

EXECUTIVE SUMMARY

This research study was carried out in the tribal sub-plan areas of Visakhapatnam, Srikakulam, East Godavari, Kurnool, and Prakasam, districts of newly covered Andhra Pradesh State and in the tribal sub-plan area of Adilabad district of Telangana State. The tribes covered under the study are Bagata, Porja, Mali, Khond, Agency Goudu, Gadaba, Savara, Konda Reddy, Kolam, Thoti, Chenchu and Konda Kammaras. Out of the studied twelve tribes, eight are considered as vulnerable tribes, such as Chenchu, Gadaba, Khond, Konda Reddy, Kolam, Porja, Konda Savara and Thoti. These tribes are still at pre-agricultural stage of economy, relatively living in geographical isolation with low literacy, stagnant or diminishing population and living in most economic backward condition. About 491 sample families were covered in the study area. The study is both Qualitative and Quantitative in nature; conventional Anthropological Research methods and techniques were employed in collection of empirical data. Ethnographic methodological procedure was strictly followed in carrying out the fieldwork.

The tribal population in the study area is at different stages of economics i.e, food gathering and hunting, pastoralism, shifting and settled cultivation, horticulture, and artisans. The Chenchus in Nallamala forest are still following the foraging activity, Agency Gondus are pastoralists, Khonds, Porjas, Gadabas, Konda Reddy and Konda Savaras are shifting cultivators. Bagatas are the settled cultivators, Malis are the gardeners and Horticulturists, Kolams are basket makers, Konda Kammaras are black smiths and carpenters and Thotis are bards to Gonds and Kolams.

In general the economy of the tribes in the study area is agro-forest based and largely considered as subsistence economy. Large chunk of the studied tribal population is concentrated in the Eastern Ghats forest ecosystem. Eastern Ghats is considered as abode for tribal population in Andhra Pradesh State. Tribals and forests are inseparable. They have established symbiotic relationship with forests since age immemorial. Even, today many tribal habitats are located on hill tops and slopes of Eastern Ghats. The tribal people in such habitats invariably depend on shifting cultivation and Non-Timber Forest Produce (NTFP) collection, only little extent of plain lands are available for settled cultivation. Over exploitation of forest resources by the internal and external agencies over a period of time resulted to degradation and depletion of forest resources which ultimately leads to the hardships to eke out livelihood by the tribals. Due to this the tribals dependency on forests is slowly declining and they are searching for outside food materials from markets in addition to agricultural production of their own to sustain. Majority of the forest dwelling tribal population is at present struggling to survive in the degraded forest environment.

Many developmental programmes were targeted towards the scheduled tribes after India's independence, specifically since fifth five year plan period under tribal sub-plan strategy. Afforestation programmes are also initiated by the forest department to enhance the forest cover, but results are not appreciative and unable to reach the expected targets. Even then, the problem of poverty has not been totally eradicated among the Adivasis at national and State levels. It is assumed that the problem of poverty among the tribals in Eastern Ghats of Andhra Pradesh is primarily due to degradation of forest environment in which they inhabited and added to the increase of population without any additional

energy base being improved. Their environment is known as sine qua non of poverty and malnutrition. The existing ecological conditions in the tribal areas of Eastern Ghats are not conducive for the comfortable living of Adivasis, some section of tribals“ are facing the problem of food. Food insecurity and poverty are the major problems experienced by the large majority of the tribals“, apart from illiteracy, indebtedness, malnutrition and exploitation, which are creating unrest among them.

The vulnerable tribes in the interior forests are starving for food atleast for a period of six months in a calendar year. Due to long starvation of food the settled and shifting (Podu) cultivators are forced to damage the natural forest scrupulously in the years to comewhereas, the food gatherers and hunters are over exploiting the plant and animal food materials. The pastoralists are facing the problem to feed their cattle due to insufficient fodder in the degraded forest environment, whereas the tribal artisans being unable to market their products because of industrialization and less demand to their ware at local level. Over exploitation of the resources by the tribals in the natural forest environment, ultimately creates the problem of sustainability for their future generations. The problems of this research study has inter disciplinary relevance, which focused ecological, economic, cultural and demographic issues of twelve different tribal communities inhabiting in Eastern Ghats forest environment found at different stages of economies with cultural complexity. This research study examined the inter connectedness in-between the population ecology, poverty and sustainable livelihoods of tribes, inhabiting in the tribal areas of Andhra Pradesh and Telangana States. The study mainly focused and dealt with the issues of poverty, hunger, population explosion and sustainability of the most vulnerable and

excluded tribal communities of both Andhra Pradesh and Telangana States. This research study problem has contemporary social relevance as well as both theoretical and applied value.

The entire research project report consists of nine chapters including introduction and summary and conclusions. The first chapter Introduction depicts about the Research plan / design which includes the problem, significance and importance of the research problem aim and objectives of the study methodology and earlier literature on the problem. The second chapter explains about the field area and people. The sample of 491 households covered in the study distributed in twenty mandals of seven districts and six tribal sub-plan areas of Visakhapatnam, Vizianagaram, Srikakulam, East Godavari, Adilabad, and Kurnool, (SrisailemSunnipenta). This chapter clearly denotes about the social background of the respondents, infrastructural facilities available to field villages. Tribe wise and sex wise distribution of population, house types of respondents health and hygiene conditions of tribal people, their accessibility to formal education and health facilities, population structure, educational and health status of aboriginals in the sample households. The third chapter provides the cultural background of the twelve tribes covered in the study. This chapter explains about brief ethnography of Bagata, Chenchu, Agency Gondu, Gadaba, Khond, Konda Kammara, Konda Reddy, Kolam, Mali, Porja, Thoti and Savara. It presents the cultural practices of all afore mentioned twelve tribes. It deals with the social, economic, religious, political and technological aspects of the tribes which are at different stages of economy from food gathering to food production. This chapter clearly depicts about the living conditions and social life of the twelve tribes studied under this research project work.

The chapter IV discusses about livelihoods of twelve tribes inhabiting in the Eastern Ghats forest environment. It clearly reveals that the livelihoods of the tribes interlinked mainly with the forest environment. In general the tribal people have established symbiotic relationship with forests since age immemorial. In the past they draw their major portion of food materials from the forests. After introduction of plough cultivation in the agency areas of Eastern Ghats the tribals^o also started to grow crops either through shifting cultivation or settled cultivation. It also explains about the forest in tribal life, the extent of forest area in the study area, N.T.F.P collection by the tribals^o, impact of forest polices on tribal life Afforestation programmes, effect of joint forest management in the tribal areas of A.P and Telangana. This chapter also explains about the economy of tribals^o, livelihoods of hill tribe^os classification into five categories such as food gatherers, shifting cultivators, settled cultivators pastoralists and artisans.

The chapter V explains about the living conditions of vulnerable tribes like Khond, Gadaba, Porja, Chenchu, Konda Reddy, Konda Savara, Kolam and Thoti. The investigations of this research study clearly pointed out that the vulnerable tribes are still living in geographical isolation and extreme backward condition. Majority of the vulnerable tribal population have no access to formal education and public health facilities. They are experiencing the severity of social exclusion due to geographical isolation and unable to participate fully in the ongoing development process of state and nation. Still more number of illiterates found in these tribes, many out of school children are found among the vulnerable tribes. The recent forest policies also adversely affected the living conditions of these tribes. The traditional practice of Totemisim by these tribes is definitely useful for the conservation of forest resources. The study clearly reveals that the vulnerable

tribes are not much benefited with the development schemes of Integrated Tribal Development agency and Reservation Policy of Indian Constitution. Only the advanced and plain tribes are benefited with the reservation in education and employment when compared with the hill tribes including the vulnerable tribes.

Chapter VI explains about the interconnectedness between population ecology, economy and poverty among the studied twelve tribes. It provides the information pertaining to the distribution of tribal population in the forest environment of Eastern Ghats, how the tribal population and communities are adapted and limited by temperature, light, minerals and other abiotic factors. The study clearly pointed out that the ecology of tribes is prone to malnutrition currently the forest ecology of tribes is not meeting the food requirement of the entire population due to depletion of food resources day by day. The problem of poverty among the tribes is mostly due to low carrying capacity of the forest ecosystem in which they live centuries together. The government initiated poverty alleviation programs are also not much helpful for improvement of their living conditions. This chapter highlights the occupational background of the studied twelve tribes land holding particulars of sample households, Tribe wise practice of shifting and settled cultivation, cropping pattern, additional land requirement for the sample households to live comfortably without food problem. This chapter reveals about the economic status of the sample households of twelve tribes, which includes, income, expenditure, savings and debts. It also depicts about the population structure, fertility, morbidity and mortality rate in each tribe studied.

The chapter VII deals with the problems of the tribes in the study area. The field investigations clearly reveals, that majority of the tribal population still experiencing the problems of food insecurity and poverty. These two are the root

causes for the under development among the Adivasis especially in the study area. The Chenchus in the Nallamala forests are still largely depending on the physical environment of forest flora and fauna for their subsistence and survival. The Khonds, Porjas, Gadabas, Savaras, Konda Reddy and KondaSavara are still practicing the shifting (podu) cultivation. The Kolams are depending on the traditional occupation basket making. The Thotis are bards and depending on yachika. The vulnerable tribal population is still struggling for their survival with scanty of food resources. A considerable number of people in the advanced and developing tribes are also experiencing with the problems of illiteracy, indebtedness, exploitation, and poverty and food insecurity. In general the tribals are experiencing with the problems of social exclusion, marginalization and economic deprivation. The incidence of indebtedness is very high among the tribal population. The study data clearly indicates that about 79.4 of sample households facing the problem of Indebtedness. It is a well-known fact that “a tribal is born in debt, lives in debt and finally dies in debt”. The problem of indebtedness in a tribal family perpetuates generations together. In general the tribals are exploited by the non-tribal money lenders in the areas of market and credit. The empirical data of this project also clearly reveals that “the incidence of malnutrition, morbidity and mortality is very high among the tribal population. Maternal, infant and child death rates are also very high among the vulnerable tribes due to of inaccessibility to public health facilities within their reach. Large majority of the sample households in the study area are experiencing with both economic and health problems. The empirical data on health issues clearly indicates that about 81.87% of sample respondents are affected with malaria. The tribal areas in Andhra Pradesh and Telangana are prone to malaria. In addition to this majority of

them are affected with diarrhoea especially during monsoon period due to drinking of polluted stream and spring water. Still large majority of the tribal settlements are lacking clean drinking water facility. The statistical data of the project indicates that the sample respondents belonging to twelve tribes are experiencing with the multiple economic and health problems like, indebtedness, poverty, food insecurity, unemployment, landless and ill health.

The chapter VIII discusses about sustainable livelihood and development of tribes. The investigations of this research study clearly points out that the forest environment sustainability is the main path way for the sustainable livelihoods and development of tribes in different tribal pockets of Andhra Pradesh and Telangana States. Majority of the tribal families are experiencing with the livelihood problems due to ecological imbalance and depletion of natural resources in the Eastern Ghats forest environment in which these families have inhabited centuries together. The development fruits are also not reached to many tribal families due to pilferage at implementation level and poor monitoring system. The development in the tribal areas are taking place in slow pace manner; still the percentage of illiteracy is more especially among the vulnerable tribes. Large majority of the tribal settlements are lacking proper infra structural facilities like, road, electricity, clean drinking water, sanitation, health, housing, market and media. Large majority of the sample households are not availing the various development schemes of both government and non-government agencies due to illiteracy, innocence and ignorance. Still large majority of the sample families are using the age old traditional technologies in its economic activities, especially in agricultural operations and getting low yields from the crops which they raise. Even though school faculty is available to 96.13% sample households in the study

area, still considerable number of out of school children are found especially among the vulnerable tribes due to poverty. More number of child laborers also found in these tribes. School dropout rate is also very high in the interior schools located in the habitats of vulnerable tribes around 65% of respondent's undergone permanent sterilization. It shows that majority of the educated married couples in twelve tribes are accepting the family planning due to awareness and poor economic condition. About 99% of the sample respondents are aware by ICDS programme of Anganwadischeme and majority of them are availing it. At present around 70% of the sample respondents have exposure to modern media devices like radio and T.V, only a few literates read newspaper regularly. The respondents, who have access to media devices like radio and T.V, mostly use it for entertainment purpose.

The development messages are not reaching to majority of the tribal people due to ineffective functioning of extension agents in the tribal areas. These extension agents are also experiencing with the geographical and ecological constraints to deliver their services at the door steps of the interiortribals". The extremists" activities in the tribal areas are also considered as one of the hurdles for slow progress among the vulnerable tribes in the study area. Large majority of the tribal families in the study area are deprived of having sustainable livelihoods due to depletion of natural resources in the Eastern Ghats forest environment, resulting to scanty of food resources and loss of energy base. Environment sustainability and enlarging of energy base in the tribal areas definitely provides lot of scope for the sustainable livelihood and development of the tribes. The Integrated Tribal development approach under Tribal Sub-plan strategy is also not fully working for the benefit of the poor tribals" to elevate their living conditions

and to achieve the expected targets of it. Sustainable development among tribals" is only possible when achieving the forest environment sustainability and maintenance of ecological balance with the community participation. Community participatory approach, need based and right based approaches should be strictly followed by the development agencies concern to Tribal development in order to achieve the inclusive growth and sustainable development among the Adivasis who are at different stages of economies and living in poor economic backward condition.

Suggestions and Policy Recommendation:

1. Forest policies to be strictly implemented to protect, conserve and regeneration of forest cover involving the forest dwelling tribal population. Community forest management, social forestry and farm forest management schemes to be intensified in the tribal areas under afforestation programme. In regard to the issue relating to ownership of NTFP, the provisions of the Panchayat extension to scheduled areas Act 1996 (PESA Act) should be implemented in the right spirit and the respective Gramasabhas should be given the right of ownership of all the Non-Tribal Forest Produce Items (NTFP).
2. Non-Timber forest produce should be clearly defined as "all gatherable biomass including bamboo and cane collected from living trees and forest areas on a sustainable and non-distractible basis. Non-Trimber products include bamboo, dead branches, leaves, reeds and grasses apart from herbs, honey, resin etc.
3. Ownership of NTFP should be passed on to the Gramasabhas which would include the right to collect, develop and trade such produce. The community

should be provided facilities to collect and grade the produce processing locally and restriction of tribal rights to access and collect forest produce should be removed. TRIFED and TDCSS should undertake marketing of such products at national and international levels.

4. Both private and public agencies are responsible for forest management and development. Forest departments should be associated with the tribal people in protection, conservation, regeneration and development of forest as well as to provide gainful employment to the people living in and around the forest. Currently, the forest departments or the forest corporation of the states are managing forests, according to an approved working plan. Many of the operations involved are of a seasonal nature and many activities including removal of timber etc. given out on contract. There is no strict rule on the part of these contractors to employ the work force. As a step towards implementing the principles of NCMP (National Common Minimum Programme). It is suggested that all forestry operations including afforestation through planting of long term, medium term and short term species, removal of timber etc, could be assigned to Self-Help Groups (SHGS) of tribals living in the vicinity of forests. The local residents (tribal) would definitely have a stake in ensuring that the forest survives and they continue to get income from forestry operations.
5. Area of Jurisdiction of PESA Act should be extended to all schedule-V areas which includes both forest and non-forest villages.
6. Forest lands under occupation of tribals should be regularized after following due process of law. It is strongly suggested that in case of tribals, the owners of proving wrongful occupation should be with the department and not with

the tribals, as they often do not have proof of possession like offence report or fine receipts by forest department.

7. Hill tribes as well as vulnerable tribes largely depend on minor forest produce items. Hence, adequate investments should be made to ensure value addition in the MFP and increase self-life.
8. The State Governments (Andhra Pradesh &Telangana) should immediately review its legislation and procedures so that the provisions of the central legislation relating to ownership rights on minor forest produce items to Gramasabha are honored in letter and spirit.
9. In order to give legal status to the residents of forest villages and lands cultivated by them, the conversion of forest villages into revenue villages should be taken in the right earnest in a time bound manner.
10. The Ministry of Environment and Forests need to issue one time exemption under the forest conversation Act for carrying out development activities in the forest villages, especially where vulnerable tribes inhabits.
11. For better conversation of forest, some more sub-regional centers are to be established in all forested zones of our country. Ministry of Environment and Forests will consider issuance of one time general clearance under section-2 of the Forest (Conversation) Act 1980, in tribal areas of forest habitations in respect of various public utility projects / infrastructural projects, subject to the fulfillment of stipulated conditions.
12. The tribals who live within the or near forest revolve around forests. Livelihoods of these people are inter connected with the flora and fauna of forests. The rights and concessions enjoyed by them should be fully protected. Their domestic requirements of fuel wood, fodder and Non-Timber Forest

produce and construction timber should be the forest change on forest produce broadening the range of products produced by forests such as food and other items and improving their supply to forest dwellers through community forest management approach and access arrangements intime with the provisions of PESA Act.

13. Tribal peasante should be encouraged in farm forestry in order to grow the plant species which complement crop and livestock production, in turn helps to protect the environment, provide income to farmers who live in closer vicinity of forest areas. Podu lands to be legalized by givingpattas to the shifting cultivators of tribal peasants to ensure livelihood and energy sources to them.
14. Government should have to support small scale forest based enterprise among tribals to ensuring a sustainable supply of input materials, providing managerial and technological assistance and improving access to credit providing marketing support to help tribal people to get better price for the forest products they sell and secure a more sustainable livelihood. The Chenchus who are living in the forest environment (Nallamals) to be allowed to continue their traditional hereditary calling foraging along with the agriculture and diary (cattle breeding).
15. Given the central role that tribal women play in food production and food security involving them and their concerns will provide invaluable insight for programme planning and direction.
16. Strengthening of school education system in vulnerable tribal habitats is much essential to promote literacy and create awareness about various welfare programmes meant for them.Public distribution system needs to be

strengthened especially in the vulnerable tribal habitats where food constitution is much worst at present. Each tribal settlement is ensured with a D.R.Depot and procurement center in order to be driven out from the clutches of non-tribal money lenders and traders.

17. The indigenous knowledge systems, traditional ecological knowledge and forest management practices of tribals" should be thoroughly studied and documented and the tribal communities to be given a free hand to practice them. This strategy is much helpful to conserve the natural forest environment and to maintain the ecological balance.
18. Permanent irrigation sources in the form of check dams bore wells and tanks to be provided to the tribal peasants for sustainable agricultural development in the tribal areas.
19. Scientific recognition should be given to tribal medicine by validating its potentiality in cure of various kinds of diseases in tribal society and to promote tribal herbal medicine in the market and the public.
20. Pastoral tribes Agency Godu need to be encouraged to improve the milk production by following the milking practice of their cattle and also by supplying fodder for their cattle.
21. The Malis should be encouraged in organic farming of growing vegetables and providing market facility to their produce in the Rythu Bazars located in nearby urban towns and cities.
22. Immediate steps should be taken to protect the intellectual property rights, especially in the field of traditional system of medicine. Tribal medical service unit should be established at each primary health Centre level in all tribal areas of our country. Community Health workers programmes and Anganawadi

schemes to be strengthened especially in the habitats of vulnerable tribes. Pre-School education system to be introduced in all the tribal settlements in order to enhance the enrollment at primary school education level.

23. The Forest Right bill of 2006 to be implemented properly in all the tribal habitats where the aboriginals depend on the forests for their livelihoods.
24. Poverty alleviation programs need to be implemented strictly in the interior tribal habitats especially where the vulnerable tribes inhabit.
25. The ITDAS need to follow the Right based and need based approaches in initiation and implementation of development programs for the Adivasis who are at different stages of economies.
26. Population control measures to be taken and nutritional programs of ICDS to be intensified in the remote tribal areas.

In conclusion, the conservation of Eastern Ghats bio-diversity is an urgent need in environmental perspective, as well as to ensure the sustainability of indigenous people, who dwell in the forest environment Eastern Ghats for centuries together. The study provides insights on the environmental concerns of population ecology, poverty, sustainability, sustainable livelihood and sustainable development of tribal communities in Anthropological perspective. The investigations of this research study clearly points out the interconnectedness in between the population ecology, poverty and sustainable livelihoods of Adivasis inhabiting in the forest environment of Andhra Pradesh and Telangana States. The study emphasized the importance of Action oriented research for creating awareness among the subjects / respondents in conservation of forests and to achieve environmental sustainability as well as to maintain ecological balance which definitely be helpful for their sustainable livelihoods and development.

Actually the investigators of this project work followed the participatory Action Research approach for the benefit of tribal respondents of the study area. The study results also emphasizes the need of enlargement of energy base in the tribal habitats of Eastern Ghats, which definitely solve the food problem and improve the working capacity among tribal people, inturn helps for the economic growth and sustainable development. Still much focus is needful for eradication of the health problems of malaria and economic problems of poverty and food insecurity especially among the vulnerable tribes in both Andhra Pradesh and Telangana States.