



Problems and Suggestions to Improve the Livelihood of Tribal Farmers

G Swathi, P Rambabu, T Gopikrishna, D Vishnu Sankar Rao and V Srinivasa Rao

Department of Agricultural Extension, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

The study was conducted in three districts of Andhra Pradesh i.e. Visakhapatnam, Chittoor and Khammam to identify the problems of tribal farmers and to find out appropriate suggestions to overcome the problems. A well structured and pre tested interview schedule was used to collect data. The statistics employed for data analysis were simple frequency and percentage. Findings revealed that majority of the tribal farmers expressed that in agriculture category as a whole, Inadequate technical knowledge in farming (85.42%) was the major problem as perceived by tribal farmers. In animal husbandry category as a whole, Non-remunerative price for milk in dairy (76.25%) was the major problem perceived by tribal farmers. In collection and selling of forest products category as a whole, Proper marketing channels is not available for selling forest products (100.00%) was the major constraint faced by the tribal farmers. With regard to suggestions in agriculture category as a whole, Skill oriented vocational training programmes on modern agricultural technologies, sericulture, apiculture etc. should be organized (85.42%) was the most important suggestion given by the tribal farmers. In animal husbandry category on a whole, enhanced milk price for the producers (76.25%) was the major suggestion given by the tribal farmers. In collection and selling of non timber forest products category on a whole, Proper marketing channel should be made available (93.75%) was the major suggestion given by tribal farmers.

Key words: *Livelihood, NTFPs, Tribal farmers, Problems and Suggestions.*

The concept of livelihoods has become increasingly popular in development thinking as a way of conceptualizing the economic activities poor people undertake in their totalities. Livelihoods are the means people use to support themselves, to survive and to prosper, which are shaped by the broader environment in which they live and other factors like economic and cultural systems. The tribal's highly dependent on biomass such as woods, agricultural crops, wastes and forest resources for their energy and livelihood. Whereas the over reliance on NTFPs disturbs the natural resource base threatening the loss of diversity and pushes them further deep into poverty trap by destroying the alternative sources of income in the long run. Hence there is an imperative need to learn about their existing livelihoods to explore the alternative sources of employment / income generation activities without destroying their natural resource base. In spite of these tribal farmers are still facing some of the major problems.

In this context, a study was planned with following specific objectives.

1. To study the problems of tribal farmers

2. To identify the suggestions of tribal farmers to overcome the problems to improve the livelihoods

MATERIAL AND METHODS

The study was conducted by using ex-post facto research design. The state, Andhra Pradesh was selected purposively as the researcher belonged to this state and well acquainted with the regional language i.e., Telugu which would help to build a good rapport and also facilitates for in depth study through personal observation and interview. One district had been selected from each region of Andhra Pradesh based on highest number of tribal population i.e. Visakhapatnam from Coastal, Chittoor from Rayalaseema and Khammam from Telangana region. Two mandals had been selected from each district based on highest number of tribal population. From Vsakhapatnam - chintapalle and Gudem kotta veedhi, Sri Kalahasthi and Madanapalle mandals representing Chittoor region and Cherla and Dummugudem representing Telangana region. From the selected mandals, four villages had been selected randomly. Accordingly,

twenty four villages were selected. From the selected villages ten tribal farmers from each village have been selected. So total of 240 tribal farmers had been included in the study. The primary data were collected using a pre-tested structured interview schedule by conducting personal interview. Data was tabulated, classified and analyzed using frequency and percentage. The problems and suggestions given by the tribal farmers to improve their livelihood were studied under three categories i.e., Agriculture, Animal Husbandry and collection and selling of non timber forest products. As combination of these three livelihood activities is the major source of livelihood of tribal farmers in the study area.

RESULTS AND DISCUSSION

Problems elicited by the tribal farmers towards their livelihoods

While taking the data, each respondent was asked to elicit any problem that they are facing regarding their livelihood. The problems were collected under three components, i.e., agriculture, animal husbandry and collection and selling of Non-Timber Forest Products, as these three are the major sources of their livelihood. All the problems collected thus were collated and enlisted hereunder. Ranks were given based on the frequency and percentage of respondents perceived a particular problem. The results are presented in Table 1. It can be observed from the table 1 that in agriculture category as a whole, Inadequate technical knowledge (85.42%) was the major problem as perceived by tribal farmers. This might be because they might have related their less yield and low income from farming to lack of technical knowledge. They might have a conception that if they are given suitable technical skills their crop yield will increase. Poor transportation facilities (77.50%) was another problem faced by tribal farmers which leads to distress sale and the products are generally sold for low price to middle men and commission agents. Hence, efforts should be made to create adequate transport facilities in tribal areas. Poor market conditions (75.00%) was important constraint felt by the tribal farmers. Due to this, the products are sold to non-remunerative price to middle men and commission agents. Hence, it is most essential on the part of government to

create a wide range of marketing network so that the produce of tribal farmers could get remunerative prices. 70.83 per cent of tribal farmers stated that low remunerative prices for the farm produce and high price fluctuations is another major problem that they face which effect their livelihood as they are small and marginal farmers and depend mainly on forest for daily livelihood activity. 62.50 per cent of tribal farmers stated that middlemen/traders cheat in weighing of their produce. This might be because of interference of middle men and commission agents due to improper marketing facilities. Hence efforts should be made by the concerned officials to provide adequate market links with the producers. If GCC or the local NGOs can impart the grading skill to tribals, they can earn better prices for their NTFPs and all of them will sell their produce to GCC instead of middlemen / traders who generally cheat the tribal farmers. Inappropriate storage facilities (61.675%) was another constraint which leads to loss of produce during adverse climatic conditions. Our villages are less accessible from the good road points with no proper approach (47.92%) was another major constraint felt by tribal farmers. Roads have to be built to improve the transport facilities as well as to improve the transport of the produce from the villages to the GCC collection points, which in turn reduces the drudgery on the tribals. It also helps in bringing the ailing patients from the villages to the nearby hospitals quickly. Insufficient credit supported by the financial institutions (41.67%) was also a serious problem faced by the tribal farmers to improve their livelihoods. This might be due to the government policies and NGOs that make available loan facilities to them at a lower interest rate. 35.42 per cent of tribal farmers reported that low employment opportunity was another major problem. This might be because of low educational standards and low technical skills possessed by them. The least constraint faced was high cost of labour hiring in farming(25.00%). The result is in accordance with the results of Krishnaprasad (2005), Anand (2007) and Ulman (2010).

In animal husbandry category as a whole, Non-remunerative price for milk (76.25%) is another main problem faced by tribal farmers. This might be due to the high competition from major dairy units and also consumer's preference to

Table 1. Distribution of respondents according to their problems expressed by the tribal farmers towards their livelihoods.

(n=240)

S.No	Problems expressed	Frequency	Percentage	Rank
I	Agriculture			
1	Inadequate technical knowledge in farming	205	85.42	I
2	High cost of labour hiring in farming	60	25.00	XIV
3	Poor transportation facilities	186	77.50	II
4	Inappropriate storage facilities	148	61.67	VI
5	Low remunerative prices for the farm produce and high price fluctuations.	170	70.83	IV
6	Poor market conditions	180	75.00	III
7	Middlemen/traders cheating in weighing of produce.	150	62.50	V
8	Low employment opportunity	85	35.42	XII
9	Insufficient credit supported by the financial institutions	100	41.67	X
10	Erratic rainfall and cumulative droughts over year.	78	32.50	XIII
11	Pest and disease prevalence is more.	90	37.50	XI
12	Poor awareness and governmental encouragement about the subsidiary occupations.	135	56.25	VII
13	Untimely and poor quality of inputs like seeds, fertilizers, pesticides and other chemicals leading to the reduction of the expected yields.	120	50.00	VIII
14	Our villages are less accessible from the good road points with no proper approach.	115	47.92	IX
II	Animal Husbandry			
1	Non-availability of green fodder through out the year.	106	44.17	XII
2	Inadequate finance by bank for purchasing milch animals	179	74.58	II
3	Shortage of medicine and vaccines in veterinary hospitals	149	62.08	VI
4	Ineffectiveness of artificial insemination in veterinary hospitals	153	63.75	V
5	Non-remunerative price for milk in dairy	183	76.25	I
6	Distantly located milk collection centre	169	70.42	III
7	Improper transportation facilities	119	49.58	X
8	Unawareness about improved dairy farming practices	163	67.92	IV
9	Difficulty in loan procedure	138	57.50	VIII
10	Poor productivity of native animals	98	40.83	XIII
11	Problems of spoilage of eggs in poultry farming.	128	53.33	IX
12	Inadequate knowledge of low cost scientific cage construction in poultry farming.	116	48.33	XI
13	Low hatchability of eggs in summer	67	27.92	XIV
14	High cost of veterinary services	142	59.17	VII
III	Collection and selling of non timber forest products			
1	Proper marketing channels is not available for selling forest products.	240	100.00	I
2	Inadequate knowledge about processing of NTFPs	220	91.67	II
3	Prohibition of collecting NTFPs	198	82.50	IV
4	Girijan cooperative cooperation treat NTFPs as second grade products, thus we get less prices for our produce.	137	57.08	VIII
5	Poor transportation facilities	172	71.67	VI
6	Low market demand for produce	208	86.67	III
7	Inadequate training programmes for improving awareness and skills	116	48.33	IX
8	Low price is paid to NTFP gatherers.	182	75.83	V
9	Inappropriate storage facilities	158	65.83	VII
10	Less awareness about the value addition of the farm produce.	102	42.50	X

quality of milk. Inadequate finance by bank for purchasing milch animals (74.58%) was another constraint faced by tribal farmers. Loan amount lent by the bank was less than actual price of milch animal, so they had to add some amount of money of their own to purchase the milch animals and also required many documents to borrow the loan. Distantly located milk collection centre (70.42%) is also a constraint faced by tribal farmers. Farmers take milk on bicycle to sell directly to consumers and sweet shops in the cities. Apart from this, milk is collected only in the morning by vendors and selling of milk in evening was often a problem. Unawareness about improved dairy farming practices (67.92%) was another problem. This might be due to low educational facilities and also improper veterinary services in the locality. Ineffectiveness of artificial insemination in veterinary hospitals (63.75%). This is due to unavailability of veterinary doctors in the veterinary hospitals and their improper services. 57.50 per cent of tribal farmers stated that difficulty in loan procedure is also a constraint as majority of them are illiterates and poor communication facilities. Non-availability of green fodder through out the year (44.17%) was another problem perceived by tribal farmers. This might be due to lack of stall feeding facilities, alternate fodder arrangements, lack of management skills of the available fodder during rest of the year. The least faced constraint was low hatchability of eggs in summer (27.92%). The result is in accordance with the results of Krishnaprasad (2005), Anand (2007) and Ulman (2010).

In collection and selling of forest products category as a whole, Proper marketing channels is not available for selling forest products (100.00%) was the major constraint faced by the tribal farmers. This might be due to lack of knowledge of market channels, disbelief in middlemen due to cheating done by them to the tribal farmers, etc. Lack of knowledge about processing of NTFPs (91.67%) is another major constraint faced by tribal farmers. This might be due to rich traditional knowledge of NTFPs and medicines which might be far more advanced than what is known to public. Lack of market demand for produce (86.67%) was also a constraint faced by tribal farmers. NTFP collection is one of the main source of livelihood for people

who live below the poverty line. This situation is mainly seen in the local markets as NTFPs are mainly traded in the local markets. Prohibition of collecting NTFPs (82.50%) is a constraint faced by tribal farmers. Government agencies prohibited tribals from collecting NTFPs as it may leads to deforestation. It might also be due to improper collection of NTFPs by tribals may lead to loss of medicinal values. 75.83 per cent of the tribal farmers reported that low price is paid to NTFP gatherers which is not enough to meet their basic needs. The gatherers often mine the plants excessively to generate more income. For forest collection labour and time are invested. They are the people who live on the edge and they should be paid enough for collecting valuable products. Other constraints are poor transportation facilities (71.67%), lack of storage facilities (65.83%). The least faced constraint was lack of awareness about the value addition of the farm produce (42.50%). Creating value in the existing value chain by scientific and technical intervention can benefit NTFP gatherers. Value addition should be done from the grass root level. (%). The result is in accordance with the results of Ulman (2010).

Suggestions elicited by the tribal farmers to improve their livelihoods

Based on the constraints, the suggestions were drawn from the tribal farmers to overcome them and presented in Table 2. Suggestions were identified and ranked based on frequency and percentage.

In agriculture category as a whole, Skill oriented vocational training programmes on modern agricultural technologies should be organized (85.42%) was the most important suggestion given by the tribal farmers. This might be because, the tribal's might be aware that they lack technological knowledge which if gained by them, would help to increase their yield, income and thus their standard of living. Creation of transportation facilities, marketing facilities, procurement of produce by government at minimum support price, stringent measures to be taken for effective functioning of regulated markets to avoid the interference of middle men at each and every stage were also suggestions made by the tribal farmers. Since majority of the tribal farmers perceived poor

marketing facilities and they were selling their products to the local middle men and commission agents at very low prices. Hence it is necessary to provide good marketing facilities coupled with arrangement of adequate transportation facilities for their produce which in turn results in good remunerative price of their products. The suggestion which gained least majority by 27.08 per cent of tribal farmers was that Employment assurance and guarantee schemes should be implemented through MGNREGS and other works. Low educational standards and low technical skills made the tribal's as unemployed which in turn resulted them into wage labourers. In order to sustain the life and to improve the standard of living, employment schemes like MGNREGS with a man days of more than 100 have to be implemented and the wage rate should be increased. (%). The result is in accordance with the results of Krishnaprasad (2005), Anand (2007) and Ulman (2010).

In animal husbandry category on a whole, enhanced milk price for the producers (76.25%) was the major suggestion given by the tribal farmers. This might be because dairy farmers were not satisfied on milk price due to high expenses such as, higher rate of concentrates, expensive veterinary services, incidence of diseases etc. Institutional finance should be given to purchase dairy animals was ranked as second main suggestion by 72.92 per cent of the tribal farmers. This might be due to the problems faced by the tribal's in procuring finance for purchase of animals. This also might be because they were aware that good cross breeds are helpful in increasing agricultural income. Marketing facilities should be provided at village level for the outlet of milk and milk products (69.58%) is another suggestion as due to distantly located milk collection centers it was difficult for the tribal farmers to reach the milk outlets due to improper transportation facilities. 66.67 per cent of tribal farmers stated that providing technical knowledge to manage the dairy enterprise is another suggestion as tribal farmers don't know proper dairy farming practices which leads to incidence of diseases and also low milk yield. Providing proper artificial insemination facility at village level is another suggestion provided by 62.50 per cent of tribal farmers. This might be due to limited number of A.I. centers opened by government hence tribal

farmers faced difficulty to inseminate their animal at proper time. 56.25 per cent of the tribal farmers perceived that cost of veterinary services should be reduced. This is due to highly expensive consultancy service of private practitioners. Veterinary hospitals are established in big village. Hence, it is quite inconvenient for tribal farmers of nearby village to give timely treatment to their animals, so the tribal farmers started approaching private practitioners in the village. 48.75 per cent of the tribal farmers perceived that knowledge regarding preservation of eggs in poultry should be imparted to the tribal farmers. This might be due to their confidence in their traditional practices of preservation. The suggestion which gained least majority by the tribal farmers is that maintenance of grazing lands by ITDA (43.75%). This might be due to in availability of fodder throughout the year and highly expensive consultancy service of private practitioners and lack of proper veterinary facilities in the local area. (%). The result is in accordance with the results of Ulman (2010).

In collection and selling of non timber forest products category on a whole, Proper marketing channel should be made available (93.75%) was the major suggestion given by tribal farmers. This might be due to the fact that the tribals mostly sold their products in nearby villages. So they might not be aware of the importance of marketing channels that might help in getting higher value for the products. This might be because they might be aware that they lack knowledge in this field. They might also be aware of its importance for selling a produce at a higher rate. 83.33 per cent of the tribal farmers perceived that training on processing of forest produce should be organized. Market and price information on species should be made available is another suggestion perceived by 77.08 per cent of tribal farmers. This might be because collection of NTFP species varies according to their market demand and availability. 66.67 per cent of the tribal farmers perceived that proper steps should be taken to promote sustainable collection of NTFPs. It is a well established fact that most tribal's who live in forest regions depend on NTFPs as the source of their livelihood. NTFPs provide important community needs for improved rural livelihood, household food security, local and regional economies. Provision of remunerative price for

Table 2 Distribution of respondents according to their suggestions**(n=240)**

S.No	Suggestions	Frequency	Percentage	Rank
I	Agriculture			
1	Skill oriented vocational training programmes on modern agricultural technologies, sericulture, apiculture etc. should be organized.	205	85.42	I
2	The farm produce should be procured by government at minimum support price.	170	70.83	IV
3	Creation of transportation facilities	186	77.50	II
4	Suitable resistant varieties have to be developed.	70	29.17	XI
5	Adequate credit should be given with low interest rate.	70	29.17	X
6	Good control to maintain the quality of inputs and timely supply.	85	35.42	VIII
7	Much emphasis should be given to encourage the enterprises like apiculture, sericulture, medicinal plants and minor forest produce which have employment potential.	90	37.50	VII
8	Proper storage facilities should be provided.	100	41.67	VI
9	Creation of marketing facilities for the organic produce	180	75.00	III
10	Stringent measures to be taken for effective functioning of regulated markets.	110	45.83	V
11	Suitable extension personnel should be posted in the problematic areas.	80	33.33	IX
12	Employment assurance and guarantee schemes should be implemented through MGNREGS and other works.	65	27.08	XII
II	Animal Husbandry			
1	Marketing facilities should be provided at village level for the outlet of milk and milk products.	167	69.58	III
2	Providing technical knowledge to manage the dairy Enterprise.	160	66.67	IV
3	Institutional finance should be given to purchase dairy animals.	175	72.92	II
4	There should be regular and planned supply of vaccines.	140	58.33	VI
5	Knowledge regarding preservation of eggs in poultry should be imparted.	117	48.75	IX
6	Adequate knowledge regarding poultry farming is needed.	110	45.83	XI
7	Providing proper Artificial Insemination facility at village level.	150	62.50	V
8	Small scale dairy industries should be encouraged at village level.	115	47.92	X
9	Enhanced milk price for the producers	183	76.25	I
10	Loan sanction procedure should be easy	130	54.17	VIII
11	Cost of veterinary services should be reduced.	135	56.25	VII
12	Maintenance of grazing lands by ITDA	105	43.75	XII
III	Collection and selling of non timber forest products.			
1	Training on processing of forest produce should be organised.	200	83.33	II
2	Proper marketing channel should be made available.	225	93.75	I
3	Steps should be taken to promote sustainable collection of NTFPs.	160	66.67	IV
4	Market and price information on species should be made available.	185	77.08	III
5	Value addition to processed NTFPs.	85	35.42	X
6	Proper storage facilities should be provided.	132	55.00	VII
7	Financial support be provided after imparting trainings to start trade activities based on NTFPs.	120	50.00	VIII
8	Awareness programmes should be organized for medicinal plants.	65	27.08	XI
9	Proper and quick transportation facilities should be provided for perishable products.	140	58.33	VI
10	Provision of remunerative price for NTFPs.	150	62.50	V
11	Proper trainings in scientific methods of collection of NTFPs and grading of NTFPs should be provided	108	45.00	IX

NTFPs is another suggestion perceived by 62.50 per cent of tribal farmers. This might be due to income generated by selling of NTFPs is bare enough to meet their needs. Proper and quick transportation facilities should be provided for perishable products (58.33%) is another suggestion perceived by tribal's. Most NTFPs are by products such as seeds, fruits and leaves which will go waste if not collected and transported at the appropriate time. 55.00 per cent of tribal farmers perceived that proper storage facilities should be provided. 50.00 per cent of tribal farmers perceived that financial support be provided after imparting trainings to start trade activities based on NTFPs. Proper trainings in scientific methods of collection of NTFPs and grading of NTFPs should be provided (45.00%). This is because such programmes not only improve the quality of raw material, but enhance the income of herb collectors. Arranging the nearest collection/distribution points can reduce the time and money spent on transportation. 35.42 per cent of tribal farmers suggested value addition to processed NTFPs. It is the need of the hour to develop capacity of locals to adopt value addition options for NTFPs so that their household income improves

substantially. Effective training and capacity building needs to be done on value addition of NTFPs at collectors' level so that collector gets his due share in consumers' price. Awareness programmes should be organized for medicinal plants (27.08%) was the minor suggestion. This might be due to the reason that medicinal plants were used for treating skin diseases, diabetes, leprosy etc. %). The result is in accordance with the results of Anand (2007).

LITERATURE CITED

- Anand R R 2007** A study on sustainable livelihoods of lambani farmers in hyderabad karnataka. *M.Sc. (Ag.) Thesis*. University of Agricultural Sciences, Dharwad, India.
- Krishnaprasad T 2005** A study on rural poverty and sustainable livelihood in agrarian sector of Andhra Pradesh. *Ph. D Thesis* Acharya N.G. Ranga Agricultural University, Hyderabad
- Ulman Y N 2010** Constraints and Suggestions related to occupations of tribals in Thane district of Maharashtra. *Journal of Extension Education*,22(3): 4455-4459.

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