CHAPTER VIII
SUMMARY AND CONCLUSIONS

The primitive tribes are the venerable groups of mankind, living with the nature and their life style being conditioned by their eco-system by hunting and food gathering. At present there are approximately 200 million tribal people, roughly four per cent of the global population. According to 1991 census, the population of Schedule Tribes in the country was 67.76 millions, constituting about 8.01 per cent of the total population, approximately one tribes - man for every thirteen Indians. Articles 14 (4), 46, 244 (1) and 339 of the Indian constitution speak of special provisions meant for the administration and control of Scheduled areas and tribals therein, for their welfare and protection.

With the advent of economic development programmes confined to tribal sub-plan sector, the Government of India and Tamilnadu have taken up innumerable developmental schemes, protective measures and welfare promotive measures. These welfare measures taken up by the Government to provide the socio-economic framework for the transformation of the tribal system, which resulted in economic differentiation, and social stratification of particular vulnerable group. This assumes significance primarily from the point of their responsiveness to welfare measures. Understanding the internal organisation in terms of hierarchy of socio-economic status of a particular vulnerable group,
assumes significance in the context of analyzing the levels of living. The major conclusions drawn on the basis of the present micro level study of the four primitive tribes namely Kota, Toda, Irula and Paniya in the Nilgiri District of Tamilnadu, India are summarized in this chapter.

8.1. SAMPLING DESIGN

The tribals chosen for the study are the primitive tribes of the Nilgiri hills of Tamil Nadu. The tribes included for the study are the Todas who are postrolicists by occupation, Kotas are having as their occupation horticulture, Irulas and Paniyas have food gatherers and labourer as their occupation. 51 villages are covered in the study area. Four, 19, 15 and 13 villages are covered in Kota, Toda, Paniya and Irula tribes respectively. In selected villages, 710 households are selected for study the socio-cultural, ecology and health and nutritional status of the selected primitive tribes. Out of 710 households, 110, 120, 230 and 250 Kota, Toda, Paniya and Irula households are covered respectively. In the study are 30742 individuals were examined to know the general health conditions among the all tribes. 580, 493, 1065 and 934 individuals covered in Kota, Toda, Paniya and Irula tribes respectively.

The systematic study on tribal socio-economic characteristics seem potentially quite useful, as they provide important insights into large issue of how different patterns of social behaviour can be attributed to economic differentials. With this in mind, it was decided to study the socio-economic conditions of the four primitive tribes as the first objective.
8.2. DEMOGRAPHIC CONDITIONS

The demographic characteristic shows that the female outnumbers the male. The overall sex ratio of the sample population of all the four primitive tribes is 1040 females per 1000 males. Irula has the highest sex ratio of 1071 and Paniya has the lowest sex ratio of 972. Kota and Toda has sex ratio of 1064 and 1106 respectively.

Overall age and sex composition shows that 36.85 per cent of the sample populations are economically dependent, (31.48 per cent are young dependent and 5.37 per cent are old age dependent). 63.15 per cent of the total sample populations are independent group. The Kota, Toda, Irula and Paniya dependent were 32.89, 36.11 38.54 and 38.40 per cent respectively. The economically independent were 68.11, 63.89, 61.46 and 61.60 per cent in Kota, Toda, Irula and Paniya respectively. More than half of the female populations (52.62 per cent) are in their reproductive age. Kota tribe female population 55.18 per cent are in their reproductive age, followed by Paniya tribe (53.72 per cent), Toda tribe (52.13 per cent) and Irula tribe (50.09 per cent).

The highest of 25.21 percent of the tribal families are four member families, only in Irula tribe has the highest of two members families. Nearly 50 per cent of the tribes are married, the divorced cases are very less to 0.49 per cent. Divorce and widow remarriage is permitted in all the four tribes. In all the four tribes, 77.04 per cent of the households are nuclear families among Kota
74.17 per cent in Toda 67.27 percent are nuclear. In Paniyas and Irulas tribes (77.39 per cent and 82.40 per cent of families are nuclear families.

8.3. SOCIO-ECONOMIC CONDITIONS

8.3.1. Literacy

The literacy rate of the four tribes shows that nearly 50 per cent of the sample household populations are illiterates. The Paniya tribes are highly illiterate than other three tribes. At the same time the Kota tribes are better educated than other three tribes. It was also observed that all the four tribes did not hesitate to send their female children to school.

8.3.2. Social Conditions

Majority of the tribes are presently living in the tiled houses (79.30 per cent), constructed by the Government under various developmental schemes. Among the four tribes Paniya are having more number of thatched houses than the other tribes and thatched houses are not found among Kota. Irula and Paniya are living in Government houses. Only 41.13 per cent of the households are having electricity for their houses.

8.4. Ecology

Majority of the tribes are using wood for cooking, so the dependency on forest is more among all the tribes. Drinking water is the major problem still 45 per cent of the tribes depend on well, river, pond and spring water. Only 1.55 per cent of the tribes are getting the protected water in their houses, the rest of them
are getting water from outside. Toilet facilities are very poor 95.49 per cent of
the tribes go for toilet in the open fields/forest and 94.93 per cent tribes dispose
the child excreta in the open field.

8.5. **ECONOMIC CONDITIONS**

Out of 3072 persons in the sample households studied main workers
constitutes 45.90 per cent, marginal workers constitute 6.28 per cent and non-
workers account for 47.82 per cent of the population. Among the various tribes
Paniya tribe (55.50 per cent) have large number of main workers, followed by the
Irula (49.04 per cent), Kota tribe (35.00 per cent) and Toda tribe (32.04 per cent).
The occupation status shows that, in all the four tribes 93.08 per cent, 2.06 per
cent and 4.86 per cent depend on primary, manufacturing and service sectors
respectively. The Paniya populations were fully engaged in primary sector.

Change in traditional occupation can be seen among the four tribes. 67.75 per cent of the tribes are possessing agricultural land but only Todas and Kotas are cultivating to some extent, the Irulas and Paniyas are not doing agriculture because the land they possess is barren and it will not suite for agriculture. All the sample tribes per household land value were Rs.2,14,639.75 and per capita land value are Rs.47,642.92. Some households possess land, but they get marginal returns from those lands and hence depend on wage employment such as agriculture forest labour and other activities to eke out their livelihood.
8.6. **FOOD HABITS AND NUTRITIONAL STATUS.**

Out of 3072 total population studied, 2584 (84.11 per cent) persons are non-vegetarian, 359 (11.69 per cent) persons are vegetarian and 129 (4.20 per cent) persons are eggitarian. Nearly 90 per cent of the all tribes except Toda tribes are non-vegetarian. The Toda tribes are purely vegetarian, the younger generation are consuming non-vegetarian rarely. The nutritional status is very low among the Paniya. Among the Toda and Kota nutritional status is better because the Toda consumes milk and milk products along with the rice and vegetables. The Kota changed their traditional occupation to horticulture and tea plantation, the Kota sell the vegetables and tea leaf in the local market and purchases their daily requirements, hence, their nutritional status is comparatively better. The change in food habits also observed in all the four tribes traditionally the tribes were depended on forest and forest produce now the dependency on the forest has been reduced to a great extent. Consuming roots, tubers and flesh foods from the forest has been changed. Now most of them are consuming ragi, samai, rice, wheat etc, which are available form the local market.

It has been observed from the study that, among the primitive tribes majority of the tribes are aware of the modern medical treatment. Once the tribes had a firm belief that a disease is always caused by hostile spirits, ghosts of breach of some taboo. Out of 3074 tribes examined 982 tribes had different types of
diseases. Majority of the diseases are cough, cold, fever, stomach pain skin infection and the diseases related vitamin and protein deficiency.

To get cure the diseases 61.41 per cent of the tribes prefer to go Government hospitals for treatment because they get quick relief and the medicines are free. Before going to the doctor or medicine man majority of the tribes (76.90 per cent) take advise before going for treatment. The vaccination of children to prevent diseases has been a corner stone of the child health care system in India. As a part of the National Health Policy, the National Immunization Programme in being implemented on a priority basis with an objective of reducing morbidity, mortality and disability from six diseases by making free vaccination services easily available to all eligible children.

From the data it is observed that 710 (sample) tribal children studied 665 (93.66 per cent) of the tribal children had vaccination. As through the mothers are illiterate and low standard of living are also vaccinated. The reason for majority of the tribes is having vaccination because of the awareness created by the PHC and Health workers in the tribal areas.

Among all the four selected tribes 311 (43.81 per cent) tribes have awareness of the health programmes sponsored by the Government. Out of the 311 tribes 187, 59, 46, 15 and four tribes are known the midday meals, DWCRA, Balawadi, ICDS and Anganwadi programmes. Out of the 710 sample tribals 300 (42.25 per cent) tribes are beneficiaries, and 410 (57.75 per cent) tribes are non-
beneficiaries. The highest percentage of welfare scheme availed by the tribes is midday meal programme which is availed in all the four tribes regions, followed by the availed by the tribal women called DWCRA and Balwadi.

8.7. Asset

The study infers that the land value of the sample households of Toda was highest among the four tribes. These lands are mostly barren and grazing lands, and the government had donated these lands. The household asset value estimation reveals that, the Kota tribe posses the highest value of asset, their average per household asset value is Rs.83,800.83. Because, these tribes are comparatively better literate and placed in good positions in government and private organizations. Therefore, they have the awareness of the saving and creating assets for their future. The lowest value of average per household asset is Rs.21,605.43 was found among the Paniya tribe. The majority of 69.01 per cent of all the four tribal households creates the household assets to the value of less than Rs.5,000.00 only.

The asset inequality of the four primitive tribal sample households with the application of the Lorenz Curve shows that, there exists inequality in the distribution of assets as the curve has concavity from the line of equity. It is found that, compared to all other tribes Paniya has the highest-level of concavity; it is followed by the Irula, Kota and Toda. The Paniya and Irula's Lorenz curve has very less deviations.
A quantitative estimation to measure the asset inequality is analysed by Gini Concentration Ratio for the given level of per capita income, the degree of inequality appears sensitive to the direction of economic performance. From the estimated asset inequality, it is found that the Kota, Irula and Paniya tribes had more 0.5 Concentration Ratio. The Paniya and Irula’s degree of inequality was more or less equal. The lowest of 0.4395 Gini Concentration Ratio was found among the Toda. It can be inferred from the study that the degree of inequality in asset was very high, this is because only a very few tribes possess assets and a majority of the tribe cant able to create asset.

8.8. INCOME

The annual Income earning pattern of the four primitive tribal sample households shows that the highest of about 44.11 per cent of their income is earned through agricultural wages, a least income is earned through forest produce and collections. This shows that the tribes are in trend of shifting their occupation from forest food gathering to agricultural sector, and also indicates the signal towards the path of economic development.

It is also observed from the study that about 38.95 per cent and 38.76 per cent of the major contribution of the Kota and Toda income is earned from agricultural crop produce. The Kota tribe earns nearly 35.46 per cent from government agencies, which is the highest share of earning than that of all other tribes taken for the study. Since, the Toda’s are pastoral, they earn 5.54 per cent
from livestock and milk production, which is the highest share compared to all other three tribes.

The Irula and Paniya tribes earn a major share of 55.41 per cent and 74.42 per cent to their total income from the agricultural wages. It is also inferred from the study that these tribes were fully depended on engaging as labourers in productive sectors.

The annual income distribution of sample households shows that, the majority of 53.66 per cent of all the tribal households fall under the income group of Rs.12,000.00 to 16,000.00. The highest share 39.56 per cent of earning to the total annual income from all the sources for all the four tribes is contributed from the nuclear family consisting of 2 to 4 members'. This shows, the nuclear family is wealthy and prosperous family.

The average annual Per Capita Income of the four primitive tribes of the sample household is Rs.3,670.15. The Kota tribe earns the highest annual per capita income of Rs.4,721.98 followed by Toda, Irula and Paniya as Rs.4,252.54, Rs.3,572.38 and 2,913.47 respectively. It also shows that both the Kota and Toda are in the economic transition period, there is an upward trend to improve their economic conditions.

The Lorenz Curve of income inequality of the four primitive tribes indicates that, compared to all other tribes the Kota tribe has the highest level of
concavity from the line of equity, which is followed by Toda, Irula and Paniya tribe.

The lowest income inequality was found among the Paniya tribes, it was 0.1411-concentration ratio. It shows that all the Paniya tribes were more or less earn to the same level with meager inequalities. The income inequality ratio of Toda is 0.2514, it shows a moderate distribution of income among the Toda's total sample population.

The Gini concentration Ratio shows that there was a vast magnitude of inequality between income and asset. From this study we found that there is a high degree of inequality. This is because of that the assets created by the tribes are not income generating assets, even the lands they posses does not yield proper income, the tribal lands are mostly barren lands, dry lands and rock soil, which can't be used for cultivation. These lands were also located nearer to the forest area; therefore the tribal assets are not income generating assets. Hence, there was a high level of inequality in asset than that of the income.

8.9. CONSUMPTION

The annual consumption expenditure pattern of all the four primitive tribes shows that a highest share of 63.53 per cent (Kota 59.16 per cent, Toda 58.28 per cent, Irula of 66.78 per cent and Paniya 66.89 per cent) a sum of Rs.75,46,800.00 from their total expenditure is spent on consumption of food.
This shows that these primitive tribes are still in a position to earn for their food, which is one among the inevitable basic needs of living.

The lowest share of 1.22 per cent to the total expenditure is spent on the education, among all the tribes except the Kota both the Irula and Paniya spent very meager share of 0.16 and 0.20 per cent and Toda to an extent of 2.01 per cent of their earnings on educational expenditure. They spend less on education because; they send their children's to government schools and Government Tribal Residential Schools (GTRS) to enjoy the special benefits offered in the educational programmes.

The item-wise comparative expenditure shows that the highest share of 12.80 per cent on cloth, 4.18 per cent in house maintenance, 8.12 per cent in social ceremonies, 3.28 per cent in education and 2.48 per cent in miscellaneous expenses to their corresponding total expenditure are spent by Kota tribe and 2.67 per cent on medicine by Toda tribe. The lowest share of 7.79 per cent in alcohol consumption by Kota, 0.16 per cent on education and 10.30 per cent on cloth, 1.89 per cent on house maintenance, 3.28 per cent on social ceremonies, 0.42 per cent on medicine and 1.27 per cent on miscellaneous expenses by Paniya tribe.

The annual consumption expenditure distribution of sample households shows that the majority of 51.22 per cent of all the tribal households fall under the income group of Rs.12,000 to 16,000. The highest share 38.77 per cent of the
total annual consumption expenditure for different items of all the four tribes is spend by the family size consisting of 2 to 4 members. It is also inferred that the highest contribution in both the income and expenditure fall under the same categories of income level and family size respectively.

The Average Propensity to Consume (APC), of all the four primitive tribes is 1.05. It is also examined that the Paniya incurs the height Average Propensity to Consume of 1.10 and it was followed as 1.08, 1.04 and 0.98 by the Irula, Toda and Kota respectively. The study reveals that, the Average Propensity to Consume is more than one, among all the four tribes except Kota. It shows that these tribes spend their consumption expenditure more than their earnings.

The Lorenz Curve drawn to study the consumption expenditure inequality of the sample households of the four primitive indicates that the Kota consumption inequality curve is highly concavity from the line of equity, it is followed by the Toda, Irula and Paniya.

The consumption inequality of the four primitive tribes lies less than 0.24 concentration ration. Among all the tribes, the highest inequality was found in Kota, it is because that their income level, the higher income earning group people spent more and lower income earning group spent very less on consumption therefore there was a highest degree of consumption inequalities. Except the Kota all other tribe has the consumption inequality ratio of nearly 0.1.
8.10. **EXTEND AND ESTIMATION OF POVERTY LEVEL**

The study estimated about 69.30 per cent of all the four tribes fall below the poverty line. In which the Paniya tribe are worst affected by 77.39 per cent than that of all other tribes, the Toda 63.64 per cent, Irula 72.00 percent and Kota 54.17 percent are below the poverty line.

The estimation of poverty level by different methods shows that, the level of poverty over head count ratio to the poverty gap ratio is declined for all the four tribes. At the same time there is slight variation between the poverty gap ratio and Sen's index of poverty measurement. According to the Sen's index of poverty, the level of poverty was the highest among the Paniya tribe and followed by Irula, Toda and Kota tribes. This conclusion coincides with the observation made in the other methods of poverty estimations, like Percent Method, Head Count Ratio and Poverty Gap Ratio.

8.11. **RECOMMENDATIONS**

1. The tribal literacy level is poor, specifically the Paniya tribe is very poor in education; this is because of that they were highly isolated from mainstream of life and they don't know the importance of education. To create interest on education, the same tribal community people has to be trained as a teacher and post them as teachers this will motive the tribes to lead the way towards development. Even the quality of the GTR schools has to be increase
and frequent quality assessment of education has to be made and plan in such a way to improve the quality of the education.

2. The tribal habitations have not yet been effectively brought into the mainstream of national life. Therefore, proper infrastructure facilities should be provided, so that they could be linked with the national mainstream, which will go a long way to develop their socio-economic conditions.

3. To bring the tribal children to the mainstream, the school curriculum should be designed according to their culture, dialect and local environment and also in respect to teachers inputs like teaching and training should be modified related to tribal culture.

4. Training programmes should be designed in schools in such a way that it should give scope for tribal talents and put them in proper use. Education with artisan works, tribal ethno-medicine, gardening etc., has to be educated to tribal children's interest, which will evoke their livelihood in future.

5. The tribal hostels and ashram schools needs considerable improvements by providing additional grants to meet the expenses on study materials and infrastructural facilities.
6. Grants to ashram schools must be enhanced keeping in mind to the present days costs. Frequent inspection by the authorities will improve the standard of the children's and it will avoid corruption and exploitation.

7. Awareness needs to be created among the tribes regarding the adverse effects of excessive intake of alcohol and the use of tobacco / drugs by the Health Workers.

8. 50 per cent of the tribals are consuming unprotected water from river, pond, spring, well and canal. Government should provide the safe drinking water through tap or bore well to all the tribal villages.

9. Only 41.13 per cent of the tribal houses are electrified, it is suggested that the Government should make arrangements to provide at least one-light service electrification to all the tribal households.

10. Tribal diets are generally deficient in calcium vitamin A, Vitamin C, Riboflavin and animal protein. Steps to be taken to provide Iron, Calcium and vitamin tablets through the Primary Health Centres and Anganwadi Centres.

11. The tribes, though different in their ecological and culture setting were found to suffer from almost all the deficiency diseases. This was due to the lack of a balanced diet in their consumption pattern.
Though the natural resource was available in abundance in the tribal areas, the tribals did not know the nutritive value of it. So, awareness should be created among the tribes on the nutritive value of the local food resources.

12. Nutritional and health education should be imparted in the tribal local dialect using preferably audio-visual materials.

13. It is observed in the field that Anganwadi Centres and Balawadi Centres are not functioning in the tribal villages. So it is suggested to open the Anganwadi Centres and Balawadi Centres in all the tribal villages for the nutritional supplement.

14. The traditional taboos related to health practices, nutrition etc. is posed as the need of the time to be evaluated.

15. Health workers are the backbone of any medical systems and a mode of contact between the tribals and the medicinal people. The data shows there is a lacuna in the functioning of the Health Workers in tribal villages. This framework should be strengthened.

16. Primary Health Care Centre is the very important in the tribal area. So it is suggested to strengthening the Primary Health Centres in tribal remote villages.
17. A special programme should be evolved exclusively for the tribals to cover the immunization.

18. Family Health Welfare Programme has to be implemented in the tribal villages, and periodically health camp has to be conducted in the tribal villages. Many Primary Health Centres in the tribal villages are not properly maintained with adequate medicines and equipments.

19. The study reveals that the prevalence of asthma, skin infection, gastric and other communicable diseases among the selected 982 tribal populations. The study found that seven per cent of the tribal populations are suffering different ailments. Less than one percent of the tribes are suffering from asthma. The disease such as tuberculosis and malaria is not found among the tribes.

20. The tribes are mostly inhabited close to the forest, their dependency on forest was reduced day-by-day because of the legal hands of forest laws. This has to be liberalized and the tribes should be provided with employment opportunities by the forest departments and the forest officials should extend a helping hand to the tribes.

21. 67.75 per cent of the tribals are possessing land (both own land and Government donated land). But the return to their investment on land is very less, since because of this they leave the land ideal. To
avoid this, government has to educate the modern techniques of cultivation and has to provide farm implements hybrid seeds and pesticides at subsidised price.

22. One of the ways to provide a basic asset that can yield income is to redistribute land. If land is given free to the poorest in the target group, they will be assured minimum level of living. This land will also keep in support of livestock farming which is a permanent source of income to tribes, which in turn increase their income also. Provision of land will benefit the tribal poor through a multiplier effect of income.

23. The direct assistance and encouragement should be given to establish cottage, tiny and small-scale sectors as well as artisan households through the supply of raw materials, technical guidance and financial and marketing back up. It will help to increase their income level and come out from the clutch of poverty.

24. To uplift the tribe economically the government has to create awareness about the tribal development programmes in the tribal villages and make them to use the welfare measures. The tribal village head has to be educated regarding the economic empowerment provided by the government.
25. In order to eliminate or reduce the level of poverty, the fundamental change in the composition of earnings, from agricultural sector to inter-sectoral occupation shift is essential, that is, an attack on tribal poverty should be made in combination with direct and indirect poverty alleviation measure.

26. The tribal has to be safeguarded from the social and economic exploitations by the intruders and these culprits have to be identified and penalized by the code of law. The government has to check the bonded labourers, and they have to be rehabilitated by creating needful employment opportunity.

27. The study found about 69.30 per cent of the tribes are below poverty line, to reduce it the tribal skill and specialty has to be identified and based on this, strategies has to be framed to generate income.

28. Participatory tribal appraisal is needed by the planners to develop strategies by keeping in view for their specific needs of the community. The programme has to be formulated in such a way that it should be systematic and comprehensive orchestration of welfare programmes. The existing programmes have to be widened to include the poorer and the poorest among the poor in the tribal community.