Feasibility of Livestock Rearing among Tribals of Wayanad, Kozhikode and Kannur Districts of Kerala

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ABSTRACT
The aim of this study is know the feasibility of livestock rearing practice among tribals of Wayanad, Kozhikode and Kannur districts of Kerala. The tribals living in Wayanad, Khozikode and Kannur districts of Kerala were taken in the study as these districts has highest number of tribal population. The results from the study found that half of the respondents from all the three districts were found literate and regarding livestock possession majority of respondents from Wayanad had more number of cattle whereas from Kozhikode and Kannur had more number of goats. Further regarding the feasibility of livestock rearing practice in Wayanad Veterinary hospital, Milk society, Tribal Extension Office, School and Club were all present within 2.5 km radius whereas in Kozhikode Government Homeo-Hospital, Tribal and Cooperative society were situated within the radius of 1 km and in Kannur within the geographical area of 5 Km they have School and Tribal development office, but they don’t have any facilities like Veterinary hospital and Milk society. It is concluded from the study that almost all the tribal families were interested in agriculture and livestock rearing related activities and also they have veterinary facilities within 3-10 km radius. The predominance of forests and grasslands is congenial for livestock rearing, but most of these tribal families still depended on leased livestock; thus if livestock is provided to the family it would help them in better income generation, also commercial poultry rearing as a subsidiary occupation has scope for increasing the farm income of these tribals.

Keywords: Feasibility, Livestock rearing, Tribals.

INTRODUCTION
Tribes according to the Imperial Gazetteer of India, 1911, are defined as a “collection of families bearing a common name, speaking a common dialect, occupying or professing to occupy a common territory and is not usually endogamous though originally it might have been so”. India has the second largest tribal population of the world next to the African countries. The tribal population of the country as per 2011 census is 10.43 crore, constituting 8.6% of the total population, 89.97% of them live in rural areas and 10.03% in urban areas.

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The decadal population growth of the tribal’s from Census 2001 to 2011 has been 23.66% against the 17.69% of the entire population (GOI, 2013).

Tribals in Kerala (known in Malayalam as the Adivasis) are the tribal population found in the Indian state of Kerala. Most of the tribals of Kerala live in the forests and mountains of Western Ghats, bordering Karnataka and Tamil Nadu.

According to the 2011 Census of India, the Scheduled Tribe population in Kerala is 4,84,839 (1.5% of the total population). Wayanad district has the highest number of tribals (1,51,443) in Kerala, followed by Idukki (55,815), Palakkad (48,972), Kasaragod (48,857) and Kannur districts (41,371). Paniyan, Irula, Kattunaikan and Adiyan are some of the major "communities" among Kerala tribals (GOK, 2020). Tribal groups with pre-agricultural stage of development, diminishing/dwindling population and very low literacy rates are defined as Primitive Tribe Groups (PTGs). Cholanaikans, Kurumbas, Kattunaikans, Kadors and Koragas are the 5 primitive tribe groups in Kerala. They constitute nearly 5% of the total tribals in the State. Kattunaikans are mainly seen in Wayanad district. Their other areas of habitation are Malappuram and Kozhikode districts. Cholanaikans are said to be a sub-community of the Kattunaikans and are seen only in Malappuram District. Nearly 59% of the Kadar population is found in Thrissur district and the balance in Palakkad district. Kurumbas are living in the Attappady Block of Palakkad district. The Koraga habitations are in the plain areas of Kasaragod district.

Majority of the tribal families below poverty line in Kerala are seen in Wayanad, Idukki and Palakkad Districts. Adiya, Paniya and Kattunaikans are the three tribal communities in Wayanad District who are still in a very underdeveloped stage compared to other tribal communities there, they are found less sensitive to the tribal development programmes especially in the field of education. Adiya and Paniya together form 53% of the tribal population in Wayanad (Scheduled Tribes population of Wayanad district was 1.51 lakh in 2011 Census). Kurichya and Kuruma are the other two major tribal communities of Wayanad have attained a satisfactory level of socio-economic advancement compared with these two communities.

Livestock sector plays an important role in socio-economic development of rural households in India. The contribution of livestock and fisheries to the total Gross Domestic Product (GDP) in India, is 4.1 and 0.8 per cent respectively (Islam, et al., 2016). Livestock rearing supplements family income and generates gainful employment in the rural sector, particularly among the landless laborers, small and marginal farmers and women.

Several empirical studies have supported the claim, that livestock rearing has significant positive impact on equity in terms of income, employment and poverty reduction in rural areas (Singh & Hazell, 1993; Thornton et al., 2002; & Birthal & Ali, 2005). The estimate of employment in this sector was 11.44 million in principal status and 11.01 million in subsidiary status, which is 5.5 per cent of the total working population of the country (NSSO, 2005) and over 70 per cent of the rural households depend on livestock for income (Chawla et al., 2005). Livestock are the best insurance against the vagaries of nature like drought, famine and other natural calamities.

This study intends to explore the feasibility of livestock rearing among Tribes in Kerala.

MATERIALS AND METHODS

An ex-post-facto research design was adopted for the study. The tribals living in Wayanad, Khozikode and Kannur districts of Kerala were taken in the study as these districts has highest number of tribal population. A structured interview schedule was prepared under expert guidance and data collection was done through using purposive sampling technique.
The socio economic data is presented in a comprehensive table such that a comparison is possible between the samples. Further the feasibility of livestock rearing will be discussed for individual samples (Wayanad, Kozhikode and Kannur). The collected data were analyzed using statistical tools viz. frequency and percentage.

RESULTS AND DISCUSSION
Socio economic profile of tribes of Wayanad, Kozhikode and Kannur districts
The socio economic profile of tribes of Wayanad, Kozhikode and Kannur districts of Kerala are given in the table 1. The result from the table revealed that majority of the respondents from Wayanad district belonged to the age group of above 50 years, whereas the majority in Kozhikode and Kannur districts were belong to below 40 years of age. With respect to gender, majority of the respondents were found males in all the three districts and regarding caste all the respondents from Kozhikode and Kannur belonged to the Paniya tribe.

It is evident from the table 1 that regarding family size, largest family size was noticed in Wayanad and least was noticed in Kannur. About literacy status around half the respondents in all three districts was found literate. Regarding family income respondents from Wayanad were observed to be from higher income group, whereas the respondents from Kannur had found lower monthly income.

Glance at the table 1 revealed that regarding livestock details majority of respondents from Wayanad had more number of cattle, whereas those from Kozhikode and Kannur had more number of goats. Regarding animal housing, majority of the respondents from Wayanad used plastic sheet roof and wooden floor shed for their animals whereas those from Kozhikode and Kannur had no shed at all.

The findings are in partial agreement with the findings of the Vijaya Lakshmi and Milcah Paul (2019).

Feasibility of livestock rearing among tribals of Wayanad, Kozhikode and Kannur Districts
1. Wayanad: Pookot- Sugandhagiri
Wayanad has the highest concentration of tribals in Kerala. They form 1/5th of the total population of the district. It is the seat of Kurichiyas the valiant warriors of late King Pazhassi Veera Kerala Varma Raja who engaged the mighty British Army in several battles. Their descendants are still expert archers. Tribals can be seen in their natural habitat in Wayanad. Reaping the benefits of modern education and social welfare schemes many of them have developed and became part of the main stream.

Feasibility of livestock rearing practice in Wayanad
1. Availability of Fundamental Facilities: 80.00% of houses were electrified, with the availability of drinking water. A Veterinary hospital, Milk society, Tribal Extension Office, School and Club were all present within 2.5 km radius.
2. Information Sources: From Milk society, Kudumbashree (Oorukoottom meeting).
3. Services: Veterinary College hospital (1-2.5km approx), Government veterinary hospital (2-3.5km approx)

Paniyas and Kurumas are the major tribes resettled in Pookot area. There are around 512 tribal families settled in 2259 acres of land. They have an average relationship with the society and most of them are a member of the SHG ‘Oorukoottom’. Most of the tribals here live in thatched roofed huts and lower made up of plastic sheet. Within a geographical limit of 5 Km, there is a Bank, School, Veterinary Hospital, Milk society and Agricultural Office.

From the study it was seen that, the Tribal families in these areas occupy an average of 2-5 acres of land which has been distributed to them by the Government of Kerala a part of the TRDM (Tribal Rehabilitation Development Mission) project. Unfortunately this land is not used by all for their livelihood, many still work as agricultural daily wage laborers in Coffee and Tea Plantation, where most of them are exploited.
by the land lords and are not given proper remuneration for the work done.

It was also observed that this land distributed by the Government is very suitable for cultivation and Animal Husbandry related activities, an added advantage being the close proximity of the area to the college of Veterinary and Animal Sciences, Pookot. Majority of the tribes in this area were into cattle rearing activities, but these cattle were taken on lease from other member of the society. It was also seen that a few families were using their lands to cultivate Coffee, Ginger and Pepper these lands were irrigated by the Pookot Lake. Most of the families depended on open well and pipe line for drinking water.

2. Kozhikode: Vattachira collective farm
Due to the TRDM (Tribal Rehabilitation Development Mission) efforts in Kozhikode, Kerala Government distributed 498 acres of lands in 3 areas to 318 tribal families. They got land in Muthukad Kullathur Estate (41 acres to 41 families), Perambra Estate (202 acres to 202 families), but presently having 13 families and in Vattachira Collective farm (5 acres of land to 45 existing families and 1 acres to 30 families).

Feasibility of livestock rearing practice Kozhikode
1. Availability of Fundamental Facilities:
   60.00% of houses were electrified with the availability of drinking water. Government Homeo-Hospital, Tribal and Cooperative society were situated within the radius of 1 km. Facilities like veterinary hospital and agricultural office were absent.

2. Information Sources: From Milk society, Tribal Cooperative Society, Kudumbashree (Oorukoottam) meeting.

3. Services: Government Veterinary Hospital (6-7 km approx)
One of the major migrant tribals areas in Kozhikode is Vattachira Collective farm. It was seen that the existing tribal families have got 5 acres of contour land while the migrant families have got a 1 acre of contour land. These tribals seem to have a good relationship with those around them and are member of SHG named ‘Oorukoottam’. Most of them are living in concrete houses built by NGO funded by Kerala Government. Within the limit of 5 Km, there is an Agricultural Office, Milk society, Veterinary Hospital and Club. They are also getting some help from an NGO named COD (Centre for Overall Development, Thamarassery).

Major cultivation in this area is Rubber, Coconuts, Areca nut and Cashew. From pilot study it was also seen that this land is irrigated by a stream and has the added advantage of being close to canal. The people of the area depend on pipe line water and Jalanidhi project for drinking water.

Most of the families here have cattle, goat and poultry. But their livestock are leased and have to be returned back after the first delivery wherein they get to keep the young one. On interacting it was noticed that tribes of this area are daily wage laborers and are employed outside this area. Most of the families showed interest to get into livestock rearing and other allied scheme.

3. Kannur: Aaralam
Aaralam farm is the major migrant Tribal area in Kannur. Before the resettlement this land was in the hands of Collective farm society. Most of the members are resettled from various places of Kannur District and belong to tribal groups like Paniyas, Muthuvas and Kattunayakka. 2874 families are resettled in 2874 acres of land in Aaralam.

Feasibility of livestock rearing in Kannur
1. Availability of Fundamental Facilities:
   Within the geographical area of 5 Km they have School and Tribal development office. But they don’t have any facilities like Veterinary hospital and Milk society.

2. Information Sources: Neighbors
3. Services: Veterinary Hospital Peravoor (10 km approx.)
The tribals in this area had an average relationship with the society and belong to a SHG called Oorukootottom. Most of them live in houses made of plastic sheets and thatched roofs. Transportation in this area is also bad. There is a school within 5 Km radius; the tribal development office is also situated inside the farm. There are no facilities like veterinary hospital, milk society, agricultural office or any NGO’s; only one club is seen near the farm.
It was seen that each of the tribal family were given an acre of land under TRDM Project. Based on its location with a flowing stream and pond, this land seemed very suitable for agricultural activities. The land is presently used for cultivation of coconut, areca nut, cashew and rubber. But most of tribal’s in this area were daily wage laborers and were employed outside for job. The drinking water facility of this area is the Municipal pipe line. The tribal’s were into rearing of livestock like cattle, goat and poultry but most of these animals were taken it on lease from outside. These tribal’s showed lot of interest in livestock rearing and allied activities requested the help of Government for the same.

**Table 1: Socio economic profile of tribes of Wayanad, Kozhikode and Kannur districts**

| Sl. No. | Socio Economic Profile | Category | Wayanad | Kozhikode | Kannur |
|---------|------------------------|----------|---------|-----------|--------|
| 1       | Age                    | Below 40 | 4 (26.67%) | 9 (60.00%) | 8 (53.00%) |
|         |                        | 40-50    | 3 (20.00%) | 1 (6.67%)  | 4 (27.00%) |
|         |                        | Above 50 | 8 (53.33%) | 5 (33.33%) | 3 (20.00%) |
| 2       | Sex                    | Male     | 14 (93.33%) | 8 (53.33%) | 10 (60.00%) |
|         |                        | Female   | 1 (6.67%)  | 7 (46.67%) | 5 (40.00%) |
| 3       | Caste                  | Paniya   | 2 (13.33%) | 15 (100%)  | 15 (100%) |
|         |                        | Kurumaran| 8 (53.33%) | -          | -       |
|         |                        | Converted Kurichyia | 3 (20.00%) | - | - |
|         |                        | Malayarayan | 1 (6.67%) | - | - |
|         |                        | Pulaya   | 1 (6.67%)  | -          | -       |
| 4       | Family Size            | Men      | 28 (40.00%) | 18 (29.51%) | 17 (35.00%) |
|         |                        | Women    | 27 (38.57%) | 19 (31.15%) | 19 (40.00%) |
|         |                        | Children | 15 (21.43%) | 24 (39.34%) | 12 (23.00%) |
| 5       | Literacy Status        | Literate | 38 (54.29%) | 34 (55.74%) | 20 (42.00%) |
|         |                        | Illiterate| 32 (45.71%) | 27 (44.26%) | 28 (58.00%) |
| 6       | Income                 | 1000-1500 | -        | -          | 7 (47.00%) |
|         |                        | 1500-2000 | -        | 3 (20.00%) | 6 (40.00%) |
|         |                        | 2000-2500 | 3 (20.00%) | 1 (6.67%)  | 2 (13.00%) |
|         |                        | 2500-3000 | 1 (6.67%)  | 11 (73.33%) | -       |
|         |                        | 3000 & Above | 11 (73.33%) | -        | -       |
| 7       | Details of Livestock   | Cattle   | 42       | -          | 9       |
|         |                        | Goat     | 11       | 37         | 37      |
|         |                        | Poultry  | 50       | 15         | 18      |
| 8       | Animal Housing         | Pucca shed | 1 (6.67%) | -          | -       |
|         |                        | Plastic sheet roof and wooden floor | 12 (80.00%) | 4 (26.67%) | 5 (33.00%) |
|         |                        | No shed  | 2 (13.33%) | 11 (73.33%) | 10 (67.00%) |

**Table 2: Land Details of Tribals of Wayanad, Kozhikode and Kannur**

| District                  | Land in Acres | Type (Marshy, Laterite) | Nature of Agriculture | Who is involved? |
|---------------------------|---------------|-------------------------|----------------------|------------------|
| Wayanad (Pookot-Sugandhagiri) | 86.67% of Tribals have 5 acres of land, 6.67% of Tribals have 1 acre of contour land and only 6.67% of Tribals have 2 acres of land | 100% laterite land | Mostly coffee & pepper and areca nut in smaller areas. | Agricultural practices done by their own, not using external manual power |
| Kozhikode (Vattachira collective farm) | 60.00% of families have 1 acre of contour land and 40.00% of families have 5 acres of land. | 53.33% laterite land and 46.67% of land is marshy | Rubber, Coconut and Areca nut is the major cultivation and coco is cultivated in small areas. | Agricultural practices done on their own, not using external manual power |
| Kannur (Aaralam) | 100% of Tribals got 1 acre of contour land. | 100% laterite land | Mostly coconut & cashew nut and small area they cultivated coco. | Agricultural practices done by their own, not using external manual power |
**CONCLUSION**

Animal husbandry has considerable scope for development in these tribal areas. Though its potential is yet to be exploited, for it is one of the sectors capable of bringing about speedy economic and social transformation in such rural areas. Almost all the tribal families were interested in Agriculture and Livestock rearing related activities. Also they had veterinary facilities within 3-10 km radius. The predominance of forests and grasslands is congenial for livestock rearing, but most of these tribal families still depended on leased livestock; thus if livestock is provided to the family it would help them in better income generation, also commercial poultry rearing as a subsidiary occupation has scope for increasing the farm income of these Tribals.

**REFERENCES**

Birthal, P. S., & Ali, J. (2005). Potential of livestock sector in rural transformation. Rural Transformation in India. The Role of Non-Farm sector. New Delhi: Institute of Human Development and Manohar Publishers and Distributors.

Chawla, N. K., Kurup, M. P. G., & Sharma, V. P. (2005). State of Indian farmer. A millennium study, Section-12, Animal Husbandry, Academic Foundation.

Government of India, (2013). Statistical Profile of Scheduled Tribes in India. https://tribal.nic.in/ST/StatisticalProfileofSTs2013.pdf.

Government of Kerala, (2020). Scheduled Tribes Development Department, Kerala. ‘Report on the Socio-Economic Status of Scheduled Tribes of Kerala’. http://www.stdd.kerala.gov.in/sites/default/files/inline-files/surveyed.

Islam, M. M., Anjum, S., Modi, R. J., & Wadhwani, K. N. (2016). Scenario of livestock and poultry in India and their contribution to national economy. *International Journal of Science, Environment and Technology*, 5(3), 956-65.

NSSO [National Statistical Sample Organisation] NSS, 61st round (2004-05).

Singh, R. P., & Hazell, P. B. R. (1993). Rural Poverty in the Semi-Arid Tropics of India: Identification, Determinants and Policy Interventions, *Economic and Political Weekly* 28(12), 9-15.

Thornton, P. K., Kruska, R. L., Henninger, N., Kristjanson, P. M., Reid, R. S., Atieno, F., Odero, A. N., & Ndegwa, T. (2002). Mapping poverty and livestock in the developing world, ILRI, Nairobi, Kenya. http://www.ilri.cgiar.org/InfoServ/Webspub/Fulldocs/Mappoverty/index.htm.

Vijaya Lakshmi, V., & Milcah Paul, M. (2019). “Socio-Economic Conditions of Tribal Communities in Telangana and Andhra Pradesh - A Review”. *Acta Scientific Agriculture* 3(8), 104-109.