

## **CHAPTER-IV**

### **THE *JARAWA* TERRITORY: NEIGHBOURING COMMUNITIES AND POST-INDEPENDENCE MANIFESTATIONS**

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In the preliminary two years after the Independence of India, the situation remained more or less same as it was during colonial period. Soon the series events took place in the independent India which made substantial impact on the *Jarawa* people and their territory. One of the most significant events among these events was opening of the Islands for the rehabilitation of the refugees from the erstwhile East Bengal (now Bangladesh). Development of the situations and its manifestation have been discussed the following manner.

**4.1 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 km<sup>2</sup> and in 2017 the Reserve area extended up to 1040 km<sup>2</sup> 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.



## 4.2 Refugee Rehabilitation Programme

Immediately after independence, Government of India along with rehabilitation department of West Bengal and Andaman Administration decided to launch a scheme for resettlement of East Pakistan refugees at Andaman Islands. With the view of all round development of the Islands, it was decided to resettle both in agriculturist and non-agriculturist category. Under this scheme a total of about 4164 people (931 families) were settled during 1949 to 1955 at the vicinity of *Jarawa* territory (table-4.2). Huge forest coverage in and around *Jarawa* territory was cleared for the purpose of providing land to the settlers. It was proposed to allot 10 acre of land (5 acre plain paddy land and 5 acre of hilly land) to each family who were settled under agriculturist scheme. About 1,42,920 acre of land in and around the *Jarawa* territory were cleared and allotted during 1949 for the above mentioned refugee rehabilitation scheme (table-4.5).

In the first batch 202 families were rehabilitated on March 1949 and settled in a liner fashion mostly closed to road at the Tsunabad–Manpur- Colinpur-Temple Myo- Herbatabad-Tirur areas of South Andaman at the edge of *Jarawa* territory (table-4.1). Similarly on the other hand about 1397 number of families were settled around the *Jarawa* territory in Middle Andaman during the period from 1953 to 1959 (table-4.3). Suddenly, the *Jarawa* found themselves surrounded by many alien neighbours and dynamics of *Jarawa* territory changed ever since. Soon the land allotted to the settlers become insufficient for their livelihood and they realised the utility of the bountiful forest resources of *Jarawa* territory. Gradually they started to encroach the adjacent forest areas for horticultural activities and many of them involved in poaching of forest resources like timbers, wild boar, deer, fishes, crabs, honey and other minor forest produces.

Altogether during the year 1949 and 1959, 68 villages of the refugees consisting of 2328 families having a total population of 10,018 individuals were established in the South and

Middle Andaman Islands (Table 4.23 and Table 4.3). Though rehabilitation of the huge number of refugees was need of the situation but rehabilitation in and around the *Jarawa* territory may also be viewed as a kind of invasion in the *Jarawa* territory. Before the above cited settlement, the forest coverage in the Andaman Islands was much thicker and wide spread. As, it was very difficult to get any large patch of cleared land, the forests coverage and resource base of the *Jarawa* was the prime target and indiscriminately cut for the settlement of refugees. During the rehabilitation programme, the refugees were brought the Andaman Islands in different batches. As it is already mentioned that initially some parts of the South Andaman Island were selected for rehabilitation programme due to because of the readily available cleared land near the administrative Headquarters at Port-Blair. The first batch of 202 families was rehabilitated in March 1949 (Table. 4.2). Each of the rehabilitee families was provided with certain facilities and grants. They were given an ex-gratia grant of Rs. 1,050/-, a recoverable loan of Rs. 1,730. Apart from that a total of 10 acres of land, of which five acres for paddy land and five acre hilly land for horticulture (Sen, 1962). In addition to this land, each family was given some homestead for construction of houses and other uses. During a span of seven year from 1949 to 1955, overall 931 families were rehabilitated in different villages of South Andaman like Homfregunj, Herbertabad, Guptapara, Wimberlygunj and Shoal Bay (table 4.2). Notably, all these villages are contagious to the *Jarawa* territory.

An analogous process of encroachment of the *Jarawa* territory was repeated in the Middle Andaman island during the second phase of rehabilitation between 1953 to 1956 and more than 1300 families were rehabilitated. Within a period of seven years (1953 to 1959), about 1397 families were rehabilitated in six batches and 32 villages in different parts of the Rangat Valley, stretching from Betapur to Uttara. Altogether 5854 individuals were settled and

overall 7398 acre of paddy land were allotted at the vicinity of *Jarawa* territory in Middle Andaman Island (Table. 4.3). Consequently, each family was provided with Rs. 2000/- as loan in addition to the usual allotment of 10 acres of land. This area has certain special features like fertile soil, abundant rain, and perennial sources of fresh water, which attracted more settlers and leads to subsequent migration in the fringe villages of *Jarawa* Reserve.

Table 4.1: Year and State of origin of Settlers (family) in Andaman during 1949 –1961

Year	West Bengal	Kerala	Madras	Burma	Mahe & Pondicherry	Ranchi
1949	202					
1950	119					
1951	78					
1952	51					
1953	97					
1954	438	35		5		
1955	390	37	4			
1956	357	42				
1957	221	5	8		4	
1958	194	6				
1959	217		14			120
1960	250	44	17			64
1961	235	14				13
Total	2849	183	43	5	4	197
Grand						3281

Total						
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Source: Dhingra (2005)

Table 4.2: Year wise rehabilitation programme in South Andaman

Year	Number of villages established	Number of families rehabilitated	Population settled	Area allotted for paddy cultivation (acres)
1949	6	202	830	1530
1950	10	265	1165	1765
1951	4	114	554	625
1952	8	123	595	789
1953	-	-	-	-
1954	3	97	400	575
1955	5	130	620	735
Total	36	931	4164	6019

Source: Rehabilitation in South Andaman, unpublished report of Andaman Administration (1956)

Table 4.3: Year wise rehabilitation programme in Middle Andaman

Year	Number of villages established	Number of families rehabilitated	Population settled	Area allotted for paddy cultivation (acres)
1953	3	198	812	1439
1954	12	438	1810	1905
1955	7	264	1157	1725
1956	8	400	1729	1884

1957	-	-	-	-
1958	1	88	807	400
1959	1	9	39	45
Total	32	1397	5854	7398

Source: Rehabilitation in South Andaman, unpublished report of Andaman Administration (1961)

Table 4.5: Assessment of land available for allotment in Great Andaman in 1949 (in acres)

Name of Island	Flat land for Paddy	Slopping land for terraced paddy	Grazing & Garden land	Land for coconut farming	Total
North Andaman	7490	13500	14290	4430	39710
Middle Andaman	25305	28600	13600	4525	72030
Baratang	2160	7500	5600	2040	17300
South Andaman	3100	5550	4200	1300	14150
Total	37785	55150	37690	12295	142920

Source: Dhingra (2005)

### 4.3 Bush Police

The genesis of establishing Bush Police Force was laid down by different expeditions and punitive measures taken by the colonial administration against the *Jarawa* with the assistance of the Great Andamanese. Since 1858, different British administrators very tactfully used one hunter-gatherer community (Great Andamanese) of the island to fight against the other

hunter-gatherer community (*Jarawa*). Often these jungle expeditions teams were engaged to hunt or caught the *Jarawa* and escaped convicts in the dense tropical rainforest of Andaman Islands. This hunting expedition team was not so far institutionalised before the year 1905.

Finally British administration in the Islands decided to establish a 'Bush Police Force' in 1905 and it was formed with friendly Great Andamanese tribe as members and Burmese Jamadar as in-charge. Later, different tribes of Chotanagpur region who were brought to the Andaman Islands primarily as forest labour, were also included in this Bush Police Force. The job of the Bush Police Force was to hunt and capture the *Jarawa* and the escaped convicts too. In one such atrocious expedition by Captain West in 1925 claimed to hunt or shot dead as many as 37 *Jarawa* (Census of India, 1931: 16). With the help of institutionalised Bush Police Force, in each passing year, the number of the punitive expeditions sent inside the *Jarawa* territory increased manifold. Consequently, the antagonistic feeling among the *Jarawa* against the outsiders was further deep-rooted. Afterwards, the policy of *Jarawa* hunting was partially modified and it was felt that the most effective way to conciliate the *Jarawa* was to capture them in large numbers and bring them at the 'homes' in Port Blair. Then tame them and then sent them back as messenger of peace. One such experiment was organised in 1939 by McCarthy Commandant, Civil and Military Police, was considered to be successful as they were able to capture one young *Jarawa* woman with three of her children (Census of India, 1961: 104). The Bush Police Force played a key role in such expeditions and experiment. However, in the following years such expeditions could not be carried out because of the Japanese occupation of these Islands during Second World War.

After independence, the same colonial legacy carried for quite a few years. It have been mentioned that the Bush Police Force also included the tribes from the Chhotanagpur region

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who had been brought in the Islands as labourers and later found jobs in the Forest Department and Bush Police. Since most of the time they were posted in or around *Jarawa* areas, they built huts in the jungle in the lack of any other proper residential amenities. Some of these settlements are namely Jirkatang-2, , Kesri Dera, Jirkatang-7, Beach Dera, Putatang, Bamboo Tikri, Sippi Tikri etc. During refugee rehabilitation scheme (1949 to 1961), hundreds of villages were established at the vicinity of the *Jarawa* Reserve. Soon, contact and conflict started between *Jarawa* and settlers of the rehabilitated villages. Different administrative measures were adopted to protect the villagers. Bush police Force was further strengthening and different forest camps were also established. By that time the Bush Police Force was no more a group of game trackers and hunters. In 1961, it was manned by 35 Jamadars, 311 Constables and 1 Inspector from 44 camps along the periphery of the *Jarawa* Reserve. In addition, the Forest Department also maintained 150 constables accordingly (Census of India, 1961). Notably, both the forces were armed and in exigencies they were instructed to open fire on the *Jawara*. Besides giving protection to the Non-*Jarawa*, one of the aims of the Bush Polish was to keep a watch on the movement of the *Jarawa*. Hence, due the growing antagonistic relationship with the *Jarawa*, the British Government established Bush Police Force to contain the *Jarawa* and to protect the settlers and convicts. As such, several outposts of the Bush Police Force were established on the periphery of the *Jarawa* territory. Many of these out posts continued to exist even in the post-Independence period (map 4.2). After 1997, when the *Jarawa* became friendly with the Non-*Jarawa*, the name of the Bush Police Force was changed and now it is known as the *Jarawa* Protection Force. Only few outposts of the *Jarawa* Protection Force exist now primarily at the entry and exit points of the *Jarawa* Reserve along with the Andaman Trunk Road (ATR).

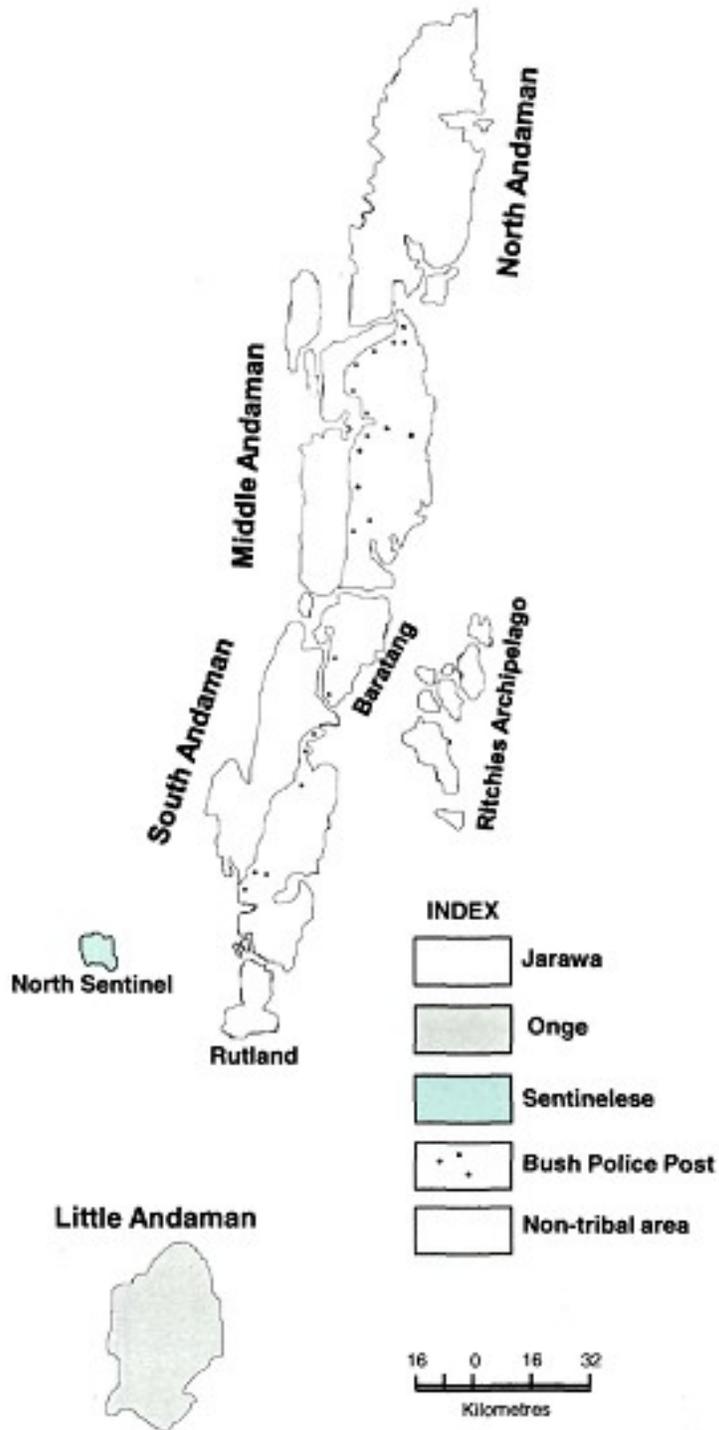


Fig. 4.2: Distribution of Bush Police posts nearby *Jarawa* Tribal Reserve in 1961 (Source: Kumar, 2009).

#### **4.4 The Andaman Trunk Road**

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. Moreover, as the capital city Port Blair is located at the South Andaman Island, it was of ultimate priority for the administration to establish suitable communication between all the rehabilitated areas of South Andaman, Middle Andaman and North Andaman. One of the most controversial and impactful decisions was taken by the Andaman and Nicobar administration in this regard during late sixties. In order to develop the land communication between the North Andaman, Middle Andaman and South Andaman Islands, administration decided to construct a ambitious road namely Andaman Trunk Road (ATR). Due to different difficulties and hassles of sea transport like turbulent weather during monsoon season, time consuming and troublesome sea journey etc. were prejudiced the administration to take such a controversial decision of land communication through the *Jarawa* Reserve areas. As most of the settlers were migrated from mainland India, Myanmar and Sri Lanka, the road transportation was the most preferred means of communication for them. Hence, the ATR was planned to connect the four major Islands namely South Andaman, Baratang, Middle Andaman and North Andaman from the Chiriya Tapu in the southernmost part of South Andaman. Construction of the 333 km long ATR began in late sixties. The work continued in different phases and finally became fully operational in 1989. The road has length of 107 km in South Andaman, 226 km in the Middle and North Andaman (Sarkar, 2015). This administrative decision was primarily taken with the view to facilitate smooth communication for the settlers of the different islands.

Different portions of the ATR were subjected to pass through the *Jarawa* Reserve area in South Andaman and Middle Andaman Islands. Many heavyweight 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. Numerous labour camps and transit areas along the proposed road were established. Consequently, the introduction of such huge machineries and labour force severely disturbed the ecological balance in which the *Jarawa* and their livelihood was accustomed. They were probably traumatised with the unexpected extreme noise which has not been experienced in distance past. As the ATR was cutting across the *Jarawa* territory from South to North along with the dense resource base forest areas, it prevented free movements of the tribe to from west to east and vice versa. Hence, construction of ATR detrimentally affected the resource availability and accessibility of resource utilisation of *Jarawa* in their territory. Large scale felling of huge trees, use of explosives and construction of labour camps at different work sides, frequent movement of heavy machines, must have multiplied the vulnerability of this small community. After rehabilitation of refugees at the vicinity of *Jarawa* territory and construction of ATR, the *Jarawa* were practically dealing within a considerably less forest areas than they had enjoyed during the colonial rule. As a natural instinct to protect their habitats and resource base, they often raided the labour camps situated within the *Jarawa* territory. They tried their level best to prevent construction of the ATR by their own ways. On several occasions they put barricades at the work head with the symbolic message not to proceed further for clearing their resource areas. In spite of, 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 or fencing encircling their camps that have taken many lives of the tribes. Even then they did not give up obstructing the wok 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* Reserve areas. Regular clashes between the *Jarawa*, settlers and construction workers

was quite common during those days. Several incidents of conflicts and clashes had taken place on the Andaman Trunk 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 (Kumar, 2009). Exact numbers of *Jarawa* killed during the construction of ATR probably never be disclosed due to different administrative reason and absence of real evidence. But probably hundreds of *Jarawa* were either killed or injured 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, resource base and livelihood.

In this regard it is notable that 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 in 1952 by Dr. Surajit Chandra Sinha, then an upcoming young Anthropologist. The study reflects that Dr. Sinha was also not in favour of further resettlement and rehabilitation 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 about entire Northern part of South Andaman and Southern part of Middle Andaman Islands was declared as Tribal Reserve in 1956 through a Government notification (ANPATR/3(1)/1, 1956/57)). The reserved area incorporated 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 which is cutting across the *Jarawa* territory has been excluded from the *Jarawa* Reserve. Earlier 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 for further protection to this vulnerable tribal people.

Impact and consequences of Andaman Trunk Road (ATR) is a much debatable and controversial issue. This is noteworthy to mention that primarily it was constructed not for the benefit of the *Jarawa*. It was the interest of the rehabilitated people of the dominant societies, which often get attention of the Administration. Demands and aspirations of the majority needs to be honoured in a democratic country. Consequences on small and already vulnerable community like *Jarawa* are often neglected and ignored. The unrevealed and underlined simple logic is that numbers matter in democracy. So, for a handful few hundreds of odd *Jarawa* individuals, the development process of the larger society with lakhs of people cannot be compromised. Introduction of the ATR through the *Jarawa* territory essentially devastated the life and culture of the tribe. They ultimately give up their antagonistic relationship with the encroachers and intruders to their territory. The territory and isolation of *Jarawa* often protected them from many unknown alien vices of culture contact. Consequences of showing friendly gesture and culture contact were almost similar to that of Great Andamanese and Onge. Several unwanted activities like movement of vehicular traffic, frequent visit of outsiders including tourist, poacher 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

complete dependency on the larger dominant societies. Lakhs of tourists with thousands of vehicles are passing through the narrow passage ATR every year with the hope to get a glimpse of the *Jarawa*. Tour operators also encourage the tourists for the road journey through the *Jarawa* Reserve. This so called *Jarawa* tourism became very popular among most of the visiting tourists (Kumar, 2009). Though the journey is always with a convey system with some limited and scheduled timings, but narrow passage of the ATR through the *Jarawa* Tribal reserve often leads to traffic jam in the reserve forest. This chaotic journey through ATR has immensely affected the livelihood of the *Jarawa* to a great extent. Moreover, ATR also facilitated different poachers to increase their accessibility and movability inside the dense forest in *Jarawa* territory which in turn have a direct impact on depletion of forest resources and livelihood.

#### **4.5 Contact and Conflict and Mutual Hostility**

As the *Jarawas* were not in a mood to establish any meaningful friendly contacts with the outsiders due to their past bitter experiences, the same situation of contact and conflict continued during also the post-independence era. The first and foremost concern for the Andaman Administration was to find an way out that would pave the ways for establishing some kind of trust and faiths among the *Jarawas* about the outsiders. The most significant change in the nature of intervention at that stage was replacement of punitive expeditions of the Colonial rulers with the welfare measure and to take initiatives befriending the unfriendly tribal populations. With this view the Bush Police personnel used to conduct periodical visits or contact missions to the *Jarawa* areas in the west coast of Middle Andaman for roping gifts like coconuts, bananas, pieces of irons and strips of red clothes etc.

Once in 1968, a few *Jarawas* entered in Kadamtala village (Middle Andaman) in a full moon night with the intension of picking up some iron implements. However, the villagers came out to catch them and succeeded to catch hold three *Jarawa* boys. Following the methods adopted during the Colonial rulers, these three boys were brought at Port Blair. However, there was a qualitative difference in achieving the desired goal. They were treated nicely and send back to the forest with large quantity of gifts. Perhaps this had some positive impact and in February 1974, few *Jarawas* showed friendly gestures to a Contact team and communicated by the Bush Police. This positive response encouraged arranging on regular visits to the area. The breakthrough finally came on 5<sup>th</sup> April of the same year when some *Jarawas* came forward, on their own to greet the members of the contact team. One of them swam across and came on board of the dinghy (country boat) and collected gifts (Pandit, 1989:169-178). It could be treated as a land mark step taken by the *Jarawas* in expressing their trust and faith on a section of the outsiders. It has been already mentioned that after the independence of our country the Andaman Administration initiated some welfare schemes for the betterment of the endangered small tribes of the Islands. All these schemes used to be formulated by the Tribal Welfare Department till 1975. Since, there was a basic difference in the gravity of the situation of these small tribes with other numerically large tribe like the Nicobarese, the Andaman Administration felt that a voluntary agency that would exclusively look after the welfare schemes as well as other issues related to the small tribes would be more effective. A flexible arrangement felt necessary so that procedures and forms did not come in the way of formulation and implementation of these special programmes crucial for survival of the vulnerable tribes of these islands.

Consequently, a voluntary agency namely, Andaman Adim Janjati Vikas Samiti (AAJVS), headed by the Chief Commissioner (at present Lt. Governor) was established and was registered with the Registrar of Joint companies, District of Andamans on 25<sup>th</sup> March, 1976. After the formation of the AAJVS, a ‘*Jarawa* Cell’ with personnel from Andaman Administration, Bush Police, experts from Health Department and anthropologists from Anthropological Survey of India was constituted to consolidate friendship and to learn *Jarawa* language in a planned way.

The policy of offering gifts made some headway towards easing out of tense relation to some extent with the members of the Contact team. After 1974, a few of this tribe, especially of the *Lakra-lunta* area of Middle Andaman used to show friendly gestures towards the members of the Contact team. They even used to come on the shore without their bow and arrow in their hands. They are intelligent enough to understand how much we are scared of these weapons. Gradually, they started coming to the visiting boat of the Contact team, spend few hours on the boat, behaving like a group of people in pleasure trips, sometimes would insist members of the team to accompany them up to their community hut at a distance from the shore in forest, there they would show their belongings, their items of adornment, with great pleasure and even offer honey to test (Sarkar, 2015). The situation of contact and conflict continued till October, 1997 when a mass of *Jarawa* population voluntarily came in friendly contact with the outsiders. Das (2016) has systematically recorded one hundred and two major incidences of conflicts between *Jarawa* and non-*Jarawa* during post-independence period (1946 to 2000). The above list of incidence also reveals that hundreds of both *Jarawa* and non-*Jarawa* individuals were subsequently killed due to those incidents of conflicts.

#### 4.6 Establishment of Friendly Contacts with the *Jarawa*

During post-independence era, under the new policy of the Government of India, the legacy of large scale and organised state violence and policy of punitive expedition towards the *Jarawa* was entirely given up. The *Jarawa* were given the constitutional status of a 'Scheduled Tribe' along with other five tribes of the Andaman and Nicobar Islands. Their territory was declared a Reserved Territory under the Government of India Forest Act and the Protection of Aboriginal Tribal Regulation of the Andaman and Nicobar Islands. Further, in order to befriend the *Jarawa*, intermittent gift giving operations were started and continued for decades.

As it has been mentioned, in 1968, three *Jarawa* were caught by the villagers of the Kadamtala in Middle Andaman when they had come to pick up some metal implements from the neighbouring non-*Jarawa* village. They were taken to the Port-Blair and kept for a month, then sent back to Kadamtala and subsequently released in the forest. After this incidence, the activity of gift dropping operation in the *Jarawa* territory was increased and systematised. On the 18th February 1974, a gift dropping party, under the supervision of Shiv Prasad Singh, Head Constable, Bush Police, was accosted by a group of *Jarawa* without their weapons and with friendly gesture. This was followed by vigorous efforts to renew contact with the *Jarawa* in the area. On 5th and 10th April 1974, Mr. Bakhtawar Singh, Officer-in-Charge, Bush Police, and other members of the contact team were able to meet the *Jarawa* at *Lakra Lungta* on the west coast of the Middle Andaman (Pandit and Chattopadhyay, 1993: 173). This was followed by frequent contact missions organised by the Andaman Administration. Between 1974 and 1996 numerous visits and contact missions were conducted in the *Jarawa* area. The contact parties often used to visit the western coast of the Middle Andaman in small vessels and make contact with the *Jarawa* on the shore. Primarily, such visits were conducted

on every full moon day and the visitors used to be officials of the local government, doctors and anthropologists. The underlying idea was that the *Jarawa* would be able to understand the regularity of such visits if they were visited on each full moon day, keeping in mind that natural cyclic phenomenon would presumably be intelligible enough to the *Jarawa*. It was also recommended that the visitors should be medically screened to prevent any possible spread of communicable diseases among the *Jarawa* (Awaradi, 1990: 132). During the contact missions the *Jarawa* were gifted with huge quantity of banana, coconut, and pieces of red cloth. The contact missions did succeed in creating some positive impact on the *Jarawa*. After sometime, the *Jarawa* started coming forward on their own to greet the members of the contact team. However, the nascent friendship and amity were interrupted time and again by continuing conflicts with the settlers (Mukhopadhyay, 2002: 24-29). In this way, one comes across ambiguous behaviour of the *Jarawa*, i.e., both friendliness and hostility towards the Non-*Jarawa* after 1974. While on one side the *Jarawa* were hostile to the settlers, forest labourers working in and around the *Jarawa* Reserve and vehicles were passing through the *Jarawa* Reserve via Andaman Trunk Road (ATR), on the other they displayed friendly gesture to the members of the contact team. It clearly explains the fact that the *Jarawa* did not like encroachment in their territory and sharing of natural resources by others as it was the question of livelihood and survival for them. Nevertheless, the *Jarawa* were friendly with members of the contact teams as the *Jarawa* found them to be not encroaching on their territory and destroying it (Kumar, 2009). However, after 1990 the *Jarawa* have also demonstrated more friendly behaviour towards their Non-*Jarawa* neighbours.

#### 4.6.1 *Enmey* episode and mass friendly contacts

In April 1996, a *Jarawa* boy named *Enmey* with broken leg was captured in the Kadamtala area of Middle Andaman when a group of *Jawara* tried to raid at Kataidera village in search

of iron and edible fruits etc. Consequently, he was admitted to the Primary Health Centre at Kadamtala and then referred to G.B. Panth Hospital, Port-Blair, where he received treatment for about six months. After being released from the hospital, Enmei was sent back to the Kadamtala area from where he was released in the *Jarawa* Tribal reserve. The underlying approach of the administration behind this act was that he would carry back to his *Jarawa* people the goodwill gesture and friendship. Following this incident, the contact situation took a decisive turn and the entire situation of contact and conflict changed ever since. Unpredictably, few months later, one day in October 1997, a group of unarmed *Jarawa* appeared at Uttara Jetty of Kadamtala area, Middle Andaman. This incident was a landmark in the history of relationship of the *Jarawa* with the non-*Jarawa*. It marked the end to the phase of mutual hostility and beginning of friendly relations between the *Jarawa* and the non-*Jarawa*. After that eventful day, the *Jarawa* started visiting the neighbouring settlement areas frequently. On the subsequent visits, they started plucking banana and other different food items from the plantation of the settlers and it soon became a regular phenomenon (Kumar, 2009).

#### **4.7 Expert Committee on *Jarawa* Behaviour**

Appearance of a group of *Jarawa* with friendly gesture at Uttara Jetty of Kadamtala area on October 1997, consequently, followed by the *Jarawa* of other areas like South and Middle Andaman within a calendric year created a panic among the villagers. The reason of their coming out of their habitats without bow and arrow, extending friendly gesture to non-*Jarawa* became a matter of guess and speculation. No one was prepared to believe that the so called 'hostile' *Jarawa* had actually come out of their forest to interact with the outsiders. It was also difficult to prevent the people of this tribe by the unprepared Government officials.

At this juncture, an advocate of the Kolkata High Court filed a Public Interest Litigation, at the Circuit Bench at Port Blair, seeking an order in nature of *mandamus*, directing the Government to provide all sorts of facilities and rehabilitate them as it was done for the Onges and the Great Andamanese (Sarkar, 2015). She was apprehending that the *Jarawa* are coming out because of food shortage and disease prevailing among them. The notion of food shortage among this tribe is nothing very specific to the concerned advocate. The Circuit Bench at the first instance appointed a special officer with the directives to submit a report on the problems and suggest the ways and means for their rehabilitation and welfare. However, the report was found not satisfactory to the Court and another Expert Committee was constituted in February 2000 by the Circuit Bench. Subsequently, the Circuit Bench further ordered on April 09, 2001, that the Ministry of Home Affairs, Government of India should constitute a Committee of Experts to study and spell out in clear terms:

1. Reasons for the sudden change in the behaviour of the *Jarawa* i.e., shedding the hostility, coming out of their forest abode in broad day light and accepting the exogenous items from non-*Jarawa*.
2. To suggest the remedial measures for the welfare of the *Jarawa*.

Accordingly a Committee of Experts was constituted in July 2001 with the Lieutenant Governor, Andaman & Nicobar Islands as the Convener. The Expert Committee decided to have a study of the *Jarawa* as detail as could be by a multidisciplinary research team in three phases to cover all the seasons of a calendric year. The Departments involved in the survey were Anthropological Survey of India, Botanical Survey of India, Zoological Survey of India,

All India Institute of Hygiene and Public Health, Forest Department, Andaman & Nicobar Administration and Directorate of Health Services, Andaman & Nicobar Administration.

The Committee of Experts submitted its report before the Hon'ble High Court of Calcutta on 28-7-2003. Based on this report and discussions of the anthropologists, sociologists and others of national and international repute generated in two seminars, the Ministry of Home Affairs formulated a policy, plans, and programmes for the *Jarawa*. The policy that was framed on the Andaman Trunk Road, the centre of controversy reads as under:

#### Regulation of traffic on Andaman Trunk Road

- a. Traffic on Andaman Trunk Road will be regulated strictly limiting the traffic to the essential purposes of public transport, supplies, and emergency evacuation of patients and to ensure that it is an innocent and harmless passage and not a source of trouble to *Jarawa*.
- b. Vehicles on Andaman Trunk Road will be allowed to move only in restricted hours and in convoy under notified speed limit to avert possible road accidents and to avoid any sort of interaction of travellers with *Jarawa*.
- c. Facilities for travel by boat/ ship will be strengthened and transportation or travel by sea will be encouraged.
- d. Maintenance of the Andaman Trunk Road will be carried out by a mobile maintenance team bringing men, machine and materials from Ferrargunj or Jirkatang and carry out the job only during day time.
- e. The tourist traffic on Andaman Trunk Road will be strictly monitored to ensure that there is no interaction between the *Jarawa* and the tourists (Andaman and Nicobar Gazette, December 21, 2004).

#### **4.8 Policy on *Jarawa* Tribe of Andaman Island, 2004**

As it has been already discussed that as per direction of the Hon'ble High Court of Calcutta, a committee of experts was constituted by Central Government vide the Ministry of Home Affairs notification number U-14040/24/99-ANL dated-21.07.2001. The Committee of experts submitted its report before the Hon'ble High Court of Calcutta on 28.07.2003. As per the direction of the Hon'ble Court, the central government was required to formulate a Policy, Plans and Programmes in respect of *Jarawa* in consultation with the Lt. Governor of A & N Islands after organising seminars and open discussion with the different experts, Anthropologist, Sociologist etc. Accordingly, the government had organised two such seminars one at Kolkata on 7<sup>th</sup> to 8<sup>th</sup> April, 2004 and another at Port Blair on 27<sup>th</sup> to 28<sup>th</sup> May, 2004 in which different relevant experts, NGOs and individuals deliberated on various issues related to the *Jarawa* and their wellbeing. The central government in the Ministry of Home Affairs have consequently decided to frame Policy or Guideline for the protection and welfare of the *Jarawa* of Andaman and Nicobar Island with the following objectives in view:

1. To protect *Jarawa* from harmful effect of exposure and contact with the outside world while they are not physically, socially and culturally prepared for such interface.
2. To prepare the compendium of social organisation, mode of subsistence and cultural identity of the *Jarawa* community.
3. To provide medical help to the *Jarawa* to reduce mortality and morbidity in case of sudden infection with diseases to which their systems are unaccustomed.

4. To Conserve the ecology and environment of the *Jarawa* Reserve Territory and strengthen support system in order to enable the *Jarawa* to pursue their traditional modes of subsistence and way of life.
5. To sensitise settler communities around the *Jarawa* habitat and personnel working for the protection and preservation of the *Jarawa* about the need to preserve these ancient community and to value their unique culture and life styles.

According to the policy following strategies to be adopted to fulfil the above objectives-

1. Protection of cultural identity
2. Protection of Natural habitat
3. Protection of health status
4. Regulation of traffic on Andaman trunk Road
5. Codification of *Jarawa* language
6. Institutional arrangements for implementation of different intervention programs and policy implementation.

#### **4.9 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.

Table 4.6: District wise list of Buffer zone villages nearby the Jawara Reserve

Sl. No	Name of the Buffer zone village or Gram Panchayat	District
1	Hanspuri	North and Middle Andaman
2	Chainpur	
3	Pudumadari	
4	Pareshnagar	
5	Jaipur	
6	Hari Nagar	
7	Duknagar	
8	Kaushalyanagar	
9	Kadamtala	
10	Yeratjig	
11	Santanu	

12	Udaygarh	
13	Entire Baratang Island	
14	Kalatang	South Andaman
15	Shoal Bay	
16	Wright Myo	
17	Malapuram	
18	Jirkatang	
19	Brindaban	
20	Ferargunj	
21	Aniket	
22	Caddlegunj	
23	Tirur	
24	Herpartabad	
25	Collinpur	
26	Temple Myo	
27	Manpur	
28	Mohowa Dera	
29	Tushnabad	
30	Miletilak	

#### **4.10 Developmental initiatives among the *Jarawa***

Developmental initiatives among the *Jarawa* may broadly be classified into two major categories namely policy level initiatives and ground level implementation of those policies.

The first category of developmental initiatives involves much of intellectual inputs often considering the ground level reality. It also incorporates planning and preparing the road map for the ground level initiatives. Often the prejudices of developmental approaches play a pivotal role at the operational level. Generally, in a typical orthodox organisational set up the welfare based approach is predominant over the right based developmental approach. The paradoxical difference between welfare based developmental approach and right based developmental approach is that the first one consider the target group (often a community) as a mere receiver of welfare measures and the second approach consider it as a right of the target group to get those basic amenities in terms of the developmental initiatives. Ideally, any policy level initiatives should be research driven and subjected to regular assessment and consequent amendment. Similarly, every assessment and amendment to be based on the ground level output from those policies.

In terms of policy level intervention among the *Jarawa*, after independence in 1947, 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]. As during those days *Jarawa* were not in a friendly relationship and they kept themselves

isolated from the outside world, this policy level intervention primarily attempted to protect their territory and resource base through different protective measures at the ground level.

It has been already mentioned that after independence of our country the Andaman Administration initiated some welfare schemes for the betterment of the endangered small tribes of the Islands. All these schemes used to be formulated by Tribal Welfare Department till 1975. Since, there was a basic difference in the gravity of the situation of these small tribes with other numerically large tribe like the Nicobarese, the Andaman Administration felt that a voluntary agency that would exclusively look after the welfare schemes as well as other issues related to the small tribes would be more effective (Sarkar, 2015). A flexible arrangement felt necessary so that procedures and formalities not to come in the way of formulation and implementation of these special programmes which were crucial for survival of the vulnerable tribes of these islands

Consequently, a voluntary agency namely, Andaman Adim Janjati Vikas Samiti (AAJVS), headed by the Chief Commissioner (at present Lt. Governor) was established and was registered with the Registrar of Joint companies, District of Andaman on 25<sup>th</sup> March, 1976. The AAJVS gets finance from the Central Government which is channelized through the Andaman Administration. The AAJVS has the following mandates and objectives -

1. To protect the health and prevent the extinction of the Particularly Vulnerable Tribal Groups (PVTG) namely, the Great Andamanese, the Onge, the Shompen, the *Jarawa* and the Sentinelese inhabiting Andaman and Nicobar Islands.
2. To promote the economic and social development of the above mentioned PVTGs.
3. To take a comprehensive view of the problems of these tribal welfare programmes in pursuance of the National Policy for their development.

4. To develop measures for coordination of governmental, institutional and voluntary action for protection of their economic and social environments, essential for their survival and growth.

Almost simultaneously, on the advice of the Ministry of Home Affairs, Government of India, an 'Advisory Committee on Primitive Tribal Groups' was set up with the Chief Commissioner (presently Lt. Governor) as Chairman, Jt. Secretary, Tribal Department, Government of India and eminent anthropologists from Universities and also from the Anthropological Survey of India, as members. Setting up of this Committee facilitates in specific tribal developmental policies and programmes, only for these small tribes. Recommendations of this Committee also became very handy for the AAJVS to incorporate in its programme. After the formation of the AAJVS, a '*Jarawa* Cell' with personnel from Andaman Administration, Bush Police, experts from Health Department and anthropologists from Anthropological Survey of India was constituted to consolidate friendship and to learn *Jarawa* language in a planned way.

During pre-contact situation before October, 1997 any intervention among the *Jarawa* was largely concentrated around different protective measures which includes protection of *Jarawa* territory and their resources. It was primarily implemented by *Jarawa* Protection Force, Forest Department and Tribal Welfare Department. In post 1997 scenario when most of the *Jarawa* came in mass friendly contact, different developmental initiatives also take a paradigm shift. Initially, it was centred on the distribution of items like banana, coconut, iron implements and red cloths etc. But after the implementation of *Jarawa* Policy (2004), some of these intervention programmes were streamlined. Medical intervention also played a pivotal role in this regard to obtain faith of *Jarawa* people and

to increase their demographic growth. Apart from the medical intervention, many other experimental developmental interventions have been initiated during last one decade. Some of the on-going developmental initiatives includes health care, plantation programme, *Ang Katha*, *Ang Sena*, Grain for gain, *Kangapo* project etc. To discuss the ongoing developmental initiatives among the *Jarawa*, the annual report of AAJVS (2016-2017) have been taken into consideration.

#### 4.10.1 Health Care facilities

Generally, *Jarawa* patient are treated at nearby Primary Health Centre (PHC) namely, Tushnabad of South Andaman and Kadamtala of Middle Andaman. Whenever, admitted to any PHC, they are kept and treated in a special ward. When patients required further investigation and expert advice they are referred to G.B. Panth Hospital at Port Blair. On recommendation of the Doctors of the G. B. Panth Hospital, the *Jarawa* patients are taken to the main land (viz. Chennai) for expert advice, further investigation and medical treatment. Two Eco-friendly *Jarawa* ward has been constructed at P.H.C. Kadamtala and PHC Ferrargunj by AAJVS. AAJVS also recruited some ANMs for prompt and direct medical intervention among the *Jarawa* at field level. Two separate tribal wards have been provided by Health Department at PHC Tushnabad and G.B. Pant Hospital, Port Blair. During Last one year (2016-2017), details of patients who were treated in various hospitals are mentioned bellow -

1. Main land : 04 *Jarawa* patients were treated at Sri Ramachandra Hospital, Chennai.
2. PHC Tushnabad : 355 patients (male, female and children)
3. PHC Kadamtala : 118 patients (male, female and children)

4. G.B. Pant Hospital : 89 patients (male, female and children)

#### 4.10.1.1 General observations on Healthcare interventions:

1. *Jarawa* patients are admitted to the hospitals are often accompanied by their nearby relatives whose numbers are varied from 2-5.
2. Ignoring their traditional food habit, two square meals provided to all of them which is similar to the all other patients.
3. Present system of medical intervention among the *Jarawa* does not recognize the traditional medicinal knowledge of *Jarawa* and is based on administration of conventional allopathic drugs. Even no other alternative system of medicines (e.g. Ayurveda) has been introduced yet.
4. No attempt has been made to understand the concept of '*Ulleda*' among the *Jarawa*. '*Ulleda*' is primarily refers to the physical unwellbeing which cannot be synonymous to the medical term 'Disease'.
5. Undoubtedly, medical intervention played a crucial role in befriending the *Jarawa* population and sudden population growth in last two decades. But discontinuity of allopathic drugs (antibiotics) and its different side effects cannot be ignored.
6. *Jarawa* being an immunologically vulnerable and numerically small community, any medical intervention must have to be with due precaution and harmonious with their nomadic, hunter-gatherer livelihood.

#### 4.10.2 Plantation Programme

Tribal Welfare department initiated different plantation programme in the *Jarawa* territory since the initial days of friendly contacts. Generally, plantations are done nearby the *Jarawa* huts due to the thin canopy of rain forest coverage. Often, agriculture Department is providing seedling and forest Department is providing tree guards and labour force in this programme. Impact of plantation programme is clearly visible nearby most of the *Jarawa* community huts.

Table 4.7: Details of Plantations in Tirur, Middle Strait and Kadamtala area during the financial year 2016 to 2017.

Sl. No	Name of the plant	Number of saplings planted in Tirur area	Number of saplings planted in Kadamtala and Middle Strait area	Total
1	Banana	120	490	610
2	Mango	80	45	125
3	Jackfruit	20	70	90
4	Coconut	65	350	415
5	Guava	20	40	60
9	Lemon	0	05	05
10	Tapioca	0	70	70
11	Papaya	0	200	200

12	Orange	0	05	05
13	Mausambi	0	05	05
Total		305	1280	1585

Source: AAJVS (2017)

#### 4.10.2.1 General observations on Plantation programme:

1. All the alien varieties of plants have been planted with lack of consultation with the community members.
2. There are four varieties of wild tubers collected and consumed by *Jarawa* namely Cheo, Bugi, Nadohata and Chigi. Chigi is the most precious and preferred wild tuber which is scarcely available. There are many other traditional variety of fruits (*amin, loge, homa etc.*) preferred by the *Jarawa*.
3. Initiatives may also be taken for plantation of those traditional wild variety of tubers and fruits in consultation and participation of the community members.
4. *Jarawa* are fond of *Chonel* (banana) of a particular variety which is locally known as China Kela. Without understanding the preference of the *Jarawa*, often another variety of banana (Jahaji kela or Singapuri kela) was planted in the *Jarawa* areas under this plantation scheme.
5. So, consultation and participation with the community members should be given prime importance before any developmental initiatives.

#### 4.10.3 *Ang* Katha

*Potatang* Hotspot / *Anaholey Chadda* in South Andaman was chosen for starting the process of informal schooling among *Jarawa* tribes. The book titled “*Ang* Katha” is in *Jarawa* dialect and in Devnagari script has been inaugurated on 22nd October, 2014 at *Potatang* Hotspot. Four Janjati Sevaks has been engaged as teacher to providing education to the *Jarawa* students and monthly @ 1000/- has been provided to them as incentive. AAJVS has provided school uniform to 143 *Jarawa* students. Monthly 10-12 classes have been conducted at Hotspots namely *Lakra Lungta*, *Phool tala*, *Potatang* and *Tirur* by the Janjati Sevaks of AAJVS. As per the records of AAJVS, average attendance of students is about 80 per cent. Numbers of *Jarawa* students enrolled in this informal educational centre are as follows -

Middle strait area	: 63 students
Kadamtala area	: 68 students
Tirur area	: 31 students
-----	
Total	: 162

##### 4.10.3.1 General Observations on ‘*Ang* Katha’ programme:

1. Discussion with the community members (*Jarawa*) reveals that contextual situation regarding number of student participation, frequency of class etc. are quite deviating with the above mentioned facts and figures.
2. Being nomadic hunter-gatherer, *Jarawa Chaddas* dispersedly located in different areas with population strength of about 10-40. Regularly, bringing of children from each and every nearby *Chadda* is quite impractical.

3. Janjati Sevak who are acting as Teacher of *Jarawa* are substantially less qualified to deal with such a sensitive issue. Primarily, they are MTS level field staff having basic recruitment qualification of Matriculation (Class-X). So, they must be properly oriented in this regard or some specially trained teacher may be recruited to deal with such a sensitive and dynamic situation.

#### 4.10.4 Grains for gains

The projects Grains for gains among the *Jarawa* initially started at “*Anaholey Chadda*” from August, 2015 and consequently extended to other areas / hotspots. A sum of 143 children in the age group 5-15 has been recorded by AAJVS at Tirur, Middle Strait & Kadamtala area. Under this project limited quantity of Rice i.e. 1.5 Kg in every 15 days is provided to those children who are so called regularly attending the ‘*Ang Katha*’ school. It would be given to the mother or aunt of that school attending *Jarawa* child only and distributed by the *Jarawa* teenagers at school who are rapidly learning numerical literacy. It must be given in front of a collective and on a prefixed day.

Altogether 2484 Kilograms of rice has been supplied to AAJVS from Directorate of Civil Supplied under BPL Scheme cost of per KG Rice @ 5.76% payment through State Bank of India. 2052 Kilograms of rice has been provided to Tribal Welfare Officer, Kadamtala and 432 KGs rice has been provided to tribal Welfare Officer, Tirur for distribution to the School going *Jarawa* Children under this scheme from August, 2015 to June, 2016.

#### 4.10.4 General Observation on the ‘Grains for Gains’ programme

1. Rice, being a non-traditional food, a Policy decision have to be taken whether rice is to be distributed among the *Jaraws* or not ? If yes, quantity and frequency of that

distribution must have to be decided scientifically with the view of probable impact on health, society and culture.

2. During the study many *Jarawa* informant told that they have sufficient stock of good variety of rice (raw poorny rice) in their storage which they got through bartering. They used to store rice in plastic containers and plastic bottles. According to them quality of the rice which is distributed through this project is of poor quality and less preferred.
3. Often this distribution of rice is termed as Mid-day-meal which has altogether different connotations and manifestations.
4. Hearing about this scheme of rice distribution one key informant of nearby settler village told that this is only instigating the taste buds of *Jarawa* to eat more and more rice which in turn they are acquiring through bartering.

#### 4.10.5 *Ang Sena*

Since the beginning of contact and conflict situation, *Jarawa* always expressed a strong sense of possessiveness towards protection of their territory and resources. There are many incidents in which *Jarawa* caught the intruders or poachers and handed over to the AAJVS officials / Forest Department / Police department. This particular sense of protecting their territory has been mobilised in the form of '*Ang Sena*' under which total six groups of *Ang Sena* are created at Tirur, Middle Strait and Kadamtala area. The prime objectives of the *Ang Sena* is to work with AAJVS field staff in securing the borders of the *Jarawa* Reserve, welfare and protection of their community. AAJVS has provided the

following necessary items to the *Ang Sena* as per list submitted by respective Tribal Welfare Officer, AAJVS.

1. Solar Lamps : 10 Nos.
2. Solar lantern with charger : 06 nos.
3. Jungle Shoe : 23 pairs.
4. Knife : 23 nos.
5. Uniform : 02 pairs to each.
6. Bag : 23 nos.
7. Torch Light : 23 nos.

Besides the above mentioned items, some iron and other metal materials are also provided to *Ang Sena*.

#### 4.10.6 *Kangapo* Project

The *Kangapo* Project has been implemented by AAJVS since October, 2014. In *Jarawa* dialect the term *kangapo* referred to any kind of cloths or clothing materials. As per *Kangapoo* Project some particular types of clothing is to be provided to *Jarawa* only in exchange of their handmade artefacts like basket and honey container. Numbers of cloths provided to the *Jarawa* in exchange of their handmade artefacts are as follows -

- Tirur area: Ninety numbers of cloths to females and twenty numbers of clothes to males have been provided to the *Jarawa* against their handmade artefacts under Kangapoo project.
- Kadamtala area: Sixty numbers of clothes to females and eighty numbers of clothes to male have been provided to the *Jarawa* against their handmade artefacts under Kangapoo project.

At present two outlets are in operation where the *Jarawa* Artifacts were kept for sale. The outlets are Segarika Emporium and Andaman and Nicobar Tribal Research Institute (ANTRI). *Jarawa* Artefacts are also displayed for sale through VSI Airport, Port Blair. As per Annual Report of AAJVS (2017), one Honey container and three baskets have been sold and the respective amount has been transfer to AAJVS account.

#### 4.10.6.1 General observations on '*Kangapo*' Project

Often it was been observed many *Jarawa* wearing the same cloth for several weeks without washing. As a result skin diseases also become more frequent and being treated by doctors. Being non-traditional item, they do not have any traditional way of maintaining the hygiene of the *Kangapo (Cloth)*. Detergent, soap etc. are not supplied to them under any schemes for maintenance of their *Kangapo (cloth)*. So, supplying of cloths without proper orientation regarding maintenance of hygiene of it is not desirable.

As per some tourists of Port Blair, the traditional *Jarawa* handmade basket and wooden bucket which are collected under this project are sold in the market with very high price

(approximately Rs. 2000 to Rs. 4000) which is quite high for most of the visitors in Port Blair.

#### **4.10.7 Discussion on Developmental Initiatives:**

According to the villagers of Bamboo Tikrey, *Jarawas* are often cited roaming around the village in search of banana, coconut, and beetle nuts. They often come with some of their forest resources viz. Crab (medium and XL), catfish, resign etc. for bartering. They often demand rice (preferably raw Poorni rice), biscuit, sukha (tobacco), cosmetics etc. According to the villagers there is a seasonal variation regarding their frequency of visit to the villages. They are sporadically cited during rainy season and frequency gradually increased after the rainy season (November to March) when *Jarawa* used to roam around the nearby forest in search of wild tubers which are abundant in the nearby hills (*Tikrey*).

One fisherman of Bamboo Tikrey village informed that it has become very difficult to sustain their livelihood by fishing only due to imposition of Reserve area and Buffer zone. Surprisingly, few *Jarawa* of nearby areas have acquired few non-mechanised dinghy (canoe) from the other visiting fisherman. With the help of that dinghy young *Jarawa* men and boys are roaming around the nearby creeks of unreserved areas also. So, when the fisherman of Bamboo Tikrey and other villages are fishing beyond the reserved areas also, often the *Jarawa* are raiding them and forcefully taking away their fishing implements like net, hooks, lines and food items. They also informed that there are few villagers who often illegally entered into the reserve forest to collect wild pig, crab and other forest resources. In due course they also interact with the *Jarawa* inside the forest and instigate them for bartering. They also fix the probable date and place for consequent bartering.

The villagers of Phooltala informed that situation has changed drastically during last fifteen to twenty years. The village Phooltala was settled during 1970s and is well known for having extreme reciprocal relationship with the *Jarawa*. After they came into regular friendly contact in 1997-1998, *Jarawa* often used to visit Phooltala village for plucking of edible fruits like banana, jack fruit, mango and beetle nut etc. Earlier villagers used to resist the *Jarawa* by shouting and chasing them, consequently *Jarawa* used to ran away. During those days villagers also used to get nominal compensation from AAJVS for their loss. According to the villages, now-a-days *Jawawa* are not running away with shouting and chasing of villagers while plucking of fruits at the villages. They used to pluck the fruits from the courtyards and backyards very firmly and calmly as if it is their prime right to pluck those ripen fruits.

Similar complementary reply was obtained during the fieldwork while interviewing a *Jarawa* man in *Thidong* area (Middle Strait). The villagers also informed that it seems *Jarawa* are keep tracking the maturing and ripening of different varieties of fruits viz. Jack fruit, banana, guava, mango etc. in the garden of each and every household of the village. Villagers are hardly getting any fruit to eat at Phooltala. Often villagers are showing a positive attitude towards the *Jarawa* and said let them take all our fruits as they are eating only and getting relief from their hunger. It is noteworthy to mention that fruits are not the source of livelihood for the villagers. Their prime source of livelihood is cultivation of beetle nut. Situation becomes worst when *Jarawa* used to take away big packets and branches of beetle nuts on behalf of other villagers. It has been reported by the villagers of Phooltala that some of the *Jarawas* are instigated by few fellow villagers to act for their benefit. In return they get desired item in exchange.

One very significant statement made by one of the key informant of Bamboo Tikrey that once he had asked a visiting *Jawara* that this village may be shifted due to the Buffer zone issue.

So, what the *Jarawa* will do for their bartering urges. A noteworthy reply came from that *Jarawa* that they will also go to that area where the villagers will be shifted. Similar kind of reply was recorded from the *Jarawa* of Middle Strait areas during the present study.

Remarkable changes have been observed throughout the present study during last five to six years. During beginning of the study (2011-2012) while visiting different *Jarawa* huts (*Chadda*), I often used to ask ... *Titab?* (meaning what you have eaten). Most of the time the used to reply as *wowo* (wild pig); *leo, pod* (honey); *napo* (fish); *chonel* (banana); *urug* (monitor lizard); *aab* (jack fruit); *cheo, bugi, nadohata* (wild tubers); *omin* (cycus fruit), *thuya* (nipa fruit), *pathen, ono* (edible larvae) etc. On very few occasion they have replied as '*Chawal Titab*' or '*Khana Khana Titab*' (meaning we have consumed boiled rice). But during the final phase of study in 2017, it has been found that most of the *Jawara* families were preparing and consuming rice and more frequently replying to the same question (*Titab?*) as '*Khana Khana Titab*' or '*Chawal Titab*'.

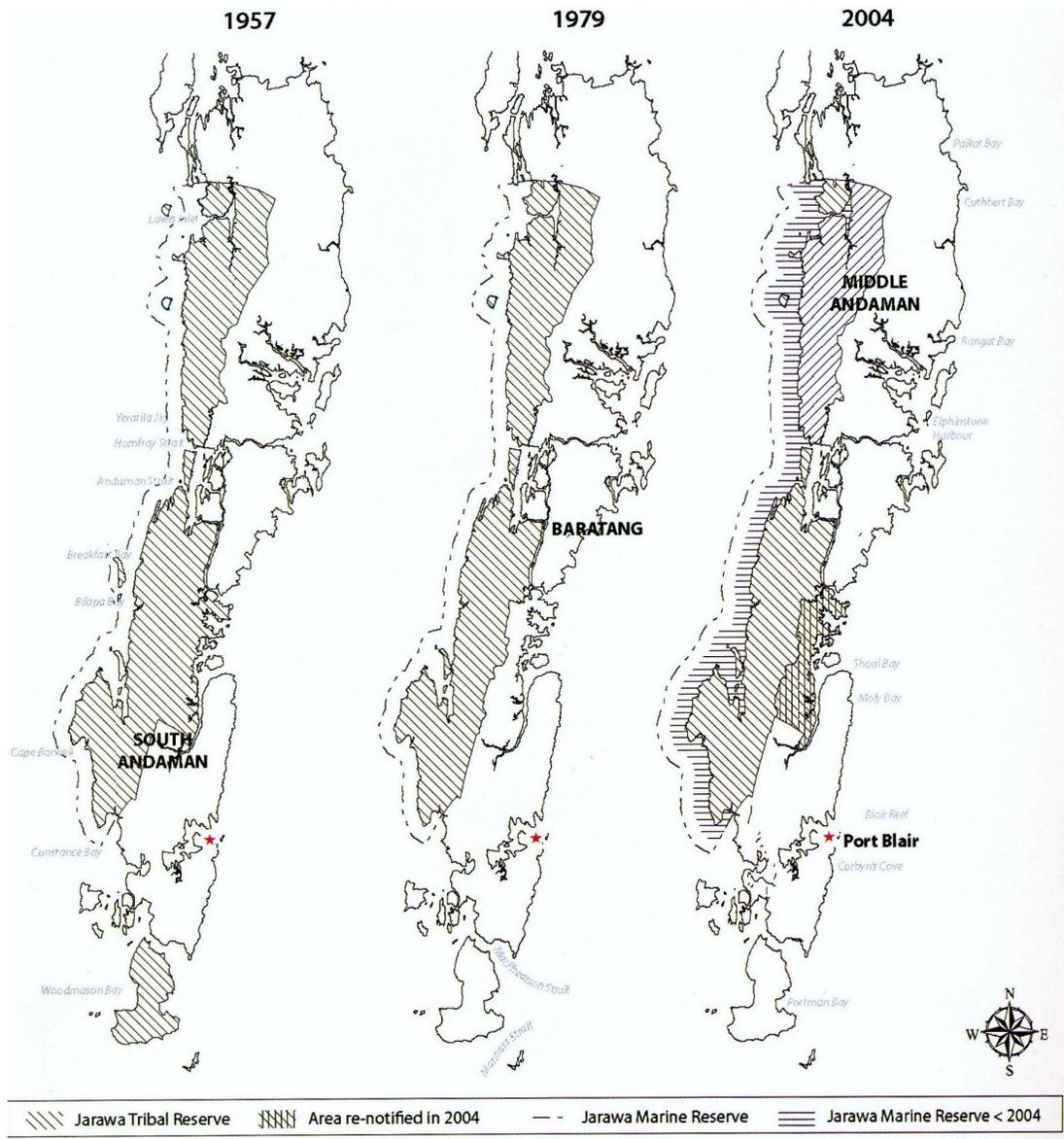


Fig. 4.3 : Changes in the boundary of *Jarawa* territory in 1957, 1979 and 2004

#### 4.11 Neighbouring Communities: The Studied Villages

According to the Buffer zone notification (2013) of Andaman and Nicobar administration, the *Jarawa* Reserve in the Middle Andaman is surrounded by ten major neighbouring villages having total population of 8426 (Census, 2011). To study interaction between *Jarawa* and non-*Jarawa*, two neighbouring non-*Jarawa* villages namely Phooltala and Bamboo Tikrey were selected. Both the selected non-*Jarawa* villages are geographically contiguous to the *Jarawa* Reserve having maximum bartering contacts with *Jarawa*. Both the villages come under Kadamtala Gram Panchayat, Rangat Tehsil, North & Middle Andaman district of the union territory Andaman and Nicobar Islands. Detailed household survey was conducted in both the selected non-*Jarawa* villages. The village Phooltala and Bamboo Tikrey are inhabited by different settler communities and are numerically dominated by Bengali population. Their prevalent primary occupation is agriculture which also includes horticultural activities like areca nut and coconut farming. Majority of them came from erstwhile East Pakistan under the refugee rehabilitation scheme of the Government during 1949 to 1954. Buffer zone notification (2013) of Andaman administration includes altogether 30 neighbouring non-*Jarawa* villages located within the 5 km radius of the *Jarawa* Reserve. Since 2011 to 2017, overall fieldwork was conducted among all the above mentioned three territorial groups of *Jarawa*. Considering the wide spread geographical landscape, the study area was restricted for the convenience. Hence, for the present research work, the study area has been limited to the *Tanmad* area or Kadamtala area of Middle Andaman Islands only. Extensive fieldwork was also conducted among the neighbouring non-*Jarawa* villages of Kadamtala area. The study area was inhabited by 189 *Jarawa* (male 99, female 90), having sex

ratio 909. They live in the dense tropical rain forest of the *Jarawa* Tribal Reserve. The *Jarawa* Reserve in the Middle Andaman is surrounded by 10 major neighbouring villages (Buffer zone notification, 2013) having total population of 8426 (Census, 2011). To study interaction between *Jarawa* and non-*Jarawa*, two neighbouring non-*Jarawa* villages namely Phooltala and Bamboo Tikrey were selected. Both the selected non-*Jarawa* villages are geographically contiguous to the *Jarawa* Reserve having maximum bartering contacts with *Jarawa*. During the present study on 2017, total population of Phooltala was 134 (male 66, female 68) while the total population of Bamboo Tikrey was 220 (male 112, female 108).

**List of basic civil amenities at Kadamtala Gram Panchayat area as on 2017**

<b>Sl. No.</b>	<b>Facility</b>	<b>No.</b>	<b>Place</b>
1.	PHC	01	Kadamtala
2	Sub Centre	02	Kataidera, Phooltala
3	Govt Sr. Sec. School	01 (581 enrolled)	Kadamtala student
4.	Govt. Middle School	02	Kadamtala Kataidera
5.	Govt. Primary School	05	Phooltala Forestvalley
6	Police Station	01	Kadamtala
7	Post Office	01	Kadamtala
8	Bank	A & N State Co- operative Bank Ltd.	Kadamtala

During initial days of rehabilitation, most of the settlers were primarily involved in agricultural activities. In addition some of them were also worked as agricultural

labourers and wage labour for additional source of income. A few of them got employed as wage labourer in the forest department. Consequently, some of the other migrants who reached Andaman on their own were not allotted any land by the authority and they were engaged in carpentry work with both wood and cane, in addition to their engagement as wage labourer. Due to lack of livelihood opportunities, a few of them started exploiting nearby natural resources of the surrounding forest of *Jarawa* Tribal Reserve areas commercially. This tendency is observed to be multiplied by the time as a undeviating consequence of increase in population over the decades. In the beginning only jobless and landless settlers used to enter into the forest for maintenance of livelihood. Subsequently, later on the people having land and other means of livelihood realized that they could get extraordinary return from forest based activities and also started to venture the *Jarawa* Reserve for poaching

During the time of settlement the amount of land (15 acre) were allocated to the settlers batch who first came to Kadamtala area. Consequently, the Phooltala village area been developed for resettlement of some growing families or 'Badi Family'. Initially 23 'badi' families were settled in Phooltala village at the vicinity of the *Jarawa* Tribal Reserve. Over the period of time population has been increased and member of family also increased and in that area agriculture is the only mean of livelihood. The land allocated to that family has been divided in many parts to cater all the families. Naturally the amount of land for per family now has become very less. Latter on fishing has become another source of income but for fishing activity there are so many restrictions being the buffer zone of the *Jarawa* Reserve area, income from fishing is also limited. Therefore, persons has been compelled to get work as daily labour and some of them naturally getting interested to the *Jarawa* forest area for the forest produce and marine

produce which is easily available there. In Kadamtala and Ultra Panchayat the production of areca nut was 1500 metric ton and production of coconut was 1 lakh number in the last year (as per information from Agriculture department, 2017). With the passing decades, the settlers of Kadamtala area less interested to grow paddy because there getting rice form PDS in less price than the cost of production of paddy. Moreover, as growing of areca nut is more profitable, nowadays, they are planting areca nuts instead of paddy or vegetables.

Table 4.8: Population distribution of studied non-*Jarawa* villages

Name of Village	Number of Family	Population		Total Population	Sex Ratio
		Male	Female		
Phooltala	29	66	68	134	1030
Bamboo Tikrey	47	112	108	220	964
<b>Total</b>	76	178	176	354	988

All together 76 non-*Jarawa* settler families having total population of 354 were studied. The studied village Phooltala and Bamboo Tikrey was inhabited by 29 and 47 families comprising of total population 354. Significantly, sex ratios of both the studied villages are far above the national figure.

Table 4.9: Ethnic Group wise population distribution of studied non-*Jarawa* families

Name of Village	Ethnic Groups			Number of Family
	Bengali	Ranchi	Telugu	
Bamboo Tikrey	33 (70.2%)	12 (25.5%)	2 (4.3%)	47 (100.0%)
Phooltala	27 (93.1%)	2 (6.9%)	0 (0%)	29 (100.0%)
<b>Total</b>	60 (78.9%)	14 (18.4%)	2 (2.6%)	76 (100.0%)

The studied villages were inhabited by three primary ethnic groups namely Bengali, Ranchi (comprising of Oraon, Munda and Kharia etc). Both the villages were numerically dominated by Bengali population.

Table 4.10: Age and gender wise population distribution of Bamboo Tikrey village

Village	Age Group	Gender		Total
		Male	Female	
Bamboo Tikrey	0-4	4 (40.0%)	6 (60.0%)	10 (100.0%)
	5-9	2 (16.6%)	10 (83.3%)	12 (100.0%)
	10-14	12 (60.0%)	8 (40.0%)	20 (100.0%)
	15-19	8 (53.3%)	7 (46.6%)	15 (100.0%)
	20-24	14 (53.8%)	12 (46.1%)	26 (100.0%)
	25-29	10 (55.5%)	8 (44.4%)	18 (100.0%)
	30-34	12 (60.0%)	8 (40.0)	20 (100.0%)
	35-39	8 (61.5%)	5 (38.4%)	13 (100.0%)
	40-44	10 (55.5%)	8 (44.4%)	18 (100.0%)
	45-49	8 (50.0%)	8 (50.0%)	16 (100.0%)
	50-54	5 (71.4%)	2 (28.5%)	7 (100.0%)
	55-59	4 (40.0%)	6 (60.0%)	10 (100.0%)
	60-64	6 (42.8%)	8 (57.1%)	14 (100.0%)

Table 4.11: Age and gender wise population distribution of Phooltala village

Village	Age group	Gender		Total
		Male	Female	
	0-4	3 (42.9%)	4 (57.1%)	7 (100.0%)
	5-9	3 (50.0%)	3 (50.0%)	6 (100.0%)
	10-14	6 (54.5%)	5 (45.5%)	11 (100.0%)
	15-19	5 (31.2%)	11 (68.8%)	16 (100.0%)
	20-24	3 (25.0%)	9 (75.0%)	12 (100.0%)

<b>Phooltala</b>	<b>25-29</b>	5 (71.4%)	2 (28.6%)	7 (100.0%)
	<b>30-34</b>	5 (55.6%)	4 (44.4%)	9 (100.0%)
	<b>35-39</b>	8 (40.0%)	12 (60.0%)	20 (100.0%)
	<b>40-44</b>	6 (85.7%)	1 (14.3%)	7 (100.0%)
	<b>45-49</b>	6 (50.0%)	6 (50.0%)	12 (100.0%)
	<b>50-54</b>	1 (100.0%)	0 (90%)	1 (100.0%)
	<b>55-59</b>	2 (50.0%)	2 (50.0%)	4 (100.0%)
	<b>60-64</b>	4 (40.0%)	6 (60.0%)	10 (100.0%)
	<b>65-69</b>	4 (66.7%)	2 (33.3%)	6 (100.0%)
	<b>70-74</b>	2 (66.7%)	1 (33.3%)	3 (100.0%)
	<b>75-79</b>	1 (100.0%)	0 (0%)	1 (100.0%)
	<b>80+</b>	2 (100.0%)	0 (0%)	2 (100.0%)
	<b>Total</b>	66 (49.3%)	68 (50.7%)	134 (100.0%)

Table 4.12: Educational status of studied non-*Jarawa* villages

<b>Name of Village</b>	<b>Educational Category</b>								<b>Total</b>
	Non-literate	1-5 (Primary)	6-8 (Upper Primary)	9-10 (Secondary)	11-12 (Higher Secondary)	Graduation (Non-Technical)	Post-graduation (Non-Technical)	NA (below 5 years)	
<b>Bamboo Tikrey</b>	48 (21.8%)	40 (18.2%)	49 (22.2%)	36 (16.3%)	22 (10.0%)	15 (6.8%)	0 (0%)	10 (4.5%)	220 (100.0%)
<b>Phooltala</b>	8 (6.0%)	40 (29.9%)	24 (17.9%)	36 (26.9%)	18 (13.4%)	3 (2.2%)	0 (0%)	5 (3.7%)	134 (100.0%)
<b>Total</b>	56	80	73	72	40	18	0	15	354

Name of Village	Educational Category								Total
	Non-literate	1-5 (Primary)	6-8 (Upper Primary)	9-10 (Secondary)	11-12 (Higher Secondary)	Graduation (Non-Technical)	Post-graduation (Non-Technical)	NA (below 5 years)	
<b>Bamboo Tikrey</b>	48 (21.8%)	40 (18.2%)	49 (22.2%)	36 (16.3%)	22 (10.0%)	15 (6.8%)	0 (0%)	10 (4.5%)	220 (100.0%)
<b>Phooltala</b>	8 (6.0%)	40 (29.9%)	24 (17.9%)	36 (26.9%)	18 (13.4%)	3 (2.2%)	0 (0%)	5 (3.7%)	134 (100.0%)
<b>Total</b>	56 (15.8%)	80 (22.59%)	73 (20.6%)	72 (20.3%)	40 (11.2%)	18 (5.0%)	0 (0%)	15 (4.2%)	354 (100.0%)

Among the studied villages 15.8 per cent of the total population was non-literate and rate of higher study is quite low. Moreover, there were not a single individual with post graduate degree. One of the prime reasons behind this may be their economic status and non-availability of any colleges and university at the vicinity.

Table 4.13: Distribution of APL and BPL among the studied non-Jarawa villages

Village	BPL /APL		Total
	APL	BPL	
<b>Bamboo Tikrey</b>	23 (48.9%)	24 (51.1%)	47 (100.0%)
<b>Phooltala</b>	22 (75.9%)	7 (24.1%)	29 (100.0%)
<b>Total</b>	59.2 (65.6%)	31 (40.7%)	76 (100.0%)

As per the PDS record, economic condition of the Phooltala villages is better than the Bamboo Tikrey village. 51.1 per cent families of Bamboo Tikrey were having BPL card while only 24.1 per cent family of Phooltala village were with BPL card.

Table 4.14: Bank account holders of the studied villages

Village	Bank Account		Total
	Yes	No	
<b>Bamboo Tikrey</b>	47 (100.0%)	0 (0%)	47 (100.0%)
<b>Phooltala</b>	28 (96.6%)	1 (3.4%)	29 (100.0%)
<b>Total</b>	75 (98.7%)	1 (1.3%)	76 (100.0%)

The above table indicate that except one family of the Phooltala village, all the families were having active bank account.

Table 4.15: Distribution of beneficiaries of bank loan among the studied villages

village	Bank Loan		Total
	No	Yes	
<b>Bamboo Tikrey</b>	42 (89.3%)	5 (10.6%)	47 (100.0%)
<b>Phooltala</b>	26 (89.7%)	3 (10.3%)	29 (100.0%)
<b>Total</b>	68 (89.4%)	8 (10.5%)	76 (100.0%)

The above table depicts that very few villagers are able to get bank loan for different purposes. For both the villages about 10 per cent families get the bank loan from the nearby State Cooperative bank.

Table 4.16: Fuel use pattern among the studied non-*Jarawa* villages

Name of Village	Fuel for cooking					Total
	Firewood	Firewood & Kerosene	LPG	LPG & Kerosene	Firewood, Kerosene & LPG	
<b>Bamboo Tikrey</b>	22 (46.8%)	12 (25.5%)	5 (10.6%)	7 (14.8%)	1 (2.1%)	47 (100.0%)
<b>Phooltala</b>	10 (34.5%)	6 (20.7%)	5 (17.2%)	8 (27.6%)	0 (0%)	29 (100.0%)
<b>Total</b>	27 (30.0%)	19 (21.1%)	14 (15.6%)	27 (30.0%)	3 (3.3%)	90 (100.0%)

Notably, the above table indicates the forest resource utilisation by the nearby villages. 46.8 per cent families of Bamboo Tikrey and 34.5 per cent families of Phooltala village were only dependent on firewood for cooking purpose. Moreover, 21.1 per cent and 3.3 per cent of the studied families were dependent on Firewood & Kerosene and Firewood, Kerosene & LPG consequently. Only 15.6 per cent families were using only LPG as fuel for cooking.

Table 4.17: Distribution of non-*Jarawa* families on the basis of source of light

Village	Source of Light			Total
	Electricity	Kerosene lamp	Electricity & Kerosene lamp	
<b>Bamboo Tikrey</b>	24 51.1%	5 10.6%	18 38.3%	47 100.0%
<b>Phooltala</b>	14 48.3%	2 6.9%	13 44.8%	29 100.0%
<b>Total</b>	38 50.0%	7 9.2%	31 40.8%	76 100.0%

As a source of light majority of the population was dependent on electricity and in combination of electricity and kerosene lamp. It also indicates frequent power cut in the studied villages.

Table 4.18: Distribution of non-*Jarawa* families on the basis of house type

Village	House type			Total
	Kaccha	Pakka	Semi Pakka	
<b>Bamboo Tikrey</b>	13 (27.6%)	5 (10.6%)	29 (61.7%)	47 (100.0%)
<b>Phooltala</b>	10 (34.5%)	6 (20.7%)	13 (44.8%)	29 (100.0%)
<b>Total</b>	23 (30.2%)	11 (14.5%)	42 (55.3%)	76 (100.0%)

The above table indicated that most of the houses of the studied villages were semi-pakka (55.3) and 30.2 per cent houses were kaccha till the study was conducted..

Table 4.19: Distribution of non-*Jarawa* families on the basis of possession of motorised vehicle

Village	Motorized Vehicle		Total
	No	Yes	
<b>Bamboo Tikrey</b>	34 (72.3%)	13 (27.7%)	47 (100.0%)
<b>Phooltala</b>	19 (65.5%)	10 (34.5%)	29 (100.0%)
<b>Total</b>	53 (69.7%)	23 (30.3%)	76 (100.0%)

The table indicates individual and as well as family mobility of the villagers with the help of motorised vehicle. Moreover, two wheeler motorised vehicle are often used by the poachers

to reach the nearby resourceful areas. Altogether 30.3 per cent families of the studied villages were equipped with motorised vehicle.

Table 4.20: Distribution of non-*Jarawa* families on the basis of possession of cell phone

Village	Cell Phone		Total
	No	Yes	
<b>Bamboo Tikrey</b>	0 (0%)	47 (100.0%)	47 (100.0%)
<b>Phooltala</b>	1 (3.4%)	28 (96.6%)	29 (100.0%)
<b>Total</b>	1 (1.3%)	75 (98.7%)	76 (100.0%)

Except one family in Phooltala village, all the studied families were having cell phone. It was often assumed that most of the poachers are taking advantage of mobile phone network for distribution and marketing of their collected items.

Table 4.21: Distribution of non-*Jarawa* families on the basis of possession of Dinghy

Village	Dinghy		Total
	No	Yes	
<b>Bamboo Tikrey</b>	42 (89.4%)	5 (10.6%)	47 (100.0%)
<b>Phooltala</b>	29 (100.0%)	0 (0%)	29 (100.0%)
<b>Total</b>	71 (93.4%)	5 (6.6%)	76 (100.0%)

Table 4.22: Village wise population of distribution of non-*Jarawa* families on the basis of primary source of income

Village	Primary Source of Income							Total
	Agriculture	Daily Labour	Horticulture (Areca nut)	Fishing	Self Employed	Service	Pension	
Bamboo Tikrey	7 (14.9%)	18 (38.3%)	13 (27.6%)	5 (10.6%)	0 (0%)	2 (4.2%)	2 (4.2%)	47 (100.0%)
Phooltala	11 (37.9%)	7 (24.1%)	8 (27.6%)	0 (0%)	2 (6.9%)	1 (3.4%)	0 (0%)	29 (100.0%)
Total	18 (23.7%)	25 (32.9%)	21 (27.6%)	9 (11.8%)	2 (2.6%)	3 (3.9%)	2 (2.6%)	76 (100.0%)

Regarding primary source of income, the above table indicates that villagers are predominantly dependent on daily wage labour (32.9 per cent), agriculture (23.7 per cent) and horticulture (27.6 per cent). Compared to Bamboo Tikrey, agriculture is more vibrant in the Phooltala villager.

Table 4.23: Village wise population of distribution of non-*Jarawa* families on the basis of other source of income

Village	Other sources of income							Total
	Agriculture	Labour	Horticulture	Fishing	Self Employed	Service	Pension	
Bamboo Tikrey	13 (27.6%)	12 (25.5%)	12 (25.5%)	8 (17.0%)	1 (2.1%)	0 (0%)	1 (2.1%)	47 (100.0%)
Phooltala	8 (27.6%)	2 (6.9%)	17 (58.6%)	0 (0%)	2 (6.9%)	0 (0%)	0 (0%)	29 (100.0%)
Total	21 (27.6%)	14 (18.4%)	29 (38.1%)	8 (10.5%)	3 (3.9%)	0 (0%)	1 (1.3%)	76 (100.0%)

Again regarding other source of income most of the families are dependent on agriculture (27.6 per cent) and horticulture (38.1 per cent).

Table 4.24: Village wise population of distribution of non-*Jarawa* families on the basis of possession of homestead land

Village	Quantum of Homestead land (in sqm)						Total
	<100	101-500	501-1000	1001-2000	2001-4000	>4001	
<b>Bamboo Tikrey</b>	0 (0%)	22 (46.8%)	14 (29.8%)	7 (14.9%)	4 (8.5%)	0 (0%)	47 (100.0%)
<b>Phooltala</b>	0 (0%)	10 (34.5%)	3 (10.3%)	9 (31.0%)	6 (20.7%)	1 (3.4%)	29 (100.0%)
<b>Total</b>	0 (0%)	32 (42.1%)	17 (22.4%)	16 (21.1%)	10 (13.1%)	1 (1.3%)	76 (100.0%)

The above table indicates that majority of the families (42.1 per cent) are having 101-500 sqm of homestead land which was allotted by government under the settlement schemes and no one in the studied villages are landless.

Table 4.25: Village wise population of distribution of non-*Jarawa* families on the basis of possession of paddy land

Village	Quantum of Paddy land ( in acre)					Total
	Nil	<1	1.1-3.0	3.1-5.0	>5	
<b>Bamboo Tikrey</b>	19 (40.4%)	11 (23.4%)	9 (19.1%)	6 (12.8%)	2 (4.2%)	47 (100.0%)
<b>Phooltala</b>	8 (27.6%)	2 (6.9%)	16 (55.2%)	3 (10.3%)	0 (0%)	29 (100.0%)
<b>Total</b>	27 (35.5%)	13 (17.1%)	25 (32.9%)	9 (11.8%)	2 (2.6%)	76 (100.0%)

As it has been mentioned that all the settlers families were allotted 5 acre of paddy land during their settlement, as on date total 35.5 per cent of the families are devoid of any paddy land and 32.9 per cent of the families are having 1.1-3.0 acre of paddy land.

Table 4.26: Village wise population of distribution of non-*Jarawa* families on the basis of possession of horticultural land (coconut)

Village	Quantum of Horticultural (Coconut) land ( in acre)					Total
	Nil	<1	1.1-3.0	3.1-5.0	>5	
<b>Bamboo Tikrey</b>	13 (27.6%)	16 (34.0%)	11 (23.4%)	5 (10.6%)	2 (4.2%)	47 (100.0%)
<b>Phooltala</b>	17 (58.6%)	6 (20.7%)	5 (17.2%)	0 (0%)	1 (3.4%)	29 (100.0%)
<b>Total</b>	30 (39.5%)	22 (28.9%)	16 (21.1%)	5 (6.6%)	3 (3.9%)	76 (100.0%)

Though it has been mentioned that all the settlers families were allotted 5 acre of horticultural land during their settlement, as on date total 39.5 per cent of the families are devoid of any horticultural land (coconut) land and 38.9 per cent of the families are having less than one acre of horticultural land (coconut).

Table 4.27: Village wise population of distribution of non-*Jarawa* families on the basis of possession of horticultural land (areca nut)

Village	Quantum of Horticultural (areca nut) land (in acre)				Total
	Nil	<1	1.1-3.0	3.1-5.0	
<b>Bamboo Tikrey</b>	32 (68.1%)	11 (23.4%)	4 (8.5%)	0 (0%)	47 (100.0%)
<b>Phooltala</b>	17 (58.6%)	6 (20.7%)	2 (6.9%)	4 (13.8%)	29 (100.0%)
<b>Total</b>	49 (64.5%)	17 (22.4%)	6 (7.9%)	4 (5.3%)	76 (100.0%)

Though it has been mentioned that all the settlers families were allotted 5 acre of horticultural land during their settlement, as on date total 64.5 per cent of the families are devoid of any horticultural land (areca nut) land and 22.4 per cent of the families are having less than one acre of horticultural land (areca nut). Moreover, 5.3 per cent of the studied families have 3.2-5.0 acre of areca nut cultivation.

Table 4.28: Village wise population of distribution of non-*Jarawa* families on the basis of possession of horticultural land (coconut and areca nut)

Village	Quantum of Horticultural (Coconut & areca nut) land (in acre)					Total
	Nil	<1	1.1-3.0	3.1-5.0	>5	
<b>Bamboo Tikrey</b>	12 (25.5%)	14 (29.8%)	13 (27.6%)	3 (6.4%)	5 (10.6%)	47 (100.0%)
<b>Phooltala</b>	10 (34.5%)	6 (20.7%)	8 (27.6%)	4 (13.8%)	1 (3.4%)	29 (100.0%)
<b>Total</b>	22 (28.9%)	20 (26.3%)	21 (27.6%)	7 (9.2%)	6 (7.9%)	76 (100.0%)

Overall as on date total 28.9 per cent of the families are devoid of any horticultural land (coconut and areca nut) land and 7.9 per cent of the studied families have more than 5 acre of horticulture land (both coconut and areca nut) cultivation.

Table 4.29: Village wise distribution of involvement in forest resources collection from *Jarawa* Reserve.

Name of Village	Number of Family	Number of family involved in collection of forest resources from <i>Jarawa</i> Reserve				Remarks
		Firewood	Wooden poles	Fish and crab	Hunted Wild animals and birds	
Phooltala	29 (100%)	25 (86.2%)	22 (75.8%)	17 (58.6)	5 (17.2)	Collection of each forest resources are overlapping
Bamboo Tikrey	47 (100%)	22 (46.8)	14 (29.8)	25 (53.2)	3 (6.3)	
<b>Total</b>	76 (100%)	47 (61.9)	36 (47.4)	32 (42.1)	8 (10.5)	

The above table indicates the pattern of forest resource collection by the villagers from *Jarawa* Tribal Reserve. Firewood is the most predominant forest resources

collected by the 86.2 per cent villagers of Phooltala village. Though entering in the *Jarawa* Tribal Reserve is a punishable offence under the PAT regulation, the villagers are taking risk of it only for the sake of their livelihood.

Table 4.30: Village wise distribution of families involved in bartering interaction with the *Jarawa*.

Name of Village	Number of Family	Number of family having barter relation with <i>Jarawa</i> during last one year	Frequency of interaction			
			Once in a year	Bi-annually	Quarterly	Frequent (Monthly)
Phooltala	29 (100%)	8 (27.6 %)	1 (3.44 %)	0 (0)	2 (6.9%)	4 (13.8%)
Bamboo Tikrey	47 (100%)	12 (25.5%)	4 (8.5% )	3 (6.4 %)	3 (6.4%)	2 (4.2)
<b>Total</b>	76 (100%)	20 (26.3 %)	5 (6.6)	3 (3.9%)	6 (6.6)	6 (6.6)

In terms of quantifying the frequency of barter relationship among the *Jarawa* and neighbouring studied villages, it has been found that altogether 26.3 per cent families of the studied villages have conducted barter at least for once in the last year. Compared to the Bamboo Tikrey village, frequency of barter is more in the Phooltala village.

#### 4.12 Chapter Summary

Systematically and consequently with the earlier chapter, this chapter titled ‘The *Jarawa* Reserve: Neighbouring Communities and Post-Independence Manifestations’ depicted different manifestations related to *Jarawa*, their territory and neighbouring

communities after independence in 1947. This chapter broadly includes altogether eleven sub-chapters namely The Jarawa Reserve, Refugee Rehabilitation Programme, Bush Police, The Andaman Trunk Road, Contact, Conflict and Mutual Hostility, Establishment of Friendly Contacts, Expert Committee on Jarawa Behaviour, Jarawa Policy 2004, Buffer Zone, Development Initiatives and Neighbouring Communities: The studied villages.

All the above aspects under this chapter have been discussed scientifically in a particular time frame. The discussion on developmental initiatives also incorporates different ongoing interventions programmes among the Jarawa namely *Kangapo* Project, *Ang Sena*, Grains for gains, *Ang Katha*, Plantation Programme, Health Care facilities. It also critically discussed the impacts of those above mentioned intervention programmes on the Jarawa society and culture.