
Promotion of Entrepreneurship among Tribal Women under Tribal Sub Plan Scheme

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Abstract

Krishi Vigyan Kendra, Venkataramannagudem is working in 25 upland mandals of west Godavari district including seven tribal mandals, to conduct location specific technology demonstrations and vocational training for the farming community. During the preliminary visits and information collected through secondary sources regarding the livelihood activities of tribal women, “processing and value addition to millets” was identified as a suitable vocation for tribal women. The activity was taken up under tribal sub plan programme of the KVK during the year 2015-16. Thirty tribal SHG women attended this training. After the training these women were divided into two Common Interest Groups (CIGs) i.e. Girivanitha and Giriposhana and they started preparation of millet based products. Both the groups are supplying their products to 28 tribal welfare schools. Every month each group is getting an amount of Rs.2 lakh under supplementary nutrition programme of the tribal welfare schools.

Keywords: KVK, millet processing, tribal women, tribal sub plan

Introduction

Tribal farmers form a significant proportion of the population and the role of tribal women in the development of family, their economy and social system is highly important. Adequate investment in developing the capabilities of women and encouraging the empowerment of women is needed. The Human Development Reports of UNDP indicate that the Human Development Index (HDI) is extremely gender sensitive. It is also stated that “investing in women’s capabilities and empowering them to exercise their choice is not only valuable in itself but is also the surest way to contribute to economic growth and development. National as well as state plans and programmes have given due importance to bring tribal women into the main stream.

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Article received on 17-01-2017; Article accepted on 20-07-2017.

Krishi Vigyan Kendra, being a transfer of technology centre at the district level to cater to the needs of the farming community in rural and tribal areas is instrumental in conducting programmes related to agriculture and allied sectors through technology assessment, demonstration and training its clientele in effective use of these technologies. Vocational training being the important mandate “Processing and value addition to millets” was identified as a suitable vocation for tribal women. (Hariprasanna K and Dayakar Rao B. 2016). The activity was taken up under tribal sub plan programme of KVK during the year 2015-16.

Tribal Sub Plan

The basic objective of the Tribal Sub-Plan (TSP) is to allocate government resources equally between the overall population and tribal population. (Planning Commission, GoI 2006). Majority of the tribal population is less vocal, has been traditionally disadvantaged, live in remote places, and for these reasons do not get their due share of the resources in terms of the percentage of their population to the population of the Country or in a State.

The strategy of Tribal Sub Plan (TSP) has been in force since 1974 to ensure adequate flow of plan resources for bridging the gap in the socio-economic development of Scheduled Tribes and ensuring their faster, sustainable and more inclusive growth. Funds from the plan are allocated under TSP in proportion to the tribal population of the country which is 8.2 per cent as per 2001 Census. Guidelines on formulation, implementation and monitoring of TSP have been issued by the Planning Commission from time to time to the 62 central ministries/ departments implementing TSP.

Objectives of TSP

The primary objective of TSP is to bridge the gap between ST population and others by accelerating development. The objectives are:

- Enhanced access to education and health.
- Providing basic amenities including housing.
- Reducing poverty and unemployment through creation of productive assets and income generating opportunities.
- Enhanced capacity to avail opportunities, gain rights and entitlements and improved facilities at par with other areas.
- Protection against exploitation and oppression.

Modus Operandi of TSP

1. Identification and demarcation of tribal areas.
2. Conducting a bench mark survey or PRA to understand the socio-economic status of the selected areas, benefits already drawn from earlier programs, occupational category *etc.*
3. Assessing potentialities, social problems and felt needs of the areas.
4. Assessment of resources and technologies available.
5. Formulation of suitable programs in convergence with other agencies to avoid duplicity and to benefit more people.
6. Implementing the programs in a participatory mode and in tune with the cultural milieu of the local people.
7. Assessment of impact in terms of socio-economic upliftment after successful completion of the TSP schemes.

Indicative activities that can be undertaken by KVKs under TSP in various thematic areas (General/Capital).

1. KVK acting as an Agro-service center

- Assessment (OFTs) of crop/livestock/fisheries and allied technologies.
- Demonstration (FLDs) of crop/livestock/fisheries/health, sanitation and nutrition /watershed management/micro-irrigation and allied technologies.
- Supply of seed/planting material/livestock strains/fish fingerlings/nutrition supplements/ fodder slips/bio-products / pesticides / micro-nutrients *etc.*
- Training programmes for farmers/rural youth / extension functionaries/ farm women on crop/livestock / fisheries / health, sanitation and nutrition, watershed management / micro-irrigation and allied technologies.
- Extension activities like kisan melas, technology weeks, extension literature, radio talks, TV shows *etc.*
- Soil/ water analysis and issue of soil health cards.
- Issue of Mobile Agro-advisory.
- Diagnostic visits to the operational area.
- Exposure visits organized for farmers / tribal youth / women.
- Creation of awareness on inputs, credit, insurance and markets for the produce from tribal areas.

2. Creation of Productive Assets (Micro-enterprises)

This is done with an aim to substantially reduce poverty and unemployment among STs and to provide livelihood security

- Creation of farming systems (IFS models) – including backyard poultry, apiary, mushroom, sericulture, dairy, goatery, fishery units and value addition of farm and forest produce and other agri-based income generating units integrated into farming.
- Establishment of hatcheries for fisheries.
- Establishment of spawn units for mushroom cultivation.
- Supply of supporting machinery.
- Supply of farm implements.
- Fishing units *etc.*
- Temporary storage units for seed, feed, fodder (silage bags) and machinery (implement sheds).
- Primary processing units of millets, dal mills, bakery equipment *etc.*
- Installation of kiosks for dissemination of information for creating awareness.
- Minor analytical equipment required at the farm site (could be for soil testing, weather data recording *etc.*).
- Small pump sets (solar) for lifting water from farm ponds and micro-irrigation equipment like sprinkler / drip/ rain jets *etc.*
- Small tractors with accessories, tube wells in electrified villages and pump sets in non-electrified villages could be given to a group of 5-10 ST farmers who have been given skill development training. This group can also be given quality seeds, pesticides and fertilizers too.
- Assets could be created on KVK premises in the form of functional demonstration units for the purpose of skill development training under capital head.
- Facilitate setting up of organic farming units and obtaining organic registration.
- Multiple skill development in basket making, mat, garment making and rural crafts.

- Creation of Implement Banks (rotavator, power tiller, chaff cutter, sprayers, ridger, portable GPS, portable soil testing kits, pruning equipment *etc.*).

The assets could be created in areas where the land is under SHGs or Village / Gram Panchayat as a group activity with common ownership.

3. Skill Development Training Programmes

Various thematic areas on which skill can be imparted are as follows

1. Seed / Seedling production.
2. Raising and value addition of horticultural crops.
3. Protected cultivation / precision farming.
4. Vegetable cultivation / high value floriculture.
5. Raising vegetable / fruit nurseries in shade net / green house.
6. Value addition of locally available millets.
7. Location specific back yard poultry /goatery /dairy / fisheries.
8. Bee-keeping/sericulture/ mushroom/vermicomposting.
9. Medicinal plants/ aromatic plants (Collection/growing/grading/value addition).
10. Multiple skill development in basket making, mat, garment making and rural crafts.
11. Training rural youth on how to install, use and maintain micro-irrigation equipment like drip and sprinkler systems.
12. Training the rural youth on plant protection techniques.
13. Training rural youth to become eco and adventure tourism guides.

West Godavari District: West Godavari District is having the distinction of being the “Rice Granary” of Andhra Pradesh on par with East Godavari and Krishna Districts. The District is bounded by river Godavari in the East, Krishna district in the West, Khammam district in the North and Bay of Bengal, Krishna District in the South.

The major agricultural crops grown in the district are paddy and other coarse grains (2,31,478 ha), pulses (6144 ha.), oil seeds (1029 ha.) and other crops (16780 ha.). The major horticultural crops include mango, cashew, oil palm, acid lime and vegetables. The average rainfall received in the district is 1153.3 mm,

in which a major part of 792.0 mm. is through the South West monsoon (June to September) and the remaining 239.4 mm. from the North East monsoon (October to December).

The district occupies an area of 7,742 square kms and consists of 901 revenue villages. As per the 2011 census the total population of the district is 39,94,410 in which the tribal population is 1,33,997 of which 65439 are male and 68558 are female. The percentage of tribal population in the district is reported as 3.35. There are seven major mandals viz; Buttaigudem, Jeelugumilli, Polavaram, Velerupadu, Kukkunur, T. Narsapuram and Chintalapudi in the district. Among the mandals, the maximum ST population is found in Buttaigudem followed by Velerupadu, Kukkunur, Polavaram, Chintalapudi, Jeelugumilli and T. Narsapuram. The Integrated Tribal Development Agency (ITDA), Kota Ramachandrapuram, is functioning to cater to the social, cultural and economic development of the tribal population.

Krishi Vigyan Kendra, Venkataramannagudem is working in 25 upland mandals of the district including seven tribal mandals to conduct location specific technology demonstrations and training to augment productivity enhancement in major crops and crop based enterprises. Under tribal sub plan programme, during the year 2015-16, funds were provided by ATARI, Zone-V, Hyderabad to a tune of Rs. 15.00 lakhs with which the following activities were taken up to introduce new and improved technologies.

Table 1. Mandal wise tribal population details where TSP is being implemented by KVK, Venkataramannagudem

Sr. No.	Name of the Mandal / block	Total population	Population of tribal people	% tribal population	Names of major tribes
1	Jeelugumilli	28,501	8,217	29%	Koyas & Konda Reddy
2	Polavaram	43,710	11,819	27%	Koyas & Konda Reddy
3	Buttaigudem	51,878	32,768	63%	Koyas & Konda Reddy
4	Lingapalem	54,844	325	0.59%	Koyas & Konda Reddy
5	T. Narasapuram	51,881	3,714	7.1%	Koyas & Konda Reddy
6	Velerupadu	21,474	13,703	64%	Koyas & Konda Reddy
7	Kukkunuru	25,758	7,407	29%	Koyas & Konda Reddy

Table 2. Details of Programmes Conducted by KVK, Venkataramannagudem

Sr. No.	Programme	Activity	No. of Farmers	Villages covered
1.	Integrated crop management in cotton	Frontline demonstration	20	Kamaiahkunta
2.	Improved cultivation practices of tomato	Frontline demonstration	10	Lankalapalli & Pandugudem
3.	Micro nutrient management in cucurbits for increased productivity	Demonstration	10	Bandarlagudem & Kamaiahkunta
4.	INM in cashew	On farm trial/ Front line demonstration	20	Kamaiahkunta, Bandarlagudem & Pandugudem
5.	Control of Tea mosquito bug in cashew	Front line demonstration	200	14 villages in Jeelugumilli & Buttaigudem mandals
6.	Introduction of millet processing and value addition	Vocational training & entrepreneurship development	30	Rajanagaram & Bandarlagudem
7.	Introduction of Apiary	Vocational training	15	Pandugudem & Bandarlagudem
8.	Improved back yard poultry breeds for nutritional security	Demonstration	100	Villages of Jeelugumilli & Buttaigudem Mandals
9.	Nutritional gardens in backyard	Demonstration	100	Kamaiahkunta, Pandugudem, Bandarlagudem & Lankapalli
10	Integrated pest management in brinjal	Demonstration	20	Datlavarigudem & Gangannagudem

Methodology

During the preliminary visits and information collected through secondary sources regarding the livelihood activities of tribal women in agency villages of Buttaigudem mandal under Integrated Tribal Development Agency (ITDA), Kota Ramachandrapuram of West Godavari district, it was found that the main occupation of the women in these areas is agriculture and it is mostly rain fed. The women in these villages are mostly dependent on agriculture labour available based on the seasonal conditions, backyard poultry rearing and collection of cashew nuts and other minor forest produce. The situation was discussed with the ITDA

officials and it was proposed to have a vocational training on millet processing and value addition and to provide millet processing units under Tribal Sub Plan funds of KVK, Venkataramannagudem during the year 2015-16. Accordingly the Project Officer, ITDA accepted the proposal and sanctioned an amount of Rs. 35,000/- towards the three days training programme on millet processing and value addition at KVK, Venkataramannagudem. Thirty tribal women who are interested to take up this vocational activity from Bandarlagudem and Rajanagaram villages of Buttaigudem mandal were selected in coordination with ITDA to undergo training at the KVK.

Training on millet processing and value addition under vocational training at Krishi Vigyan Kendra, Venkataramannagudem was conducted from 05th - 08th December, 2016 and 30 tribal SHG women attended the training. During the training period they acquired knowledge relating to the nutritional importance of millets, methods of millet processing, preparation of millet based products and use of machinery in millet processing (Chavan *et al.*, 2016). Special emphasis was given on product development by using multi grain mix, nutritional analysis of the product prepared, branding and packing (Shankaran, 1994).

Two millet processing units purchased by KVK, Venkataramannagudem under tribal sub plan funds for the year 2015-16 which included one multiple pulverizer and LPG based oven were provided to these two groups by Sri. Magantti Venkatesvar Rao, Hon'ble Member of Parliament, Eluru during the Kisan Sammelan organized by the KVK.

These units were kept at the infrastructure provided in ITDA, KR Puram premises. These women were motivated to form two Common Interest Groups (CIGs) and they were named "Girivanitha" and "Giriposhana" groups. The Girivanitha group is led by Smt. Pattodi Bullemma from Bandarlagudem village and Giriposhana group is working under the leadership of Smt. Madakam Lakshmi Devi from Rajanagaram village.

A preliminary group meeting was conducted in the presence of PO, ITDA and a detailed plan of action was designed for the next six months to take up this activity as a commercial activity. The ITDA provided an amount of Rs. 30,000/- as revolving fund to each group and the KVK facilitated in procurement of all the required material and equipment to take up the activity.

Registration of brand name in the name of "Sri Foods" was completed under Food Safety and Standards Authority of India during January, 2016 and the two groups

started preparation of millet based malt and biscuits at the centers. After checking the product quality and nutritional supplementation as discussed with the KVK Home Scientist, the ITDA authorities decided to supply these products to 26 tribal welfare schools in this agency area.

Accordingly Girivanitha group is supplying the snacks for the tribal welfare schools in the villages viz. Kamaiahkunta, Nuti ramannapalem, Koya Rajahmundry, Lankalapalli, Puliramannagudem, Reddikopalli, Tellam varigudem, Doramamidi, Madakamvarigudem, Marrigudem, Velerupadu, Koyyada, Kunkala and ITDA AR School, Jeelugumilli (Table 3).

Table 3. Details of Millet Processed Products supplied by “Girivanitha” Group

Sr. No.	Month	Supply details							
		Tribal welfare Schools				Outside marketing			
		Biscuits		Malt		Biscuits		Malt	
		Qty. (kg)	Value (Rs.)	Qty. (kg)	Value (Rs.)	Qty. (kg)	Value (Rs.)	Qty. (kg)	Value (Rs.)
1	February, 2016	18	5,400	32	6,400	2	600	5	1,000
2	March, 2016	380	1,14,000	639	1,27,800	60	18,000	25	5,000
3	April, 2016	97	29,100	117	23,400	20	6,000	16	3,200
4	May, 2016	-	-	-	-	10	2,500	-	-
5	June, 2016	-	-	-	-	165	49,500	46	9,600
6	July, 2016	465	1,39,500	120	24,000	106	26,500	40	8,000
7	August, 2016	492	1,47,600	80	16,000	180	54,000	28	5,600
8	September, 2016	393	1,17,900	120	2,400	199	59,700	53	10,600
9	October up to 20.10.2016	251	75,300	90	18,000	120	36,000	39	7,800
	Total	2,096	6,28,800	1198	2,18,000	862	2,52,800	252	50,800

Giri Poshana group is supplying snacks for the tribal welfare schools in the villages viz., Itikalakota, Bodigudem, Chegondapalli, Rajanagaram, Barrinkalapadu, Palakunta, Andirivadi, Ankannagudem, Barrinkalapadu, Jeelugumilli, Kukunuru, Madhavaram, Vankavarigudem and Chintalapudi (Table 4).

Table 4. Details of Millet Processed Products supplied by “Giri Poshana” Group

Sr. No.	Month	Supply details							
		Tribal welfare Schools				Outside marketing			
		Biscuits		Malt		Biscuits		Malt	
		Qty. (kg)	Value (Rs.)	Qty. (kg)	Value (Rs.)	Qty. (kg)	Value (Rs.)	Qty. (kg)	Value (Rs.)
1	February, 2016	14	4,200	25	5,000	1	300	4	800
2	March, 2016	304	91,200	511	1,02,200	48	14,400	20	4,000
3	April, 2016	78	23,400	94	18,800	16	4,800	13	2,600
4	May, 2016	-	-	-	-	8	2,400	-	-
5	June, 2016	-	-	-	-	132	39,600	37	7,400
6	July, 2016	372	1,11,600	96	19,200	85	25,500	32	6,400
7	August, 2016	393	1,17,900	64	12,800	144	43,200	22	4,400
8	September, 2016	314	94,200	96	19,200	159	47,700	42	8,400
9	October up to 20.10.2016	201	60,300	72	14,400	96	28,800	31	6,200
	Total	1,676	5,02,800	958	1,91,600	689	2,06,700	201	40,200

Both the groups are supplying their products viz., Ragi, Jowar, Multigrain biscuits and malt powder to 28 schools. Every week both the groups supply about 800 kg (400 kg each) approximately of the products to schools. Every month each group is getting an amount of Rs. 2,00,000 under supplementary nutrition programme of the tribal welfare schools. After deducting their expenses, the remaining amount is shared among the group members by way of working wages @ Rs. 150/- per day and the remaining amount is being utilized as share capital to prepare the products for further marketing. The outside marketing is also being taken by the group members to nearby super markets in Eluru, Koyyalagudem, Rajahmundry and local shandies in the villages. ITDA is encouraging by giving orders as per their requirement for official meetings and functions. Recently an outlet in Eluru Rythu Bazar was also started and the sales are encouraging with a turnover of about Rs. 30,000/- to 50,000/- per month.

Further refinement in packing was done by going for box packing which is attracting the consumers and has created more demand for the product in the open market. These two groups participated in the “Millet Fest” organized by the College of Home Science, ANGRAU, Guntur, Exhibitions at Vijayawada, Eluru, and Pattiseema and could raise demand for their products.

The division of work among the members of the group was done *viz.* product preparation, marketing, record keeping *etc.* which was constantly reviewed by the KVK and ITDA officials to motivate them and provide further guidance. Now these groups are ready to procure further required machinery like Atta Kneader, Solar Drier *etc.*, to make a quality product with an intention to go for online marketing. The CST registration was also completed and they got the TIN number and Amazon.in: Online Shopping India was contacted for online marketing of the product. Product diversification by way of providing further training is planned for these women groups during the year.

Spread of the Technology

Seeing the success of the activity and potential market demand created by these value added products, the activity horizontally spread to two other villages namely Muddappagudem and Kota Ramachandrapuram of Buttaigudem mandal. Eighteen tribal women from these two villages were trained in preparation of millet based products for three days by the KVK at ITDA and two additional millet processing units have been established during 2016-17. Vertical spread of the technology has also taken place, as a similar programme is being conducted at Krishi Vigyan Kendra, Pandirimamidi for 30 tribal women from two villages of Rampachodavaram, East Godavari with the technical support of KVK Venkataramannagudem. The millet processing units are being run successfully with effective linkages created with ICDS, GCC and ITDA in the respective district.

Conclusion

Six millet processing units are being established *i.e.* four in West Godavari District and two in East Godavari district by both the KVKs working under Dr. YSR Horticultural University under tribal sub plan funds allotted to both the KVKs by ATARI, Zone V during the year 2015-16. The tribal women are successfully running the enterprises and earning an amount of Rs. 5000/- to Rs. 6000/- per month and the economic empowerment has direct impact on the standard of living and change in the life style of the tribal families. Now, further product diversification by using other locally available food grains and palmyrah neera, candy, jaggery *etc.*, are being proposed during the year 2016-17.



Product prepared, packed and ready for marketing

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