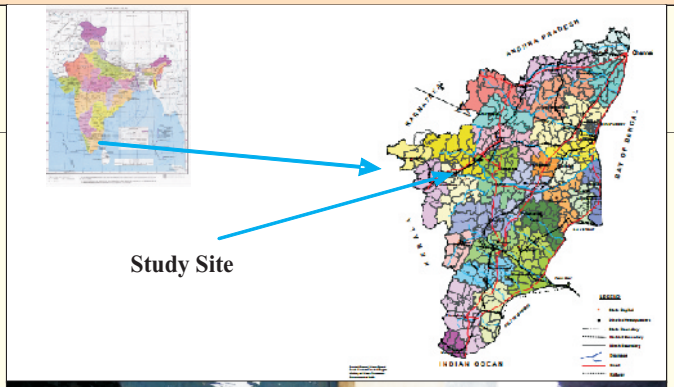
Success Story

Developing livelihood security on sustainable basis for tribal people in Satyamangalam block of Erode district (Tamil Nadu)

Status		Interventions
Rainfed area Hilly terrain Small fields Limited irrigation facility Non-availability of quality inputs Lack of marketing infrastructure		Training on rainfed crop production under integrated farming system Seeds and bio-fertilizers distributed related to maize, beans and fodder crops Facilitated to market the crop produces
Low crop productivity		Training on alternative income generation through: • Goat rearing • Mushroom cultivation • Honeybee rearing • Vermicomposting • Broom preparation • Poultry farming
Low employment		

Tamil Nadu tribal population 651321

Erode district	CD Block Satyamangalam	Bejeletti and Talamalai villages
Dominant S.T. : Mudugar, Irular, Kurumans, Mayali	Dominant S.T. : Mayali, Oorali, Sholangan and Irular etc.	Dominant S.T. : Malayali, Oorali, Irular
Rainfall : 789.7 mm Ground water utilization : 135.2% Depth of ground water : 1.5 to 36.0 m bgl	Rainfall : 720 mm Ground water utilization : 97% Depth of ground water : 2 to 35 m bgl	
Total Population 2581500	Total population 82756, S.T. population 5189 (6.3%)	Tribal population 297
Literacy :M (75.3%), F (55.2%)	Literacy : M (29.4%), F (16.3%)	Literacy : M (28.2%), F (17.3%)

Tribal Scenario

The total population of Tamil Nadu state, as per the 2001 census is 62,405,679. Of this, 651,321 (1%) are scheduled tribes (STs). Thirty six STs have been notified in Tamil Nadu by the Scheduled Castes and Scheduled Tribes Order (Amendment) Act, 1976. Of the STs, Malayali, Kurumbas, Kanikaran, Kammara, Kota and Toda have been notified with area restriction. Malayali have been notified in Dharmapuri, Vellore, Tiruvannamalai, Pudukkottai, Salem, Namakkal, Villupuram, Cuddalore, Tiruchirappalli, Karur and Perambalur districts; Kurumbas in Nilgiri district; Kanikaran in Kanniyakumari district and Shencottah taluk of Tirunelveli district. Kammara, Kota and Toda have been notified through out the state except Kanyakumari district and Shencottah taluk of Tirunelveli district. The growth rate of ST population in the decade 1991-2001 at 13.4% was higher than the overall growth rate of 11.7% of the state. As per the 2001 Census, among the numerically large STs, Kurumbas reported the highest growth rate of 43%, followed by Malayali (24.2%), Irular (12.1%) and Kattunayakan (5.8%).

Malayali, Irular, Kattunayakan, Kurumans and Kondareddis together constitute 85.3% of the ST population of the state. Malayali are the largest ST with a population of 310,042, constituting 47.6% of the state ST population. They are followed by Irular, numbering 155,606 (23.9%), Kattunayakan 45,227 (6.9%), Kurumbas 24,963 (3.8%) and Kondareddis 19,653 (3.0%). Fourteen STs have returned population below one thousand in 2001 census. Expectedly STs are primarily residing in the rural areas and only 15.4% are in the urban areas of the state. Among major STs, Malayali have the highest (98.3%) rural population, followed by Irular (87%), Kurumbas (78.9%) and Kondareddis (71.7%). On the other hand, Kattunayakan, the third largest ST population have reported as much as 61.6% urban population. Salem, Tiruvannamalai, Viluppuram, Vellore, Dharmapuri, Namakkal and Eorde are major ST populated districts of the state as these six districts account for 64.0% of the ST population of the state. Erode district of Tamil Nadu is ranked 10th place in terms of ST population to total population. Majority of ST population in this district belongs to Malaiyali (Oorali) and small proportions are other categories.


Tribal Village


Traditional way of honey collection


Extraction of honey in tribal village


Flock of hen


Sheep herd in tribal village

Study Area

Erode district is located in the western part of Tamil Nadu. It borders Coimbatore and Tiruppur district in the south. Project villages Bejeletti and Thalamalai are located in Sathyamangalam taluk in Erode district. Total population of the village Bejeletti is 2120 of which 92% are tribes of Malayali and Oorali community. Population of Thalamalai village was 4860 of which 52% was of tribes. Literacy levels of adults are very low and poor communication, damaged roads and poor transport facilities, lack of hospitals and veterinary services are some of the major constraints. Agriculture is purely rainfed and fields are sloppy in an undulating terrain. Maize, finger millet, little millet, vegetables like beans, onion and potato are major crops and vegetable cultivated by the tribes but their knowledge of improved production technologies (seed, nutrient, pest and disease management, machineries, etc.) of different crops is limited. Post-harvest and processing facilities for agricultural products are lacking. Non-availability of quality inputs and lack of marketing infrastructure are other major constraints. Another major livelihood is rearing milch animals and goat, and the farmers also managed back yard poultry and poultry birds are predated by the rapacious wild cats. Collection of honey from the forest area is another source of income.

Objectives under Tribal Sub-Plan (TSP)

- To provide employment opportunities to tribal people
- To develop skills for income generation to tribal youths
- To provide technological interventions and scientific knowledge in goat and poultry farming
- To improve standard of living and provide livelihood security to tribal community

Technology Description

Intervention at village level (Bejeletti and Thalamalai village)

(i) Participatory rural approach for agricultural technology needs and resource inventory of tribal farmers

- Hands on training
- Awareness training
- Supply of agricultural inputs

(ii) Modern production technologies for hill based agriculture and horticulture supplying good quality seed materials of agricultural crops and vegetables in time

- Terrace stabilization, soil water conservation and intercropping
- Supplied bio-fertilizer
- Biological and integrated pest and disease management
- Introduction of green manure crops to restore soil fertility

(iii) Training on the following aspects imparted

- Field crops production technologies
- Vegetable cultivation and home stead farming
- Dryland horticulture
- Fodder production technologies
- Soil health management
- Organic farming practices

(iv) Processing and value addition of agricultural products

- Special training on processing and development of value added products like papad, composite flour, vermicelli and malting and puffing
- Visit to Tamil Nadu Agricultural University
- Training on organic manure production and Method demonstration on preparation of botanicals
- Awareness training on kitchen garden
- Training on vermicomposting

(v) Agricultural marketing infrastructure facilities and farm credit and insurance schemes

- Awareness training on marketing institutions

(vi) Improvement of the livelihood and nutritional security of tribal farmers through IFS mode

- Introduced new breed of goat- Thalachery
- Dairy farming
- Honey bee rearing
- Mushroom cultivation
- Poultry rearing
- Artificial insemination and mineral mixture
- De-worming and vaccination
- Supply of CN Hybrid grass slips

On-campus training of tribal farmers

On-campus training conducted	5
Total tribal farmers trained	278
Number of villages	30
Faculty members involved in training	25

Class room training of tribals

Tribals visiting fodder block

Training tribals on improved beekeeping

Training tribals on improved sorghum cultivation

Distribution of seed and fertilizer kits

Topics Covered in the Training Programme

Fodder crops and their cultivation
Importance of millets and their cultivation
Organic farming
Dry land technologies
Soil health
Rainfed vegetable and fruit cultivation
Honey bees and tribals
Integrated farming system
Vermicomposting
Mushroom cultivation
Animal rearing
INM for cropping systems

Faculty member involved in training programme

A. Velayutham	N. Asokaraja	P. Gopalakrishnan	R. Balagopal	M. Balusamy
N. Ganapathy	P. Kalaiselvan	R. Kalpana	C. Jayanthi	S.D. Sivakumar
P.M. Shanmugam	R. Venkitaswamy	K. Srinivasan	V. Manivannan	P. Muthukrishnan
R. Shanmugasundaram	K. Siddeswaran	M. Maheswari	P. Muthuraman	N. Kumar
K. Velayudham	M. Premsekhar	P. Subbaian	S. Ramasamy	Md. Yassin

Villages covered under training programme

Village	Trainee	Village	Trainee	Village	Trainee
Dhinnaikadu	6	Pottapathi	6	Sundakaravu pudur	1
Pudukkadu	31	Moopanur	1	Koparani	2
Kuliyada	35	Kalkotthipathi	19	Senkuttai	3
Anaipodu	11	Poolapathi	1	Neelampathi	5
Vellimalai	3	Sarkarporathi	5	Koodapatti	2
Anthanie	21	Ookkampatty	2	Aalangandy	1
Eppathampalayam	13	Motiyur	17	Ookarayur	2
Thamarkarai	1	Arakkadavu	3	Ookapatti	16
Seengapathi	9	Yezhuthukkal pudur	2	Bejeletti	28
Saadivayalpathi	22	Kaaliyur	1	Kodampalli	7

Impact of TSP activities on yield of crops and vegetable

Crop/vegetables	Yield with existing practice (kg ha^{-1})	Yield after adoption of improved technologies (kg ha^{-1})	Yield increase* (%)
Maize irrgated	3200	5100	59
Maize rainfed	1850	2910	57
Sorghum rainfed	1893	2480	31
Pearl millet rainfed	1500	2215	47
Finger millet irrigated	2650	3600	35
Finger millet- rainfed	1300	2200	69
Minor millets			
Tenai	750	1080	44
Samai	670	880	29
Varagu	910	1120	23
Cowpea (grain–rainfed)	540	900	66
Soybean	780	1020	30
Lab Lab	600	870	45
Cowpea (vegetable–rainfed)	1200	2100	75
Okra (rainfed)	6000	10000	66
Clusterbean (rainfed)	800	1500	87
Tonmato (rainfed)	10000	15000	50

*After adoption of improverd technologies over existing practice

Scientists Involved

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