

*Case Report***Village Adoption Programme – A Baseline Survey Report**

S. Senthilkumar*, M. Vinothini, R. Sanagmeswaran, V. Thanaseelaan, A. V. Gensis Inigo and M. Boopathy Raja

Department of Veterinary and Animal Husbandry Extension Education, Veterinary College and Research Institute, Tirunelveli, Tamil Nadu, INDIA

*Corresponding author: usveteng@gmail.com

Rec. Date:	Mar 12, 2019 06:11
Accept Date:	Aug 14, 2019 18:57
DOI	10.5455/ijlr.20190312061134

Abstract

A baseline survey research was conducted in two adopted villages of Veterinary College and Research Institute, Tirunelveli. It was found that, male female ratio in Kalakudi and Thulukkarkulam is 1423:1451 and 425:450 respectively. Results showed that 28 per cent and 46 per cent of the population are engaged in poultry related activities of Kalakudi and Thulukkarkulam villages respectively. Nearly thirty-three per cent of the total livestock population of Kalakudi village constitutes goats followed by cows (21.49 %), poultry (16.33 %), sheep (16.27 %) and dogs (3.29 %). On the other hand, forty-one per cent of the total livestock population of Thulukkarkulam constitutes poultry followed by cows (23.72%), goats (17.93 %), sheep (8.32 %), dogs (1.35 %) and horses (0.06 %) nearly. The study concludes that integrated approach of using meikal lands (waste land for grazing) for livestock related activities with periodical mass contact programmes are needed in the adopted villages.

Key words: Baseline Survey, Need Based Assessment, TANUVAS Village Adoption

How to cite: Senthilkumar, S., Vinothini, M., Sanagmeswaran, R., Thanaseelaan, V., & Raja, A. (2019). Village Adoption Programme - A Baseline Survey Report. International Journal of Livestock Research, 9(9), 212-220. doi: 10.5455/ijlr.20190312061134

Introduction

At the moment, rural development has been receiving attention of the policy makers since the backwardness of the rural sector would be a major impediment to the overall progress of Indian economy. Consequently, village adoption concept was evolved and adopted in many states of India to energize the rural economy. The village adoption study envisages integrated and holistic development of village or cluster of villages selected on a micro/macro watershed basis, on an action research mode. The process of village adoption is thus an experimentation and involvement of faculty members to drive the process of development in a selected village. In which, the baseline survey and introduction of new scientific interventions should be conducted to reveal certain crucial areas that need urgent attention for rural development and also the

development of the villages in different spheres of the socio-economic arena. Accordingly, the Veterinary College and Research Institute, Tirunelveli has adopted Kalakudi and Thulukkarkulam villages of Manur Block under TANUVAS village adoption programme. The college is conducting various need-based programmes in these two hamlets with the objective of augmenting their socio-economic status.

Livelihood, literacy, health and moral values are 4 main dimensions identified by Mahatma Gandhi in regards to developing the rural India (NIRD, 2017). Base line survey also sometime referred as need-base assessment survey. After completing the baseline survey, one should conduct need base assessment with the data and information collected. Thus, the baseline survey research was conducted in the adopted village to obtain baseline information of the villages, to understand the training needs of the village households and to know the accessibility and availability of health care and veterinary services.

Materials and Methods

Kalakudi and Thulukkarkulam villages in Tirunelveli district were selected purposively as a study area since Veterinary College and Research Institute, Tirunelveli adopted these villages under TANUVAS Village Adoption Programme. Exploratory study design was followed for this study. The data were collected by using well-structured interview schedule for households and key informants during the year of 2015 - 16. The schedule includes, demographic information i.e., village profile, household profile, livelihood options available to the people in the village, and literacy level among male and female. The data from the respondents, key informants and secondary sources were triangulated to obtain best possible accuracy. Data was then tabulated and interpreted for conclusion and recommendation.

Results and Discussion

Demographic Information

Demographic information was depicted in the Table 1. Sex-ratio is one of the important demographic characteristics of a society. Imbalance in sex-ratio (i.e. a gap between number of females and males) generates a lot of demographic, social and ethical problems. The male female ratio in Kalakudi and Thulukkarkulam is 1423:1451 and 425:450 respectively. Kalakudi village had household of 840 and Thulukkarkulam village had 240 numbers. 63.40 per cent of population in Kalakudi village belongs to backward class (BC) and 46 per cent of population in Thulukkarkulam village belongs to most backward class (MBC) followed by almost 30 per cent of population belongs to scheduled caste (SC) in both villages. The data in the Table 1 shows that majority of population are in middle age group i.e. 1040 and 287 in Kalakudi and Thulukkarkulam villages respectively. Out of 240 households 75 families were below poverty line. Details of children less than 18 years are 37 were between 5.1 to 10 years. Only seven children were

less than one year. Only two dropouts from formal education of fifth standard are observed. It is also analysed no drop outs in formal education is due to availability of primary institutions in the village itself.

Table 1: Demographic information

Sl. No.	Particulars	Kalakudi	Thulukkarkulam
I	Total human population (Nos.)		
1	Male	1423	425
2	Female	1451	450
II	Community share (Per cent)		
1	OC	0.96	13
2	BC	63.4	8
3	MBC	3.02	46
4	SC	32.61	33
5	ST	--	--
III	Age wise population (No.)		
1	Above 60 years	709	66
2	46 – 60 years	400	88
3	36 – 45 years	530	124
4	18 – 35 years	510	163
5	Less than 18 years	450	106

Livelihood Option

There are various primary sources of livelihood found as reported by the villagers during survey. About 28 per cent and 46 per cent of the population are engaged in poultry related activities of Kalakudi and Thulukkarkulam villages respectively (Table 2). The findings also show that around 26 per cent of population are engaged in agriculture and allied farming activities in the study area. The number of households who are not possessing lands are 100 in both villages.

Table 2: Livelihood occupation

S. No.	Particulars	Kalakudi	Thulukkarkulam
1	Agriculture and allied farming	27%	26%
2	Animal Husbandry	16%	15%
3	Poultry	28%	46%
4	Fisheries	3%	15%
5	Wages workers	3%	7%

Educational Institution

Anganwadi centre is available in both villages. Private and government aided schools are not available in the village. Government primary school is in the surveyed villages to provide formal education upto 5th

standard. The government primary schools are present in survey villages. No institutions are available in the surveyed villages for providing formal education from 3rd standard.

Healthcare Facilities

Access to health services and awareness about critical factors for determining health condition is inevitable for social development. Government and private hospitals are not accessible to the villagers of the surveyed villages. The local doctors are easily available in the village and provide health care services at nominal cost. Common human ailments recorded in the village were fever, diarrhoea/dysentery and dental problems (Table 3). Awareness regarding health and dental care was not organized in the Thulukarkulam village. On the other hand, one awareness campaign was conducted in Kalakudi villages by primary health centre.

Table 3: Distribution of respondents based on health ailments

S. No.	Particulars	Kalakudi	Thulukarkulam
1	Fever	200	700
2	Diarrhoea / Dysentery	--	350
3	Dental problems	700	400
4	Diabetes/BP	350	--
5	Vision	100	--

Land Use Pattern

Chandrasekhar and Ghosh (2004) conceptualise land as an important part of livelihood strategies. Another key natural resource issue relates to common property resources (CPRs) – including communal land holdings, forest areas and water supplies. The proportion of irrigated versus un-irrigated land in Thulukarkulam 54.0 and 46.0 per cent respectively. On the other hand, proportion of irrigated versus un-irrigated land in Kalakudi villages were 17 and 83 per cent respectively. Tirunelveli has fertile soils only in scattered regions. Less fertile red soils are found distributed over most of the region. The network of the irrigation system marks full use of the water resources; the natural deficiency has been overcome to a greater extent. Pond irrigation and river water forms a major source of irrigation in Thulukarkulam and Kalakudi villages. Checkdam, river and canal do not constitute water used for irrigation in Thulukarkulam village. Data showed that total land area of in Thulukarkulam and Kalakudi is 507.89 and 1869.15 acres. About 58 per cent of the total land is private. Majority (41 %) of total land of Thulukarkulam is Meikal lands (Waste land for grazing). On the contrary only five per cent of the total land of Kalakudi is Meikal lands (Waste land for grazing).

Livestock Sector

The ownership of the livestock is highest in the study area. Table 4 shows that nearly thirty-three per cent of the total livestock population of Kalakudi village constitutes goats followed by cows (21.49 %) further followed poultry (16.33 %), sheep (16.27 %) and dogs (3.29 %). On the other hand, forty-one per cent of the total livestock population of Thulukarkulam constitutes poultry followed by cows (23.72%) further followed goats (17.93 %), sheep (8.32 %), dogs (1.35 %) and horses (0.06 %).

Table 4: Total livestock population

S. No.	Species	Kalakudi		Thulukarkulam	
		Number	Per cent	Number	Per cent
1	Cows	654	21.49	422	23.72
2	Buffaloes	8	0.26	--	--
3	Bullocks	10	0.33	10	0.56
4	Calves	250	8.22	125	7.03
5	Goats	1009	33.16	319	17.93
6	Sheep	495	6.27	148	8.32
7	Poultry	497	16.33	730	41.03
8	Dogs	100	3.29	24	1.35
9	Horse	--	--	1	0.06
10	Pigs	20	0.66	--	--

Survey report showed that average milk production per day is 1000 liters and 650 liters in Kalakudi and Thulukarkulam village respectively. This may be due to fact that awareness programme on scientific intervention like inclusions of mineral mixture in dairy cattle ration and azolla cultivation technology to increase milk yield by Veterinary College and Research Institute, Tirunelveli in frequent intervals. Moreover, regular Veterinary health camps were conducted by the college. Average egg production is 250 number and 200 number in Kalakudi and Thulukarkulam village respectively. The college has conducted ATMA - Farmer Field School and introduction of scientific techniques in poultry production in these villages. Average meat production per day is 75 kgs and 25 kgs in Kalakudi and Thulukarkulam villages respectively. Many sheep and goat improvement programmes were conducted by the college in these villages like conservation of Kilakarsal, Kanni and Kodi adu schemes.

Marketing Avenues

There are several challenges involved in marketing of agricultural and livestock produce. There is limited access to the market information, literacy level among the farmers is low, multiple channels of distribution that exploiting both farmers and consumers. Availability and accessibility of marketing avenues for

livestock and agriculture producer is presented in Table 5. No producer organisation/ federation is formed or operations in surveyed villages. They are relying in shandies for marketing their produces.

Table 5: Marketing avenues for the villagers produces

Produce	Kalakudi		Thulukkarkulam	
	Type	Distance (Kms)	Type	Distance (Kms)
Milk	Dairy Cooperative Society	1	Dairy Cooperative Society	< 1
Animals	Reddiarpatti shandy	12	Melapalayam, Kadayam Naiakaram (near Tenkasi) Shandy	15 – 60
Flowers	Nainarkulam, Tirunelveli	25	Tirunelveli - town	9
Vegetable	Sankarankoil	60	Thatchanallur	9
Paddy	Reddiarpatti	7	Alangulam	25

Availability and Accessibility to Infrastructure Facilities

Table 6: Availability and accessibility to infrastructure facilities

S. No.	Infrastructure Facilities	Kalakudi	Thulukkarkulam
A. Health care facilities			
1	Nearest Primary Health Centre (PHC)	8 km	15 km
B. Veterinary care facilities			
1.	Veterinary Dispensary	8 km	2Km
C. Educational institutions			
1	Primary School	Yes	Yes
2	Nearest Middle School	2 km	5 km
3	Nearest Secondary School	2 km	5 km
4	Nearest Higher Secondary School	2 km	5 km
5	Nearest Graduate College	30 km	5 km
6	Nearest ITI / Polytechnic Centre	No	5 km
7	Library	8 km	2 km
Agriculture / Veterinary			
1	Nearest Agro / Veterinary Service Centre	8 km	8 km
Availing credit facilities			
1	Agriculture Credit Cooperative Society	2 km	5km
2	Nearest bank	2 km	2 km
3	Nearest ATM	2 Km	2 Km
4	Milk Cooperative /Collection Centre	Yes	Yes
Transportation Facilities			
1	Bus Stop	Yes	Yes
2	Railway Station	5 km	5 km
3	Common Service Centre	--	Yes

Availability and access to quality infrastructure facilities is a backbone for rural development. Therefore, characterizing socio-economic system involves baseline information about available infrastructure viz., intensity of roads in rural areas, regulated markets, institutions providing credit facilities, number of electrified villages, MSME, number of other processing mills, number of technology transfer agencies, stakeholders engaged in technology transfer and other infrastructure facilities. The infrastructures and facilities available in the Thulukkarkulam and Kalakudi villages were presented in the Table 6.

Social Participation for Livelihood Approach

Sudha Rani *et al.* (2002) stated that “Empowerment is a multifaceted process which encompasses many aspects enhancing awareness, increasing access to resource-economic, social and political, but of which an equally important component in the Mobilization and organization of women into groups, because these groups form the basis for solidarity, strength and collective action”. Self-help group model of self-employment generation seems to be a workable model. Two common livestock groups are operational in Kalakudi village (Table 7). But no group approach by social participation of villagers is operational in Thulukkarkulam village.

Table 7: Social participation for livelihood approach

S. No.	Parameters	Kalakudi	Thulukkarkulam
1	Number of active job card holders under MGNREGA	755	240
2	Number of SHGs	19	9
3	Number of Farmers Clubs	1	--
4	Number of CLGs	2	--
5	Number of youth clubs	--	2

Needs Assessment

The needs of villagers about various aspects viz., village needs, training needs, livestock farming needs, women welfare activities required, knowledge sharing programme needs for youth were collected and presented in Table 8.

Table 8: Need assessment

S. No.	Categories	Need	
		Kalakudi	Thulukkarkulam
i.	Village needs	Tar Road facility up to I Km each	School upto Middle School
		i. Adi dravidar mayaana salai	
		ii. Pudukulam mayaana salai	
		Borewell facility for water storage – 01 km	Mobile hospitals
		Shed in bus stop – Panchayat stop	Alteration of bus timings / frequency
		Renovation of Ration Shop	Compound wall around anganwadi
		--	Two Tanks of 30,000 liters capacity
		--	Building a canal to Thulukkarkulam pond for distance of 0.25 km
ii.	Training needs	Training on Organic agriculture farming	Training on first Aids
		Training on Driving	Income generating activities
		Training on Masonary works	Tailoring
		--	Phenol/ Soap/ Micro enterprises
iii.	Livestock and Agriculture farming needs	Training on Livestock Rearing	Fodder Cultivation for livestock
		Cultivation of Fodder	Disease Outbreaks Prevention in livestock and poultry
		Preparation of feed ration for Livestock and Poultry	Native chicken farming
		Overcome problems of Feed scarcity	Sheep and Goat farming
		Self-employment training on Livestock	Training and Demonstration of value-added products
		Awareness camp for women	--
iv.	Women welfare activities required	Health camp for women	Health camps for women
		Income generating activities	Awareness camp on diseases
		Vehicles for Physically disabled people	Dental camp for all villagers
		--	Assistant for purchase of livestock for the parents of mentally disabled children

Conclusion

Rural development is the product of interaction between various physical, technological, economic, socio-cultural, institutional and environmental factors. Indeed, the rural sector should experience the required changes so that it can join the mainstream of national development and contribute its share for economic development. The study concludes that Integrated approach of using *meikal* lands for livestock related activities, create both backward and forward linkages for agriculture, livestock and fisheries sector and farmers need to be provided with periodical mass contact programme for health care facilities are needed in the adopted villages.

Acknowledgement

The authors are thankful to Tamil Nadu Veterinary and Animal Sciences University, Chennai and Veterinary College and Research Institute, Tirunelveli for the facilities provided to carry out the research work.

References

1. Chandrasekhar, C.P. and Ghosh, J. (2004). The Continuing Possibilities of Land Reform, Food and Agriculture, Macroscan, New Delhi: Economic Research Foundation, www.macroscan.org
2. Sudha Rani K., Uma Devi and G.Surendra. (2002). Self Help Groups Microcredit and Empowerment. *Social Welfare*, Pp: 20 -22.
3. www.nird.org.in/nird_docs/vag16012017.pdf