian trained Sikkimese medical assistant then served in the Gangtok dispensary. Certainly by 1905 the dispensary was under the control of Civil Hospital Assistant H.M.Mitra, who remained there for some years. The first brief statistical report on Sikkim state provide the daily average number of patients at Gangtok dispensary between 1896-97 to 1901-02, year wise was 6.5, 7.4, 7.4, 5.9, 5.3 and 12.8 respectively. In June 1902 another state dispensary was opened in Chindam, and around this time a third dispensary opened at Rongpo. The latter was under the charge of the

⁶⁶¹ Bulletin of Tibetology, available at: <http://www.himalaya.socanth.cam.ac.uk/bot/pdf> (last visited on July 27, 2014).

⁶⁶² S.K. Mitra, "Present day health organization in Sikkim" 13 *IJPH* 6 (1969).

⁶⁶³ White, J. Claude, *Sikkim and Bhutan* 36 (Sagar Book House, Delhi, 1992).

Public Works Department. With the establishment of these institutions, a structural basis for future medical developments had been made.⁶⁶⁴

From 1902-03, Sikkim became an important staging post for what is popularly known as the “Young-husband mission”. White requested the appointment of “a man experience and tact” to administer both civil and military medical matters in Sikkim, and it was eventually agreed to establish a new position of Assistant Civil Surgeon at Gangtok to supervise all medical matters in Sikkim State, including the State and missionary dispensaries, jails, schools, and personal attendance o the Chogyal and his family. The first Civil Surgeon appointed to Gangtok was Assistant Surgeon 2nd class John Nelson Turner, born in 1871, a member of the Indian Subordinate Medical Service, and not a qualified doctor and took up his post in August 1909. He remained in Sikkim until early in 1920. When Turner arrived in Gangtok, the three Government dispensaries at Gangtok, Chidam and Rongpo, had, in the previous year 1908-09 treated around 14,000 patients. In addition, three Church of Scotland Mission dispensaries in the State, to which the Government contributed an annual sum of Rs.250 had treated more than 9,000 patients.⁶⁶⁵

After annexation of Darjeeling area of Sikkim in 1935, and Kalimpong area from Bhutan in 1966, the Christian missionaries were already working in Kalimpong-Darjeeling by 1880 and the expansion of their activity to Sikkim was a logical consequence. In spite of the Chogyal’s resistance, the Scottish missionaries were successful in opening a dispensary at Chidam staffed by a compounder, Elatji Matiyas, a Lepcha convert to Christianity in 1897. By 1906 further dispensaries staffed by local Christian Compounders had been opened at Rhenock, Seriyong, and Dentam. In 1906 they dealt with 5,734 cases, and by 1910 three more dispensaries had been opened. Additional dispensaries followed, and by 1923-24 there were a total of 11 mission dispensaries in Sikkim, including one opened at Lachung in North Sikkim by the Scandinavian Alliance Mission, which established a base there with two female missionaries in 1894. Compounders trained by the missionaries in Kalimpong staffed both government and missionary dispensaries, and their standards, facilities and resources must have been similar. While eventually overtaken by State initiatives, the missionaries

⁶⁶⁴ S.K. Mitra, “Present day health organization in Sikkim” 13 *IJPH* 6 (1969).

⁶⁶⁵ McKay Alex, *The indigenisation of Western Medicine in Sikkim* 29 (Bulletin of Tibetology: Vol. 40(2), Namgyal Institute of Tibetology, Gangtok, Sikkim. 2004).

continued to be important agents for the spread of medicine particularly in remote areas, down to the 1930s and 1940s.⁶⁶⁶

By 1915 considerable progress had been made towards the indigenisation of western medicine in Sikkim. While the colonial State did, in many senses, use medicine as a tool of empire, it was also part of the ideological justification for empire; providing humanitarian provision to the citizens of the colonial state in return for their assent to colonial rule. It was also a tool that the imperial Government wished to give up. The provision of medical services was expensive, and it became more so as Western medicine developed new therapies and technologies. The indigenisation of medicine was thus both an economic necessity, and (at least from the British perspective) a humanitarian service.⁶⁶⁷

Tibet and Bhutan did not develop any significant indigenous Western medical tradition during the British period. But in Sikkim the indigenisation of medicine proceeded steadily. While Sikkim state's closer treaty links to British India and the political alliance that developed between the British and the Sikkimese aristocracy fostered this process, the key factor appears to have been the number of Sikkimese who had received a Western education. The Government and mission schools in Darjeeling and Kalimpong, and in Sikkim itself from 1880s, provided a small but regular supply of youths, either from the Sikkimese aristocracy or the Lepcha and Nepali Christian communities, who were educated in the Western system. Such an education was an essential precursor to the biomedical training process, imparting the modern scientific worldview necessary for the understanding of medicine. Western medicine in Sikkim thus developed local social characteristics with the Buddhist aristocracy occupying the higher positions in the developing medical structures, while the native Christians from traditionally lower status social groups, filled the lower ranks of compounders, dressers and nurses.⁶⁶⁸

During White's residency, no Sikkimese appear to have progressed beyond compounder qualification, but his successor Charles Bell sent the first three students from Sikkim to Temple Medical College in Patna, two were immediately posted to a Political Department dispensary in Tibet when they graduated. These men were Tonyot Tsering and Bo Tsering, both Kalimpong educated Sikkimese, who graduated as Sub Assistant Surgeons in 1913 and 1914 respectively. Their contemporary, Bhowani Das Prasad Pradhan, was placed in charge

⁶⁶⁶*Id.* at 31.

⁶⁶⁷*Id.* at 33

⁶⁶⁸*Id.* at 34.

of the Chidam dispensary in 1913. Thus, as the structures of a state medical system began to be developed in Sikkim, the emerging Sikkimese medical graduates filled vacancies. Their training was financed from the Sikkim State revenues. Thus in 1924-25, Lobzang Mingyur, who was sent to Campbell Medical School Calcutta was posted at the Gangtok hospital as an extra compounder after his training. During 1920s, registration of births and deaths was made compulsory, while a Civil Veterinary Department was established with a hospital and dispensary at Gangtok under a Babu Bannerjee, and dog licenses were introduced, with orders given to destroy dogs without the appropriate discs. In addition, sanitary measures were introduced in the Gangtok Bazar.⁶⁶⁹

The 9th Chogyal Sir Thutob Namgyal, Sidkeon Tulku and Tashi Namgyal were very supportive of modernization. On 24th September 1917, Sir Tashi Namgyal officially opened the Sir Thutob Namgyal Memorial Hospital. Situated on a ridge overlooking Gangtok, it began with beds for ten in-patients, and charge of it was given to a state Medical Officer of Sikkimese nationality. The hospital became the centre of medicine in Sikkim, although it was initially poorly equipped until 1923-24 for example, did it have a microscope. But additional specialist wards were added; a tuberculosis ward in the late 1920s and a maternity ward in the late 1030s, after a trained midwife was posted to the hospital in 1929-30. In 1923-24, just about 8,000 patients attended the hospital, which increased to 16,000 by 1933-34. On the 1st November 1922, Dr. John Turner was replaced as Gangtok Surgeon by an Anglo-Indian, Dr. John Charles Dyer, and he was replaced by Dr. Kenneth Percival Elloy in 1928. Dr. Kenneth was replaced by Dr. W.St.A.Hendricks in 1932. In the early years several individuals who had trained as compounders in Kalimpong and worked in dispensaries in the region began private biomedical practice in Sikkim, although it was not until the 1970s that fully-qualified doctors set up private practice there. Until then, any Sikkimese qualifying as a doctor would be observed into government service.⁶⁷⁰

The departure of the British had little medical impact in Sikkim. The last of the imperial Civil Surgeons, Dr. G.F. Humphreys, was an experienced doctor who had served as the Medical Officer in Gyantse from October 1940 to May 1944, and had visited Lhasa in 1942-43 as accompanying physician to two American emissaries. As an Anglo-Indian, he stayed on in Gangtok until the mid 1950s, providing continuity throughout the transitional post-colonial period. The Sikkimese Sub-Assistant Surgeons who had served in the imperial dispensaries in

⁶⁶⁹*Id.* at 33.

⁶⁷⁰*Id.* at 33.

Tibet withdrew back to Sikkim during 1950s as the Chinese take-over of Tibet intensified, thus increasing the pool of experienced medical practitioners available to the Sikkim State. Patient numbers continued to increase to 115,060 in 1954 to 188,526 in 1963. But throughout the 1950s and 1960s, the limited state revenues available restricted medical development in Sikkim. At the time of the Indian takeover in 1975, there were just four district hospitals in addition to the Sir Thutob Namgyal Memorial Hospital in Gangtok, and the bulk of medical consultation took place in rural dispensaries and primary health care centres staffed by compounders, who thus remained the principal interface between allopathic medicine and the local patients.⁶⁷¹

During this period, the Sikkimese health services were heavily reliant on the variable commitment of Indian specialists employed on short-term contracts. But an indigenous class of medical specialists capable of administering and operating Sikkim's medical services was developing. Rather ironically, more indigenous Sikkimese occupies the higher ranks of the public health service today than was the case in independent Sikkim before 1975. The first generation of Sikkimese practitioners of allopathic medicine was not fully qualified doctors. Men like Bo and Tonyot Tsering were licensed Medical Fellows. But by the 1940s, a new generation of qualified doctors began to emerge, largely from the small group of Western educated Sikkimese who formed a bureaucratic class serving the Chogyal and colonial Governments. Among the new generation of medical practitioners Rai Bahadur Tonyot Tsering, Dr. Pemba, T. Tonyot, Dr. Tsering Tendup Kazi (first Sikkimese MD). Dr. Tsewang Palzor (first Sikkimese Surgeon), Dr. T.R. Gyatso, and Dr. Leki Dadul (first Sikkimese lady doctors).⁶⁷²

Along with the doctors and licensed practitioners, the profession of nursing also developed in Sikkim, albeit that the profession is still not of particularly high status. In 1954. Mrs. Sonam Eden (Phigoo) and Mrs Prabitra Pradhan, were sent for nurse training to Scottish Missionary under Dr. Albert Criag after completion of the study Phigoo was posted to the Sir Thutob Namgyal Memorial hospital where she remained until retiring in 1995, after 40 years of service.⁶⁷³

⁶⁷¹ S.K. Mitra, "Present day health organization in Sikkim" 13 *IJPH* 5 (1969).

⁶⁷² J.R. Subba, *History, culture and customs of Sikkim* 247-248 (Gyan publishing house, New Delhi, 2008).

⁶⁷³ McKay Alex, *The indigenisation of Western Medicine in Sikkim* 33 (Bulletin of Tibetology: Vol. 40(2), Namgyal Institute of Tibetology, Gangtok, Sikkim. 2004).

Sikkim today, the Sir Thutob Namgyal Memorial hospital straddles a main Gangtok intersection. As of 2006, it was a 300 bed hospital, with 78 doctors including 36 specialists of staff under the charge of Director-cum-Medical Superintendent. For medical purpose the state is divided into four districts, each under a Chief Medical Officer who is also head of the central hospital in that District. A network of primary health care centres and sub-centres exists in each district, and medical services remain largely free of cost. A subjective judgement considering patient-doctor relations, service morale, non-elite class access, and not least financial probity, as well as numerous statistical indicators, would suggest Sikkimese today enjoy among them better biomedical services in India.⁶⁷⁴

With the beginning of the 21st century, a new light in terms of healthcare and learning under the name of Manipal Referral Hospital was started at Tadong, East Sikkim in 2002 for medical education of the people. The State desires to foster a better health care umbrella with a good network of hospitals, district hospitals, primary health centres and sub-centres for allopathic treatment; Ayurvedic medical centres, Tibetan Herbal Medical Centres, and Homopathic medical centres, which are spread throughout the State for treatment of all types of diseases.

5. IV. Present day belief and prospects of Medico-Spiritual healers of Sikkim:

a) Medico spiritual healing practices:

The diverse forms of religion and medicine in Sikkim is believed to have been popularized by Guru Padmasambhava or commonly known as Guru Rimpoche. He is considered to be a master in healing. In this form of Medico Spiritual healing he is called Ugen Menla. As Mahaguru Dewache, he is able to heal mental depression and psychological problems. Different kinds of illness are treated with worship and devotion with animal sacrifice. The notion of scared is prominent exorcism, the medico spiritual means of treating diseases. Spiritual not only includes Gods and Goddess but also spirits of ancestors and forests, the spirits present everywhere. There is a prevailing supernatural basis of medico spiritual healing treatment, even where the chief means of treatment is herbal. The medico spiritual healers claim that unless a medicine concoction has been empowered by special benediction, it will have little effect. The medico spiritual healers collect the herbs in

⁶⁷⁴*Ibid.*

auspicious time because for better efficacy. The medico spiritual medicine practices with their cultural values are based on the three major communities of Sikkim as follows:

I. Lepcha Medico Spiritual practices:

In Sikkim the idea of wellbeing and poor health among the Lepchas is completely taken care by the idea in paranormal. The Lepchas have their distinct writing, and distinct attire, culture and lingo. The uses of medicinal flora are found in the epics of Lepchas.⁶⁷⁵ There are convinced semi-divine beings or protector spirits identified as Lungzee which are not gods but treasured like a enormous tree, a bunch of trees, grassland, a loch, a cavern or a particular small hill, and other usual objects. If they are uncared for or any lack of respect is revealed to them by defile or polluting by answering nature's call, etc. may well invite anguish to the community or the particular individual- they may experience from serious sickness or even die. According to them, the humanity is governed by superior spirits; and evil spirits-Mung. All adversity such as ill health, bad harvests, dearth, hailstorm and other calamity believed to be the actions of the evil spirits, i.e. Mung. Moreover good health and vitality, good harvest and prosperity are believed to be the actions of the good spirits. Lepchas are basically Animist, traditionally only the Bongthings⁶⁷⁶ and Muns⁶⁷⁷ are called during ailments and in cultural and memorial service ceremonies. After the beginning of Buddhism, the lamas executed the pujas in close alliance with the mun/ bongthings. They, however, perform the custom associated with spiritual forces in which the lamas have no role. Pougorip/ Totola (*Oroxylum indicum*) plays an important role in the Lepcha culture. The plant/tree is regarded the most sacred tree/plant by the Lepchas. The buds are in bunch opens only at night and falls before the dawn. The Lepchas consider that Totola is not even handled by the bees, representing the transparency and chastity of virginity and it is used as liver stimulant and anti diabetic remedy. The produce of the plant is bent like a very massive sword. The seeds are in order within the outgrowth and are flagellated similar to paper silk. It is the flagellated seeds which are worn in any good ritual like haldi in Hindu culture. Chi (millet beer) stage a very crucial role in Lepcha culture too. The Lepchas believe that the Good Spirit (God the creator) made the Lepchas from snow of Mount Kanchenjunga. Therefore, in the beginning

⁶⁷⁵ Namthar, Tengyur, Domang)

⁶⁷⁶ Male Lepcha priests.

⁶⁷⁷ Female Lepcha priestess.

of the harvesting festival Chi made from the first harvested grain is offered to Mount Kanchenjunga who is believed to be the guardian deity of the Lepchas.⁶⁷⁸

II. Bhutia Medico Spiritual practices:

The Bhutias place enormous emphasis on coercive means of exorcising and demolishing malevolence spirits. Similar to the Lepchas, the implementation of faith is in the possession of skilled specialists like the pau, neyjum and Lamas. The pau is a male and the neyjum is female. While therapeutic process, the pau goes into a reverie; and converse; with spirits to determine why they have afflicted individuals with ailments. Sometimes he diagnoses by prediction with the aid of a plate filled of rice. He goes on quivering the plate till the sign of the wicked spirit makes manifestation. The pau executes Phuphi by contributing funds, offspring and attire which has been disseminated thrice over the patient's top to the malignant character.

These belongings are chucked out and merely the outfit are brought back. It is assumed that the individuals will get healed in three days of this formal procedure. All Sikkim peoples's settlements are adorned with prayer flags, or Dacho, which are supposed to carry the luck of the individual through the air in every direction. These belief flags are of four types-the Lungta which is four-sided figure in shape, and contains a horse by means of spiritualist outline at the centre. It is hung on the ridges of the dwelling place and in the neighbourhood of settlements; the chonpen, lengthy, slim, rectangle shape, are attached to branches of trees or to bridges or to bamboo flag pole; the Gyal-tsen dse-mo, is similar to lung-ta, but consists a big sacred wording; and the enormous fortune appeal, which is pasted on the ramparts of the residence or folded up and about and worn in the region of the neck as a charisma for good fortune. The fortune flags are planted only subsequent to performing definite precise lamaic respect. Most of the lamaic adoration is copied from demonolatry, a the minority of the mainly intellectual lamas be converted into Tsi-pa lamas (astrologers), and all the laity have been lead to recognize that it is extremely essential for every of the three large epochs of life, viz. beginning, matrimony and demise; and also at the start of each year to have a prediction of the year's ailing affluence assist its remedies drained out for them.⁶⁷⁹

⁶⁷⁸ Panda Ashok Kumar and Mishra Sangram, "Some belief, practices and prospects of folk healers of Sikkim", 11(2) *IJTK* 369-373 (2012).

⁶⁷⁹ *Ibid.*

III. Nepali medico spiritual practices:

Like Lepchas and Bhutias, Nepalese also believe in super natural forces in the conception of poor health. Dhami and Jhakries execute puja for bodily and psychological epidimic and Phedangba are particularly supposed for Limboo society. The folk maintain of medicinal plants such as Oroxylum indicum (hypertension), Fraxiknus floribunda (gout), Panax pseudoginseng for prolonged existence, Ephedra gerardiana intended for asthma, etc. The utilization of Elshcolzia blanda and Mahonia nepalensis in eye problem and eczema and of Urtica parviflora (youthful inflorescence) as a glading and bracing instrument subsequent to child birth by neighbouring women folk are of immense worth. Rhizome of Budo-Vokati (Stible rivlaris) is well thought-out to be excellent for back pain. It is compressed and engaged as decoction following steaming in water or else masticated as betel nut for reviewing body ache. The flowers of Pandanus nepalensis is found in Sikkim up to 1752 m elevation, it is said to be aphrodisiac and induces sleep. Its flowers are considered to remove headache and weakness and its seeds cure wound in heart. The Nepalese community believe that Cordyceps sinensis has the power to fight all kinds of diseases.⁶⁸⁰

d) Prospects of Medico spiritual healers:

The total number of medico spiritual healers identified by the researcher through the information and data provided by Department of Culture, Government of Sikkim, to whom various benefits are provided by the State government are 864 till date. Further, as a doctrinal study, the researcher through available documentation has here provided information of 102 such healers, in four districts of Sikkim, out of which the maximum healers are habitat of East Sikkim district. Distribution of sex and age¹⁰² identified Medico-spiritual healers of Sikkim are as follows:

Table 5.3

Distribution of sex and age 102 identified Medico-spiritual healers of Sikkim

Age in Years	Male	Female	Total	Percentage
20 – 30	02	01	03	2.9%

⁶⁸⁰ Panda A.K, “Tracing the historical prospective of cordyceps sinensis – an aphrodisiac of Sikkim Himalaya” 45 *IJHS* 189-95 (2010).

31 – 40	03	04	07	6.86%
41 – 50	02	01	03	2.9%
51 – 60	19	05	24	23.52%
Above 60	60	05	65	63.72%
Total	86	16	102	100%

The aforementioned age and sex table provides that only 10% of medico spiritual healers are young in between the age of 20 – 40 years and 64% medico spiritual healers are above the age of 60 years. Thus, it becomes mandatory to acquire healing knowledge from the elderly healers, or-else this kind of healing practices will soon extinct. The study shows 84.31% medico spiritual healers are male and 15.68% is female.⁶⁸¹

Table 5.4

Educational backgrounds of 102 identified healers

Education	No. Of Medico spiritual healers	Percentage
Illiterate	53	51.96%
Up to class 5	20	19.61%
Below Matriculation	09	8.82%
Above Matriculation	20	19.61%
Total	102	100%

The educational backgrounds shows, out of 102 maximum 53 (51.96%) medico spiritual healers are illiterate; 20 (19.61%) are educated up to class 5. The number of those healers who have studied till class 9 is 9 (8.82%) and 20 (19.61%) of such healers are qualified above matriculation.⁶⁸²

Table 5.5

The sources of knowledge in 102 identified healers

Sources of Knowledge	No. Of Medico spiritual healers	Percentage
Traditional	53	51.96%
Guru (Folk healing teacher)	20	19.61%

⁶⁸¹ Panda Ashok Kumar and Mishra Sangram, "Some belief, practices and prospects of folk healers of Sikkim", 11(2) *IJTK* 371 (2012).

⁶⁸² *Ibid.*

Own experiences	12	11.76%
Books/Manuscripts	11	10.78%
Dreams	06	5.88%
Total	102	100%

Medico spiritual healers in Sikkim have got healing knowledge from different sources. According to the above table 53 (51.96%) healers have received it traditionally from their parents, 20 (19.61%) have received it from their guru (Folk healing teacher), 12 (11.76%) have received it by their own experience, 11 (10.78%) have received it from various books and manuscripts. It is interesting to note that 6% (5.88%) of medico spiritual healers actually received their knowledge from their dreams. The data implies that maximum medico spiritual healers have got their knowledge traditionally from their family members.⁶⁸³

Table 5.6

Types of practices in 102 identified healers of Sikkim

Types of Practices	No. Of Medico spiritual healers	Percentage
Bone Setting	52	50.98%
General treatment	30	29.41%
Vetenary medicine	12	11.76%
Birth attendant	07	6.86%
Poisoning treatment	01	0.98%
Total	102	100%

The above table shows the area of expertise among the 102 identified medico spiritual healers. It shows maximum healers 52 (50.98%) are practicing bone setting with one or two general treatment like jaundice, gastritis, problems relating to women, etc. followed by general treatment 30 (29.41%) and 12 (6.86%) healers practicing veterinary medicine. Out of them 7 (6.86%) practice as birth attendant and only 1 (0.98%) medico spiritual healer practices treatment relating to poison.⁶⁸⁴

⁶⁸³ *Ibid.*

⁶⁸⁴ *Ibid.*

Table 5.7**Types of community prevalent in 102 identified healers of Sikkim.**

Types of community	No of folk healers	Percentage
Lepcha Community	12	11.76%
Bhutia community	30	29.42%
Nepali Community	60	58.82%
Total	102	100%

Different communities have different types of beliefs and practices, the above table shows out of 102 identified medico spiritual healers 60 (58.82%) are from the Nepali community followed by 30 (29.42%) Bhutia community and 12 (11.76%) from the Lepcha community, despite many Lepcha herbalists are found in North Sikkim. Perhaps, probably they don't want to expose to the outside world and express their claims due to their inherent shy nature.⁶⁸⁵

Medico spiritual healing practices are gradually declining its practice in this trans-Himalayan region, as new generation are hardly coming forward to adopt such practices as a profession. It is praise worthy that Department of AYUSH, Government of India, State Government, NGO's and many folk practitioners are doing their best to keep their tradition alive.

All the three communities have their own system, treatment principles, believes, and medical ailments, though they have more or less similarity with each other. The primitive people have good faith on their own system of medicine rather than other systems and western medicine. Need of methodical corroboration, overturn pharmacological and observational studies are necessary for diverse way of life and healing of these three communities. The greatest challenge in the new millennium is to preserve and promote the traditional knowledge and medico spiritual healing in Sikkim. The knowledge behind such healing practices requires recognition, respect and understanding in the light of modern medicines. The revitalization of traditional health of Sikkim may promote the health of rural poor people of this region for their primary healthcare.⁶⁸⁶

⁶⁸⁵ *Ibid.*

⁶⁸⁶ *Ibid.*

5. V. Healing or therapeutic strategies:

Personal or habitat healing is typically the initial step in health care, consisting above all of concoction of herbs, barks of vegetation, flora, pedigree, and leaves, seeds etc. and alteration in diet. Customary therapeutic understanding is coded into family circle cooking exercises, habitat remedies, ailing health avoidance and health preservation values and routines. The practices are acknowledged to elders in the residence or vicinity or are recommended by traditional therapist. Cure is usually a family based procedure, and the recommendation of family members or other significant members of a neighbourhood have a chief authority on physical condition performance and the appearance of healing that is required.⁶⁸⁷

Lenience in numerous therapies appears to be familiar in long-lasting period of ill health. Nevertheless, it is not easy to get on precise outline. The approach a being chooses for the conduct of one's disease or that of a family member depends upon one's choice and experiences. The tribal reaction to physical condition exertion reveal a numerous and concurrent practice of home remedy and multiple treatment. The mainstream practitioners whose forces are required are medico spiritual healers, conventional herbalists and public wellbeing practitioners. The tribal conventional medicinal structure is based on personalistic custom of super normal healers and their ministrations and herbalists. The hypothetical side of medico-spiritual healing, their spiritual background, and chiefly the idea in the terror of evil feelings, remedial performed according to religious rites give explanation the perseverance of native structure. These conventional healers work within a spiritual paradigm, with no certification to be conventional or support the custom. It is supposed that these are authorized by their belief. The scheme works on the conventional reputation of the personal methods, status and presentation. The original medicinal scheme has continued in society's communal cultural complexes through intensely deep-rooted processes. It is a set of concepts of physical condition and poor health that reflects certain principles habits and viewpoint based on people's way of living. It is a steady procedure of conventionality to modern emotional requirements with in a recreated intellectual individuality.

⁶⁸⁷ V Bhasin, Medical Anthropology: Healing Practices in Contemporary Sikkim- Kamal-Raj Enterprises, available at: <http://krepublishers.com>Anth-SI-03-7Bhasi...> (last visited on November 17, 2015).

Narrative of the Shaman and his curative formula sheds radiance on the connection between procedure and penalty of healing. The Shaman provides a lingo⁶⁸⁸ and like therapist allows the mindful and comatose to merge. This he achieves from side to side a shared symbolic scheme and healing of one ailing person improves the cerebral physical condition of the collection. In this background, the enduring performs a very significant social purpose and validates the scheme by vocation into engage in leisure the groups sentiments ad representative illustration to have them turn out to be personified in genuine practice. In favour of these healers, the intelligence, the body, and the investigational field are solitary. The Bongthing/pau can preeminently be implicit as a healer of the intelligence and body as well as neighbourhood. This is achieved through his or her position as the exponent of code, those intellectual instruments for perceiving and arranging realism. They are imperative vectors of a rule that compels intelligence, substance and acquaintance. The ceremony healers are specialists possessing authority to restore to health or put off illness and tragedy. It is supposed by tribals that ill health emanate from a disjunction of a quasi-symmetry maintained between men, his surroundings and the paranormal. A being or super being force can upset the organization order. The reinstatement of the command or the homecoming to the physical condition can merely be achieved from side to side a healer or medication man. The remedy man has option to the make use of of therapeutic plants, animal goods or natural resources. In former cases, he has alternative to rituals with the assist of which he goes into trance and counteracts the malevolence forces. The accessibility of diverse healers enables them to control on or after solitary type of wellbeing practitioner to an additional in look for of the best. The tribal's who can benefit the provision of bio-medicine or amchi do so not including being recognizable with the hypothetical standard of medicinal scheme. As the financial position of the family does not vary much, they show similarities in their conduct in case of ill health as well. They do not utilize pluralistic strategies not perceiving any disagreement among these alternatives, nor do they give the impression to observe them as dissimilar systems, but somewhat as a diversity of options, in the middle of which they can use.

Generally custom is chronological but some is instantaneous. For instance, an infant who is being given approved medicine for diarrhoea might also be engaged simultaneously to a Bongthing for removing malevolence or giving home remedies. Though merely indigenous healers heal certain illnesses such malevolence spirits, this does not prevent the exercise of

⁶⁸⁸ Levi-Strauss, C, *Structural Anthropology* 198 (Doubleday, New York, 1967).

bio-medicine to heal the symptoms. Gonzales⁶⁸⁹ information that in Guatemalan, the symptoms are treated with biomedicine; at the same time as the reason of ill health is dealt with from side to side of a traditional specialist. Conventional theories of ill health aetiology are frequently multi-factorial and multilevel. This permits the exercise of diverse treatment capital for dissimilar fundamental factors. For Guatemalan plantation, pluralistic behaviour among tribal population groups is pragmatic, often based on trial and error, perceived effectiveness, uncertainty of illness causation and expectation of quick results. In addition to this empirical and pragmatic behaviour, however, is the role played by faith in the paranormal or sacred cure. As individual is at the same time a body, a character and a societal individual, so are the Medico-spiritual practitioners of the tribal's. As explained by Adams tribal healers "pursued a dialogic, relational remedy for its patients through reciprocal relationships that encouraged community, such as in gift giving to spirits and etiologies based on real social conflicts".⁶⁹⁰ The characteristics of certain ailments points to the cause and mode of action accordingly. These "fixed-strategy diseases"⁶⁹¹ automatically affirm to particular type of cure.

According to Khare, explicates practiced remedy in India and how it manages not merely manifold conventional and contemporary medicinal approaches, languages, healing regimen and substance medica, but it as well leads us to a continued ethical, communal and matter criticism from inside. The learning of such variety leads to a insecurely shared, and ethno-graphically demonstrable, cultural way of thinking, rehearsal and sensible ethos across the conventional and contemporary remedial worlds. Puralistic therapeutic condition in tribal areas provides suppleness and fulfils diverse requirements of the inhabitants. Amongst tribal's these healing sessions seem to spiritually enabling performance that assist tribal's conquer the distress of their life. These sessions provide their functions and the division sandwiched between empirical realism and thoughts are ambiguous. This contrasts brusquely with the proximity of international medication, which is irregular from normal social procedure and is disobliging to substitute systems.

Wide-ranging quantitative review on the use of numerous psychoanalysis systems among tribals gives an idea that they have preference in the direction of indigenous type. The

⁶⁸⁹ Health behaviour in cross-culturalperspective: A Guatemalan example. Human Organization, (1996).

⁶⁹⁰ Adams Vincanue, *Reconstituted relations of production in Sherpa tourism* 154 (Ann, Tourism Research, 1992).

⁶⁹¹ A Beals, *Stratigies of resort to curers in South India* 194-195. In *Asian Medical System*, C Leslie, (ed), (University of California Press, Berkely, 1980).

numerous health check systems accessible to tribals and the options obtainable to any particular group are various. For the most part tribals fall short to see modest disagreement between medicine and remedial rituals. All through their life span they have used the two at the same time. In areas anywhere bio-medical institutions are surrounded by the contact of the tribal's, they do not vacillate to use the remedy in position of herbal concoctions. Tribals do not discover peculiar to exercise medicines at the side of the healing practice of bongthing/pau. The customary representation is beliefs shared by healers and patient.

In vision of not haveing communiqué services and remoteness of physical condition institution from the villages, remedial aid is not availed by tribals excluding in grave cases. Tribal's depend on traditional medico-spiritual healing healers, who in addition relying upon convinced occult occurrence deal with a variety of herbs for preparing medicines for healing purpose. In these places people are gripped with the weird, outrageous performance of spirits, and deities. The ailment considered to be caused by paranormal, insist medico-spiritual remedy. The tribal's way out to various medico-spiritual healers for relieving individuals of bereavement and illness caused and delegated by the furious paranormal.

Amongst the Sikkimese Tribal, a series of alternative does not give the impression to exist; even though the tendency is to start with home healing remedies to bongthing to bio-medical practitioner, as the route of the ill health profits and turn out to be more solemn. However, there is also a flipside movement between assets or a cut down approach, often based on referrals and recommendation from family and neighbours and other practitioners, which seems to be connected with extreme anxiety over the apparent increasing harshness of an ill health. When someone is sick, he or his relatives are first and foremost interested in attaining his health restored, for which they promptly unite different treatments irrespective of their ontological, epistemic, ethical and artistic base. A medical pluralism consequence out of this compass reading where accomplishment of physical condition is above all objective and the individual is taken care of in its holistic self. When one scheme of action fails to give assistance, individual moves onto one more and if this management fails to offer aid, individual moves on to an additional and this is persons or his group's preference. As a matter of fact it is traditional, consequently, for the person to present his symptoms to his kin and kith for their assessment prior to he takes step to get therapeutic cure. The patient without help is not allowed to make a decision whether or not he is unwell, although he himself may perhaps be persuaded that he is sick sufficient to permit individual concentration, his inmates have got to still be convinced of the gravity of his grievances.

Every remedial system is not only a produce of exacting past situation and intellectual machinery; it has also its personal cognitive category. Individual beings caught in sickness episode are less worried about the subject of grouping; they are unusually concerned with revival and assistance. For this, division between logical and illogical methods of analysis and treating sickness is abolished. Here the division flanked by, science and devotion categories collapses; and so is the division linking magic and religious conviction. Systems of consideration and illumination, like astrology and Sufism, which first and foremost are not therapeutic, are approached for remedial as well as curative purposes, on the principle that religious conviction is to be resorted in case of anguish, and poor health is a brand of anguish, the lessening of which can be wanted through prayers, contact incantation of emotional state, surrender, libation, conciliatory the adverse planetary arrangement and tiring amulet and charms.

In North District of Sikkim, there is no medicalisation of traditional medication by modern drug. Bio-medical systems as a regulation stand up in quick distinction to the native ones, even though an exercise done in parts of Kerela and Punjab has recommended that there are abundant of native medico-spiritual healers who used modern medication. In spite of opening up of community wellbeing Centres and enormous propaganda, conventional ideas of ailment and wellbeing prevail. Bongthing/pau/Lamas heal with prayers and rituals whereas Amchis heal from beginning to end at the site of the physical body by means of a complex analytic system. It is thought by tibals that medico-spiritual healing system is capable of restoring physical condition of the body or the mind bongthing/pau. Amongst the tribal's, the breakdown of the therapy did not describe for inquiring the effectiveness of the scheme, but on the discord of ceremony performance. The total pledge of the believers in the conventional system persists and so does the trust of the patient in the healer, despite of the outcome.

Traditional physical condition care practices are patient-oriented and holistic attitude of numerous factors meet additional effectively the requirements of the beneficiaries. Patient's observation about the significance of physical condition, treatments, the role of emotions and healer-patient connections are significant. Variety of emotions and spiritual factors have contact on tribal wellbeing, and that primary transformation is necessary in the technique health concern is prepared and provided to obtain full description of this. Nowadays, the tribal's notwithstanding relying on ceremony healers, as well opt for Medico-spiritual ways of treatment. Since Medico-spiritual medicines are cheap and are effortlessly obtainable; as compared western medicine. To add more to its benefit medico-spiritual

remedies are free from side effects, as compared to that of other forms of medicines, to which the ethnic people does habitually grumble of. Medicinal plants in Sikkim are a pivotal supply for restoring ones physical condition. In case of stern illness, medico-spiritual practice is crucial alongside with other therapies. Sacrament and empiric therapies are incorporated. Phyto-therapeutic healing may perhaps be suggested for the condition diagnosed by Medico-spiritual healers.

It was obvious in ethnic areas where facilities were available; the tribal's regularly acknowledged and availed of the Medico-spiritual facility. on the other hand, side-by-side they also practiced traditional rituals. Sadly, adequate medical facilities are not available in many tribal habitats and irony is that the tribal's are accused of not accepting the non-existing medical facilities. Biomedicine as provided by main wellbeing Centres are by and large criticised for deteriorating to respond to the wider poignant and sacred needs of the beneficiaries. It is like a product delivered by physical condition professionals and their acquaintances. Neighbourhood members do not participate in its preparation, functioning and assessment. In areas where public physical condition services are easy to get to, tribals depend on customary and traditional medico-spiritual healing; herbs are used as remedies along with rituals to heal diverse ailments. The competence of a dispensary or ainfirmary in such circumstances is shortened in conditions of mutually areas and inhabitants enclosed. If therapeutic services were positioned at far flung areas from the settlements, the health centre takers population ratio would be significantly slighter than the established international model. Nonetheless, in some cases effectiveness have insignificant or no constructive effect on the efficiency of the therapeutic system. The reliance and self-assurance on medico spiritual healers are a consequence of confidence and belief among beneficiaries. All the way through them, the tribal's transmitted their needs to paranormal powers and ask for aid and consideration.

The divergence between conventional and contemporary medical ailments still obtains in the anthropological narrative, in spite of its flawed and deceptive illustration. All conventional medical systems are not illogical and not identical and even bio-medicine has its personal folklore. The chief force of medico-spiritual healing practice is its ability to rise as psycho support structure. The descriptive representation of this category of tradition emphasises the idea of dissonance as a reason owing to man's association by means of the paranormal powers and other corporal associated conflict caused by consuming incorrect things.

Tribal's epidemiological report sponsor for stipulation of preventing forces for epidemic like gastro-enteric disease, pulmonary virus, influenza etc. These inconvenience have before now been tackled in many Nations by starting wellbeing condition physical condition services. The state physical condition services have been operating too in India but are ineffectual or have ignored the reality that comprehensive physical condition levels cannot advance not including defensive mechanism, such as immunization and ecological hygiene etc.

5. VI. Legal Perspective:

a) Protecting the Indigenous Knowledge of communities:

Indigenous Knowledge has been used since ages by indigenous and local communities and has been the mainstay of their existence especially in the key segments of health and food. Contemporary discipline has of late begun seeing at Indigenous Knowledge as a basis of innovative medication especially since the expenditure of putting new drugs on the market is becoming relatively high. The growing phenomenon of bio-piracy shows the somewhat hypocritical attitude of Western science to Indigenous Knowledge. Scavenging it on one hand and claiming patents on all kind of products derived from Indigenous Knowledge (turmeric, neem, etc.) yet refusing to acknowledge its economic value and ownership. The indigenously known wound healing properties of turmeric required a hype of the United States Patent scenario to be recognized as a part of the traditional knowledge of India.

Despite the growing recognition of Indigenous Knowledge as a valuable source of knowledge, Western Intellectual Property laws continue to treat it as a component of "public domain", freely available for use by anybody. Moreover, in some cases, diverse forms of Intellectual Knowledge have been appropriate under Intellectual Property rights by academicians and business enterprises, exclusive of any recompense to the awareness initiator or possessors.

Similarly, the use and continuous improvement of farmers' varieties (landraces) is essential in many agricultural systems. In many countries, seed supply fundamentally relies on the decentralized, local system of seed production which operates on the basis of the diffusion of the best seed available within a community and local farmers ensure that the farming community is supplied with planting material. The knowledge of farmers about crop

varieties and their special characteristics has been central to the development of new plant varieties and for global food security.

b) Traditional Medicine and Intellectual Property Rights:

New experiments are beginning to emerge on benefit-sharing models for indigenous innovation. An example of our Country here is worth sharing. It relates to a medicine which is developed from and based on the active ingredients in a plant, *Trichopus Zeylanicus* (Arogyapaacha), found in South-western part of India. Scientists at the Tropical Botanic Garden and Research Institute in Kerala learned of the plant, which is claimed to bolster the immune system and provide the additional energy. The medicine is traditional knowledge used by Kani tribe. These scientists isolated and tested the ingredient and incorporated it into a compound, which they christened 'JEEVANI', the giver of life. The tonic is being manufactured by a major Ayurvedic drug company in Kerala.⁶⁹²

In another incident, two America based Indians, Suman K. Das and Hari Har P. Cohly were granted a United States Patent 5,40,504 on 28 March 1995 on use of turmeric in wound healing. The patent was assigned to University of Mississippi Medical Center, United States of America. This patent claimed the administration of an effective amount of turmeric through local and oral route to enhance the wound healing process, as a novelty finding. Any patent, before it is granted, has to fulfil the basic requirements of novelty, non-obviousness and utility. Thus, if the claims have been covered by relevant published art, then the patent becomes invalid. Council of Scientific and Industrial Research could locate 32 references (some of them being more than one hundred years old and in Sanskrit, Urdu and Hindi), which showed that this finding was well known in India prior to filing of this patent. The formal request for re-examination of the patent was filed by Council of Scientific and Industrial Research at United States Patent Office on 28 October 1996. On 20 November 1997, the examiner rejected all the claims once again as being anticipated and obvious. The re-examination certificate was issued on this case on 21 April 1998 bringing the re0examination proceedings to a close. The following points are interesting to note:

- i. The turmeric case was a landmark case in that this was the first time that a patent based on the traditional knowledge of a developing country was challenged successfully and United States Patent Office revoked the patent. This eventually

⁶⁹² Brij Bhushan Gupta, *Intellectual Property Rights and Protection of Traditional Knowledge: A General Indian Perspective* 23 (FICCI Auditorium, Tansen Marg, New Delhi, 2008)

opened up the path to the creation of Traditional Knowledge Digital Library, Traditional Knowledge Resource Clarification, and finally inclusion of traditional knowledge in the International Patent Clarification System.⁶⁹³

- ii. Amidst the loud protests against ‘biopiracy’ and ‘theft’ of India’s biodiversity and traditional knowledge by foreign nationals, it is interesting to note here that the patentees were Indians (Das and Cohly), the re-examination in United States Patent Office was done by an Indian (Kumar) and the re-examination was sought by an Indian institution (Council of Scientific and Industrial Research).⁶⁹⁴

c) The core problem of Indigenous Knowledge protection:

International conventions and treaties dealing with Indigenous Knowledge are characterised by the fact that they are not binding. Every clause that deals with benefit sharing is contested and refused. International Labour Organization Convention No. 169 which says a lot about legal standards for indigenous rights fails to protect the Intellectual Property Rights of the Indigenous people. Whereas the United Nations Declaration on the rights of Intellectual Property recognises the rights and aspirations of the Intellectual Property, it will be a non-binding document, which cannot be legally enforced. In the International Treaty on Plant Genetic Resources, developed nations have successfully blocked an international recognition of Farmers Rights. They also contest any notion of paying for the use of traditional germplasm in a benefit sharing arrangement. The Convention on Biological Diversity which has attempted to push through the interests of Intellectual Property has been thwarted by the American refusal to ratify it and accept its conditions.⁶⁹⁵

d) National action:

Action is needed at the National level, in policy and legislation, to protect indigenous knowledge. Some features that should be included in national legislation are included below.

⁶⁹³ *Ibid.*

⁶⁹⁴ *Ibid.*

⁶⁹⁵ Suman Sahai, Safeguarding Indian Traditional Knowledge 13 (FICCI Auditorium, Tansen Marg, New Delhi, 2008)

- i. Disclosure of origin of materials or knowledge used. For example, the use of a farmer variety in breeding a new variety; use of a medicinal or aromatic plant to make products or extracting vegetable dyes from certain minerals and plants.
- ii. Evidence of Prior Informed Consent (in standard format) before using the bio-resource.
- iii. Evidence (in standard format) of the nature (monetary, non-monetary) mode and method of sharing benefits derived from using Indigenous Knowledge.
- iv. Applications for use of Indigenous Knowledge should be published in all major newspapers, specially the vernacular press.
- v. Proof of Indigenous Knowledge will be entertained in both written and oral form and in the form of community knowledge conveyed by third parties.
- vi. The onus of proving compliance (burden of proof) should be reversed. In the case of a dispute, the user agency will be required to prove that all conditions of disclosure and benefit sharing have been met.
- vii. The penalty for infringement should be severe enough to be effective deterrent.

There are several legislations which come into picture in relation with genetic resources in India and means for their protection. The key legislation include-

- i. Indian Forest Act, 1927
- ii. Wildlife (Protection) Act, 1972
- iii. Forest (Conservation) Act, 1980
- iv. Protection of Plant Variety and Farmers' Rights Act, 2001
- v. Patent (Amendments) Act, 2005
- vi. G.I of Goods (Registration and Protection) Act, 1999
- vii. Seeds Act, 2004

The Expert Committee on Traditional and Tribal Knowledge has in its agenda to develop guidelines for documentation of local biodiversity and bio-resources and associated Traditional Knowledge and for its effective use and short listing medicinal plants for commercial utilization. It is also to develop guidelines for protecting and safe guarding the Traditional Knowledge available with the Tribal and local community along with creating awareness for the same.

To top the above efforts, the National Knowledge Commission of India established in 2005 includes among its terms of reference the mandate to promote creation of knowledge in

various laboratories and to improve management of institution engaged in intellectual property rights.

The Working Group of the National Knowledge Commission on Traditional Medicines has made its recommendations to the National knowledge Commission. These recommendations include establishment of National mission on Traditional Health Science of India with an initial investment of 1000 Crore Rupees. The creation of teaching and research institutes, establishment of Traditional Knowledge informatics programme, digitization of Indian medical manuscripts, supporting of science initiative on Ayurveda and up gradation of colleges of Traditional Health Science are included in the goals. The establishment of a nationwide network of 300 forest gene banks and introduction of and legislation to allow cross medical practices is another forthcoming recommendation.

The three communities (Bhutia, Lepcha and Nepali) of Sikkim have their own belief, healing principles, classification, and medical ailments, though they are more or less similar with each other. The majority of Sikkimese people have a good faith on their own system of medicine rather than western medicines and other systems. Need of scientific support, observational studies and reverse pharmacological studies are required for different beliefs and treatment of these three communities. The greatest challenge faced today is to promote and preserve indigenous knowledge and medico spiritual healing practices in Sikkim. The knowledge behind such healing practices requires respect, recognition and understanding in the light of contemporary medicines. The revival of such healing practices of Sikkim may promote the health of rural underprivileged people of this state for their primary healthcare.

The establishment of concrete legislations and appropriate databases of international recognition for addressing the burning concern of the indigenous societies/ countries rich biodiversity for protection of traditional knowledge are some of the steps which are yet to be taken. The grant of Geographical Indication registrations to local germplasm, establishment of patent rights and benefit sharing models are stepping stones towards Traditional Knowledge protection. The modalities for protecting Traditional Knowledge are still emerging and evolving and therefore the measures for doing so at a flexible stage. How will Traditional Knowledge be appropriately preserved and protected and also respected is yet to be seen.

Therefore, the million dollar question which still haunts us is whether the delivery of traditional knowledge a public service or a business? Should patent owners and their lawyers

profit from carving up traditional knowledge into privately held parcels? Which aspect of medicine must be held in common for the greater good? Unlike land or other forms of tangible property, knowledge is not depleted by use. The endless discussion on protecting Intellectual Property Rights mask a troubling question: Do we have a great body of 'intellectual property' being generated that merits protection? Disturbingly, many discussions centre on protecting 'ancient knowledge' and 'indigenous resources' that often lie unused, from external predators. In the near future the Intellectual Property Rights debates are not going to fade away. However, we might, begin to wonder how we can generate more useful 'intellectual property' so that the task of protecting it becomes worthwhile.

CHAPTER VI

STATUS OF MEDICO-SPIRITUAL HEALING PRACTICE SCENARIO IN SIKKIM: AN EMPIRICAL STUDY

The present study relating to Medico-Spiritual healing practice requires an empirical study in the State of Sikkim to corroborate and substantiate the doctrinal findings at the national and international level. In order to do so a locational and demographic understanding of Sikkim is essential. Hence the following sketch upon Sikkim.

6. I. Geographical Location of Sikkim State:

Sikkim, known as the 22nd State of the Indian Union is located in the southern mountain ranges of the Eastern Himalayas between Northern Latitudes 27°4' 44" to 28° 7' 45" N latitudes" and 88° 45" to 88° 35' 15" E Longitudes. It is spread below the world's third highest mountain range, Khangchendzonga (8585m), revered by the Sikkimese as their protective deity. Sikkim is separated by the Singali la range from Nepal in the west, Cho la range from Tibet in the northeast, and the kingdom of Bhutan in the southeast. The Rangit and Rangpo rivers form the borders with the Indian State of West Bengal in the south.

The geographical area of the State is 7096 sq.km. Most of Sikkim is mountainous with altitudes varying between 300 metres above sea level to over 8500 metres at Khangchendzonga peak.

6. II. Population of Sikkim:

Sikkim's population is comprised of many ethnic, Linguistic and cultural groups. According to the 2001 Census of India findings, Sikkim recorded a total population of 540,851 persons out of which 288,484 were males and 252,367 were females, giving a ratio of 875 females per 1000 males. The State covers an area of 7,096 sq km and the density of population is recorded at 76 persons per sq km in 2001. The urban population comprises only 11.07 per cent of the total population of the State.⁶⁹⁶

The State Socio Economic Census 2006 records the total population figure at 581,546 persons, out of which the number of males figured 302,852 and females 278, 695, giving a

⁶⁹⁶H.H. Risley, The Gazetteer of Sikkim 1-3 (B.R. Publishing Corporation, Delhi, 2005)

ratio of 920 females per 1000 males. The latest population figures of the State are provided by the 2011 Provisional Population Census which gives the total population of the state as 605,688 persons divided into 321,661 males and 286,027 females giving a ratio of 889 females per 1000 males.⁶⁹⁷

The first population Census of Sikkim, which was the third Census of India, was undertaken in 1891. Sikkim, during this period, was a protectorate of the British. The 1981 census was the first one to be conducted after the merger of Sikkim with India and it was done separately for the State while earlier censuses were included with that of West Bengal. Sikkim has witnessed a steady growth in population in the past century.⁶⁹⁸

Table 6.1

Existing scenario of Population, Literacy and Sex ratio of Sikkim as per Census data of 2011⁶⁹⁹

Sikkim	Total	Male	Female
Population	610,577	323,070	287,507
Literates	444,952	251,269	193,683
Children (0-6 age)	64,111	32,761	31,350
Average Literacy (%)	81.42%	86.55%	75.61%
Sex Ratio	890		
Child Sex Ratio	957		

6. III. Officially recognised Medico-Spiritual healers in Sikkim

With the increasing number of population, the medical service providers also have risen in Sikkim, yet a vast portion of the population affirms their faith on Medico-Spiritual healers.

In Sikkim Medico-Spiritual healers are officially recognised by the State Government health service providers and are provided annual financial aid through Culture department, Government of Sikkim, so that such practices can be preserved from extinction. As per the

⁶⁹⁷ *Ibid.*

⁶⁹⁸ *Ibid.*

⁶⁹⁹ Sikkim Population Sex Ratio in Sikkim Literacy rate data-Census 2011, available at: <https://www.census2011.co.in>States> (last visited on March 20, 2017).

data collected from Culture department, Government of Sikkim, there are 891 officially recognised Medico-Spiritual healers in Sikkim till 2017, who are provided with annual financial grants.⁷⁰⁰

6. IV. The Study Area/ Universe

The universe under the study is a finite universe but large in size containing four (4) districts namely, East district, West district, North district and South district. The population though finite, is of different characteristics

For the purpose of analysis, the ethnic composition was not taken into account because of the remoteness of accessibility. Ten healers from each District have been interviewed, in a snow balling method. This number consists of both Governmental recognised and unrecognised healers.

The empirical study at the outset had to face certain astounding variables such as:

- a) Most of the Medico-Spiritual healers live in far flung remote areas of Sikkim, where the only means of communication is on foot and the time taken for to and fro walk was about four hours at an average.
- b) There are no repositions or record of the names and address or proper direction of the healers. The researcher had to rely on local people's description and was fortunate enough in only five instances, where a local guide agreed to help. Hence snow balling method of survey had to be adopted.
- c) Many healers and their families were reluctant to discuss with the researcher their healing knowledge, as it would expose their knowledge to public domain.
- d) Heterogeneous Linguistic communities inhabit different districts. Language had been a great barrier to communication and no interpreter is available in the remote parts of the State.
- e) Prior approval from the village elders were required to meet the Medico-spiritual healers in various remote areas. The village elders could not understand the purpose and value of "research" and declined to give permission for interview.

⁷⁰⁰ Information obtained from Mr. C.K. Sharma, (Under Secretary) Culture department, Government of Sikkim, on September 13th 2017.

- f) At least in two instances, the researcher was suspected to be a politician or some such thing and altercations, accusations etc took place.

Despite the aforementioned hurdles the researcher could interview 10 (ten) Medico-spiritual healers from each District, of which 3 (three) were Government recognised healers and the remaining 37 (thirty seven) were Government unrecognised healers.

6. V. Methodology adopted for the Collection of Data

Collection of data is an important aspect for any empirical research. The researcher had collected data from various Medico-Spiritual healers.

The study is mainly focused on the legal framework, or absence thereof, governing Medico-spiritual healing and the Intellectual property rights related thereto. Due to the aforementioned difficulties snow balling method was adopted and the tool used was open ended questionnaire. Different trips were arranged to different locations in the State to identify the Medico-Spiritual healers. The State Culture department, Government of Sikkim, did help to identify the recognised healers through a list of 891 recognised healers provided by them. The face to face interaction with the Medico-Spiritual healers, along with different rare resources utilized for curative different ailments and their way of life were collected and compiled by dint of field survey during October 2017 to January 2018.

The Questionnaire survey was conducted in order to build a requisite database on various aspects of healing, its form of treatment, awareness among the target groups, etc. which in turn became a storehouse of information.

6. VI. The Respondents

The majority of these healers considered their healing practice to be a mode of side income, since according to them sustaining life by just this kind of practice would be difficult, as the mode of payment is voluntary and the new generations are not interested in carrying forward this type of practice, which seems to be a matter of grave concern. The maturity level in terms of age and sexual category, matrimonial status, learning qualification, foundation of knowledge, types of exercise and know-how of practice of the surveyed Medico-Spiritual healers have been shown below.

Table 6.2**Officially recognised Medico-Spiritual healers of Sikkim till 2017**

	East District	West District	North District	South District	Total
No of recognised healers	286	285	100	220	891
Bhutia	29 10.13%	18 6.31%	31 31%	16 7.27%	94 10.55%
Lepcha	34 11.88%	14 4.91%	55 55%	04 1.81%	107 12%
Nepali	223 77.97%	253 88.77%	14 14%	200 91%	690 77.44%

The aforementioned table provides data which clearly indicates that among the three ethnic communities of Sikkim the Nepali community has the highest percentage of Medico-spiritual healers i.e. 77.44%, followed by Lepcha community i.e 12% and 10.55% of the Bhutia community. Despite the Lepchas and Bhutia's being the original residents of Sikkim, the percentage of Nepali healers in the State is tremendously high, one of the pivotal factors for such outcome is the population index of the State in terms of one's community. For instance in earlier days with the coming of different communities from Nepal the composition of the society further changed and the Nepalese population increased tremendously, ultimately out numbering the other two ethnic communities. This was evident from the first Census of 1891, where Nepalese population of Sikkim showed 18,955 out of the total 30,458, where as the Lepchas were only 5,762 and 4,894 were Bhutias.⁷⁰¹ The system of adaptation and imitation continued and Sikkimese society developed a unique society where one gets the elements of the Lepchas, Bhutias and the Nepalese.

⁷⁰¹ H.H. Risley, Gazetteer of Sikkim 27 (Calcutta, 1894).

Table 6.3**Gender division of officially recognised Medico-Spiritual healers of Sikkim till 2017**

	East District	West District	North District	South District	Total
Female	22 7.69%	10 3.50%	12 12%	04 1.81%	48 5.38%
Male	264 92.30%	275 96.49%	88 88%	216 98%	843 94.612%
Total	286	285	100	220	891

In terms of the above table the percentage of male and female Medico-spiritual healers are 95% and 5% respectively. Earlier studies within the country and elsewhere have also suggested lower percentage of female practitioners in Sikkim. The low participation of female Medico-spiritual healers in the State may not have much to do with education and discrimination. The reason behind this could be the patriarchal society prevalent and patrilineal inheritance in this region, where medicinal practice is mainly passed on to male children who are considered heirs of the family.⁷⁰²

Table 6.4**Age & sex distribution of forty Medico-Spiritual healers of Sikkim**

Age in years	Male	Female	Total	Percentage
05 to 15	00	00	00	00%
16 to 30	11	00	11	27.5%
31 to 60	11	04	15	37.5%
Above 60	14	00	14	35%
Total	36	04	40	100%

⁷⁰² <http://www.researchgate.net> (last visited on May 27, 2018)

From the above table it is evident that there are 37.5% of Medico-Spiritual healers in between the age group of 31 to 60 years, which is the highest and consists of four female healers too. 35% of healers are above the age group of 60 and paradoxically, healers in between the age group of 05 to 15 years are nil. It indeed is a matter of great concern, as this way Medico-Spiritual healer and its practices are in a verge of extinction from Sikkim, and no attempt has been made to document and record it in Traditional Knowledge Digital Library, India. The study shows maximum (90%) are male healers and (10%) are female Medico-Spiritual healers.

Table 6.5

Educational background of 40 Medico-Spiritual healers of Sikkim

Education	Number of healers	Percentage
Illiterate	13	32.5%
Up to class 5	23	57.5%
Below Matriculation	04	10%
Above Matriculation	00	00%
Total	40	100%

The educational backgrounds of the forty Medico-Spiritual healers does not seem to impress much, as the above table 4 shows, the educational percentage of healers who are above matriculation is nil and 13 (32.5%) of them are illiterate. **23 (57.5%)** are educated till class five and only 04 (10%) are educated below matriculation level.

Table 6.6

Source of knowledge in 40 Medico-Spiritual healers of Sikkim

Sources of knowledge	Number of healers	Percentage
Apprentice hood through parents	13	32.5%
Apprentice hood through another person	09	22.5%
Dreams	15	37.5%
Self acquired by birth	03	7.5%
Books/ Manuscripts	00	00%

Total	40	100%
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The table above, gives us a clear picture that Medico-Spiritual healers in Sikkim have got and acquired healing knowledge from different sources, as maximum 15 (37.5%) interestingly have acquired it from their dreams. 13 (32.5%) have received it from their parents, along with 09 (22.5%) having received it from another person. Surprisingly the figure above indicates 03 (7.5%) healers have self acquired their knowledge by birth. Interestingly, the data implies maximum Medico-Spiritual healers have acquired their healing knowledge through dreams.

Table 6.7

Types of practice in 40 Medico-Spiritual healers in Sikkim

Types of practices	Number of healers	Percentage
Bone setting	7	17.5%
Herbalist	2	5%
Spiritualist	22	55%
Traditional birth attendant	2	5%
Poisoning treatment	4	10%
Child related	3	7.5%

The table above shows maximum Medico-Spiritual healers 22 (55%) practice as spiritualist, followed by 7 (17.5%) who happen to be very popular bone setter practitioners. Among the rest 4 (10%) practice poisoning treatment, 3 (7.5%) deals with practice relating to children, 2 (5%) are traditional birth attendant and the other 2 (5%) practice as herbalist.

From the aforementioned data, the researcher feels it necessary especially in cases of traditional birth attendants to make them aware, since none were aware of reproductive rights in India. As reproductive rights embrace certain human rights that are already recognized in National laws, International human rights documents and other relevant United Nations consensus documents. These rights rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so, and the right to attain the highest standard of

sexual and reproductive health. It also includes the right of all to make decisions concerning reproduction free of discrimination, coercion and violence as expressed in human rights documents. In the exercise of this right, they should take into account the needs of their living and future children and their responsibilities towards the community.⁷⁰³

6. VII. Assessment of Medico-Spiritual healers in the four districts of Sikkim in the light of their practices, facilities and equipment used

Table 6.8

Number of patients treated by the healers on weekly basis

Number of Patients	Number of Healers	Percentage
1 to 5	20	50%
6 to 10	08	20%
11 to 20	Nil	Nil
21 to 30	Nil	Nil
Depends	12	30%

In terms of treating patients on weekly basis, the above figures indicate that 20 (50%) Medico-Spiritual healers treat 1 to 5 numbers of patients, 8 (20%) healers treat about 6 to 10 patients weekly and 12 (30%) number of healers say, the number of patients they treat on weekly basis depends. As according to them at times there are plenty of patients visiting them and at times there is none. They believe, giving a numeric value of patients visiting them would be difficult, and would be against their ethics, as most of them see this form of healing practice as social work

Table 6.9

Number of patients treated by the Medico-Spiritual healers till date

No of patients treated till date	No of healers	Percentage
Nil	Nil	Nil
10-20	Nil	Nil

⁷⁰³⁷⁰³Reproductive Rights in India – Human Rights Law Network, available at: <http://www.hrln.org/hrln/433-reproductive-...> (last visited on June 25, 2018).

20-40	08	20%
40-80	01	2.5%
100 above	31	77.5%

During the study the researcher made an effort by attempting to figure out an approx number of patients treated by the Medico-Spiritual healers till date, the result of which would help understand and reflect their efficiency. The data aforementioned indicates 8(20%) number of young healers, have healed 20 to 40 patients till date, 1(2.5%) healer has healed 40 to 80 patients till date and the amazing aspect here is 31(77.5%) number of healers have healed 100 plus patients till date. In my personal interaction with them at-least 20 numbers of Medico-Spiritual healers proudly claims to have healed 1000 plus number of patients and many were even able to name a few, despite their old age.

Table 6.10

Where are the sick members of the Medico-Spiritual healers referred?

Mode of treatment	No of healers	Percentage
By self	Nil	Nil
By other Medico-Spiritual healers	16	40%
Modern Hospitals	Nil	Nil
Depends	24	60%

A question which always created that inquisitiveness within the researcher was, even these Medico-Spiritual healers have family and at times even them themselves or their family members fall prey to different ups and downs in life in relation to health. Such times pose a great challenge and question to their belief and practice. Thus, the above table gives us a clear indication regarding their mode of treatment, when it comes to treating themselves or their family members. During the study, the researcher was impressed and surprised to see the faith these healers had in their form of practice, as the above table clearly indicates 16(40%) healers prefer being treated by other Medico-Spiritual healers, and 24(60%) number of healers prefers to answer in “depends” as they believe, if its outside their healing purview they would obviously take help of modern hospitals but it would be their last resort. No healers choose to take help of modern hospitals in first instance, which is clearly evident from the above table.

When it comes to healing, treating and taking care of patients, one pivotal aspect which reflects its outcome and speaks volumes about it is its Facilities provided and equipments used. To address this, the table below will provide some assistance.

Table 6.11

Treatment Facilities provided by the Medico-Spiritual healers

Place of treatment	No of healers	Percentage
Patients home	Nil	Nil
Healers home/Patients home	40	100%
Traditional selected area	Nil	Nil

The data above shows us that, the mobility of Medico-Spiritual healers are flexible, as 40 (100%) numbers of healers prefer seeing their patients at their own residence or at the patient's residence. During the researcher's interaction with them, the majority of these healers laid more emphasis on the patient's convenience.

Table 6.12

Facilities in terms of payment

Mode of Payment	No of healers	Percentage
Fixed rate for different treatment	Nil	Nil
It's not compulsory, its voluntary	40	100%
Its free	Nil	Nil

One of the demerits of a modern day treatment in a hospital today is its financial burden, which at times is back breaking. When the only motive is to be healed and be free from all kinds of physical ailments, Medico-Spiritual healing practice in Sikkim seems to have acted as a blessing in disguise to all fellow Sikkimese in terms of healing people and the fees prescribed for it. As the above figure clearly indicates that 40(100%) number of healers prefer a mode of payment which is voluntary and not compulsory. According to these healers they see their form of practice as a social service and do not want to degrade it by giving a price tag to it, which indeed is a pleasant thought.

Different forms of practice in healing people adopt different equipment. Likewise in order to bring to light the types of equipments used by Medico-Spiritual healers in Sikkim to heal people the following study was made by the researcher.

Table 6.13

In patients facility, Assistant used, any modern form of treatment equipment (Razor blade, scissors, X ray report, syringes, stethoscope) used

Facilities & Equipments	Yes	Percentage	No	Percentage
Facilities to admit patients	01	2.5%	39	97.5%
Facility of assistant	24	60%	16	40%
Use razor, scissors, X ray report, syringes, etc.	01	2.5%	39	97.5%

The above table indicates that only 1(2.5%) healer has the facility to admit patients and use some kinds of modern equipments to heal. In my personal interaction this healer expertises in bone setting and proudly admits to have healed above 2500 patients till date and is still going strong. The rest i.e. 39 (97.5%) do not have the facility to admit patients and also do not use any modern equipment as listed above to heal people. These healers believe different kinds of illness are treated with worship and devotion with animal sacrifice. The notion of sacred is prominent exorcism, a spiritual means of treating diseases. There is a prevailing supernatural basis in Medico-Spiritual healing practices in Sikkim, even where the chief means of treatment is herbal. They believe and claim that unless a medicine concoction has been empowered by special benediction, it will have little effect.

6. VIII. Situational analysis of Sikkim Government in protecting and preserving Medico-Spiritual healing practices

It is pivotal to study the role of the State Government played till date to preserve and protect the Medico-spiritual healing practices in Sikkim. The scenario about the role of the State Government has been of two types. A different version of the story by the Culture department has been told, where they admit of leaving no stone unturned in protecting and preserving the Medico-spiritual healers. But paradoxically in practice, after meeting and interviewing them, the story seems to have a different scenario. Having a certified Medico-spiritual healer always gives some sort of security to the patient and their family wherein these days everything under the sun is turning out to be counterfeit. Quack doctors are in

plethora in our country, and the researcher believes that by certifying the Medico-spiritual healers a check and balance can be maintained in identifying authentic healers in the State. In this case, the researcher made it a point to have an individual interaction with selected healers from all four districts of Sikkim, the results to which are here under.

Table 6.14

Number of Medico-spiritual healers who have been certified by the State Government, from the ones interviewed by the researcher

Types of Healers	Yes	Percentage	No	Percentage
Certified Healers	03	7.5%	37	92.5%
Uncertified Healers	37	92.5%	03	7.5%

In this context, the researcher made it a point to personally interview 40 Medico-spiritual healers, 10 from each districts. The data given above clearly provides that among 40 Medico-spiritual healers, only 3 (7.5%) has been certified by the State Government, leaving 37 (92.5%) to be uncertified. Here the researcher would suggest having at-least one annual State event, which would help identify and certify the Medico-spiritual healers, in order to preserve and protect their authenticity.

Since, from the forgoing pages, it is evident that these healers accept only voluntary mode of payment, thus financial grants to these healers by the State Government also plays a pivotal role in keeping intact such practices. The data provided below gives us a better understanding in this context.

Table 6.15

Number of Medico-spiritual healers, who have received financial grants from the State

Types of Healers	Yes	Percentage	No	Percentage
Receiving financial grants	03	7.5%	37	92.5%
Not receiving financial grants	37	92.5%	03	7.5%

Out of 40 Medico-spiritual healers, only 3 (7.5%) has been receiving financial grants and 37 (92.5%) have not till date received any form of financial grant from the State

Government. The ones not receiving financial grants from the State Government are in majority, collaterally overburdening them in terms of financial matter. As earlier stated; whatever these healers earn through their practice is voluntary payment, thus this way the healers believe that sustaining ones and their family life is very difficult, forcing many to put an end to such way of practice and to adopt some different means of livelihood.

The Culture Department, Government of Sikkim, states⁷⁰⁴ that an annual event is organised every year by the Government to felicitate the Medico-spiritual healers. Like-wise to see the applicability and awareness of such programme among the healers the researcher also interviewed them on this basis but paradoxically the result which came into light after the completion of story had a different story. For instance; one of the questions which the researcher put forward to the Medico-spiritual healers was if they were aware of any sought of a programme organised by the State Government to preserve and protect such practices. The table provided below gives us the answer for the same.

Table 6.16

Number of Medico-spiritual healers aware of different programmes organised by the State Government to preserve and protect such practices

Types of Healers	Number	Percentage
Healers who are aware	08	20%
Healers who are unaware	28	70%
Healers who are not sure	04	10%

On the basis of the data provided from the above table, it seems only 8 (20%) Medico-spiritual healers are aware of different initiatives taken by the Government to protect and preserve such practices within the State. Whereas 28 (70%) are unaware and 4 (10%) are not sure of such initiatives carried by the State Government.

After personally meeting the healers, the enthusiasm within the researcher grew more and as a result the researcher also wanted to know through the healers that if there was any sought of a body under the State Government to look after Medico-spiritual healers. This question too was put to the healers and the feedback which the researcher received was pretty

⁷⁰⁴ Information obtained from Mr. C.K. Sharma, (Under Secretary) Culture department, Government of Sikkim, on September 13th 2017.

weird, as none of the healers had heard or admitted of recognising any type of body within the state. The table below says it all.

Table 6.17

Number of Medico-spiritual healers who are aware of a body under the State Government to look after such practice

Types of Healers	Numbers	Percentage
Healers who are aware	Nil	Nil
Healers who are unaware	08	20%
Healers who are not sure	32	80%

The healers who's respond was affirmative was nil, 8 (20%) were not sure and the rest 32 (80%) were not sure whether such a body existed. The outcome of the above table also clearly indicates the amount of consciousness the healers have for themselves.

In the last two plus decades the State Government has been conferring many awards to the ones into Medico-spiritual healing practice, as a mark of recognition and encouragement, but during the researcher's interaction with the healers, it was found out that only 3(7.5%) healers had been conferred with such awards and the remaining 37 (92.5%) differ in their feedback.

6. IX. Existing scenario reflecting the level of Legal awareness among the healers

Knowledge among the Medico-spiritual healers in terms of Legal awareness relating to subjects like Indian Forest Act 1927, Wildlife (Protection) Act 1972, Patent (Amendment) Act 2005, Geographical Indications of Goods (Registration and Protection) Act 1999, Intellectual Property Rights, Traditional Knowledge Digital Library etc. are definitely the need of the hour. To test the healer's level of legal awareness the researcher through simple questionnaire interviewed them regarding the same. As a result, all healers who were interviewed by the researcher frankly admitted to not knowing the same. But the healers did admit that all Medico-spiritual healing practitioners should be legally protected through a National level Council or a Commission. The table below will give us a clearer understanding.

Table 6.18

Number of healers who feel Medico-Spiritual healing practice should be legally protected

Views of Healers	Number of healers	Percentage
Yes healers should be legally protected	40	100%
No healers should not be legally protected	Nil	Nil
Not sure	Nil	Nil

Although all healers were interviewed differently in different days, location and time but all had a similar feedback which was affirmative, when they were asked if all Medico-spiritual healers should be protected. So the need and feeling of being legally protected is a common among the healers.

The State of Sikkim despite being one of the smallest Indian States has many forms of dialects within the State. This makes communication very difficult, especially in some interior parts of Sikkim. Thus; even though if the State Government agrees to legally sensitize these healers, it would be an up-hill task, since in many places the language changes in every two to three kilometres. To minimise the burden on the State Government, the researcher had come-up with an idea of distributing handbooks containing all legalities regarding Medico-spiritual healing practice in different local languages. The table below provides the data.

Table 6.19

Number of healers who feel that a handbook should be introduced by the State Government containing legalities in different local languages for distribution to the Medico-spiritual healers

Views of Healers	Number of Healers	Percentage
Yes, it should be distributed	38	95%
No, it should not be distributed	Nil	Nil
Not sure	02	5%

From the above table it can be seen that 38(95%) healers are in favour of the idea of distributing handbooks to Medico-spiritual healers in different local languages, according to ones understanding. No healer is against the idea but 2 (5%) healers are not sure regarding it.

In common parlance and in legal parlance, all health care units, be it Allopathic, Homeopathic, traditional etc. should have legal guidelines, so that these health care practitioners are aware of their duties, along with their rights and privileges.

The relationship between law and medicine has been there since inception, and the check and balance needed between them has been maintained, as and when required especially during medical negligence. The people of Sikkim have strong faith on Medico-spiritual healers and their methods of healing, as their forefathers having been doing so. The patients do get well too but at times many patients do not get better or get worse and eventually die. In cases like these there is hardly any action of negligence taken against the healers, due to unavailability of laws which directly address negligence by such healers. In majority of cases many take it as natural death, unlike if the same act would be done by a medical practitioner, the case would come to court with negligence suit against the concerned authorities and the doctor. Under such circumstances, depending upon the outcome of the cases, the aggrieved victims are also entitled to compensation, if the doctors and the concerned authorities are found guilty of medical negligence, which is not the case in terms of Medico-spiritual healing practitioners. Likewise, when it comes to health care in Sikkim, especially by Medico-spiritual healers, the relationship between this form of health care and law seems to be missing, which would undoubtedly give rise to numerous negligence by the Medico-spiritual healers, which till date has not been reported and a tremendous rise of quack healers in the State. After a one on one interaction of the researcher with the healers, a need for a legal framework was felt to address these healers directly, which till date seems to be missing?

Legal awareness among the healers through any means seems to be the need of the hour, which the researcher feels should be addressed by the State Government at the earliest, otherwise proper disposal method of such practice would not be possible, as a big problem primarily, would be to differentiate between a genuine healer and a quack healer. Therefore, taking into consideration the aspect of legal awareness among the healers, an important and much need analysis can be drawn. The table referred below highlights on this aspect.

Table 6.20

Number of Medico-spiritual healers who consider it a hindrance in their practice for not being legally aware

Views of Healers	Number of Healers	Percentage
Who considers it a hindrance	31	77.5%
Who do not consider it a hindrance	08	20%
To some extent	01	2.5%

It is evident from the above table that despite healing a plethora of patients, 31(77.5%) Medico-spiritual healers consider a hindrance in their practice for not being legally aware of their rights and duties in terms of their health care practice. 8 (20%) healers do not consider it a setback and 1 (2.5%) feels it to some extent.

6. X. The Associations

Despite the officially recognised healers by the Government, there are many healers who are yet to be recognised, living in remote parts of Sikkim. This was witnessed and evident to the researcher during the empirical study.

The healers that are recognised by the State Government with the assistance of various ethnic community association of Sikkim are as follows-

- a) Renzyong Mutanchi Rong Tarjum
- b) Bhutia Kay Rab Yangay Tshogpo
- c) Akhil Sikkim Khas, Chettri Bahun Sangh
- d) Akhil Kirat Rai Sangh Sikkim
- e) Sukhim Yakthung Sapsok Songjumbho
- f) All Sikkim Gurung (Tamu) Buddhist Association
- g) All Sikkim Mangar/ Magar Association
- h) Sikkim Newar Guthi
- i) Sikkim Tamang Buddhist Association
- j) Denzong Sherpa Association
- k) Sikkim Sunuwar (Mukhia) Koinchbu
- l) Akhil Sikkim Bhujel Sangha

- m) All Sikkim Schedule Castes welfare Association
- n) Akhil Sikkim Thami Sangh⁷⁰⁵

To understand the role of these association in protecting and promoting Medico-spiritual healing practice in Sikkim, the researcher visited and interviewed the Presidents of 4 (four) aforementioned associations. The researcher had to face a great deal of difficulty, as the majority of Presidents of different aforementioned association were not cooperating. In many cases, mobile numbers of the associations President given to the researcher by the Culture department, Government of Sikkim, were in most cases not correct. In three cases though the mobile numbers were correct, their tenure as Presidents was over, they were not willing to respond. In one case, the association's President said that his tenure as President will be over next month, so the researcher should speak to the next President. Many associations president after the researcher's first call stopped receiving calls from the researcher there after and even blocked the researcher's mobile number. Despite such difficulties the researcher was able to convince and interview the Presidents of the following four associations

On 13/06/18, the researcher visited and interviewed Shri. Namdol Bhutia, President of Bhutia Kay Rab Yangay Tshogpo. According to him, the association was established in 1983, with an objective to preserve its language and culture. He admits that there are Medico-spiritual healers within his association but he is unaware of the exact figures. It was also learnt from him that no steps had been taken to safeguard and promote the healers legally despite wanting to, due to lack of laws, by-laws, guidelines, etc directly addressing issues relating to such healers. The primary activity of the Association is preservation of language and culture.

On 29/05/18, the researcher visited and interviewed Shri D.K.Gurung, President of All Sikkim Gurung (Tamu) Buddhist Association. He told the researcher that he had been recently appointed as the President of the Association and was quite unaware of many things. Thus he requested the researcher to call back after meeting the Association's former President. He noted the query made by the researcher and called the researcher to meet him on 30/06/18, exactly after one month. On this visit it was learnt that his association was established on 1993, with an objective to promote, preserve and protect the heritage of the Gurung community. 33 (thirty three) Medico-spiritual healers from his community has been

⁷⁰⁵*Ibid.*

representing his Association. The healers from this community have passed the knowledge of identifying certain medicinal plants to other members of the association, which has benefitted many. According to him, no rules and regulations pertaining to such practices are available and his association will try to formulate some norms to regulate such practices in future. This association has been working towards registering Medico-spiritual healers, so that they are recognised not just within the community but outside too. The association in future plans to document this age old knowledge and practice, so that contribution made by such healers in terms of health sector could be recognised. The association also plans to conduct workshops and organise conferences to make the younger generations aware of the value of such practices, having an approach of safeguarding it and making it an integral part of our identity.

On 20/06/18, the researcher visited and interviewed Shri N.P.Bhujel, President of Akhil Sikkim Bhujel Sanga. Mr. Bhujel too, like the earlier President requested the researcher to state his queries which he noted down, and promised to get back soon. Thereafter, despite several efforts there was no response from him, then on 15/06/18 he called the researcher to inform that he has sent the answer to the researcher through Whats app. On opening the Whatsapp page the researcher was surprised to see pictures of two computer screens. According to his computer screen shot, the Association was established on 1993, with an objective to unite all Bhujel's from Sikkim and to make them all aware about their tradition, language, script, culture etc. Though there are Medico-spiritual healers representing this association but he's unaware about the exact figures. He too feels that there should be laws and rules directly governing such healing practice. According to him, till date the members of the association themselves have been playing a pivotal role in promoting these healers by showing faith and visiting them during various illness.

On 05/05/18, the researcher visited and interviewed Shri. Mani Kumar Yonzon, president of Sikkim Tamang Buddhist Association. According to him this association was established on 1961, with an objective to promote, propagate and preserve customs, tradition and culture of the Tamang community. To him there were Medico-spiritual healers from his community representing his association but such records were not available with the association. In terms of promoting and safeguarding such healers in future, he said decision has not been taken so far.

In end view of the aforementioned it emerges that; the Associations that have been surveyed above are engaged in activities as follows.

- 1) Bhutia Kay Rab Yangay Tshogpo
Established in 1983.
Objective- Preservation of language and culture.
- 2) All Sikkim Gurung (Tamu) Buddhist Association
Established in 1993
Objective- Protect the heritage of Gurung community.
- 3) Akhil Sikkim Bhujel Sanga
Established in 1993
Objective- To unite all Bhujel from Sikkim and to make them all aware of their tradition, language, script and culture.
- 4) Sikkim Tamang Buddhist Association
Established in 1961
Objective- To promote, propagate, and preserve the customs, tradition and culture of Tamang community.

From the above interaction, it was evident that the associations were basically formed for the preservation and development of traditions, culture and language of the respective communities. Even though there were Medico-spiritual healers within each Association. The Associations was not overtly concerned with the traditional knowledge involved therein. Even though preservation of tradition and culture was their basic objectives, it was only on the producing of the researcher that the Presidents of the respective Associations applied their minds to the issues at hand.

The benefit of the growing number of Medico-Spiritual healers in Sikkim is that it is very inexpensive and patients from all over the State and from neighbouring States and Countries can avail the health care services. Apart from providing health care services these healers are expected to help the State Government to preserve and protect rare life saving medicinal plants, and help in boosting the States revenue by attracting patients from other States and Countries. Moreover their cooperation is expected to help the State to preserve and promote Indigenous Knowledge.

The problem of treatment through Medico-Spiritual healing in Sikkim is an extremely important issue because statutory laws in India do not directly address the key issues relating to protection and promotion of such practices. Spiritual healers have not been made a part of alternative medicine in India but it has a far reaching impact on the health as well as on the

environment. Therefore a proper legal frame work is necessary to preserve and protect such ancient practices and check quack healers. With this view the researcher has undertaken an empirical survey under this chapter to highlight on the current Medico-Spiritual healing practice in Sikkim.

6. XI. An Overview

From the above discussion it can be concluded that there exists a difference in opinions and views in terms of practice and perception among the Medico-spiritual healers in Sikkim. Although, the practices followed by the healers were different, taking into account their experience, education level, the mode through which they acquired, still much has to be done, instead of just randomly certifying them and providing them annual stipend to improve the condition for the proper management of such healing practices in the State. There is an urgent need to improve the condition of Medico-spiritual healers within the State in terms of legal development, by enacting laws, by-laws, guidelines etc. and by implementing the same through sensitization, introducing and distributing handbook containing guidelines for the healers in different local languages, which has been discussed in foregoing pages. Overall improvement of the condition of the healers in the State without addressing the pivotal need i.e. legal condition would be futile as nothing can be achieved and the whole Medico-spiritual healing practice scenario would remain unchanged.

Thus it's time that the important decision steps of the planners and policy makers in Sikkim in this regard, in the next few years should be documentation and codification of all the medicinal plants with full description of their traditional practices and Medico-spiritual healers across the Sikkim Himalaya.

Documentation of Medico-spiritual healing practices in the region along with the extent of their contribution in the health status, laying out their advantages and disadvantages also seems to be the need of the hour. Moreover it will not only check the economic exploitations of our biological resources and Indigenous knowledge bases but also offers us to claim our ownership of the natural economically important germplasms.

Action is needed at both the State and National level, in policy and legislation, to protect the Medico-spiritual healers. Some features that should be included in this legislation are as follows:

- i. Disclosure of origin of materials or knowledge used. For example, use of a medicinal or aromatic plant for healing.
- ii. Evidence of prior informed consent, before using the bio resources.
- iii. Evidence of the nature, mode and method of sharing benefits derived from using Indigenous knowledge.
- iv. Application for apprenticeship as a Medico-spiritual healer should be published in all major news papers.
- v. The penalty for infringement should be severe enough to be an effective deterrent.
- vi. Provisions to avoid quack Medico-spiritual healers.
- vii. Remedy available against Medico-spiritual healers in case of negligence.
- viii. Appropriate steps by the concerned authorities are needed to document and record this form of Medico-spiritual healing practice in Traditional Knowledge Digital Library.

Finally, what different steps could be adopted has been discussed by the researcher in this chapter, which would definitely be of immense help in improving the existing scenario both in terms of common and legal requirements relating to the Medico-spiritual healers and its beneficiaries in Sikkim.

CHAPTER VII

CONCLUSION AND SUGGESTIONS

The concern over Medico-spiritual healing practice has acquired enormous proportions today and is receiving attention all over, as it has connection with primary health care and the environment and there is a commitment to safeguard both from the physical and social impacts associated with it. It is peculiar that where on the one hand huge investment is made in constructing super speciality health care institutions, while on the other hand, slight thought is given in dealing with the Medico-spiritual healing practice prevalent in Sikkim. The information of ailments presumption and moor care system of the the world enables us to manage extra judiciously, more sympathetically while introducing original indigenous medicinal practice amid individuals who have identified Medico-spiritual healing practice previously. A lot has been whispered but little is prepared in the direction of safeguarding and promoting of Medico-spiritual healing practice in Sikkim.

The study of Medico-spiritual healing practice in Sikkim as a traditional management of human ailments indicates that the study area is rich in its medicinal plants composition and the associated indigenous knowledge possessed by the healers. The extensive uses of these medicinal plants specify that there is good harmony on the efficiency of their medicinal properties. The traditional medicinal floras are fundamental to the rural cultures. The healers are conversant about the plant life, their distribution, application and conservation. This is further promoted and safeguarded by cultural and spiritual practices.

Indigenous Knowledge has been exercised for ages by indigenous and restricted communities and has been the basis of their existence specially in the key sectors of health and food. Modern science has recently started looking at Indigenous Knowledge as a foundation of new ailment specially as the expenditure of putting new medicine on the marketplace is becoming very costly. The growing phenomenon of bio-piracy⁷⁰⁶ shows that somewhat hypocritical attitude of western science to Indigenous Knowledge. Scavenging it on the one hand and claiming patents on all kinds of products derived from Indigenous Knowledge (turmeric, neem, etc.) yet refusing to acknowledge its economic value and ownership.

⁷⁰⁶The practice of commercially exploiting naturally occurring biochemical exploiting naturally occurring biochemical or genetic material, especially by obtaining patents that restricts its future use, while failing to pay fair compensation to the community from which it originates.

Similarly, amidst the loud protests against ‘bio-piracy’ and ‘theft’ of India’s biodiversity and traditional knowledge by foreign nationals, the turmeric case was a landmark case. In it, this was the first time that a patent based on the traditional knowledge of a developing country was challenged successfully and United States Patent and Trademark Office revoked the patent. This eventually opened up the path to the creation of Traditional Knowledge Digital Library, Traditional Knowledge Resource Clarification, and finally inclusion of traditional knowledge in the International Patent Clarification System.

The efforts of the National Biodiversity Authority is further carried forward by the nationalized institution of Science communiqué and the division of Indian Systems of drug and Homeopathy of Ministry of Health and Family Welfare, which have come together to compile the Traditional Knowledge Digital Library. The Traditional Knowledge Digital Library is to document the Traditional Knowledge available in the public domain in a digitized format. Starting with the existing literature in Ayurveda, it would cover Unani, Siddha, Naturopathy, Homeopathy, folklore medicine and medico-spiritual healing too. Despite, having such a beautiful concept and a medium to preserve and protect such an age old practices, sadly, Medico-spiritual healing practice prevalent in Sikkim do not find a place in the Traditional Knowledge Digital Library. Hence their Intellectual Property Rights are not protected, which indeed causes a great threat to such age old practice in Sikkim.

Taking into consideration the seriousness of the problem persisted in management of Medico-spiritual healing practice throughout the country and to examine the efficacy, the researcher has undertaken the subject with objectives in hand which includes among others, detailed in-depth knowledge about the existing Medico-spiritual practice scenario prevailing in the Sikkim, its evolution by tracing out the past history, international instruments (general and specific) to deal with the same, general and particular laws of the country under which the subject could be properly dealt with, the existing scenario of Medico-spiritual practice in countries like Nepal, Indonesia, Ethiopia, Venezuela etc. On the basis of the available data, primary and secondary, the researcher had tried to reach to the findings with relevant remarks under this work. The Chapterisation of this research work is based on the hypothesis that natural resources such as herbs, medicinal plants and other flora and fauna are not adequately protected by the State and do not find a place in Traditional Knowledge Digital Library and no Intellectual Property Rights is protected. Further, Statutory laws available in India do not directly address the key issues relating to Medico-spiritual practices in Sikkim; hence a comprehensive legislation is needed to address such issue and there is an urgent need to take

steps to extend legal protection to them so that in terms of equity, efficiency, quantity and quality they would significantly improve.

Another object of this research work was to highlight the exercise prevailing in Sikkim in terms of Medico-spiritual healing practice, for which the researcher had undertaken to conduct field study as part of the empirical research and it has been found that the scenario in Sikkim in terms of this form of healing practice is more or less similar to that prevailing in the other States of the Country, which is neglected. Being the primary aim, the researcher had visited different Medico-spiritual healers in Sikkim, questioning and interviewing them. A glimpse of the chapter dealing with the empirical study shows a very grim picture of the Medico-spiritual healers in Sikkim. The study makes it evident that despite ages of traditional healing practice within the State, the concerned authorities have failed to find a place for such healing practice in Traditional Knowledge Digital Library. Moreover, despite having many associations representing various ethnic communities in Sikkim, lack of a legal framework to address issues pertaining to Medico-spiritual healing practice in the State is of a grave concern, for the protection of Intellectual Property Rights.

In this background, where the Medico-spiritual healing practice all over the country including Sikkim portray a similar picture, there is an urgent need to develop a legal framework within which progress can be made on a step by step basis which shall foster the philosophy that any small but steady step of improvement is better than being a mere spectator and doing nothing. The framework can be compared with a ladder where each stair is a detailed plan of action that aims to protect and promote Medico-spiritual healing practice and practitioners, the basis for moving up the next level, leading ultimately to the establishment of a sound traditional health care regime within the State. To achieve the same, strict implementation of the following must be ensured and then only Medico-spiritual healing practice in Sikkim would be practically and effectively protected.

7.1. RECOMMENDATIONS AND SUGGESTIONS

Therefore, the Medico-spiritual healing process should begin with the following:

1. The Policy guidelines

The policy has to provide a framework within which the Medico-spiritual healers are to be operated. If the framework is not well conceived, the tasks of those concerned with such healing practice and the beneficiaries would be very difficult. The policy makers

should also provide support and guidance to the concerned healers involved in such kind of traditional practice. Intellectual Property Rights guidelines are intended to provide an approach to such form of healing practice, as it would promote the healers, beneficiaries and the environment. To ensure effective management of traditional healing practice in Sikkim, Medico-spiritual healers should prepare a policy guideline with an assured implementation scheme. The policy must be compiled taking into consideration various policies, national and international relating to the management of Medico-spiritual healing practice. This depends, of course, on the role played by such traditional healing practice to promote primary health and its potentials. For the proper and effective implementation of the policy it is essential to establish a Management Cell, to monitor such healing practice whose task would be to prepare an integrated master plan regarding training and education, with more emphasis on its legalities.

2. Medico-spiritual healers management cell

A separate wing, called Medico-spiritual healers management cell can be set up in the State for each Districts, which would maintain an inventory of the speciality possessed by different healers. The management cell in each district should establish a management committee and appoint a management representative who is assisted by a team of adequate trained staff and will be directly responsible for maintaining all the requisites needed in that district, relating to such healing practice. The members of the Committee should include representatives from various Government departments including Health department, Culture department, and Ecclesiastical department. The management cell should frame a management strategy to ensure that all relevant regulatory requirements are fulfilled; including finding a place for such traditional healing practice in Traditional Knowledge Digital Library. The strategy should clearly outline management committee

- a) To the principle of responsible Medico-spiritual healing management;
- b) In terms of resource allocation;
- c) Highlight the accountabilities and responsibilities of management, healers and beneficiaries;
- d) Clearly define the various categories of treatment available, plainly articulating appropriate procedures and its healing potentials;
- e) Provide adequate and ongoing education

Strict compliance of the strategy by each and every personal involved in the management of Medico-spiritual healing practice in the State is the most essential function of the head of the management. The making of the policies and setting up of the Management Committee would be futile if the strategies are not successfully implemented.

3. Medico-spiritual healers management action plan

The representatives of different ethnic community associations of Sikkim should come together to develop a plan, an action plan, to give effect of its Medico-spiritual healers management policy. The members of the Medico-spiritual healer's management committee should begin by conducting a survey for understanding the entire systems in each district and should prepare a document in this connection. The document should cover the following aspects:

- a) Name and address of each healers;
- b) Type of speciality possessed by the healers;
- c) Application for apprenticeship as a Medico-spiritual healer should be published in all major news papers;
- d) Description of the existing methodology practiced under different forms of treatment, such as pre-treatment, post-treatment;
- e) One should cross check whether the procedure practiced are adequate as per standard practices;
- f) Remedies available to beneficiaries against Medico-spiritual healers in case of negligence.
- g) Existing methodology should be modified appropriately, consistent with the type, quantity and result of beneficiaries in each district;

The action plan should lay the standard healing procedures covering all components and modes of Medico-spiritual healing. The first step would be to identify the entire Medico-spiritual healers in Sikkim be it Government recognised or unrecognised and segregate them district wise. The management representative of each district should be properly educated and well acquainted with such healing practice. Each management representative of different districts should give points or rate the healers on the basis of beneficiaries' feedback which would help in identifying the potential of the healers. The person must have a vigilant eye over the entire process especially those involved in

identifying and segregating the healers on the basis of one's district because improper identifying and segregation would put the entire management process at jeopardy and all the efforts would go in vain, collaterally promoting quack Medico-spiritual healers within the State. Only trained and experience personnel's should be engaged in this process. Such personnel may be assisted by not so trained ones who not only would obtain the practical knowledge, in the course of time but would become trained and experienced and the risk factor in the primary stage due to quack Medico-spiritual healers would be completely reduced to nil.

The method of cross-checking after following each step in the entire system of Medico-spiritual healer's management is considered as a valuable step and if the same is implemented, the risk factor would be nil. The head of the management may be held liable to the higher authorities for not discharging the duty of cross checking on a regular basis. The existing methodology may vary from time to time depending upon the situation keeping in view the ultimate aim of safeguarding Medico-spiritual healing practice in Sikkim.

4. Ensuring infection control healing practices

Infection control refers to policies and procedures used to minimise the risk of spreading infections in the health care institutions. The control of infection in the health care institution is the responsibility of all health care personnel which includes the Medico-spiritual healers. Infections known as nosocomial infections require a hygienic and sanitised environment and maintenance of good practices and use of protective gear. Routine cleaning of every healer's healing place and the instruments used by them is absolutely essential. Infection control practices can be grouped in two categories:

- a) Standard precautions: To be applied to each and every patient at all times, regardless of his diagnosis or infectious status. This includes hand washing and antisepsis, use of appropriate personal protective equipment while handling organs, blood, body substance etc.
- b) Additional precautions: These are infection control precautions specific to modes of transmission such as airborne, droplet and contact and are applied in addition to standard precautions, wherever necessary.

Many a times it has been seen that despite the availability of the protective equipments, due to lack of education and training the Medico-spiritual healers are careless in wearing the same and as a consequence it results in spreading and contacting of infection to them, including other visiting patients, and all those who are directly or indirectly connected with the healers. To stop the same the head of management dealing with Medico-spiritual healing in each district should be careful and should see whether protective measures have been adopted and followed. In addition, such person should also sensitise the healers regarding the benefit of adopting such safety measures and see whether appropriate protective measures are being adopted by the healers while exposing themselves and their family members to certain types of life threatening communicable diseases.

5. Proper Training and Education

The purpose of training and education is to mitigate the risk of injury associated with the healing process. The concerned authorities should provide training to the following personnel:

- a) Medico-spiritual healers;
- b) Those as apprentice under the healers;
- c) Family members of the healers; and
- d) Personnel's frequently visiting the healers for maintain inventories.

Training of the personnel is an important aspect for a successful Medico-spiritual healers management programme. Training will provide orientation for new as well as existing Medico-spiritual healers with new responsibilities and help in avoiding negligence and any sought of mishap. It has been seen that till date segregation of healers has been done district wise by the Culture department, Government of Sikkim, randomly without proper mechanism. Training should focus on all principles relating to the management of Medico-spiritual healing. The training module may be divided into the following categories:

- a) Introduction to Medico-spiritual healing problem;
- b) Development of a strategic approach;
- c) Policy development and programme planning;
- d) Planning to Medico-spiritual healers level;

- e) Strategic planning to avoid quack healers.

Regular training of the personnel would increase awareness among them. The training should be made mandatory for all the Medico-spiritual healers. At the same time, Medico-spiritual healing related education materials both in print and electronic format like posters, books, leaflets, films, video slides is to be prepared. Audio-video screening sessions, field visits, situation analysis, problem solving, along with informal interactions should be incorporated in training programme.

It has been seen that many Medico-spiritual healers in Sikkim are involved in such traditional healing practice without proper training and without having adequate knowledge regarding the same. Thus, in-house training of all healers should be made mandatory in Sikkim, which would help in proper management of such healing practice. In addition to this, the Government through Culture department should annually conduct programmes to sensitise the Medico-spiritual healers regarding the dos and don'ts. The benefit of conducting and attending such training programme is that the Medico-spiritual healers in the State would be well versed with the methodology of such healing practice and its management.

6. Emphasis on waste generated through Medico-spiritual healing practice through audit

Audit of waste generated in Sikkim through Medico-spiritual healing practice is an important step in the management of Bio Medical Waste because the success of the entire traditional healers depends on it. The purpose of the waste audit is to determine current performance in terms of safety, efficiency, environmental impact assessment, costs and regulatory compliance. The following information should be collected and assessed in accordance with the guidelines:

- a) Types, volume and/ or weight, quantities and composition of waste generated;
- b) Hazard assessment of waste;
- c) Incidence and severity of waste handling injuries;
- d) Sources of solid and liquid waste;
- e) Collection and storage sites;
- f) Loading, transport and disposal methods;

- g) Costs of waste packaging, internal and external transport, treatment and disposal.

The policy guidelines should include in their respective policy the matter relating to the waste audit. It has been found that, despite waste both hazardous and non hazardous being generated through Medico-spiritual healing practice in Sikkim, the healers aren't aware of Bio Medical Waste and its vulnerable impact. However due to its non implementation to this kind of traditional healing practice the situation remains the same. Thus in order to achieve the goal of effective management of the Bio Medical Waste within Sikkim, the Concerned authorities in the State should also bring the Medico-spiritual healers within the ambit of Bio Medical Waste management rules and sensitise them regarding the same. The audit would help in identifying the areas where there is lack of proper management and after detecting it, appropriate corrective measures can be taken to remove the defects. Regular waste audit is an important aspect in the management of Bio Medical Waste identifying the most negligible area in Sikkim i.e. Medico-spiritual healers healing place and accordingly appropriate steps could be taken to overcome it. This would also help in identifying the persons for whose negligent and careless act have been making the situation worse and thereby appropriate steps can be taken against them by the concerned authorities of the government.

7. Documentation under Traditional Knowledge Digital Library

Interrelationship between nature and Sikkimese society, mainly ethnic/ indigenous communities and utilization of bio-resources in the healthcare sector has a rich legacy. Both codified system of traditional medicine (Ayurveda, Siddha and Amchi) and non-codified medicinal knowledge (Medico-spiritual healing practice or indigenous medicine without written text) have a pivotal role in the healthcare system and can act as leads for new biologically active molecules or therapy. Medico-spiritual healing practice prevalent in Sikkim sadly is in a verge of extinction, since firstly, it's voluntary and all the healers are engaged in different means of livelihood to meet their ends and secondly, the sons and daughters of these healers do not want to follow in their parents footsteps.

Till date, no form of Medico-spiritual healing practice exercised in Sikkim has been documented in Traditional Knowledge Digital Library. Thus the researcher feels that the Culture department, Government of Sikkim should take appropriate steps in recognising traditional healing practice in the State and documenting such modes of healing practice

in Traditional Knowledge Digital Library. This way the traditional healing practice along with its knowledge can be better safeguarded and Medico-spiritual healing practice prevalent in Sikkim will also gain national and international recognition. Traditional Knowledge Digital Library is an initiative by India to digitize and document knowledge available in public domain hence, if Sikkim's Medico-spiritual healing practice finds a place there it would facilitate systematic arrangement, dissemination and help in retrieval of information.

The other advantage would be, there has been international acceptance of Traditional Knowledge Digital Library, with the World Intellectual Property Organization constituting a group of members from America, China, Japan, Europe and India for discussing the findings of the Traditional Knowledge Digital Library task force. The outcome is to create a new sub-class for Traditional Knowledge Resource Classification with Ayurveda. India's Traditional Knowledge Digital Library database has also been selected and when completed, Traditional Knowledge Digital Library would help patent examiners easily retrieve traditional knowledge-related information, thus avoiding the possibility of granting patents to unoriginal inventions or cancellation of already granted patents.

8. Human Rights Protection of Medico-spiritual healers

Two protective paradigms have been employed to protect traditional knowledge using intellectual property tools. For example, countries like America, Japan etc. have shaped traditional knowledge folder to prove their traditional knowledge as preceding art in direct to put off perceived abuse such as bio-piracy. Although traditional knowledge databases may pre-empt some from securing rights over traditional knowledge, databases do disclose such traditional knowledge to the public. This becomes a problem since many communities would rather keep such traditional knowledge within their community. Many communities have their own traditional or customary laws that regulate the use of traditional knowledge that may differ substantially from their national systems or the international system of intellectual property rights. Disclosure may violate these customs.

Disclosure may also displace the problem. Disclosure is a tool to stop the granting of patents, or the revocation of granted patents. In intellectual property law, patents cannot be granted or can be invalidated if it can be shown that there exists "prior art" knowledge

in the public domain that is equivalent to the process or product for which a patent is sought. Disclosure puts the knowledge into public domain. It does not stop use of the traditional knowledge or associated resource.

The second protective paradigm (often called “positive protection”) seeks to secure protective legal rights over traditional knowledge. This is achieved by either using the existing laws or using legislative means to enact new sui generis laws. Some have argued that some countries, like the United States, may face constitutional problems with granting perpetual rights to these communities. They also raise utilitarian concerns with granting legal rights to traditional knowledge. For instance, some forms of traditional knowledge (Medico-spiritual healing practice) may be used to help others; and if exclusive rights were granted, some may go un-helped. Other concerns deal with the equitable sharing of benefits and resources.

Due to not being legally aware, many Medico-spiritual healers in Sikkim are uncomfortable with applying the concepts of intellectual property to their traditional knowledge healing systems, even for positive protection. Just as citizens of one country are bound to respect the intellectual property laws of foreign countries related to imported products through international agreements, indigenous and local communities should respect their traditional beliefs and Medico-spiritual healing knowledge beyond their territorial borders. Indigenous peoples and local communities in Sikkim have shared much of their knowledge and resources with their community. Many have traditions of sharing. Healers in general, have spiritual obligations to heal the sick and have shared their healing knowledge.

Forced disclosure of and access to traditional knowledge and resources for the benefit of mankind, against their customs, without consent or without reciprocity may be as unjust as privatization of their knowledge and resources in patents, trademarks, trade secret and copyrights. In Sikkim indigenous and local communities have strong traditions related to the spiritual, sacred, secret or guardianship nature of their knowledge and resources that may prohibit some sharing. Despite many indigenous and local communities within the State arguing that the reasons and mechanisms for protecting their knowledge do not lie within the logic, misappropriation and misuse of this knowledge may violate customary laws that are at the core of their collective and cultural identity. These beliefs are currently being recognized as a distinct human right within the

United Nations and thus the concerned authorities should sensitise the Medico-spiritual healers in Sikkim regarding the same.

9. Safeguarding Medicinal plants

One of areas to be addressed at the earliest in terms of Medico-spiritual healing practice in Sikkim is that Medicinal floras are under threat which is collaterally eroding indigenous knowledge attached with it. The main pressure to medicinal floras and the related knowledge in this particular study area are agriculture expansion and over grazing, the side effects of being an organic state. In addition, exploitation for fire wood, timber production, charcoal production and construction have major threatening impact on the biodiversity of medicinal vegetation. These have significantly affected the availability of medicinal plants and the indigenous knowledge of the healers within the State. It's evident that there is little tradition of bringing medicinal plants under cultivation. Medico-spiritual healers still depend to a greater degree on naturally budding species, as they consider these species in the wild vegetation are more potent in the prevention and treatment of different diseases and health problems.

The outcome of this study would have considerable contribution in efforts directed towards management and preservation of the residual resources of which there is still a substantial quantity left, provided that the essential strategies are put in safeguarding these medicinal plants. The researcher would like to recommend the following:

- a) Local communities in Sikkim should be concerned in safeguarding and managing plant resources and their indigenous knowledge in their locality;
- b) Identifying valuable medicinal flora and encouraging the local people to grow medicinal flora in home-gardens, mixing with other vegetation and at live fences of their neighbourhood and surroundings;
- c) The Medico-spiritual healers should be sensitised by the concerned authorities regarding harvesting medicinal plants for business or for household use, along with its threat, or awareness should be raised as to which sustainable harvesting be practiced.

7.2. RECOMMENDATIONS AND SUGGESTIONS BASED ON EMPIRICAL STUDY

Based on the empirical study the following suggestions are forwarded by the researcher:

- a) The concerned authorities should necessitate coordination of Medico-spiritual healers in Sikkim together by certification and organise events annually within the State to promote their indigenous knowledge;
- b) Establishment of Medico-spiritual healers association in every district should be made mandatory by the State Government;
- c) The Government should provide land to the healers for cultivating medicinal plants, and assist them financially with professional guidance to conserve the fast eroding medicinal flora in Sikkim;
- d) Analysis reveals that chief application of medicinal flora for healing of different diseases ranges from simple diseases to deadly diseases. These traditional therapy indeed, need to be established through technical investigations to categorize those that may provide alternatives for modern drugs;
- e) Workshops or sensitization programmes in local languages should be organised at-least annually to update the Medico-spiritual healers regarding various legalities relating to their practice covering subjects like:
 - i. Indian Forest Act, 1927;
 - ii. Wildlife (protection) Act, 1972;
 - iii. Patent (Amendments) Act, 2005;
 - iv. Bio Diversity Act, 2002;;
 - v. Bio Medical Waste;
 - vi. Medical Negligence;
 - vii. Medical termination of pregnancy 1971;
 - viii. Intellectual Property Law, etc.
- f) Action is needed both in terms of State and National level, in policy and legislation, to protect the Medico-spiritual healers and their indigenous knowledge. Once this is done the same can be distributed as handbooks to the healers in different local languages. This would help create a better mechanism for the proper functioning of Medico-spiritual healers in the State.

- g) Policy and legislations should also include provisions for healer's negligence. Stringent punishment should be there for quack healers and the penalty for infringement should be severe enough to be an effective deterrent.
- h) An upper age limit for healing people should be fixed by the concerned authorities and the ones retiring should be provided financial aid from the Government.
- i) Much traditional knowledge in India including that of Sikkim in relation to Medico-spiritual healing practice is not documented and is transmitted orally from generation to generation. This indigenous knowledge is of immense importance and the intellectual property rights needs to be protected in the context of globalisation and property rights through Traditional Knowledge Digital Library, particularly in the context of the standards and principle laid down;

Sikkim have their own structure healing principles, believes and medical ailments, though they have more or less resemblance with each other. The Sikkimese populace have a good belief on their own method of medication rather than other systems and western medication. Need of technical justification, reverse pharmacological and observational studies are essential for different beliefs and healing. The greatest challenge today is to protect and promote the Medico-spiritual healing practice in Sikkim. This knowledge of traditional healing practice requires recognition, respect and understanding in the light of contemporary medicines.

Today survival for Indigenous people in Sikkim has been more than a question of physical existence, however it is an issue of protecting, preserving and enhancing indigenous worldviews, knowledge systems, languages and environments. It is a matter of sustaining spiritual links with ecosystems and communities. Unfortunately, these ecosystems, knowledge and communities are often critically endangered.

All people must have equal dignity and essential worth. Their languages, heritages, and knowledge must be equally respected by public institutions and by all people. Their ecological order and intellectual integrity must be respected by the market economies. Equality and respect require cooperative frameworks, efforts, and innovations to protect Indigenous intellectual, cultural and healing policies. Medico-spiritual healers in Sikkim must be actively involved in the development of any new convention or law in

relation to traditional healing. They need representatives to discuss how to move toward developing these legal regimes. Their participation will develop new sensitivities to what is sacred, to what is capable of being shared and to what is fair compensation for the sharing of information among diverse people. Community based partnerships are also needed to resolve the nature of fair compensation and the ethics of healing. Public education is needed to develop an understanding of the new regimes and framework of Medico-spiritual healing.

The issues associated with protecting Medico-spiritual healing practice in Sikkim are deeply concerned with the structural inability of State and National law to give the Sikkimese people control of their healing practice, heritage and communities. The absence of legal protection of these healers and their beneficiaries in State and National level is disturbing. As Medico-spiritual healers, they have had more than their share of adversity and tragedy because of the denial of the manifestation of legal protection. The State and National law should embrace and celebrate this universal healing culture and intellectual diversity for the richness and depth this Medico-spiritual healing practice brings to life on earth from a small State of Sikkim.

The establishment of concrete legislations and appropriate databases of National recognition for addressing the burning concern of the Medico-spiritual healers in Sikkim for protection of their Traditional Knowledge Intellectual Property rights are some of the steps which are yet to be taken. The grant of Traditional Knowledge Digital Library registrations to Medico-spiritual healing practice prevalent in Sikkim, establishment of patent rights and benefit sharing models are stepping stones towards Traditional Knowledge protection. The modalities for protecting Medico-spiritual healing practice are still emerging and evolving and therefore the measures for doing so is at a flexible stage. How will Medico-spiritual healing practice in Sikkim under Indigenous Knowledge be appropriately preserved and protected and also respected is still to be seen. Therefore, the widely accepted old philosophy 'better late than never' can be appropriately applied in this connection considering its healing potential which is the need of the hour.

QUESTIONNAIRE

Medico-Spiritual Healers Name:

Mobile Number:

Name of Community:

Address:

District: East [] West [] North [] South []

Date: _____

Time: _____

Section A: Personal Information

Tick the appropriate answer:

1. Age:

[] 5-15 Years [] 16-30 Years [] 31 – 60 Years [] 60 Years above

2. Sex:

[] Male [] Female

3. Marital Status :

[] Married [] Unmarried [] Divorced [] Widowed

4. Number of Children:

[] One [] Two [] Three [] Four [] Five [] Six [] Seven [] Eight []
above Nine

5. Presently whom are you living with:

[] alone [] Family [] Children [] other healers [] Friends

6. Have you attended any formal schooling?

[] Yes [] No

7. What was the highest schooling grade that you completed?

[] None [] Till 5th standard [] Till 10th standard [] Till 12th standard []
Graduate

8. Are you engaged in any other occupation or type of work

[] Yes [] No

9. What other occupation are you involved in? []
- a. Government employee
 - b. None
 - c. Business
 - d. Farming
 - e. Religious
 - f. Construction
 - g. Artisan
 - h. Transport
 - i. Other(Specify_____)

10. Will you pass on this knowledge of practice to your children? []
- a. Yes
 - b. No
 - c. Depends upon their choice
 - d. No idea

Section B: Professional Information

11. How did you become a Medico-Spiritual healer? Was it by : []
- a. Apprentice-hood to your parents?
 - b. Apprentice-hood to another person?
 - c. Dreams/ spiritual revelations?
 - d. Any other trainer?
 - e. Other means (Specify : _____)

12. Since when did you start practicing as a Medico-Spiritual healer? []
- a. 5 Years
 - b. 10 Years
 - c. 15 Years
 - d. 20 Years
 - e. 30 Years
 - f. 30 plus years

13. What types of practice do you have? Do you have any speciality?
- Bonesetter []
 - Herbalist []
 - Spiritualist []
 - Traditional birth attendant []
 - Tooth puller []
 - Circumciser []
 - Other (Specify _____) []
 - No particular speciality []
14. On weekly basis how many new patients do you treat []
- 1 – 5
 - 6 – 10
 - 11 – 20
 - 21 – 30
 - Depends
15. Till date how many patients have you treated []
- None
 - 10 -20 approx
 - 20 - 40 approx
 - 40- 80 approx
 - 100 above
16. How effective is your treatment []
- Always effective
 - Sometimes effective
 - Rarely
 - Never
17. How much must your patient pay (in cash or in kind) for complete treatment []
- There is a fixed rate for every treatment
 - Payment is not compulsory its voluntary
 - its free
 - Other (Specify:_____)
18. When members of your family are sick, where are they treated? []
- By myself
 - By Other Medico Spiritual healers
 - Modern Hospitals
 - Depends
 - Others: (Specify:_____)

Section C: Facilities and Equipment

19. Where do you conduct your treatment session? []
- a. Your Home/Office
 - b. Your Office
 - c. Patient's Home
 - d. Your home and patient's home
 - e. Traditional selected areas
20. Do you admit in-patients? []
- a. Yes
 - b. No
21. Do you have beds for patients use? []
- a. Yes
 - b. No
 - c. N.A
22. Do the admitted patients have their own ward or share with household members? []
- a. Have their own ward
 - b. Share with household members
 - c. N.A
23. Do you have any assistants working with you as a Medico Spiritual healer or Practitioner? []
- a. Yes
 - b. No
24. How many assistants or trainees are working for you now? []
- a. None
 - b. One
 - c. Two
 - d. Three
 - e. Four
 - f. Five plus

25. While treating your patients, do you use any of the following?

- a. Razor blade? []
- b. Scissors? []
- c. Reusable Syringes? []
- d. Disposable Syringes? []
- e. Examination bed? []
- f. Stethoscope? []
- g. Aspirin? []
- h. Antibiotics? []
- i. Rubber gloves? []
- j. Vehicle? []
- k. N.A []

26. Do you sterilize your equipment? []

- a. Yes
- b. No
- c. N.A

27. How do you sterilize your equipment? []

- a. Boiling
- b. Flame
- c. Disinfectant
- d. Others (Specify: _____)
- e. N.A

Section D: Prescription and Referrals

28. Do you refer your patients to other places? []

- a. Yes
- b. No

29. Where do you refer them to? []

- a. Modern hospitals?
- b. Another Medico Spiritual healer?
- c. Holy places?
- d. Others (Specify: _____)

- 30.** What are the reasons for referring them? []
- a. I have no facilities?
 - b. Beyond my skill?
 - c. Patient not improving?
 - d. Pressure from patients relatives?
 - e. Others (Specify_____)

- 31.** Are there patients attending modern treatment in hospitals who come to you for consultation? []
- a. Yes
 - b. No

- 32.** What are the reasons you think such patients decide to consult you?
List three most important reasons 1- [], 2- [], 3- []

- a. Not cured
- b. Drugs unavailable in modern centre
- c. Price too expensive
- d. Distance to far
- e. Staff arrogant
- f. Neighbours/Friends suggestions
- g. Others (Specify:_____)

- 33.** Do you prescribe any medicine or potions? []
- a. Yes
 - b. No

- 34.** Are these medicines and potions prepared by you? []
- a. Yes
 - b. No
 - c. N.A

Section E: State Governments role in protecting and preserving such practices

- 35.** As a Medico Spiritual Practitioner, have you been certified by the Government of Sikkim? []
- a. Yes
 - b. No
- 36.** Have you received any annual grant from the State Government? []
- a. Yes
 - b. No
- 37.** Is there any sought of a programme organised by the State Government, to preserve and protect such practices? []
- a. Yes
 - b. No
 - c. Not sure
- 38.** Do you pay any royalty to the State Government for collection of herbs, used in such practices? []
- a. Yes
 - b. No
 - c. Not sure
- 39.** Is there a body under the State Government to look after such practitioners? []
- a. Yes
 - b. No
 - c. Not sure
- 40.** Have you received any award from the State Government as recognition for your practice? []
- a. Yes
 - b. No

Section F: Level of Legal awareness

- 41.** Have you heard about Intellectual Property Rights Law? []
- a. Yes
 - b. No

42. As a Medico Spiritual Healer, are you aware of your rights and duties under Intellectual Property Law? []
- Yes
 - No
 - Not sure
43. Do you know about Indigenous Knowledge? []
- Yes
 - No
44. Do you think Medico Spiritual Healing practice and practitioners should be legally protected? []
- Yes
 - No
 - Not Sure
45. Have you heard about Biological Diversity Act, 2002? []
- Yes
 - No
 - Not Sure
46. Have you heard about World Health Organization? []
- Yes
 - No
 - Not Sure
47. Do you think a handbook containing all legalities regarding Medico Spiritual Healing should be printed in different local languages and the same should be distributed to all healers by the State Government? []
- Yes
 - No
 - Not Sure
48. Has not being legally aware been some sought of hindrance to your practice as a Medico Spiritual healer. []
- Yes
 - No
 - Not at all
 - To some extent
 - Not Sure

Thank you for your valuable time and cooperation.

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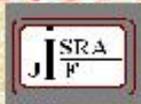
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**MEDICO-SPIRITUAL HEALING PRACTICES IN SIKKIM – AN
EMPIRICAL STUDY**

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Abstract

In human life, sound health is an important aspect without which an individual cannot lead a purposeful life. Absence of sound health hinders potential development of human beings, which in turn hampers the development of human society or community. So health is not a matter of individual issue rather a public concern. Even with the progress of science and technology, in this 21st century, Medico-spiritual healing practices in Sikkim play a pivotal role. Medico-spiritual healing practices have been used for centuries in Sikkim by Indigenous and local communities and have been the mainstay of their existence especially in the key sectors of healing and health. Western science has recently begun looking at this form of practice as a source of new drugs, especially since the cost of putting new drugs on the market is becoming very high. The study was conducted in whole of Sikkim and the data were collected by field survey and personal interviews of 40 Medico-spiritual healers. There is immense challenge to revitalize the traditional health and to promote Medico-spiritual healing practices in Sikkim, as the knowledge behind such practices requires recognition, respect and understanding in the light of modern medicines.

Keywords: Medico-spiritual healing practices, Sikkim.

Sikkim, known as the 22nd State of the Indian Union is located in the southern mountain ranges of the Eastern Himalayas between Northern Latitudes 27°4' 44" to 28° 7' 45 N latitudes" and 88° 45" to 88° 35' 15" E Longitudes. It is spread below the world's third highest mountain range, Khangchendzonga (8585m), revered by the Sikkimese as their protective deity. Sikkim is separated by the Singali la range from Nepal in the west, Cho la range from Tibet in the northeast, and the kingdom of Bhutan in the southeast. The Rangit and Rangpo rivers form the borders with the Indian State of West Bengal in the south.¹ The geographical area of the State is 7096 sq. km. measuring approximately 113 km from North to South and 64 km from East to West. Most of Sikkim is mountainous with altitudes varying between 300 metres above sea level to over 8500 metres at Khangchendzonga peak.²

¹ H.H. Risley, Gazetteer of Sikkim 1 (B.R. Publishing corporation, Delhi, Second reprint 2005).

² *Ibid.*

With the increasing number of population, the need arises for the Medico-Spiritual healers to provide health care to the patients as a result of which there has been a tremendous growth of such healers throughout the State. The scenario of Sikkim in terms of health care is slightly different from other parts of the country, since the majority of the population prefers traditional mode of healing.

Methodology

The study is mainly focused on traditional health care practices and prospects of Medico-spiritual healers in the three ethnic communities (Bhutia, Lepcha and Nepali) in Sikkim. The study area is whole Sikkim in four districts. Extensive literature survey was carried out for compilation of various health care practices within the three communities. Different trips were arranged to different places within the State to identify the Medico-spiritual healers. The Culture Department, Government of Sikkim helped to identify the certified healers within the State. The study was aimed to assess the Medico-Spiritual healing practice in the four districts of Sikkim. To achieve the goal, the researcher had prepared questionnaires touching different aspects relating to the medico-Spiritual healers in Sikkim. All the questions were brought under different specific heads dealing with the healer's age, sex, educational background, basis of knowledge, forms of practice; number of patients treated on weekly basis has been studied in 40 Medico-spiritual healers (both recognised and unrecognised), 10 from each districts of Sikkim, which form the data for the study, by analysing of which the researcher would be in a position to highlight about the practical scenario of the Medico-Spiritual healers of Sikkim. The data provided below gives us a clearer picture in understanding these healers better.

Results & Discussion

In Sikkim Medico-Spiritual healers are officially recognised by the State Government and are provided annual financial aid through Culture department, Government of Sikkim, so that such practice can be brought back from the path of extinction. As per the data collected from Culture department, Government of Sikkim, there are 891 officially recognised Medico-Spiritual healers in Sikkim till 2017, who are provided with annual financial grants.

Table 1
Age & sex distribution of forty Medico-Spiritual healers of Sikkim

Age in years	Male	Female	Total	Percentage
05 to 15	00	00	00	00%
16 to 30	11	00	11	27.5%
31 to 60	11	04	15	37.5%
Above 60	14	00	14	35%
Total	36	04	40	

From the above table it is evident that there are 37.5% of Medico-Spiritual healers in between the age group of 31 to 60 years, which is the highest and consists of four female healers too. 35% of healers are above the age group of 60 and paradoxically, healers in between the age group of 05 to 15 years are nil. It indeed is a matter of great concern, as this way Medico-Spiritual healer and its practices are in a

of the hour. Moreover it will not only check the economic exploitations of our biological resources and Indigenous knowledge bases but also offers us to claim our ownership of the natural economically important germplasms.

Action is needed at both the State and National level, in policy and legislation, to protect Indigenous knowledge. Some features that should be included in this legislation are as follows:

- i. Disclosure of origin of materials or knowledge used. For example, use of a medicinal or aromatic plant for healing.
- ii. Evidence of prior informed consent, before using the bio resources.
- iii. Evidence of the nature, mode and method of sharing benefits derived from using Indigenous knowledge.
- iv. Application for use of Indigenous knowledge should be published in all major newspapers.
- v. The penalty for infringement should be severe enough to be an effective deterrent.

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