

CHAPTER-II
THE *JARAWA* (*ANG*)

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2.1 Concept of *Ang*, *Enen* and *Yono*

Only in recent years we came to know from the *Jarawa* that they call themselves as *Ang*. It has been argued that Aka-Bea, one of the Great Andamanese tribes used to refer the *Ang* as '*Jarawa*'. As during early period of British colonisation the Great Andamanese tribes used to be the jungle guide for different administrators and surveyors who picked-up the term *Jarawa* to refer this particular group of Jungle dwellers of South Andaman and Rutland Island. So, in Great Andamanese dialect, the *Negrito* inhabitants other than them, were referred as *Jarawa*.

So, till recently it was not known to us that by what term *Jarawa* used to refer themselves. During the present study also it has been found that *Jarawa* refer themselves as '*Ang*' which means people. This term is uniform to all the territorial groups of *Jarawa*. Simultaneously in *Jarawa* dialect, there are different terms to refer different groups of people. All the non-*Jarawa Negrito* people of Andaman Islands are referred as '*Yono*'. Hence, it has been found during the fieldwork that *Jarawa* recognised the photographs of Great Andamanese, Onge and Sentinelese as '*Yono*'. All the outsider non-Negrito people are collectively referred as '*Enen*'. Though the term *Enen* is a generic term to refer all the non-Negrito outsiders, there are separate terms to refer the communities like Ranchi (Oraon, Munda, Kharia), Burmese etc. Understanding about these terms may help us to recognise the emic views of the community.

During the present study voice of few *Jarawas* were recorded during pronunciation of the name of their own community i.e. '*Ang*'. It is noteworthy to mention that their pronunciation of '*Ang*' often heard like '*Ong*' which is quite close to the pronunciation '*Onge*' (the

‘Negrito’ inhabitant of Little Andaman). So, Brown (1922) was rightly assumed that ‘The natives of Little Andaman refer to themselves as Onge (men). It is probable that the so-called *Jarawa* of the South Andaman have the same word.’

2.2 Social Organisation

The basic unit of social organisation among most of the hunter-gatherer communities is ‘band’ which often referred as a small-scale nomadic group of ten to forty people related by kinship. The *Jarawa* is an endogamous community and they maintain their identity through their unique dialect, socio-cultural traits, belief, customs, territorial affinity and subsistence activity etc. They never violated their rules of endogamy in any event of marriages and till date they have maintained their purity of blood. Unlike other many hunter-gatherers of the world they still reveal the earliest form of human society. They live in local territorial groups or bands without any prominent central leadership. Leadership is quite informal among them. They show respectful attitude towards the elderly persons and decisions are often taken unanimously with the consent of other members. Being a nomadic hunter-gatherer, the social organisation of *Jarawa* is primarily regulated through their nomadism, subsistence and resource utilisation. The society is regulated by different prohibitions and prescriptions. Every grown-up *Jarawa* is a self-sustained and individual entity. They believe in freedom of life and nothing is forcefully imposed on any individuals. After individuals, the family is the fundamental unit of *Jarawa* society followed by ‘band’, ‘territorial groups’ and ‘*Jarawa* community’ as a whole.

2.2.1 Family

Likewise, many other societies, family is the fundamental unit or basic structural and functional unit of the *Jarawa* society. Family is generally consisting of husband, wife and their minor Children. *Jarawa* children (both boys and girls) after attaining the age

of eight to ten, they started to stay separately from their parents. They started to live in separated dormitories or groups. The boys group is called *lepale* and the girls group is known as *abile*. *Lepale* is composed of pre-adolescent, adolescent boys and young unmarried boys. Widower may also join the *lepale* till further remarriage. Similarly, the girls group (*abile*) is constituted with pre-adolescent, adolescent and young unmarried girls and widows. The system of *lepale* and *abile* is the *Jarawa* custom of socialising their children and youths. They also learn their foraging way of subsistence through this system. But at the same time they never cut off their linkages with their parents and other relatives. As we know that *Jarawa* refer their huts or camp sites as '*chadda*'. On the basis of size and number of dwellers, there are three different kinds of *chaddas* namely community huts (*chadda thuma*) or permanent huts, semi-permanent huts and temporary huts. Altogether ten to fifteen families may stay in a community hut. Space and place allotted to each families, *lepale* and *abile* are fixed and demarcated. There are separate hearths or fireplaces for every families and groups. Apart from the family hearths, there are common hearths at the centre of the community huts. In a vacant community hut, number of inhabited families may be counted by locating the hearths and demarcated areas within the hut. Monogamy is the prevalent in *Jarawa* marital system and predominantly their families are of nuclear type. Generally, they establish a separate family immediately after the marriage. All the families staying in a *chadda* are invariably related by kinship which may be either affinal or consanguineal type. Often these families move together during their nomadic mode of subsistence.

2.2.2 Band

Consequent to the family, the next social unit among the *Jarawa* is the band or local groups. One of the basic unit of social organisation among most of the hunting and gathering communities is the band which may define as a small-scale nomadic group

of fifteen to fifty people related by kinship. Throughout the world, the band societies share a number of common features. Firstly, they are relatively egalitarian and leadership is less formal. Mobility is another prime characteristic of band societies. People tend to move their settlements frequently or several times a year. This movement is basically related with resource utilisation or in search of food. Thirdly, people of all band-organized communities exhibit a pattern of concentration and dispersion or fusion and fission. Instead of living in uniformly sized groupings throughout the year, band societies tend to spend part of the year dispersed into small foraging groups and another part of the year aggregate into much larger groups. Territorial affinity is another characteristic feature of the band societies. It is further characterized by rules of reciprocity.

In case of *Jarawa* the bands or local groups are also constituted with fifteen to fifty individuals or more. It also includes nuclear families, *lepale* (boy's groups) and *abile* (girl's groups). Being a nomadic hunter-gatherer tribe of dense tropical rain forests of Andaman Islands, fusion and fission within the band is quite common. Generally, we may find bands are divided into smaller groups in dry season and aggregated band with large number of individuals are commonly found during the rainy season. This concentration and dispersion of bands are primarily dependent on availability and accessibility of food resources. It may happen that different families of a band or local group may divide themselves in smaller groups and proceed in different directions. Then they may reassemble at somewhere different place at later. But undoubtedly, there is a systematic and calendric pattern in this seasonal movement. Each families and bands have their systematic plan of resource utilisation and seasonal movements. It has also been found that most of the bands or local groups are composed of two to five kin groups who are related by either consanguineally or affinally.

2.2.3 Territorial Groups

The next larger social unit among the *Jarawa* is the 'territorial groups'. The territorial groups are generally composed of several bands or local groups. As perceived by the *Jarawa* and in accordance with their notional territorial classification the entire *Jarawa* community may be divided into three notional territorial groups namely *Boib*, *Thidong* and *Tanmad*. So, the entire 1040 square kilometre area of *Jarawa* Reserve of South and Middle Andaman Islands is notionally classified into three territorial groups i.e *Boiab* (Tirur area), *Thidong* (Middle Strait area) and *Tanmad* (Kadamtala area). Territories of the *Boiab* (Tirur area) and *Thidong* (Middle Strait area) are contiguous to each other while the third territory, i.e., *Tanmad* is situated on a separate Island. Movement of different groups of the *Jarawa* are territory specific in terms of their hunting and gathering activities. But this rule is not applicable for social purposes like marriage alliances and visit to the *chaddas* of relatives. It clearly indicates that each group has access only to its own territorial resources while inter-territorial sharing of resources is strictly prohibited for each of the three territorial groups. It also reveals a prominent understanding of possession of resources of each territory at the territorial group level. Inter-group marital and reciprocal relationship is quite strong and well established among different territorial groups. Members of different territorial groups frequently visit their relatives and in-laws as a guest. Bartering exchanges do take place among the *Jarawa* different territorial groups. Being divided into different territorial groups also secure their primary rights of resource utilisation in a particular territory. Without the consent of members of respective territorial groups, they never violate this territorial regulation of resource utilisation.

2.3 Subsistence Economy

Subsistence economy is often described as a non-monetary economic system which mostly dependent on natural resources to provide basic needs of a community through hunting, gathering, fishing and subsistence agriculture. The term 'Subsistence' also indicates self-sufficiency which means supporting oneself at a minimum level. In a subsistence economy surplus is minimum. *Jarawa* is an example of classic hunter-gatherer community and their livelihood is based on hunting, gathering, fishing and honey collection. In *Jarawa* system of subsistence, hunting is primarily pursued by male folk while gathering is dominated by the female members. Simultaneous pursuance of hunting and gathering ensure the food security of the community in case any scarcity. The *Jarawa* practice hunting, gathering and fishing with very simple tools and technology. There are only few finger counted implements used by the *Jarawa* for their subsistence. Further, the implements for hunting, gathering and fishing may also be categorised as traditional implements and non-traditional (often improvised) implements. Traditional implements include bows (*aav*), arrows (*patho*), traditional knife (*tohad*), small fishing hand nets (*batho*) etc. Often the non-traditional implements are improvised in accordance with its function and adaptability. Non-traditional implements include hunting trap, machete, fishing hook and line, iron hook etc. Similarly, traditional gathering implements includes cane basket (*taika*), wooden bucket (*uhu*), adze etc. Moreover, gathering also require some non-traditional items like machete, axe, digging rod (*satang*), plastic bucket etc. So, the subsistence of *Jarawa* is primarily based on hunting, gathering and fishing which require a detailed discussion with reference to their territory and resources.

2.3.1 Hunting

In spite of thick coverage of tropical rain forest, the *Jarawa* Reserve has lack of faunal diversity. There are only few animals to be hunted by them. The most

preferable and primary game animal is wild pig (*wowo*) followed by monitor lizard (*urug*). Apart for *wowo* and *urug* *Jarawa* also hunt sea turtle which is quite seasonal and frequently cited during winter season (November to February). Though the wild pig and monitor lizard is available throughout the year but there is a seasonal variation in terms of frequency of availability and accessibility. They have different kind of arrows (*patho*) to hunt different kind of animals. Even they used to assign different names to those arrows. Making of all the above mentioned traditional hunting, gathering and fishing implements are their regular activity. One can assume *Jarawa* as an artisan tribe while preparing those implements. Notably, there is prominent division of labour based on gender. Preparing of bow, arrow, traditional knife, wooden bucket, chest guard and any other iron related works are primarily pursued by male members. While the preparing of cane basket, fishing hand net, bark fibre rope etc. are female dominated job. Broadly speaking preparing of hunting related implements are male dominated work and gathering related implements (except wooden backed) are dominated by the female folk. Nothing is absolute rigid in the hunter-gatherer society. Always there are some exceptions based on functionality. Females were of often cited doing decorative and binding work associated with wooden bucket while males were occasionally observed doing weaving work of the fishing hand net. Except iron pieces, all the raw materials are collected by the *Jarawa* from their natural resources within their territory.

The most preferable and primary game animal is wild pig (*wowo*). Hunting of wild pig is often an individual or group endeavour performed by the male members only. Hunting is considered as a hazardous and risky job and it also requires long travel while chasing the hunt. So, hunting may keep away the hunters from their *chaddas* for a longer duration which may be from morning to afternoon or even up to evening.

Hence, it is often not feasible for the *Jarawa* women and mothers for such a precarious job which may detach them from their children for longer duration. The traditional wisdom of *Jarawa* assists them to find out the wild pig in the dense vast tropical rainforest. They are also well versed with the hotspots of the wild pigs. Wild pigs are often cited in the marshy land of the interior dense forest. With their traditional wisdom *Jarawa* can easily identify the foot trails of the wild pigs. Hunting expeditions usually start in the morning. A fully equipped individual hunter or the group including adolescent or young boys move into the jungle to locate the pigs, following the foot prints, smell and other remnants like faeces, food particles etc. They proceed and approach carefully as the long tusked boar may become ferocious. After citing the hunt, they prefer to reach at the proximity. During group hunting they communicate each other by different signs through gestures. The group members try to take position from different angles. Usually, they shoot an arrow from a short distance about 10-20 metres. After contact with the outsiders, now a day, they often take support of dogs to surround the pigs from different sites so that hunting operation becomes easy. As a natural instinct of the dog, they try to trap the pig in the long extended buttress roots of gigantic trees. In group hunting the man whose arrow strikes the pig first is regarded as principal hunter. After killing the pig, the main hunter or any senior member of the team cut open the abdomen of the pig with traditional knife (*tohad*) and removes the inedible parts like intestine, stomach and other different portions of alimentary system and lungs etc. The delicious parts like liver and heart are taken out and again kept in the hollow abdomen after cleaning. After that they fill the hollow abdomen of that pig with the tender leaves of *Liquala peltata* (locally known as *Selai patti*). Then the pig is entirely fastened with bark threads for carrying it to the settlement. They have their own system of sharing mechanism and division of labour for processing and consuming of hunted animals.

After consuming the pig, they have a tradition of keeping the mandible and skull of that pig's skull as a memento or hunter's trophy. They decorate the mandible and skull by tiding it with cane thread and hang it near the ceiling of the *chadda* at their dwelling place in a decorative manner. The accumulation of round the year collection of these pig's skull indicates the superiority of that hunter. This tradition also has some animistic value and super natural believe of prosperity and expectation of good hunt for the future.

Apart from wild pig, *Jarawa* do hunt monitor lizard and sea turtle. No separate hunting expeditions are set out for these. Once cited monitor lizards are often hunted by chasing or by shooting arrow or striking by knife (*tohad* or machete). Consuming meat of monitor lizard is tabooed to the pregnant women. Similarly, once cited the sea turtles in the shallow lagoons they often hunt it with the help of detachable arrow. Egg laying sea turtles are hunted in the sandy sea shore. Both the sea turtle and monitor lizards are consumed by after boiling or roasting.

2.3.2 Gathering

In *Jarawa* subsistence gathering is often associated with the women folk. Generally, gathering includes collections of wild fruits, tubers, turtle eggs, grub larvae, different shells and molluscs etc. Though honey collection is often considered as a part of gathering, but considering its importance, extends and utility for the *Jarawa* society, honey collection has been considered as a separate mode of subsistence. So, *Jarawa* subsistence related to honey collection with reference to the territory, resources, traditional knowledge has also been discussed separately. Gathering is a very important component of *Jarawa* subsistence and livelihood. It often ensures the food security among them. In case of any failure in hunting by men, gathering and fishing etc. by the women helps the community to survive. So, to assure their food security,

Jarawa never depends on a single means of livelihood or subsistence. Depending on seasonal variations, availability and accessibility of resources hunting, gathering and fishing are pursued simultaneously. Gathering is also performed individually or in groups. As the items of gathering are subjected to the seasonal variation, availability and accessibility *Jarawa* also shift their camp sites (*chadda*) accordingly. While visiting neighbouring non-*Jarawa* villages for different bartering urges, they also pluck different fruits and edible items from there. *Jarawa* also consider this collection as a part of gathering. The groups may compose of females of different age groups or adolescent females etc. Generally, females do not spend much time in gathering pursuance. They usually spent two to four hours either in forest or sea shore or creeks to collect the gathering items like wild tubers, fruits, berries, shells and molluscs, turtle eggs, grub larvae etc.

2.3.2.1 Collection of tuber

In *Jarawa* cognition there are four different varieties of wild tubers available in the forest. The varieties of wild tubers are *cheo*, *chigi*, *nadohata* and *bugi*. *Cheo* and *chigi* are the most preferred and scantily available in the jungle. This classification is primarily based on typology and preference. The wild tubers *nadohata* and *bugi* are the least preferred and more abundantly available. The least preferred wild tubers like *nadohata* and *bugi* may have high content of raphides which leads to itching in the mouth and throat. Maturity and availability of wild tubers are subjected to seasonal variations. Generally, it is collected during dry season October-November to March-April. Consumption of wild tubers meets their carbohydrate needs. The tubers are collected with the help of digging rod, adze and machete. In order to ensure the sustainability, they never destroy the entire plants while collection of tubers.

During digging up the tubers with the implements, the roots at base of the tuber are generally left which consequently grow as new plants with tubers.

In *Tanmad* area (Kadamtala) wild tubers are abundantly available in the deciduous forests located nearby the non-*Jarawa* villages. So, *Jarawa* are more frequently cited during the dry season (season of collecting wild tubers). They even set-up temporary *chaddas* (camp site) at the fringe areas. Incidences of bartering contacts are also raised many folds during this period. They even collect areca nuts, coconuts, banana, guava, mango etc. from the plantation areas of non-*Jarawa* villages.

2.3.2.2 Collection of grub larvae

The grub larvae are one of the most preferred and delicious food items for *Jarawa*. It is frequently found during the rainy season (May to October) and collected from the rotten tree trunks. As perceived the *Jarawa*, there are two types of grub larvae namely *pathen* and *ono*. This typology is primarily based on colour and appearance. *Pathen* is whitish in colour and *ono* is blackish in appearance. They preferably consume both *pathen* and *ono* either raw (live) or after slightly roasting it. *Jarawa* are so fond of these *pathen* and *ono* that they sometimes cut full grown trees for allowing the grub larvae to grow. Two examples may be cited in this regard. Firstly, while collecting wild jack fruits (*aab*), often they cut and fell down fully grown trees along with the fruits. Then they collect the *aab* for further processing and consumption. But they left the huge tree trunks to be rotten during rainy season. Consequently, *pathen* and *ono* are generated there. Secondly, it has also been observed that during the set-up of new camp site (*chadda*), some trees are cut and felled. These

felling of trees during collection of wild jack fruit and setting up of new camp sites serves some purposes like (1) it allows the sunlight to reach the *chadda*, (2) the felled tree trunks soon started to decompose under the hot and humid condition of the tropical rain forest which facilitates the germination and growth of grub larvae, (3) felling of large trees creates a hole in the forest canopy which accelerate the growth of small saplings to regenerate the biodiversity.

2.3.2.3 Collection of wild fruits

Different seasonal fruits and berries are part of *Jarawa* diet. *Jarawa* consume different varieties of fruits and seeds. Most of these seasonal fruits are available during dry seasons to early rainy season (March to June). Collections of these different fruits are mainly performed by the female members of the society. Most of the small fruits are consumed on the spot on their way by both male and female. These wild fruits include cane fruits (*panato*) different citrus fruits (*loge, gini, homa* etc), wild banana, wild mango (*Mangifera andamanica*), wild jack fruit (*aab*) cycus fruits (*amin*), pandanus fruit, Nipa fruit (*thuiya*), Garcinia fruit (*wakkam*) etc. They also habituated and fond of different non-traditional fruits like coconut, banana, guava, jack fruit, mango (*Mangifera indica*) etc. These exotic fruits are collected during their visit to the non-*Jarawa* neighbouring villages.

2.3.2.4 Gathering from sea shore

Gathering of different edible marine resources are often found around the shallow lagoons, sandy sea shores and creek areas. Gathering of sea resources includes turtle eggs, different mollusc like trochus, turbo, giant clams, conchs,

bivelbs, cowries etc. Likewise, other different gathering items, gathering of marine resources are also dominated by female members. Male members and couples were also observed to collect these edible marine resources while proceeding for marine fishing. These items are accumulated in the cane basket or hand net for carrying towards the *chadda*. Most of the marine gatherings are consumed after boiling.

2.3.3 Fishing

Though women may not take part in hunting but they do fishing of variety of fishes in the shallow lagoons, creeks and streams. *Napo* is the blanket term to refer fish in *Jarawa* dialect. They also have separate names for different types of fishes. Though there is a gender division based on fishing methods and fishing implements, fishing is equally pursued by both male and female members. The fishing arrows of *Jarawa* are different from the hunting arrows. It's really amazing to observe *Jarawa* while shooting arrow to the moving fish and how they overcome the effect of refraction of light which do not allow the human eyes to identify the exact location of any underwater objects. *Jarawa* men do fishing with bow and some special type of pointed wooden arrow (*Tochau-thad*) or needle like iron arrow pointed arrow (*tochau-thom*). Fishing activity is generally performed during low tide. The women use hand net (*batho*) to catch fish from shallow waters, creeks and streams. They used to collect both marine and sweet water fishes. Usually women do fishing in groups including the adolescent and young. Fishing by couple together is also a common practice. Principal implement of women fishing is hand net (*batho*). They use hand net for trapping fishes, crabs etc. The group fishing has an advantage over individual fishing. Compared to the group fishing, success rate is less in the individual fishing. Group fishing is generally carried out in blockaded channels, creeks and marshy areas during the low tide. During the group fishing, the females form a semi-circle and drive the fish towards a corner. Once the fishes have been

cornered, they put the hand net at the escape routes. *Jarawa* consume fish mostly by boiling or roasting.

2.3.4 Honey collection

Though honey collection is often considered as a part of gathering mechanism but considering its importance, extends and utility for the *Jarawa* society, honey collection has been considered as a separate mode of subsistence. So, subsistence based on honey collection was taken a case study to understand dynamics of forest resource utilisation by the *Jarawa* in their territory i.e. *Jarawa* Tribal Reserve. *Jarawa* subsistence related to honey collection with reference to the territory, resources, traditional knowledge have also been discussed accordingly. Throughout the world honey is symbolically associated with different aspects of societies and cultures. Honey is an inseparable component of *Jarawa* society and culture. It contributes as a major food item for the *Jarawa* for about half of the calendric year when other foremost food resources are of scanty. Moreover, honey-*Jarawa* relationship may be observed from their every activates starting from searching of bee-hive to marking it, collection procedure to consumption pattern, storing procedure to use of by-products, social dynamics to medicinal use etc. Use of different herbs as bee repellent during honey collection and dynamicity of its application is also of immense importance with regards to their territory and resources. In *Jarawa* cultures, honey is not only associated with food but it also extends far beyond regarding its use as a foodstuff. In songs, myth, aesthetics, world view, group dynamics folk belief honey is frequently associated.

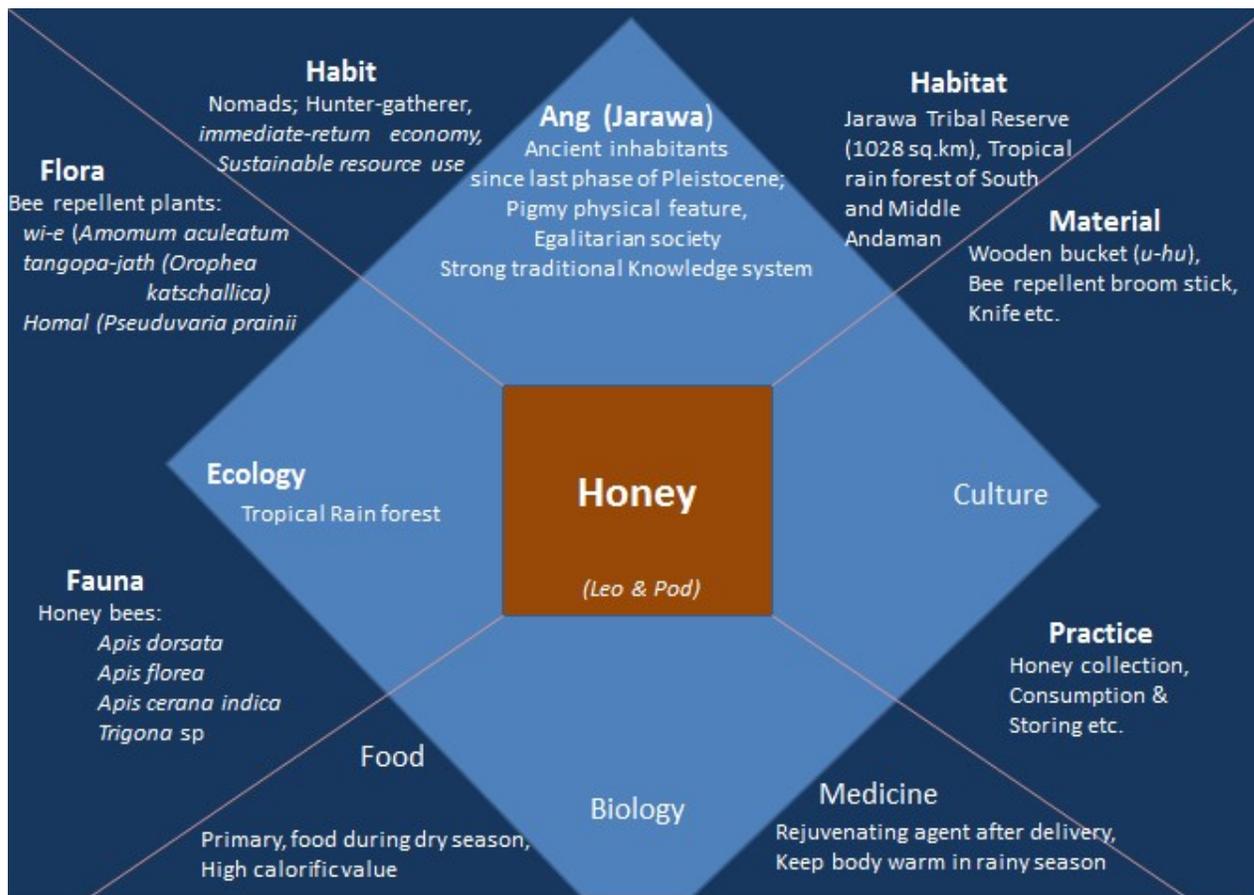


Fig. 2.1: Schematic representation of Jarawa-honey relationship.

2.3.4.1 Honey Varieties and Sources

In *Jarawa* cognition there are mainly two types of honey viz. *Leo* and *Pod* which is collected and consumed by them.

2.3.4.1.1 *Leo*

It is derived from white honeycombs generally made by big honey bees i.e. *Apis dorsata* (Maa, 1953, considered the *A. dorsata* of Andaman islands as *Megapis dorsata*). Colour of *Leo* honey is similar to the common honey which is known to all. The colour and taste of *Leo* is subjected to seasonal variation

and generally dependent on the type of flower from which nectar was collected. *Leo* is found to be suspended in open branches of tall trees in forests and it is more frequently found in the deciduous forest patches. As it is already mentioned in *Jarawa* cognition *Leo* is not only the sweet liquid content (honey) of the bee hive but it also includes honey comb and larvae. To them the Sweet liquid content (honey) of bee hive is called *inteo*, larvae are *ajim* and the wax is known as *otthab*. They consume *inteo* along with *ajim* and *otthab*. After consumption of *inteo* and *ajim*, the chewy *otthab* is kept aside and accumulated in a specified place. The *otthab* contains elements of bee wax and it has many other utilities like polishing bow, *u-hu* (wooden bucket) etc. (Plate 3)

2.3.4.1.2 Pod

It is obtained from blackish or brown honey combs made by small, black and stingless bees. Colour of *Pod* is dark chocolate to brown. It is found in the hollow tree trunks in the forest. Compared with the *Leo*, honey content (*inteo*) of *Pod* is less. *Jarawa* are also fond of *Pod*. As the honey bees of *Pod* don't have any sting, it is less hazardous to collect. The only effort to put is to climb the tree and cutting or digging the tree trunk but often the main obstacle is the height of the tree. *Jarawa* were observed to cut a whole tree the search of *Pod*.

Two other native honey bees beside *Apis dorsata* are *Apis florea* and *Trigona* sp. *Apis dorsata* is the chief honey bee in the islands and is the most important source of honey. It is also the chief pollinator of plants in the region. *Apis dorsata* is a migratory wild bee of pan-Asiatic distribution. These bees make a single large comb on the open branches of tall trees in the in the forest

or generally inaccessible high perches (Singh, 1975). *Apis dorsata* is dreaded as the most vicious and vindictive insects on earth they can chase intruders in swarms over long distances. Their stings are very painful, indeed are sometimes fatal to man and animals. During the monsoon season the bees nest in deep forests for apparent protection from the heavy rains with their accompanying gales. During the dry season, they migrate and nest in open and flowering areas. Due to their aggressive nature, migratory habits, and easy excitability any unprotected approach or manipulation of the hives makes hazardous (Dutta et al., 1985). Besides the above mentioned honey bees, study report of the expert committee on *Jarawas* of Andaman (2003) also mentioned the name of *Apis cerana indica* as a honey bee in the *Jarawa* territory.

2.3.4.2 Significance of Honey

Honey is the second most preferred food item for *Ang* (*Jarawa*) followed by *wowo* (meat of wild boar). For collection, storage of honey and keeping, carrying other articles also, they even prepare wooden buckets called *u-hu*. Report of the expert committee on *Jarawas* of Andaman (2003) reveals that the buckets are prepared from the wood or bole of *Pajanelia longifolia*, *Oroxylum indicum* and *Sterculia villosa*. Moreover, honey is an integrated part of their life and it has immense significance in their society and culture.

2.3.4.2.1 As precious food

Since, their economic pursuits completely depend on collection and hunting of various natural resources. An inventory on food related natural resources had prepared in the same area during various seasons of 2000; which revealed that

honey is the most potential food resource among the *Jarawas*; during the early-dry (February) and pick-dry (April) season. Honey, itself contributed 56.94 per cent of total procured food items during early dry season and 50.47 per cent of total procured food items during pick-dry seasons, more in compare to wild-boar during those seasons. Hence, collection of honey is more conducive for maximizing the net calorie return than any other accessible natural resources during entire summer. Seasonal variation, accessibility, abundance and calorific values in combines have insisted them to develop and nurture intrinsic traditional knowledge regarding honey collection. Honey, its' potentiality; cultural norms for procurement and other relevant practices do also endorse traditional way of sustenance of the natural resources, within the locality.

2.3.4.2.2 Medicinal value

Despite it's' food value, honey has immense medicinal value in the society. In their traditional practice expectant mothers are only to be provided honey during on-set of delivery to facilitate smooth delivery of the baby; as they believe that regular consumption of honey during third trimester of pregnancy; would help in growing-up *kidu* (the foetus) inside the womb. Even after successful delivery; mothers are provided the honey, as the first ever natural food item as rejuvenating natural resource.

2.3.4.2.3 Social dynamics, sharing and gender role

Moreover, honey is also predominantly the second most food item which is also shared among the group members; but extend of its sharing is lesser than

the flesh of wild boar. There are marked gender role in foraging activities. A few economic pursuits (e.g., hunting of wild boar) are exclusively male's job. However, both male and female do participate in collection of matured bee-hive from the tree. Women are also expert in instant tree climbing and collect honey-comb as fast as possible before larvae and pupae get matured and left the hive. Women do follow necessary precautionary measures during collection of bee-hive.

2.3.4.2.4 Norms and taboos

They often consume honey in group and there are certain norms and taboos related to different aspects of honey. Consumption of honey is prohibited after sun-set; as this is considered being 'hot' food item. Despite its food value and medicinal value as well, consumption of honey is strictly prohibited during menstruation period for maiden girls; as they believe that consumption of honey during those days, may increase vitality. Feeding honey is also prohibited to infants till weaning semi-solids initiate to them. Consumption of honey inside hut is also prohibited for avoiding infestations of insects inside. They take away honey-bucket out-side hut and consume it. When that course will over, they again wrap residue and hang it again properly. After having honey and honey-comb, taking bath is compulsory not only to wash down sticky substances but also to maintain immediate thermo-regulatory process inside the body due to huge consumption of honey-juice and combs.

2.3.4.2.5 By-products

Jarawa consume honey along with the larvae and honey comb but they do not ingest the Honey-comb wax. Chewed honey-comb ultimately became small

solid portions of wax that finally dry those in sun and store for further multifarious uses in domestic use. Honey squeezed wax pieces keep carefully and those reuse as bio-fuel while lighting traditional torch, set fire (with little wet fire-woods) in rainy seasons. Those also use for shining of wooden-bow and protection from moisture. Moreover, thorough polishing with honey-comb wax also ensures elasticity and durability wooden-bow. They do melt accumulated wax pieces and apply it on honey-buckets to seal cracks.

2.3.4.3 Collection of Honey

Jarawa are the nomadic hunter-gatherers live in groups or band. Depending on certain factors, the groups or bands migrate from one place to another after a certain period of time. Number of member in a particular group and duration of staying in a certain place is basically depended on the availability and accessibility of resources. On the other hand availability of resources is depended on seasonal variations. That's why during dry season large groups are divided in to small groups and migrations of groups are more frequent than the rainy season. Regarding subsistence there are three ways of procuring food i.e., hunting, gathering and fishing. Collection of honey comes under the gathering process.

Jarawa recognize *aludan* (flowers of Gurjan i.e. *Dipterocarpus Sp.*) very well, as the primary flowers for rich source of honey in the forests. They even have very clear cognitive categories to identify various parts of a flower like *athitong* (calyx); *olaag* (corolla), *ethithelaag* (androecium), *unpothathangna* (gynoecium), *unthaothod* (ovary) and *withopad* (androecium and gynoecium in combine). They know, that honey bees fly and sit on *the olaag* and collect honey from *withopad*.

The honey season generally started during the last week of November and it continues up to May or before the onset of the monsoon. Honey is dispersedly found all over the forest but it's more abundant in and around deciduous forest patches.

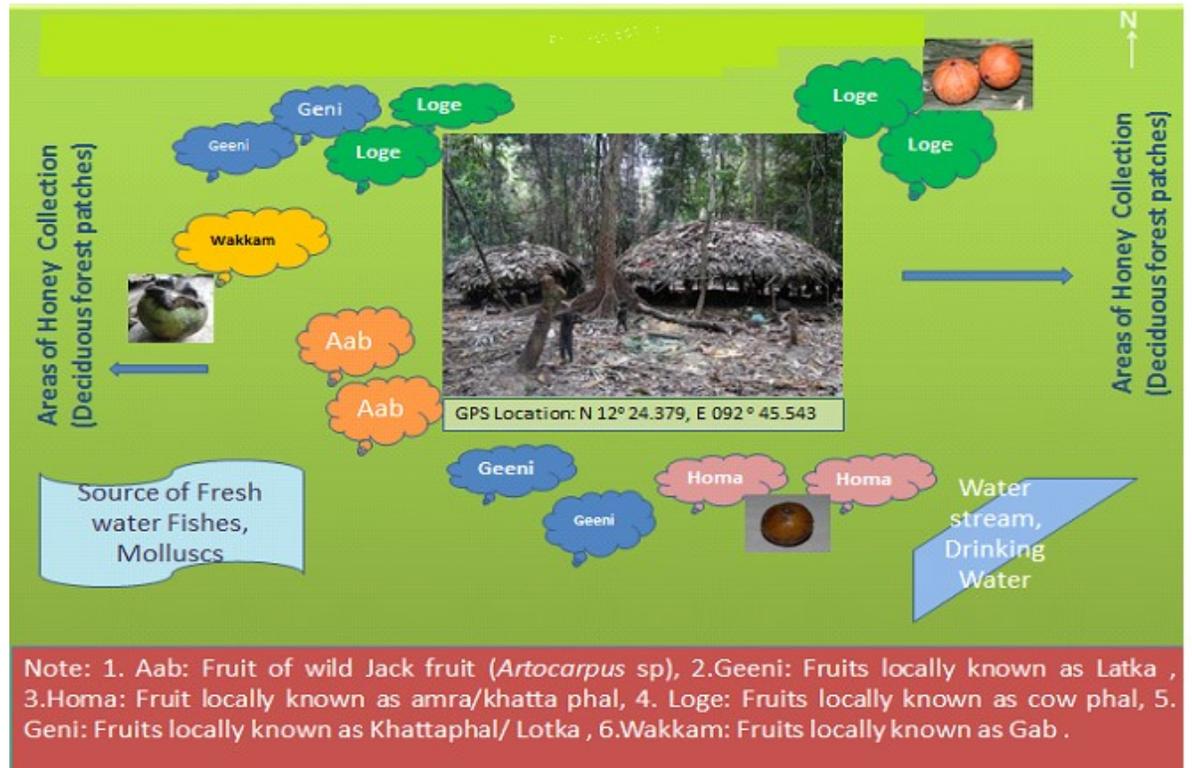


Fig. 2.2: Notional distribution of honey collection areas and other forest resources around the Jarawa *chadda* during peak dry season (April-May)

2.3.4.3.1 Belief and practices

Generally separate expeditions are setup for honey collection during the season of honey collection (November-December to April-May). For that type of expedition they equipped themselves with bee repellent plants, wooden bucket (u-hu) for carrying honey, knife etc. Usually they search the forest in small expedition team (2-5 members) who are often kin members. During the

pick honey collection season they can search the forest more than five kilometre radius from their camp site. Sometimes it was observed to spend nights outside their original camp site.

Amongst natural food resources, honey is the most favorite and targeted foraging items among the *Jarawa*; in view of its food value, abundance, medicinal use and reuse of its' bi-product in day to day life. Blooming of flowers in evergreen forests, seasonally convey the on-set of honey-season around their habitat. Hence, the flowering season brings a lot of joy to them. They sing song expressing happy mood and dance together, adorned with flowers. A very popular song of that type is mentioned bellow:

“uu leloo waayaayi uu leloo waayaayi

uu leloo waayaayi uu leloo waayaayi

liya thadaavedi uu leloo waayaayi

liya thadaavedi uu leloo waayaayi

he lee Ie lee he lee Ie lee” (Srinathan, 2002)

2.3.4.3.2 Identification and marking

During the honey search operation at first they try to locate the bee hives in the deep forest. With acute knowledge of the landscape and vegetation of the area, they usually search flying honey bees or its faeces at the forest floors or on the leaves. Even humming of bees in the forests make them understand to locate the tree, where bee hive is grown and continuous drizzling of honey

from bee-hive confirms its maturity. With the help of any of these signs, they search the forest and locate the bee hives. Once a matured honey-comb is identified by any individual; he/she immediately put some identification mark at that particular tree. To mark that identified bee hive they cut few shrubs around that the tree and it symbolizes possession of that honey-comb as well as honey of that particular tree to a specific person. The right or privilege to collect honey from that particular tree belongs to that person only who had first located the bee hive. The norm is not to collect honey from any bee hives which has already been identified or marked by others. After identifying the mature bee hive, they initiated the process to collect honey from that tree.

2.3.4.3.2 Impact of lunar cycle

Honey is abundant during December to May. However, its quantum increase with successive months and April onwards, natural production of honey decreases gradually. Even, quantum of natural production of honey also varies with lunar cycle of the months. Honey collection frequency increases and decreases with waxing and waning of moon respectively. As, days approach towards full-moon; *Jarawas'* foraging activities mainly emphasis on honey collection from forests around almost every day. Each family do collect plenty of honey during this period.

2.3.4.3.3 Collection procedure and use of herbs

From ancient times smoking of bee hives has been the worldwide most popular method practised to procure honey from honey bees. This method of honey collection often kills the bees and causes about total loss of the brood, thereby seriously disturbing the ecological balance. The negrito communities

of Andaman Islands are known to use certain plants as bee repellent during the collection of honey. The method of using smoke to collect honey was probably unknown to them. Different studies reveal that there is striking similarities of honey collection procedure among the *Jarawas* and Onge. Thothathri (1966) first reported that *Orophea katschallica* Kurz (Annonaceae) was used by the Onges of Little Andaman to collect honey from the forests, a fact later confirmed by Bhargava (1983). The Onges chew the leaves of the plant and smear the juice mixed with their own saliva on their bodies. They then climb the trees, reach the hives, and spit the juice mixed with saliva in the form of a coarse spray on the hives. The bees fly away from the comb without stinging the honey collectors. The honeycombs are cut and the honey is gathered (Dutta et al., 1985).

Coming to the *Jarawas*, the honey collection procedure is quite similar with that of Onge. The plant (*Orophea katschallica*) used by Onge as bee repellent is also known to the *Ang* (*Jarawas*) and they called it '*tangopa-jath*'. Beside '*tangopa-jath*' another two types of bee repellent plants used by the *Ang* (*Jarawas*) are '*homal*' (*Pseuduvaria prainii*) and '*wi-e*' (*Amomum aculeatum*). Sometime combinations of two or more plants are also applied as bee repellent during honey collection. For example, sap of leaves and stem of '*wi-e*' (often mixed with saliva) applied on body and to spit on bee hive. At the same time leaves of *kekad* (another bee repellent plant, bark of which was also used to make chest guard) are tightly packed with the many ribbon like bark of *homal* (*Pseuduvaria prainii*) to prepare a bee repellent broom stick. Branch of ribbon like bark thread of *homal* (*Pseuduvaria prainii*) can also be used as head gear to remove the stinging honey bees from facial parts. This

broom sticks are used to remove the remnant honey bees from the bee hive after the spitting of sap of *wi-e* (*Amomum aculeatum*). Leaves of '*tangopa-jath*' (*Orophea katschallica*) are also can be used as broom stick to remove honey bees from the bee hive. But when we come to preference, *wi-e* got the first place among the other bee repelling plants. Most of the time sap of stems and leaves of '*wi-e*' got the first preference for the *Ang* (*Jarawa*) as bee repellent.

Before climbing to the tree for honey collection, they rub the sap (often mixed with saliva) of *wi-e* on the face and exposed body parts and started to chew the stem of that herb. Juice of the stem is mixed with saliva and eventually the mixture spat with force on the beehive. Immediately the honey bees started to fly away from the bee hive. Within few seconds most of the bees left the place leaving the naked bee hive with few remaining honey bees. The remnant honey bees are removed with the help of that bee repellent broom stick and cut off the bee hive with the help of a sharp knife. Dutta et al. (1983) discovered that the stem sap of *Amomum aculeatum* Roxb. (Zingiberaceae) acts as a tranquiliser for the giant rock bee and the slightly aromatic sap vapour completely tranquilising the vindictive worker bees. They become so docile that they do not sting even when bare fingers are moved among them. In absence of '*wi-e*', two other bee repellent plants viz. *homal*, *tangopa-jath* are also can be used in a similar fashion and as it is already mentioned combination of applying two or more bee repellent plants in a single operation can also be observed.

2.3.4.4. Consumption Pattern

In *Jarawa* perception honey (*Leo* and *Pod*) is not only the sweet liquid content of bee hive but it also includes honey comb and larvae. They consume both types of honey along with the larvae and honey comb. Practices related to honey consumption do follow several traditional wisdoms in terms of cultural prescriptions and prohibitions. *Jarawas* do follow very flexible meal schedule. They do not intake foods in bulk at a time, like to surplus-based societies. They consume foods intermittently; whenever they feel hungry. Consumption of honey along with larvae and portion of honey-comb is unique. Any time of the day, anybody of a family can have honey. Any other member of the family and close kin may participate together. People sit together around the honey bucket; and insert palm into the honey-juice to soak thoroughly and then lick it. Simultaneously, they cut some portion of honey-comb and suck honey from it. Then they relish chewing comb along with honey, some larvae and wax. Chewed honey-comb wax do not ingested and ultimately became small solid portions of wax which is kept aside. It has observed that *Jarawa* adult consume not less than 1000 - 1200 ml. pure honey-juices at a time and the minors are 300 - 500 ml. honey-juices respectively along with larvae and wax-fat. In that way, during the period of abundance, they consume honey twice to thrice a day.

They consume within a day or two of harvested honey at a time. Again they collect fresh one. Frequency of harvesting honey-comb and quantum of honey consumption, supplemented to daily diet indicates affluence of natural resources in terms of species density of flowering plants and honey-bees in around the '*Jarawa* Reserve' during dry season, thus does not to share or exchange with band members, as sharing of food items is common in case of certain food resources; particularly which are enrich in animal protein.

2.3.4.5 Storing of Honey

During flowering season (honey collection season), *Jarawa* do engage in harvest honey as much as possible. They collect plenty of honey regularly. After collection of honey-comb, they carry it to hut and keep it cover with *pe-pe* (selai-patti, *Licuala peltata*) till the harvest consumed.

2.3.4.5.1 Temporary storing

Storing of fresh honey in bucket does not follow squishing of honey-comb. They simply put the comb into bucket. Honey juice gradually comes out. Combs are cut into few pieces according to space of the bucket. Temporary preservation technique of honey is different from under-earth preservation technique. Honey bucket categorically covers with processed leaves. A few branches of pá-pá (selai-patti, *Licuala peltata*) initially fold it and hold it into diminished flame of firewood oven till water contain ooze out from leaves and dried up fully. Primarily honey is high-value (calorific) food resources during dry-seasons; which can ferment, coming in contact with water particles/moisture by any means. In view of nature of honey, they wrap maw of the bucket tightly with those processed *pe-pe* (selai-patti, *Licuala peltata*), tied with bark-fibers and then keep honey bucket hanging, usually from lean-to type ceiling of hut.

2.3.4.5.2 Storage for future

In accordance, *Jarawa* store a portion of honey, which used to collect during the peak dry season. For such purpose honey used to put in wooden buckets (u-hu), then tightly wrap that bucket with tender leaves of selai-patti (*Licuala peltata*) and then store that bucket underneath the soil (select some area, where soil type is sandy-loam and contain less moisture). Before placing that bucket (filled with honey), they used to place layers of the same leaves on the floor as well as cover the surrounding walls of the digging hole to prevent soaking/pouring of water to the bucket. Those buckets are retrieved during rainy season. It has observed, the retrieved honey was fermented in anaerobic storing condition, probably due to its high calorie fructose and glucose content. Though it's not like *mead* (alcoholic beverage prepared from honey) but just partially fermented. Fermented honey used to consume in small quantum during rainy season; while their habitat receive heavy shower almost without break. That fermented honey helps them to maintain warmth in body. Honey, which generally consumed as high-energy producing food item during dry season, then it used for medicinal purpose during the rainy season.

As honey is an important item of bartering exchange with the non-*Jarawa* neighboring communities, the above discussion reflects the intricate relationship between *Jarawa* and honey. Moreover, it also indicates importance of *Jarawa* Reserve and its rich biodiversity for the survival of this Particularly Vulnerable Tribal Group (PVTG). Ongoing culture contact and bartering relationship with the non-*Jarawa* neighboring communities may be of utmost detrimental for both the *Jarawa* and their territory.

2.3.5 Sharing in subsistence economy

Sharing of resources among the community members is an important component of any hunter-gatherer society and the *Jarawa* is not an exception. Distribution of territorial groups (*Boib, Thidong and Tanmad*) of the *Jarawa* ensures resource utilisation at the territorial level. It ensures that all the members or bands of a particular territory have right to access the natural resources of that particular territory. At the band level, the edible resources collected by an individual or a family or a group are brought to the *Chadda* (*Jarawa* campsite) and generally shared systematically among the family or group members or band. Meat of the wild pig (*wowo*) is the most preferred and precious food item among the *Jarawa*. There is a particular pattern and norms for sharing the meat of the game animals. In group hunting meat is shared almost equally to all the participated members. In addition to his normal share, the head of the *wowo* is always given to the main hunter. Depending on the quantity of hunted animals, meat is shared among all the families and group members. When quantity of hunting is more, the meat is distributed to all the family members of that *Chadda*. Same rule is followed in the individual hunting also. In case of individual hunting sharing quantity of meat is subjected to the proximity of the kinship. Regular supply of protein to all the members in the *Jarawa* society is ensured through sharing of meat of the wild pig, monitor lizard and turtle etc. The meats of the game animals are regularly shared from a communal hearth and each household is given a portion of the meat. In case of individual hunting, generally, the hunter's family gets the larger share while other families of that *Chadda* get comparatively smaller share of the meat. Sharing is also considered as a social mechanism to ensure food security to every member of the *Chadda*. The individual hunters may find it rationale to share excess food items which they cannot consume. For the individual hunter and his family, food sharing is mechanism of securing food for future. So, in case of any failure in hunting in future, he may deserve the surplus of other hunters. As flesh of wild pig (*wowo*) is the most

preferred of all food items, the *Jarawa* always share this item as a survival strategy. Marriage between different territorial groups is quite common. They occasionally visit *chaddas* of the relatives and in-laws of other territorial groups. During these visits the guest used to bring several gifts like food items, implements and other resources which are plentiful in their territory. While returning they again carry back different resources to their territory as offered by the host. *Jarawa* never consider the visitors as a burden to them. Visitors also participate in food collection and hunting expeditions. They also share their collections and hunted animals with other members of that group. So, sharing is an important mechanism among the *Jarawa* to maintain their subsistence and food security.

2.4 Resources in the *Jarawa* territory

As perceived by the *Jarawa*, resource distribution in their territory may be classified into five categories namely *Titon* (deep forest), *Chanhanap* (valley area), *Tagid* (marshy land), *Pileh* (sea shore) and *Howa* (freshwater streams). The resources in the *Jarawa* Reserve include both terrestrial and aquatic resources. The aquatic resources may further sub-divided into three categories viz. marine resources, creek resources and fresh water resources. Under the Andaman and Nicobar Island (Protection of Aboriginal Tribes) Regulation 1956, all the resources of the *Jarawa* territory have been reserved for the *Jarawa* only. But many poachers and villagers from neighbouring areas illegally entered into the *Jarawa* Reserve to exploit different resources. Resources which are illegally collected and utilised by the non-*Jarawa* have been discussed later. Broadly, the resources gathered by the *Jarawa* may further be classified as edible resources and non-edible resources.

2.4.1 Edible Resources

Kumar (2009) have conducted a detailed study on the resources in the *Jarawa* territory. The edible resources (both plants and animals), which are perceived and collected by the *Jarawa*, have been discussed in the following lines.

2.4.1.1 Edible plant resources

There are numerous plant species available in the '*Jarawa* Reserve', which are yet to be fully documented. The edible plant resources of the *Jarawa* may be classified in three broad groups namely (a) tubers, (b) fruits, pulp and tender leaves and (c) seeds. Apart from that based on the importance and utility the edible plants are further categorised into three categories viz. major foods, minor food and supplementary foods. There are only few plant species which provide for major part of *Jarawa* diet in a different season. These plants are wild jack fruit (*aab*), Nipa fruit (*Thuiya*) and Cycus fruit (*amin*). Apart from that honey is also one of the major food item which is from plant resources through large bees. Minor foods include those plants which are eaten in less quantity compared to the above mentioned plant resources. Minor plant food resources also scantily available in the *Jarawa* Reserve. As mentioned by Kumar (2009), as gathered by *Jarawa*, there are about fourteen minor food resources which includes *Artabotrys speciosus*, *A. lakoocha*, *Baccaurea ramiflora*, *Alamus andamanicus*, *Diospyros andamanica*, *Ficus racemosa*, *Garcinia cowa*, *Mangifera andamanica*, *Pinanga manii*, *Donax canaeformis*, *Pometia pinnata*, *Terminalia catappa*, *Sterculia rubiginosa* and *Entada redeedei* etc. After that, the supplementary plant resources are also not gathered and consumed regularly. These are consumed on the spot as and

when found during their foraging movements. Seasonal fruits and the shoots of the tender plants come under this category. Both minor and supplementary foods are consumed in less quantity and usually at the place of collection itself. These edible plants are the prime source of carbohydrate, vitamins and other micro nutrients for the *Jarawa*. Most of the fruits are eaten fresh and raw. exceptionally, there are few plant resources which are processed before eating. These are the seeds of the wild jackfruit (*Artocarpus chaplasi*) locally known as *aab* and the *Cycas rumphii* locally known as *amin*. The seeds of the wild jackfruits (both ripen and tender) are processed. They put the seeds of wild jack fruit in a net bag and bury it under muddy creek for about two to three weeks. Afterwards, it is taken out and dried in sun light before consumption. The seeds of the *amin* (*Cycas ramphii*) are also kept into saline water of sea for about one to two weeks before consuming it. As perceived by the *Jarawa*, the intention behind these processing of *aab* and *amim* is to remove the toxin content in these seeds.

2.4.1.2 Edible animal resources

The edible animal food items are collected from both terrestrial and aquatic resources of the *Jarawa* Reserve. The terrestrial animal resources primarily include wild pigs (*wowo*), monitor lizards (*urug*), grub larvae (*pathen and ono*), honey (*leo and pod*) and a few species of birds and other animals. The resources of the aquatic ecosystem comprise of turtle (*ugale*), turtle eggs (*ugale ugane*), fish (*napo*), crab (*haga*), molluscs, crustaceans etc. As reported by Kumar (2009), there are about 82 edible animal resources consumed by the *Jarawa* and *Jarawa* Tribal reserve is one only source of these animal food resources for *Jarawa*. All the above mentioned animal food resources are

collected by either hunting, gathering and fishing. All these resources are again subjected to seasonal variation, availability and accessibility. The flesh of the wild pig (*wowo*) is the most preferred and relished of all. So, *wowo* has a very significant role in *Jarawa* society and culture. Aquatic resources of *Jarawa* generally consist of different types of fish (*napo*), crabs (*haga*), shells, molluscs, turtle (*ugale*) etc. Most of the aquatic resources are again dependent on seasonal variation. The aquatic animal food resources of *Jarawa* may be classified into three categories namely major food resources, minor food resources and supplementary food resources. The major foods of the *Jarawa* consist of meat of wild pig (*wowo*) and monitor lizard (*urug*), bivalve shells, turtle eggs and different species of fish. Significantly, the honey (*leo* and *pod*) is also included in the major foods which is derived in combination of plant resources and animal resources. Under the category minor animal food resources, the animals which are eaten in less quantity compared to the major foods, may be included. Different sea animals like trochus, turbo, giant clam etc, grub larvae (*pathen* and *ono*), prawn, certain species of fish and crab are included in this category. The supplementary animal food resources include those animals which are not eaten frequently in any season. Rather, they occasionally consume animal foods items are sea cow, lobster, birds and certain species of shell and fish etc. Apart from the above mentioned edible plant and animal resource, drinking water is one of the most important resources for the *Jarawa*. They always consider the source of drinking water while setting up of new camp site (*chadda*). Moreover, all the community huts of the *Jarawa* are located nearby the fresh water streams.

2.4.2. Seasonal variation of resources

All the above mentioned food resources in the *Jarawa* territory are subjected to the seasonal variations. Nevertheless, the availability and accessibility of resources are also the key factors for their subsistence. In *Jarawa* cognition, seasonal variation is primarily based on wind directions in associated with occurrence and disappearance of different flora and fauna. They also have their animistic believe on seasonality and resources. So, broadly there are three seasonal categories of different food resources of *Jarawa*.

1. Rainy season or Season of South-West wind (mid of May to mid of October):
This is the prime monsoon season in Andaman Islands. During this season, wild pigs (*wowo*) and Monitor lizard are abundantly available in the dense tropical rain forest. The seeds of *amin* (*Cycus rumphii*) and *thuiya* (*Nipa fruticans*) and some seasonal fruits and tubers are also available during the rainy season.
2. Winter season or transitional season or season of North Eastern wind (November to February): this is the high time for collection of honey (*leo* and *pod*) and turtle eggs etc followed by hunting of pig and turtle and fishing. Often honey collection is the major subsistence activity during this season. This is also the pick season for collection of different varieties wild tubers.
3. Dry summer season or season of alternative winds (March to mid of May): After April onwards honey collection gradually started to decrease. This is the pick time for collection of wild jackfruit (*aab*). The fruits of wild jackfruits are collected in large quantity during dry summer season. Different citrus fruits are plentifully available during this season. Compared to the other seasons, food resources are occasionally available during this season.

2.4.3 Non-Edible Resources

Apart from the food resources, there are many non-edible resources used by the *Jarawa* to pursue their livelihood. Most of the non-edible resources are related to their material culture and aesthetics. The non-edible resources related to the *Jarawa* material culture are primarily consists of different plant resources. The non-edible usages of plant resources are predominantly for shelter (*chadda*), medicines, ornamentations and aesthetics, repellent for honeybee and implements (bow, arrow, wooden bucket, cane basket, hand net, traditional knife, machete, adze etc.) etc. As noted by Kumar (2009), there are at least 85 plant species which are used for these for non-edible purposes. In addition to the non-edible plant resources, there are a few non-plant resources which are immensely significant for the *Jarawa* society and culture. Ochre (red and white), iron and metal utensils etc. are worth to mention. Red and white ochres are used ritualistic body painting while the iron is used to make hunting, gathering and fishing implements. This is noteworthy to mention that many bartering items received from non-*Jarawa* neighbouring communities may also be categorised as non-edible items or resources. These item includes plastic containers, torch, battery, match box, safety pin, cosmetics, mirror, aluminium dekchi etc. *Jarawa* also receive some metal items, iron pieces, utensils, cloths etc. from the Andaman Adim Janjati Vikash Samity (AAJVS), an organisation under directorate of Tribal Welfare, Andaman Administration.

2.5 Material Culture

Jarawa are primarily dependent on natural resources to fulfil their material needs of different cultural attributes. Most of the raw materials of their material culture are derived directly from nature which are being utilised in a sustainable way. As per studies on mitochondrial DNA, *Jarawa* are living in these islands since about thirty thousand years (Barik etal, 2008)

and since then they are maintaining their subsistence way of life. They even select their camp site (*chadda*) depending on the availability and accessibility of natural resources for food, shelter, drinking water and other material resources. Being a society with immediate return economy, they do not believe in the storing of resources for future. Resources are collected only on the basis of immediate requirement basis. Thus their technique of resource utilisation is much sustainable and eco-friendly. They collect different forest resources for the immediate material cultural requirements for shelter (*chadda*); hunting, gathering and fishing implements like bow, arrow, knife, fishing implements etc.; dress and ornaments; household articles like wooden bucket; cane basket etc.

2.5.1 Chadda

The *Jarawa* term *chadda* is quite general in nature and it indicates traditional huts, shelters, camp site, habitation site etc. Shelter is one of the basic requirements of the human beings. As constructed and perceived by the *Jarawa* there are three different types of traditional huts (*chadda*) namely temporary hut or *chadda tutime*, semi-permanent dome shaped hut or *chadda huthu* and big community hut or *chadda thuma*. They basically differentiate different types of huts depending on its construction and use. A small lean-to-type temporary huts used by a single nuclear family is known as *tutime chadda* or temporary hut. A semi-permanent hut may be of oval or round shaped and medium size which may be inhabited by two to five families. This kind of medium sized semi-permanent huts are known as *chadda huthu*. Big community hut or *chadda thuma* may be inhabited by five to fifteen families. Apart from the centrally located common hearth or fireplace, there are separate hearths for each and every families residing in the community hut. *Lepale* or boys group and *abile* or girls groups are also allotted separate demarcated space in the community hut. The size of is approximately about length-5 feet, bredth-5 feet and

height-5 feet. Structurally it is made from locally available braches and thatched with cane leaves or a kind of palm leaves (*Liquala peltata*). Roofs of every temporary huts are very sloppy and almost touching down the ground. Usually temporary huts are located in a linear manner at the sea shore and non-linear manner in the deep forest. Linear type temporary huts are generally blocked at the backside and helps to protect from sea winds. Both men and women take part in collection of materials and construction of huts. *Jarawa* never allow to extinguish the fire at the hearths. Fire is used cooking, keeping the hut warmth and keeps insects and wild animal away from the huts. So, the *Jarawa* construct huts made of different parts of plant. Based on the size and structure, the *Jarawa* huts may again be classified in two categories namely the large bee-hive type huts and lean-to type huts. While the former is a community hut or *chadda thuma* which is bigger in size and stronger. The latter is individual family hut, small in size. During construction of huts, the plant products are used as poles, strips and for thatching purposes. As mentioned in the report of the expert committee on *Jarawa* behaviour (2002), the *Jarawa* generally use stems of plants like *Mussaenda macrophylla*, *Baccaurea ramiflora*, *Knema andamanica*, *Leea angulata*, *Antidesma velutinum*, *Sterculia alata*, *Lagerstroemia*, *Areca triandra*, bamboo etc. The selection of the plants generally dependent on the availability and accessibility in that particular area. For thatching purpose, the leaves of *Licuala peltata*, *Daemonorops kurzianus*, *Caryota mitis*, *Calamus grandis*, *Calmus pseudorivalis*, *Daemonorops* and *Musa sapientum* plant species are used. Interestingly, the *Jarawa* were never seen using the leaves of the *Nypa fruticans* or *thuiya* for thatching purpose while the other tribes of the Andaman and Nicobar Islands use it quite frequently. For making bark strips *Antidesma velutinum* (*Euphorbiaceae*), *Anodendron manubrium* (*Apocynaceae*), *Calamus longisetus* (*Areaceae*), *Sterculia villosa* and *Dendrobium* *sps.* (*Orchidaceae*), *Desmos dasymaschalus* (*Annonaceae*), *Hibiscus* (*Malvaceae*),

Pterocymbium tiliaceous tinctorium (Sterculiaceae), *Combretum latifolium* and (Combretaceae) *Calamus* etc plant species are utilised. For twigs they generally use *Combretum* plant species. The floor of the huts, particularly the place demarked for sleeping is usually covered with leaves of *Licuala peltata* or *Pterospermum acerifolium*.(Plate no. 12, 13 and 14)

2.5.2 Dress and ornaments

Traditionally, the *Jarawa* adorn themselves with various kinds of natural objects like sea shells, clay, leaves, barks, flowers and fruits etc. The *Jarawa* have high aesthetic value. They wear girdle made from finely dissected tender leaves of plants. Besides, they also wear ornaments made of seasonal flowers. These ornaments include headband, necklace, garland and armlet. Recently they have added cotton and woollen threads and plastic beads along with their traditional objects. Though both male and females adorn themselves with above mentioned different objects, but frequency and tendency of adornment among the females are comparatively more. Ornaments are primarily prepared by the female folks. Broadly the ornaments of *Jarawa* may be classified in two categories namely short-term or temporary ornaments and long-term ornaments. The short term or temporary ornaments are made of seasonal flowers, barks, tender leaves and fruits etc. on the other hand the long-term or semi-permanent ornaments are made of different sea shells and cowries, cotton and woollen threads, plastic beads etc. Generally, the ornaments are used as neckless, headgear, armlets and waist girdle etc. the temporary ornaments are often named after the plants from which the materials are collected. Women of all age groups are very fond of decorating themselves with different seasonal flowers. Each and every *Jarawa* individuals including male, female and children of all age groups decorate their face

and body with a particular kind of white clay known as *ood*. After consuming meat of wild pig (*wowo*), monitor lizard (*urug*), turtle etc., they invariably smear their face and body with *ood* or white clay. Afterwards they make designs and different patterns on it. Certain specific geometric line designs like wavy, criss-cross and strait line are some predominant designs in this regard. The patterns and designs are made with freely with fingertips, nails, shells or occasionally with wooden stencils known as *thomtang*. Before the contact situation in 1997, *Jarawa* did not use any attire to cover their body parts. In recent years some of them use to wear cloths occasionally and particularly during their visits to the neighbouring non-*Jarawa* communities. All kinds of cloths and fabrics including woollen threads are known as *Kangapo*. In general, they do not feel shy to be without cloths. Concept of wearing clothes in the hot and humid tropical environment is quite alien to them. Somehow, the sense of wearing cloths have been imposed on them. Cloths are generally collected through their bartering exchanges and from the AAJVS (Government welfare agency). Further, many of them collect cloths not only for the purpose of wearing them, but also to make ornaments from different parts of it or from the threads. (Plate 6)

2.5.3 Implements

Jarawa pursue their subsistence activity with the help of simple tools and technology. Some of the major traditional implements of *Jarawa* for hunting, gathering and fishing are bow (*aaw*), arrow (*patho*), knife (*tohad*), fishing net (*botho*), fishing arrow (*thom*) etc.

2.5.3.1 Bow (*aaw*)

The prime indigenous implements used for hunting and fishing are the bow and arrow. The size and length of the bow is subjected to physical structure and strength

of the user. Generally, the length of the bow used by an adult male varies from three feet to four feet. Locally known as Chooi tree wood (*Sagarea elliptica*) is the most preferred for making of bow. *Jarawa* refer this tree as *tothaan-tang*. Being a deciduous tree *tothaan-tang* is dispersedly and scantily available in the *Jarawa* Reserve forest which is primarily a tropical rain forest. In order to procure the same wood they often compelled to travel long distances. Desirable portion of the tree is cut with the help of machetes and shaped it using that machete and adze. After that, they smoked it and dried it in the sun for several days. The final shape of the bow is attained after the minute retouching with the traditional knife (*tohad*). Notches (*othopale*) are cut at each end and both sides of the shaft by knife to fix the bow string. The bow string, locally called *betho* is made from long strip of bark fibre of climber plants known as *way* or *tigule*. It is twisted through its length and is tied permanently in one side notch of the bow. While at the other end of the string a loop is formed to fix it in the other end of the bow shaft during operation. The bow is polished with wax mixed with resin. It is generally, designed and engraved with knife and painted with red ochre mixed with wax or saliva. Bow is used for hunting, fishing and also for self-defence. Bow making is predominantly done by male and is mostly used by them. (Plate 8)

2.5.3.2 Arrow (*patho*)

The *Jarawa* use different types of arrows for different purposes. Depending on material, the arrows may be of two types namely wooden arrow (*tochau-thad*) and arrow with iron tip. Both the shaft and point of the *tochau-thad* is made of areca nut wood. Before the invention and use of iron, *tochau-thad* was the prime hunting equipment of the *Jarawa*. Till date it is occasionally used for fishing and other minor hunting purposes. Whereas, in accordance with name, the arrow with iron tip is made

with iron point and bamboo shaft. Further, on the basis of size, shape and functionality, the arrows may be of different types like arrow for pig hunting (*tochaluhe-thad*), arrow for hunting of monitor lizard (*tochaluhe-patang*), arrow for fishing (*tochu-thom*), arrow with detachable arrowhead (*taheeya-patang*) etc. Each and every arrow has two basic parts namely the body or the shaft and the arrowhead. The shaft the known as *theenang* which is made of strait bamboo stick. The length of the arrow is generally varies from two feet five inches to three feet. Arrow making is a long process and the iron for the same is either procured from the nearby settlements or supplied by Andaman Adim Janajati Vikas Samity (AAJVS) of Andaman administration. It is known that the tribes of Andaman Islands used to collect iron from ship wrecked along with coastal areas. To make the arrow head, as it has been found, the *Jarawa* mostly used the blade of spade. They cut the spade into conical pieces, generally six to seven inches in length and one inch in breadth (butt end). The iron pieces are given shape of arrowhead by hammering and further cutting with the chisel. The technique of tempering of iron is unknown to them and they never use the fire to prepare the iron implements. Afterwards it is further sharpned on a piece of stone (*chadauli*). Once the arrowhead is ready to fix on a bamboo shaft (*theenang*), it is tied with the fibre string which is made from the fibre of a orchid plant known as *wibo*. Thereafter, the tied portion (*thopijaya*) is fixed with wax and the shaft is smoked and straightened. The sharp point of the iron arrowhead is known as *tuhetang* while the sharp ages are called *ichale*. Except the extraction of the orchid fibre, all the works related to the arrow making is performed by the male members.

2.5.3.3 Traditional knife (*Tohad*)

The *Jarawa* traditional knives (*tohad*) have multipurpose role in different activities of hunting, gathering and preparing of different material cultural items. The shape of

tohad is quite resemblance to the shape of willow leaf. It does not have a separate handle which is continuous with the knife. Generally, *tohad* is of different size are commonly used for cutting the flesh of hunted animals, extracting bark fibres, preparing leaf and thread ornaments, making and finishing of shaft of the bow and arrow, wooden basket, cane baskets etc. Method of making traditional knife is relatively similar with the arrow head. It is made either from iron or aluminium. Female folks are mostly found to use aluminium knife for making ornaments, fishing net and cane basket. The edges of iron knife are made extremely sharpen with pointed sharp tip and working edges. The flattened butt end of *tohad*, is thick unsharpened and covered with bark fibre which is warped with brown threads of an orchide (*Dendrobium sp.*).

2.5.4 Chest guard (*Kekad*)

Earlier the chest guard (*Kekad*) was used by adult male during hunting and raiding expeditions. They used to keep traditional knives (*tohad*) by inserting within folds of chest guard. It seems that wearing of chest guard may be related with the hostile relationship with the colonial rulers and neighbouring communities. *Jarawa* believe that multilayer chest guard has the potential to resist any striking arrows or even bullets. It also protects their chest and abdomen from injury which may occur during any hunting and raiding expeditions. After post contact scenario in 1998, nowadays, we may rarely observe any *Jarawa* wearing chest guard at any time. *Kekad* is made of a single bark strip derived from a tree known as *kekad* tree (*Sterculia villosa* or *Planchonia andamanica*). Depending on physical structure of the user, thick bark strips measuring about seven to eight feet in lengths and eight to ten inches in breadth cut out from that tree with the help of machete. The outer rough surface of the bark is

further peeled off and the bark sheet is properly cleaned. Then it is kept for few days and sundried. The bark sheet is further retouched with traditional knife (*tohad*) to attain the desired finish shape. The edges are stitched with soft bark threads in a criss-cross pattern. After that the bark thread is roundly bended and folded in three layers. It is smoked and the outer surface is decorated with red juice of *bailatha* plant (*Myristica andamanica*) or pigs blood and red ochre. The chest guard (*kekad*) is predominantly prepared and used by men folk only.

2.5.5 Wooden bucket (*uhu*)

Traditional wooden bucket is generally used for collecting and storing honey, storing of household articles, keeping pork and to carry household belongings during periodic movements etc. the *Jarawa* term for this traditional wooden bucket is *uhu*. It is a dugout hollow wooden block of tree trunk. *Jarawa* refer this special kind of tree as *thaad*. So, to prepare the wooden bucket (*uhu*), wood of the *thaad* plant (*Pajanelia longifolia*, *Oroxylum indicum* and *Sterculia villosa*) is used. Making of wooden bucket is an exclusively adult male activity. The *uhu* is made from a solid log of the above mentioned soft wood which is scooped with help of some chisel like iron implement. The bark is peeled off and the outer surface of the wooden bucket is slightly charred over fire. Thereafter, natural wax (derived from honey comb) is coated at the both inside and outside of the bucket to avoid any leakage and also to increase the durability and longevity of the wooden bucket. For the carrying purpose, a long bark strip is tied at the both side of the mouth of the basket with the help of wrapping cane strips. (Plate 3)

2.5.6 Cane basket (*taika*)

The *Jarawa* also use cane basket (*taika*) for collection of fruits, tubers, shells, fishes, flower, leaves and other foraging items. These baskets are of various sizes and essentially conical in shape with wide mouth and narrow bottom. Circular rims are made from thick stripes of red cane (*Korthalsia sp.*) while the frame is made of fine stripes of another variety of cane (*Calamus sp.*). Thin and flexible cane stripes are systematically tied around the rim with the help of wrapping threads. A long bark thread or strip is tied at the both side of the mouth of the basket for the carrying purpose. Making of cane basket is primarily female dominated job but males are also cited to assist them. Being a gathering implement, cane baskets are mostly used by the female folks.

2.5.7 Resin torch (*Pone*)

The *Jarawa* term for resin torch is *pone*. It was used during night time for moving from one place to other. To prepare the resin torch the semi-powdered resin of some particular trees (*Parishia insignis* and *Canarium euphyllum*) put into the leaves commonly known as *selai patti* (*Licuala peltata*). Afterward, the leaves are rolled and tightened with the bark threads or cane stripes. A thin coating of clay is applied on the outside of the torch to prevent the leaves from burning quickly. The resin torch is one of the one of the significant material cultural items which is adversely effected to culture contact and bartering relation with the neighbouring non-*Jarawa* communities. Due to intervention of match box and modern torch light, nowadays, *Jarawa* are rarely preparing and using any traditional resin torch (*pone*). Even the younger generation are least bothered about the vanishing trend of *pone*.

2.5.8 Fishing hand net (*Botho*)

A fishing hand net or *botho* is generally prepared and used by the ladies for fishing during low tide and to carry small light weight items during shifting of camps. It's circular working end or mouth is made of a long and narrow piece of cane which is bend to form a circle. The ends crossing each other of that circle are tied while another end of the cane stick is left extended to form a handle. *Botho* is knitted with threads prepared from fine bark fibre or fibre of orchid stem. The threads are weave around with the help of a small bamboo knitting needle. The knots used are quite similar to the fisherman's knot. To make the *botho* long lasting and durable, a mixture of wax and resin is polished on its threads. Nowadays, it has been observed that instead of bark fibre, *Jarawa* are often using common nylons threads obtained from the sea shore or from the neighbouring non-*Jarawa* communities.

2.5.9 Ochre (*Ood* and *Alam*)

Ochres are primarily used for body painting and to colour different implements. The *Jarawa* use two types of ochres namely *ood* or white ochre and *alam* or red ochre. Both the *ood* and *alam* are naturally available in the *Jarawa* territory. *Odd* is a white or grey colour clay like thing which is mixed with pig fat or water to make paste. Then the paste is applied on the face and other body parts like chest, arms thighs etc. After applying the white clay paste (*ood*), different designs and patterns are made on the face and body parts in a decorative and aesthetic fashion. Generally, designs and patterns like wavy, strait line, zig-zag and criss-cross etc. are made with the help of finger tips and stencils. Generally, couples used to make these face and body paintings of each other. Other members also assist each other in the body painting. There is different spiritual and ritualistic believe behind the body painting with the

ood or white clay. After consuming the meat of wild pig (*wowo*), it is compulsory to apply the *ood* on the face and body. The same rule is also fairly applied after eating the monitor lizard, turtle, fishes and molluscs etc. Being animistic, the *Jarawa* believe in different spirits of both benevolent and malevolent. To get rid of the malevolent spirit of the eaten animal, they invariably smear the *ood* (white clay) on their face and body after consuming the *wowo* (meat of wild boar) or any other animal or fish. They also believe that the smearing of *ood* will also hide the smell of the consumed animal. Apart from *ood* they also occasionally apply red ochre or *alam* to paint their face and body. Moreover, *alam* is also used to colour different implements like bow, arrow, wooden bucket etc. They also believe that both the ochre (*ood and alam*) have medicinal and healing properties.

2.5.10 Iron and metals

Iron and metals are very precious for the *Jarawa* society and culture. The iron and other metals like aluminium and steel etc. are used for making different kinds of arrowheads, traditional knife (*tohad*) and digging rod etc. These implements are of immense importance for the *Jarawa*. Since when, the *Jarawa* are using iron implements and what were the probable source of the metals are quite hypothetical and mysterious. As iron is not naturally available in the Andaman Islands, it can be assumed that earlier they might have collected iron from wreckage and parts of broken ships washed away at the shore. But since the colonial age and after settlement of nearby non-*Jarawa* villages, *Jarawa* used to collect the iron and metals from neighbouring villages. Undoubtedly, acquisition and use of iron has substantially effected their hunting and gathering way of subsistence. As informed by many elderly *Jarawa* men that during pre-iron era, they used to have only pointed wooden arrows made with the wild areca nut wood for the hunting, self-defence and attacking

purposes. Nowadays, they do not know about any other easy source for iron and metals other than the nearby non-*Jarawa* villages or AAJVS or left out abundant railway track inside the forest. They also acquire metal utensils for storing, cooking and other household purposes from the fringe villages through bartering exchange or from Andaman Adim Janjati Vikas Samiti (AAJVS), an organisation under the Tribal welfare department. During field work, it has been observed to prepare traditional knife (*tohad*) from different utensils. Flat and thin utensils alike steel plates are cut and further modified as *tohad*. This is also noteworthy to mention that *Jarawa* do not know the technique of tempering the metal with fire. So, they prepare their metal tools and implements with hammering and sharpening techniques only.

2.6 Rite-de-passage

The rite-de-passage vis-à-vis the ceremonies of life cycle rituals, beliefs and customs are associated to mark the important transitional period of each and every individual's life. Rituals and believes related to birth, puberty or initiation ceremony, marriage, and death etc. reveal the socio-cultural milieu and reciprocity of any community. The existing rituals which are being observed by the *Jarawa* also play a significant role in their Society. In a nomadic hunter-gatherer community like *Jarawa*, it starts from birth and continued till death or even through believe and practices after death also. Moreover, animistic believe of *Jarawa* is somehow reflected in each and every aspects of life cycle rituals, customs and believe.

2.6.1 Birth

The birth of a child is significant because it determines not only one's membership in the society but also ascribe with the status and affiliation with the particular kinship

system. Regardless of gender stereotype, birth of a child is pride and joyful moments for the both the parents and the society. Though the adult *Jarawa* individuals are well aware of the basic biological reasons of pregnancy and child birth, but they also have believe that the blessings of their ancestors and the supernatural power are the prime cause for a woman to get pregnant (*kidu aaleum*). They recognise the cessation of regular menstrual cycle (*cheng mameya*), followed by the tendency of vomiting etc as a common symptoms of pregnancy. During pregnancy every women must have to follow certain social prohibition and prescriptions in her daily life. Prohibitions and taboos are more vigorously followed during the first pregnancy. These prohibitions include that she has to abstain to consume honey (both *leo* and *pod*), meat of monitor lizard (*urug*), turtle (*ukale*) etc. and any non-traditional food items received from the non-*Jarawa* (*enen*). Moreover, though she is allowed to go to forest for foraging activities but she cannot climb trees for honey collection, she cannot decorate herself with any non-traditional ornaments. During the advance stage of pregnant, a temporary hut is constructed at the corner of the camp side (*chadda*) or an extended temporary living space at one corner of the communal hut where husband and wife are allowed to stay for a certain period. The temporary hut or living space is specially built with a raised wooden floor which is about four to five feet in length and breadth. The floor is usually made up of areca nut planks or wood and supported by four comparatively strong wooden pillars. The floor is covered with tender leaves of *selai patti* (*Liquala peltata*) and fire places are set at sides of the floor to keep the space / hut warm. During delivery, except husband, no male members are allowed to stay there. Generally, elderly women, experienced mothers, teenage girls and husband assist in delivery process. When labour pain started, they give a massage or light pressure on the abdomen with a piece of fresh bark of some particular plant. Simultaneously they also give foment to the abdomen of the would be mother by

heating their palm on fire. Further the husband or any other experienced women collect the amniotic fluid (*chelo oten*) of the expectant mother and massage her abdomen in a up to downward motion. After the birth of the baby, one of the women cleans the baby with soft tender leaves and cut the umbilical cord with a traditional knife (*tohad*) and knot it. In accordance to the *Jarawa* tradition, the new born baby is ritualistically feed with little drops of pig's fat oil which is taken through the middle finger and touch it the mouth of the new born. This custom is known as *echo-hobo*. After that the baby is allowed to feed the colostrum or milk (*kug*). The mother is not allowed to consume honey for about a month and no other food restriction is imposed on her. Liquid fat of wild pig or monitor lizard are applied to massage the newborn baby. The baby is mostly dependent on breast feeding till the dental formation. The first stage of weaning is started with little quantity of wild pig's fat and honey followed by boiled or roasted soft tubers, fish etc. Often it has been observed that the baby is breast fed by the other mothers of that band / local group, when the mother is away for some foraging or fishing activities. Gradually the teenagers, elders and other group members share the responsibility of brought up the children. The infants are carried suspended on the back as a head load with the help of a bark fibre band. Acculturation of *Jarawa* a children take place in a familiar social environment and in the lap of nature. On attaining the age of eight to ten years or so, hardly any *Jarawa* children are seen to live or share the sleeping places of their parents. They started to stay and live along with their respective peer groups or dormitories namely *lepale* for the boys and *abile* for the girls.

2.6.2 Lepa ceremony

Jarawa is a classical nomadic hunter-gatherer community of tropical rainforest of Andaman Islands and hunting is predominantly a male specific job. Consequently,

Lepa is a male specific ceremony of attaining the adulthood of an adolescent boy. In *Jarawa* perception, an adolescent boy can only attain the adulthood after hunting a *wowo* (wild pig) by his own effort. *Lepa* is highly desired and most awaited social ceremony for each and every grown-up youth, their parents and society as a whole. *Lepa* may also be termed as initiation ceremony of an adolescent boy or man for attaining socially recognised adulthood. Physically a *Jarawa* man can attain the age of thirty or fifty but without *lepa* he will not be socially recognised as an adult. *Lepa* is also quite mandatory before marriage also. After hunting the wild pig for the first time an elaborate and ritualistic ceremony along with songs and dances conducted in that *chadda* (camp site). Everyone praise and embrace for the heroism and effort of hunting a wild pig by his own effort. A group fest is organised on that occasion. *Ood* or white clay is smeared on his face and body which is well decorated with different patterns and lines. The hunted pig is roasted or boiled then liver and some fatty portion is offered to him. The skull and mandible of the hunted pig has immense importance for any *Jarawa* hunter. As per their legendary beliefs and custom they abstain from destroying the hunted pig's skull and mandible, rather they preserve it. After cleaning, it is tied with cane stripes in a decorative fashion and hanged near the sleeping place of that hunter. As a result, huge numbers pig's skulls and mandibles are found to be hanged from the thatched roofs of the community hut. these are kept as a memento or hunter's trophy. They also believe that it will praise their ancestors and benevolent spirits for further and consequent good hunting. Consequent to the *lepa* ceremony, the name of that hunter is changed and a new adulthood name is given to him. So, each and every *Jarawa* hunter has two names, firstly, a childhood name and secondly an adulthood name after *lepa* ceremony.

Culture contact and bartering relation with neighbouring non-*Jarawa* communities has also adversely affected different traditional customs and ceremonies like *lepa*.

Earlier, the hunted animal used to be roasted on fire during *lepa*. But nowadays, it is often boiled in large aluminium container (*buchu*). Young *Jarawa* boys also learned the technique of laying rope trap from the poachers to catch the wild pig. In some cases, *lepa* was observed after catching the wild pig in non-traditional rope trap followed by shooting the arrows. Due to extensive poaching of wild pigs and other forest resources, in future *Jarawa* may suffer from a socio-cultural shock of not being *lepa* or socially not attaining adulthood. The similar situation has already been observed among the Onge of Little Andaman Island.

2.6.3 *Upemame* ceremony

Contrary to *lepa* ceremony, *upemame* is a female specific ceremony of attaining the menarche. So, attainment of the first menstrual cycle is of immense significance for any *Jarawa* girl, her parents and the society as whole. Consequently, different prohibition and prescriptions are imposed on her from the very first day of menarche. Except in the early morning, her movement is restricted for going to the forest and sea. A separate raised wooden platform is prepared at the *abile chadda* (female dormitory) with the planks of wild areca nut wood. In case of temporary hut, the wooden platform may also be prepared at the ground. Tender leaves are spread in that wooden platform and the girl is said to remain sited or slept there only. The leaves are to be replaces in every morning. A mixture of *alam* (red ochre) and wild pig's fat is smeared on her face and body. She is not permitted to take bath during the entire period of menstrual cycle. Smearing and decorating with *ood* or white ochre is also prohibited. Foods like meat of wild pig (*wowo*) and honey (*leo and pod*) are forbidden to consume. She has to subsist primarily on fish, molluscs, tubers and fruits etc. However, the restrictions are less vigorously implied during the successive menstrual cycles.

On fourth or fifth day or after the completion of the cycle, she is allowed to take bath and consume *wowo* (meat of wild pig), especially the fatty portion. In accordance with the *Jarawa* custom, she has to take a small baby on her lap and prayed to their ancestor and benevolent spirits for their blessings of attainment of fertility and reproductivity. During the evening she is well decorated with *ood* (white ochre), flowers, tender leaves and allowed to sit in an open space of the *chadda* (community hut or camp site). All the women and girls of that camp site also adorn themselves with flowers, tender leaves etc. and the *upemame* is celebrated with songs and dance. With different myths and stories, the girl is taught about the importance of attaining adulthood and reproductive age. Though premarital sex is quite common among the *Jarawa*, she is also informed about different do's and don'ts in this regard. However, except children, no male member take part in this ceremony.

2.6.4 Marriage

Jarawa are strictly endogamous community and monogamy is the common rule of marriage. They believe in prefixed marriage in which marriage is fixed during the early childhood by their parents and relatives. Consanguinity is forbidden among the *Jarawa*. So, proposed bride or groom should not have any direct kinship relation. Different consanguinal and affinal kins of both the parents play a pivotal role in search and selection of the prospective bride or groom. Once the prospective bride and groom are selected, both the parents and their relatives in presence of other elderly persons mutually declare the selected children as prospective bride and groom. Preferably, marriage is fixed before the age of six to seven. As the children grown up and after attaining the age of eight to ten years, they started to live separately in their respective *lepale* or *abile* (boy's dormitory or girl's dormitory). They move freely to

the jungle and sea shore for their hunting and gathering activities. Being a prefixed couple, premarital sexual relationship is quite common. In case of any untoward incident of death of the prospective husband before marriage, the girl is often unable to find a suitable mate to marry. Preferable, she has to marry a boy who has also lost his betrothed bride before the actual marriage. Otherwise, the only option left for the girl to marry a widower of the local group or the community, irrespective of his age. Often the young unmarried *Jarawa* women without having any prospective husband have to suffer a lot including sexual exploitation by the youths and widowers. In case of marriage, *Jarawa* do not consider age in terms of years. It is important whether the prospective bride or groom have attained the socially recognised adulthood ceremony (*lepa* or *upemame*) or not. Generally, the age at marriage among them is around 16-19 years for the boys and 13-16 years for the girls. Consequent to the declaration of the prospective bride and groom, on attaining the socially desired adulthood, the date and place of the actual marriage is again fixed by the parents and relatives. *Jarawa* do not observe extensive and elaborative ceremony of marriage. It is as simple as *lepa* or *upemame*. A grand community feast of *wowo* (meat of wild pig) along with songs and dance is organised. The prime theme of the songs is to seek blessings from their ancestral and other benevolent spirits for the prosperous and productive married life. Both the bride and groom are decorated with *ood* (white clay) and in presence of all the community members and elderly persons, the bride is ritualistically sit on the lap of the groom for few minutes. In *Jarawa* dialect the husband and wife are termed as *wagi* and *wangab*. Just after the marriage, the new couple (*wagi-wangab*) is shifted to their new *chadda* (*hut or living place*). They usually practice post marital patrilocal residence but the reverse (matrilocal residence) has also been observed in some cases. The newly married couples are often found together to pursue the gathering and fishing activities.

2.6.5 Death

The *Jarawa* comes under the category of Particularly Vulnerable Tribal Group (PVTG) and numerically, they are much more vulnerable than many other PVTGs in India. As on November, 2017, total *Jarawa* population was 496. For such a vulnerable community death of any individual is of immense concern and significance. Being a nomadic hunter-gatherer community, they have to live a very harsh and troublesome life for their subsistence and sustenance which may lead to any untoward incidents and death of the individuals. As reflected in the table 2.3, there are only three elderly individuals with the age of above sixty years. It indicates that most of the *Jarawa* people die before attaining the age of sixty. Every adult and elderly *Jarawa* individual are self-sustained and self-relied entity. In *Jarawa* society no one is burden on each other. Like most of the society, death of any kin member or relative is a matter of great sorrow and painful. Being animistic, they believe in the spirit of the deceased person and other supernatural phenomenon. But they rarely express their sorrow in the form of extensive gesture and loudly crying. Their expressions in this regard are quite calm, quiet and empathetic with few drops of tears. They perceive their ancestral spirits as benevolent. So, in *Jarawa* cognition death is end of the physical body only, but the spirit is immortal which roams the forests, creeks and sea. Moreover, death rituals of the *Jarawa* reveal their intricate relationship with nature and their territory. In accordance with their customs, they have different death rituals based on the nature of death, gender and age of the deceased person. In case of any death of any new-born or children, they used to bury or keep the death body near the buttress roots of a gigantic tree in the dense forest and partially cover it with leaves and creepers. In case of any adult male or good hunter they use to tie the body tightly

with bark fibres in sitting position by folding his legs, so that the knees come closer to the chin and hands kept suspended close to the feet. The body is kept in the arch or hollow space of the buttress roots of any gigantic tree. The body inside the arch of the buttress roots is covered with leaves, creepers and small wooden logs and partially covered with soil. If the deceased person is a male or a good hunter, some of his used articles like bow (*aaw*), arrow (*patho*), knife (*tohad*), chest guard (*kekad*) etc. are kept on his grave. But if the deceased is female some of her regular used ornaments and household items are kept. After returning from the so called burial place, they used to smear their face and body with *ood* (white clay). They also remove all the household belongings, implements of that deceased person from the hut and thrown or kept in the dense forest or creeks or streams. Afterwards, the entire group or band will leave the camp site (*chadda*) and abandoned the area for about a year. However, some close kin member may occasionally visit that burial place till the complete decomposition of the body. Then as per their unique custom, they collect some pieces of bones like mandible, collar bones, finger bones etc. which are to be worn by any close relatives of the deceased person. Generally, the mandible and collar bones are tied with bark threads and worn as necklace. The small finger bones are worn as waist girdle for several weeks or months to mark the mourning or affection to the deceased person. In this regard this is noteworthy to mention that based on this observation of wearing human bones and mandibles, some travellers and scholars during pre-colonial and colonial period, have mentioned the tribes of the Andaman Islands as cannibals.

One of the secret rituals of *Jarawa* community is their practice of ritual killing or honour killing of unwanted babies. In *Jarawa* cognition, they have different categories of these unwanted babies for their society. Firstly, any child born out of any illegitimate sexual relationship. So, the new born child of any unmarried women,

widow etc. will come under this category. The second category of unwanted babies includes, the new born children with any congenital physical impairment or suffering from any incurable diseases etc. Thirdly, any children born out of any illegitimate sexual relationship with *enen* (non-*Jarawa*, non-negrito outsiders). In accordance to their custom, within a few days after the birth of the above mentioned unwanted or illegitimate babies, decision is taken for this ritual killings or sending the baby to the *thaluawa chadda* which they believe as a heavenly abode. Generally, the, *thaluawa chadda* is located inside the dense forest and hillocks. With the mutual consent of the parents and community members, an elderly person (being a mediator of the supernatural power) takeaway the baby to the dense forest of some hillocks and left the baby helplessly to die. *Jarawa* have their own supernatural and spiritual justification behind this ritual killing. Feasibly, custom may be related with the harsh, troublesome and nomadic way of subsistence which may not allow to survive an illegitimate child with mother only. Moreover, any handicapped child may be a burden for the entire family or band in terms of their nomadic and hunting-gathering livelihood. To keep the purity of blood may also be one of the reasons for the ritual killing of babies under the third category. As *Jarawa* rarely talk much about this secret ritual, the above mention logic of this ritual may be of mere assumption and detailed further research is required to be conducted.

2.7 Population Details

As it has already been mentioned in the Chapter-I (Serial number 1.10) that study was conducted since 2011 to 2017, the following demographic details are of November, 2017.

Table 2.1: Area wise distribution of family and population among the total *Jarawa* of Andaman Islands

| Area or territorial groups | Number of family | Population |
|----------------------------------|------------------|------------------|
| Kadamtala (<i>Tanmad</i>) | 43 (38.70) | 189 (38.10) |
| Middle Strait (<i>Thidong</i>) | 39 (35.10) | 188 (37.90) |
| Tirur (<i>Boib</i>) | 29 (26.10) | 119 (24.00) |
| Total | 111 (100) | 496 (100) |

(Figures in the parenthesis indicates per cent age)

Table 2.1 reveals that out of three territorial groups namely Kadamtala (*Tanmad*), Middle Strait (*Thidong*) and Tirur (*Boib*), the study area Kadamtala (*Tanmad*) is inhabited by the highest number of *Jarawa* family (38.70 %) and population (38.10 %). while the Tirur (*Boib*) has the lowest number of *Jarawa* family (26.10 %) and population (24 %).

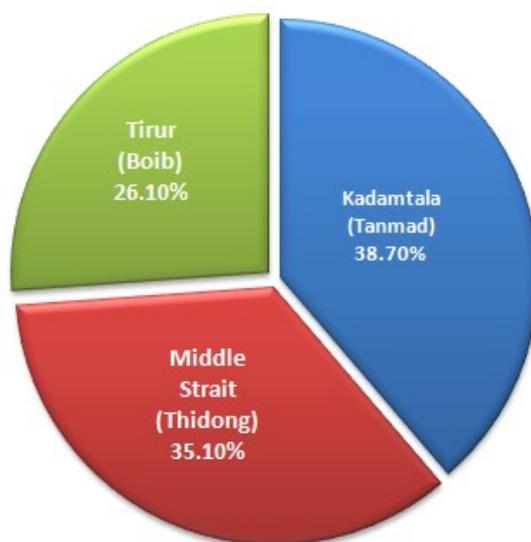


Fig. 2.3: Diagrammatic representation of area wise household distribution among the *Jarawa* (as mentioned in the table-2)

Table-2.2: Area wise gender distribution of total *Jarawa* population

| Area or territorial groups | Gender | | Total | Sex Ratio |
|-----------------------------|--------|--------|-------------|-----------|
| | Male | Female | | |
| Kadamtala (<i>Tanmad</i>) | 100 | 89 | 189 (38.10) | 890 |
| Middle Strait | 105 | 83 | 188 (37.90) | 790 |

| | | | | |
|--------------|------------|------------|------------------|------------|
| (Thidong) | | | | |
| Tirur (Boib) | 59 | 60 | 119 (24.00) | 1016 |
| Total | 264 | 232 | 496 (100) | 879 |

(Figures in the parenthesis indicates per cent age)

The table 2.2 depicts gender wise male, female distribution of population in three territorial groups of *Jarawa*. Moreover, it shows that the overall sex ratio of total *Jarawa* population is 879 which is quite lower than the national and state level sex ratio. Among the three territorial groups, there is remarkable differences sex ratio (890, 790 and 1017). Further in-depth study is required to explain this significant variation.

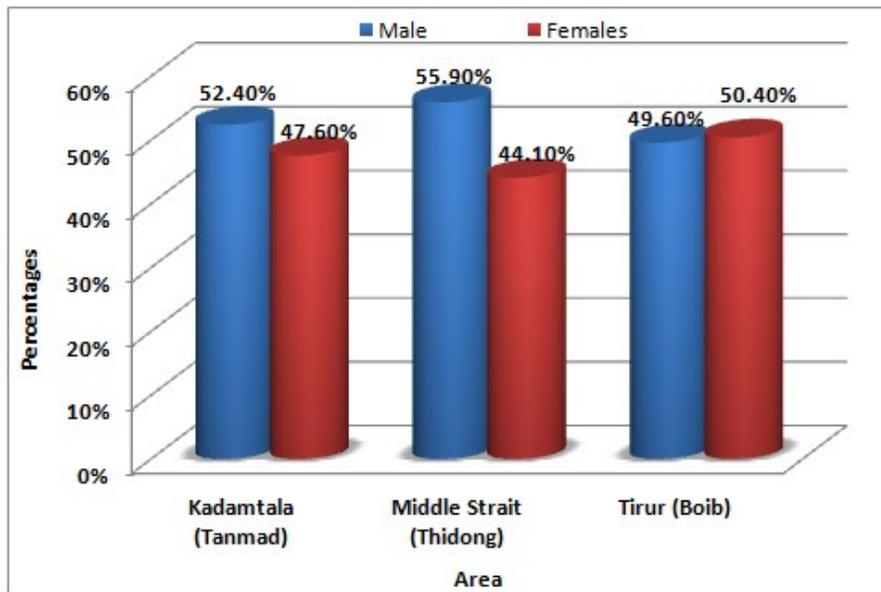


Fig. 2.4: Diagrammatic representation of area wise male-female distribution of *Jarawa* population

Table 2.3: Age group wise population distribution among the *Jarawa* of Kadamtala (*Tanmad*) area

| Age Group (Years) | Frequency | Per cent age |
|-------------------|-----------|--------------|
| <1 | 3 | 1.6 |

| | | |
|--------------|------------|------------|
| 1 to 9 | 65 | 34.4 |
| 10 to 19 | 31 | 16.4 |
| 20-29 | 38 | 20.1 |
| 30-39 | 22 | 11.6 |
| 40-49 | 11 | 5.8 |
| 50-59 | 16 | 8.5 |
| 60-69 | 3 | 1.6 |
| >70 | 0 | 0 |
| Total | 189 | 100 |

The table 2.3 reflects age group wise population distribution among the *Jarawa* of *Tanmad* area. Significantly, it shows that 34.4 per cent of the *Jarawa* population of that area is under the age of 10 years which reflects the positive tendency population growth. Moreover, the adolescent and younger generation between 10-29 years constitute the 36.5 per cent of the total population which further reflects the growth prospect of the *Jarawa* population.

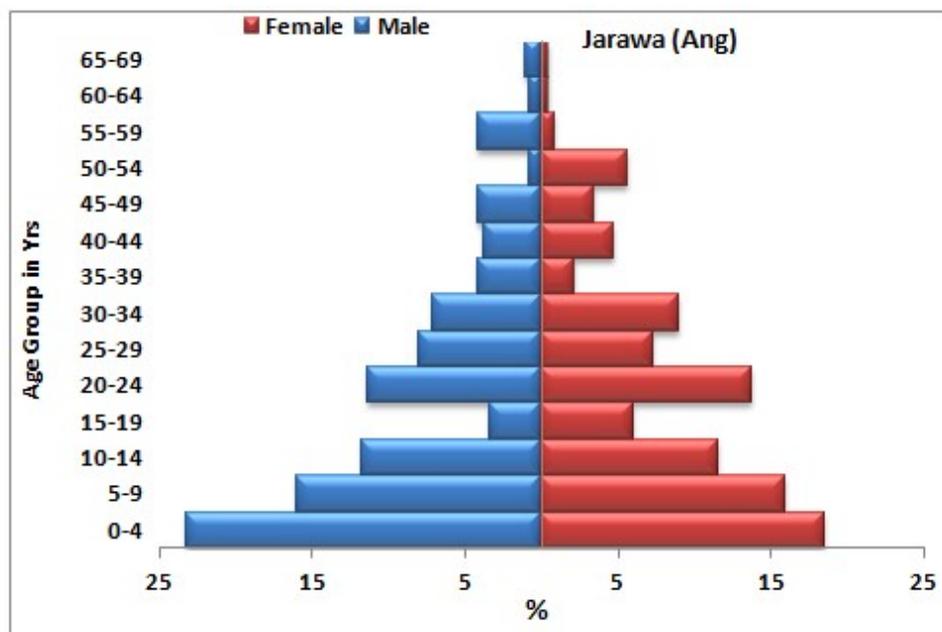


Fig. 2.5: Diagrammatic representation of population pyramid among the *Jarawa* of Kadamtala (*Tanmad*) area.

The broad base of the population pyramid clearly indicates the growth tendency of the *Jarawa* population. As the population data is based on the recent survey of November, 2017,

the sudden decline in the population at the age group 15-19 years is quite parallel to the year 1998-2003. Notably, in 1998 first time *Jarawa* came in a mass friendly contact with the outsiders and neighbouring non-*Jarawa* villagers. Afterwards, up to 2003, the situation was quite tensed, haphazard and uncontrolled. Due to frequent culture contact, *Jarawa* livelihood was significantly affected during that period, since the *Jarawa* policy was enacted in 2004.

Table 2.4: Age group wise distribution of head of the family among *Jarawa* population of Kadamtala (*Tanmad*) area

| Age Group (Years) | Number of head of the family | Per cent age |
|-------------------|------------------------------|--------------|
| 10-19 | 0 | 0 |
| 20-29 | 14 | 32.60 |
| 30-39 | 13 | 30.20 |
| 40-49 | 5 | 11.60 |
| 50-59 | 9 | 20.90 |
| 60 and above | 2 | 4.70 |
| Total | 43 | 100 |

Significantly, the above table shows that out of the 43 families of the study area, 62.80 per cent families' head are below the age of 40 years.

Table 2.5: Marital status among the *Jarawa* population of Kadamtala (*Tanmad*) area

| Marital status | Number of <i>Jarawa</i> individual | Per cent age |
|----------------|------------------------------------|--------------|
| Married | 81 | 42.9 |
| Unmarried | 104 | 55 |
| Widow | 3 | 1.6 |
| Widower | 1 | 0.5 |
| Total | 189 | 100 |

Table 2.6 : Gender wise distribution of marital status among the *Jarawa* population of Kadamtala (*Tanmad*) area

| Marital status | Male | Female | Total |
|-----------------------|------------------|-----------------|------------------|
| Married | 41 (41.00) | 40 (44.94) | 81(42.85) |
| Unmarried | 58 (58.00) | 46 (51.68) | 104 (55.02) |
| Widow | NA | 3 (3.37) | 3 (1.60) |
| Widower | 1 (1.00) | NA | 1 (0.58) |
| Total | 100 (100) | 89 (100) | 189 (100) |

(Figures in the parenthesis indicates per cent age)

Table 2.7: Distribution of *Jarawa* families of Kadamtala (*Tanmad*) area having bartering relation with non-*Jarawa* community

| Area | Total number of family | Number of family do not have bartering relation with the non-<i>Jarawa</i> | Number of family having bartering relation with the non-<i>Jarawa</i> |
|-----------------------------|-------------------------------|---|--|
| Kadamtala (<i>Tanmad</i>) | 43 | 8 (18.60 %) | 35 (81.40 %) |

The above table is focused on the number of *Jarawa* families having and without having bartering relation with the non-*Jarawa* neighbouring communities in the study area i.e. Kadamtala area (*Tanmad*). The survey of the *Jarawa* families reveal that 81.40 per cent *Jarawa* families did bartering exchange during last one year in the study area which is quite significant and alarming with respect to their socio-cultural changes. On the other hand, altogether 18.60 families did not maintain any bartering exchange during last one year. These families are mostly residing in the interior forest and rarely come in the nearby non-*Jarawa* villages.

Table 2.8: Distribution of frequency of bartering exchange among the *Jarawa* household of Kadamtala (*Tanmad*) area

| Area | Total number of family | Number of family having bartering relation with the non- <i>Jarawa</i> | Frequency of Bartering (in last one year) | | |
|-----------------------------|------------------------|--|---|-------------------------------|------------------------|
| | | | Low (once in a year) | Moderate (once in six months) | High (once in a month) |
| Kadamtala (<i>Tanmad</i>) | 43 | 35 | 10 (28.75 %) | 16 (45.71%) | 9 (25.71%) |

The table 2.8 is particularly showing the frequency of bartering exchange with the neighbouring non-*Jarawa* communities. In this particular aspect, the frequency is measured in terms of number of bartering exchange made by any member of that particular family during last one year. The frequency of barter is further categorised as low (minimum once in a year), high (minimum once in last six months) and high (minimum once in every month). It has been found that out of 35 *Jarawa* families having bartering relation, 45.71 per cent families come under the category of moderate frequency of bartering exchange, 28.75 per cent families with low frequency and surprisingly 25.71 per cent *Jarawa* families did bartering exchange at least once in every month. So, the situation is quite alarming in terms of culture contact scenario between the *Jarawa* and neighbouring non-*Jarawa* communities.

2.8 The *Jarawa* Reserve

After Indian independence in 1947, the Andaman and Nicobar Islands are included under the administrative control of the Government of India. It took about a decade to frame a regulation for the protection of *Jarawa* and their territory. The ‘Andaman and Nicobar Protection of Aboriginal Tribes Regulation’ (ANPATR) came into existence in 1956. Most

of the areas which were inhabited by *Jarawa* declared as reserved area by the Andaman and Nicobar Administration (notified by ANPATR/3(1)/1, 1956/57). The reserved area includes entire areas along with the west coast of South Andaman and Middle Andaman including coastal water up to 3 km starting from the mouth of Constance Bay to the Louis Inlet Bay. The *Jarawa* territory was further modified by different notifications and de-notification by Andaman Administration [107.7/F No. 40.243/78-TW dated-19.07.1979 and No. 159/2004/F. No. 1-752/2002- TW(PF) dated-15.09.2004]. Significantly, the Andaman Trunk Road (ATR) which is cutting across the *Jarawa* territory has been excluded from the *Jarawa* Reserve. Previously existing 200 metre belt from central line of Andaman Trunk Road has also been minimised to 30 metre on the either side of the Andaman Trunk Road. The *Jarawa* Reserve is also extended towards coastal waters up to a distance of 5 Km from the high tide water mark line on the western side of the South and Middle Andaman Islands from Constance Bay to Lewis Inlet Bay. After the administrative notification in 2004, the *Jarawa* Reserve was again extended to an area of 1028 km² and in 2017 the Reserve area extended up to 1040 km² spread along with the western coast of Middle and South Andaman Islands. Apart from that special wards for the *Jarawa* at the Primary Health Centre at Kadamtala and Tusnabad are also included in the *Jarawa* Reserve. A scrutiny of the different notification reveals that this increase in the territory is only notional increase in the Reserve area but it does not have much relevance for the *Jarawa* as they have had been exploiting that area even prior to the notifications. So, the declaration of *Jarawa* territory as demarcated '*Jarawa* Reserve' may be treated as a protective mechanism to safeguard their territory and resources.

2.9 Buffer Zone

Recently, the most debated and politicised issue regarding *Jarawa* territory was 'Buffer Zone'. With the view of all-round protection of *Jarawa* vis-à-vis their territory and to regulate the harmful effect of culture contact with the outsiders, the Andaman administration in 2007 declared the area up to 5 km radius adjacent and contiguous to the entire *Jarawa* Reserve starting from Constance Bay of South Andaman to Lewis Inlet Bay at Middle Andaman as Buffer Zone. Many villages of different Gram Panchayats of South Andaman and Middle Andaman Islands came under this Buffer Zone declaration. Establishment and operation of different commercial, tourism activities were regulated and restricted in the buffer zone villages. Primarily, livelihoods of all the villages were seriously affected due to this declaration. Tremendous social and political agitations were raised by the settlers. Consequently, a negative attitude towards the *Jarawa* was developing among the buffer Zone villagers. Many villagers were of opinion that the *Jarawa* are the sole responsible for this negative impact on their livelihood. Subsequently, this Buffer Zone declaration was amended and re-notified in 2013 and with some partial modification which declared to exclude 30 villages and entire seaward side of west of South and Middle Andaman from buffer zone. This re-notified Buffer zone also excludes most of the settlement villages near to the *Jarawa* territory.

2.10 Andaman Trunk Road

One of the most contentious decision was taken by the Andaman and Nicobar administration in the late sixties. In order to develop the land communication between the North and South Andaman Islands, administration decided to construct a road namely Andaman Trunk Road (ATR). Since after the independence, under the Refugee Rehabilitation scheme the Government has established many settlement villages in different places of North Andaman, Middle Andaman and South Andaman Islands. Since the capital city Port Blair is located at

the South Andaman Island, it was of utmost priority for the administration to establish suitable communication between all the inhabited islands of Andaman. Due to different difficulties of sea transport like turbulent weather during monsoon season, time consuming and troublesome sea journey etc. were prejudiced the authorities to such a decision of land communication different nearby islands through the *Jarawa* territory. Being migrated from mainland India, Myanmar and Sri Lanka, the road communication was the most preferred means of transportation for the settlers also. So, the ATR was planned to connect the four major Islands namely South Andaman i.e Baratang, Middle Andaman and North Andaman from the Chiriyá Tapu in the Southernmost part of South Andaman. Construction of the 333 km long ATR began in late sixties and work continued in different phases and finally became fully operational in 1989. The road has length of 107 km in South Andaman and 226 km in the Middle and North Andaman (Sarkar, 2015). The decision seems to be taken with the view to introduce smooth communication facilities for the settlers of the different islands. Different portions of the ATR were designed to pass through the *Jarawa* Reserve area in South and Middle Andaman Islands. Many heavy machineries and large numbers of labourers for clearing of forest and construction of the road were brought to the construction places in the *Jarawa* territory. A number of labour camps along the proposed road were established. Invariably, the introduction of such huge machineries and labour force severely disturbed the ecological equilibrium in which the *Jarawa* livelihood was accustomed. They were probably traumatised with the unprecedented noise which have not been experienced in distance past. As the ATR was cutting across the *Jarawa* territory from South to North, it prevented free movements of the tribe to from west to east and vice versa. Thus, it detrimentally affected the resource accessibility and resource utilisation of *Jarawa* in their territory. Large scale felling of huge trees, frequent movement of heavy machines, use of explosives and construction of labour camps at different work sides must have multiplied the vulnerability of this small community. They have been virtually concerned within considerably less forest area than

they had enjoyed during the colonial rule. As a natural instinct to protect their habitats and resources, they occasionally raided the labour camps situated within the *Jarawa* territory. They tried to prevent construction of the road in their own ways. On several occasions they put barricades at the work head with the message for the labourers not to proceed further for clearing their resource areas. However, under the protection of armed police, the barricades used to be cleared and construction work continued. It was alleged that the labourers used to put electrified wires encircling their camps that have taken many lives of the tribes. Even then they did not give up obstructing the work of ATR. They conducted attacks on the labourers and other workers causing many casualties, whenever opportunities came, also destroyed many of their camps of those road workers. A section of people in Port Blair and many in the mainland raised their voices in protest of construction of ATR through the *Jarawa* Resource areas. Regular clashes between the *Jarawa*, settlers and construction workers was quite common. Several incidents of conflicts and clashes had taken place on the road since the 1970s and continued up to 1997 when the scenario changed drastically and the *Jarawa* came into a mass friendly contact with the outsiders. Exact numbers of *Jarawa* killed during the construction of ATR probably never be revealed, be it by electrocution, bullets or other means. Attacks on different labourers, Bush Police, trucks and buses by the *Jarawa* were merely a form of resistance towards the outsiders' intrusion into their territory.

In this regard it is notable that in 1952, a study to assess the feasibility of further resettlement of Bengali refugees from the then East Pakistan to the South and Middle Andaman Islands was conducted by Dr. Surajit Chandra Sinha, then an upcoming young Anthropologist. The study revealed that Dr. Sinha was also not in favour of further resettlement of the refugees in the vicinity of the *Jarawa* territory, especially in South Andaman. The report states that "these small numbers of *Jarawa* hold a very extensive territory from North West of South Andaman to South West of Middle Andaman and are a menace to extension of refugees'

resettlements in South Andaman. So long as friendly relation is not established with these aboriginals through active effort of the Anthropologists, the only way open is to keep them confined within a specific territory as *Jarawa* Reserve Area” (Sinha, 1952). The territory covering virtually entire Northern part of South and Middle Andaman Islands was declared as Tribal Reserve in 1956 through a Government notification (ANPATR/3(1)/1, 1956/57)). The reserved area includes entire areas along with the west coast of South Andaman and Middle Andaman including coastal water up to 3 km starting from the mouth of Constance Bay to the Louis Inlet Bay. The *Jarawa* territory was further amended by different notifications and de-notification by Andaman Administration [107.7/F No. 40.243/78-TW dated-19.07.1979 and No. 159/2004/F. No. 1-752/2002- TW(PF) dated-15.09.2004]. Significantly, the Andaman Trunk Road (ATR) which is cutting across the *Jarawa* territory has been excluded from the *Jarawa* Reserve. Previously existing 200 metre belt from central line of Andaman Trunk Road has also been minimised to 30 metre on the either side of the Andaman Trunk Road. The *Jarawa* Reserve is also extended towards coastal waters up to a distance of 5 Km from the high tide water mark line on the western side of the South and Middle Andaman Islands from Constance Bay to Lewis Inlet Bay.

Regarding impact and consequences of Andaman Trunk Road (ATR), this is noteworthy to mention that primarily it was constructed not for the benefit of the *Jarawa*. It was the interest of the immigrant people of the dominant societies, which often receive attention of the State since demand of the majority needs to be honoured in a democratic country. Consequences on small and already vulnerable community like *Jarawa* are often ignored. The unrevealed and underlined simple logic is that numbers matters in democracy. So, for a handful 400 odd *Jarawa* individuals, the development process of the larger society with lakhs of people cannot be suffered. Introduction of the ATR through the *Jarawa* territory essentially devastated the life and culture of the tribe. They had to ultimately give up their antagonistic relationship with the encroachers and intruders to their territory which often protected them from many

unknown alien vices of culture contact. Consequences of showing friendly gesture were almost similar to that of Great Andamanese and Onge. Several untoward activities like movement of vehicular traffic, frequent visit of outsiders including tourist, poaching and supply of alien food items etc. have been in operation in the *Jarawa* territory. These would likely to push the *Jarawa* to a stage of total dependency on the larger dominant societies. Lakhs of tourists with thousands of vehicles are passing through the ATR every year with the hope to get a glimpse of the *Jarawa*. Tour operators also motivate the tourists for the road journey through the *Jarawa* Reserve. This so called *Jarawa* tourism became very popular among most of the visiting tourists. This chaotic journey through ATR have immensely effected the livelihood of the *Jarawa* to a great extent. Apart from that ATR also facilitated different poachers to increase their accessibility and movability inside the dense forest in *Jarawa* territory which have a direct impact on depletion of *Jarawa* resources.

2.11 Chapter Summary

This chapter basically dealt with thick ethnographic description about the very little known and vulnerable tribal community i.e. *Jarawa* in terms of their livelihood, Society and Culture. . This empirical ethnographic description is the baseline to understand the dynamic changes therein in terms of *Jarawa* territory and territoriality. Overall this chapter include aspects regarding concept of *Ang*, *Enen* and *Yono*, social Organisation, subsistence Economy, fishing, honey Collection, resources in the *Jarawa* territory, seasonal variation of resources, Material Culture, rite-de-passage, population details, *Jarawa* Reserve, buffer zone and Andaman Trunk Road (ATR). This chapter also emphasised on the aspects of material culture like traditional huts (*chadda*), dress and ornaments, implements namely bow (*aaw*), arrow (*patho*), traditional knife (*tohad*), chest guard (*kekad*), wooden bucket (*uhu*), cane basket (*taika*), resin torch (*pone*), fishing hand net (*botho*), ochre (*ood* and *alam*) and iron and metals which are

subjected to rapid change with the influence of culture contact. It also includes many preliminary information regarding social organisation of the *Jarawa* which is till grossly unknown to the academic world. It also laid the foundation of relevant discussion in terms of the objectives research question of this particular Ph.D dissertation.