EXTENT OF ADOPTION OF VARIOUS ANIMAL HUSBANDRY PRACTICES AMONG THE LIVESTOCK REARING TRIBAL IN NORTHERN KERALA, INDIA

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Abstract

The study was conducted with tribal from three districts viz , Wayanad, Kannur and Kozhikode . Data were collected using a structured intetrview schedule.The respondents were classified as livestock rearing and non livestock rearing. The data collected from the livestock rearing group is presented in this paper. This study aims to observe the rate of adoption of various animal husbandry practices among the selected tribals.Result of the study reveals that from three district majority of the respondents were males and below 40 years of age. All the respondents from Kozhikode and Kannur belonged to the Paniya tribe. whereas in Wayanad, majority were from the Kurumar (53.33 %) tribe. Higher rates of adoption was noticed in case of management practices and poor adoption was noticed in case of housing practices.

Key words : *Social Science, Extent Of Adoption , Animal Husbandry Practices , Livestock Rearing, Tribal Studies.*

India has tribal folk with 8.2 per cent of the total Indian population (GOI, 2008). In the state of Kerala tribes constitute about 1.14 per cent of the total population (Government of Kerala, 2001). Tribal groups we endowed with pre-agricultural stage of development, diminishing/dwindling population and very low literacy rates. Animal husbandry has considerable scope for development of the tribal areas, since this sector plays an important role in socio-economic development of rural households in India.

Tribals have their own set of traditional beliefs and practices. Selvanayagam (1986) studied the traditional beliefs among the dry land farmers of Tamil Nadu, along with their strength and rationality. The study identified strongly held superstitious beliefs that could be blockers of technological diffusion. The study also revealed that the variables, years of experience, economic motivation and age were negatively correlated with the degree of belief and extent of adoption of traditional practices, whereas innovativeness, scientific orientation, mass-media exposure and extension agency contact were positively correlated. The adoption behavior among tribal goat keepers in the Terrai belt of West Bengal was studied by Chandra et al. (2005). The study revealed that adoption of improved practices in goat keeping was positively and significantly correlated with education, family income and communication sources. A study conducted by Rahman (2007) among the pig farmers of Aizawl district of Mizoram reported that the variables , the farming

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experience and herd size were positively and significantly associated with the adoption of improved technologies where as age of the farmer was negatively and significantly associated with the adoption of improved technologies. Under these circumstances the present study was conducted with the objective of observing the rate of adoption of various animal husbandry among the selected tribals of Northern Kerala, India.

Materials and Methods

The study was conducted in the three northern districts of Kerala State, viz Wayanad, Kozhikkode and Kannur, which have the largest tribal settlements as well as beneficiaries of the programme- Tribal Rehabilitation and Development Mission (TRDM) being implements by the State Government. The respondents were selected purposively with multistage random approach from the tribal livestock rearing folk. The data collected with regard to adoption of various animal husbandry practices is discussed in detail.

Results and Discussion

Majority of the respondents from Wayanad belonged to the age group of above 50 years, whereas in Kozhikode and Kannur majority were below 40 years of age. In all three

Table 1. Adoption of various animal husbandry practices in Wayanad district (N=15)

	I. Nutrition Practices	Continued adoption	Discontinued	Not adopted
1	Feeding concentrates in relation to production	(73.33%)	(6.67%)	(20%)
2	Feeding extra concentrates from 6 months of pregnancy	(40%)	(6.67%)	(53.33%)
3	Feeding concentrates for growing animals in production	(86.66%)	(6.67%)	(6.67%)
4	Feeding enough green grass	(100%)	-	-
5	Continuous supply of clean drinking water	(100%)	-	-
6	Feeding enough concentrates to heifers	(93.33%)	-	(6.67%)
II. Management				
1	Daily removal of dung from cattle shed	93.33%	-	6.67%
2	Record keeping / Keeping of AI receipt to known date of AI and possible date of calving	73.33%	20%	6.67%
3	Pre milking udder cleaning	100%	-	-
4	Post milking teat dipping	93.33%	-	6.67%
5	Regular milking of animals	100%	-	-
6	Drying the cow minimum 2 months prior to parturition	100%	-	-
III. Disease Control				
1	Vaccination every 6 months against F.M.D	66.67%	13.33%	20%
2	Seeking Veterinary aid for ailments	100%	-	-
3	Regular deworming of animals	60%	13.33%	26.67%
4	Isolation of sick animals	100%		
IV. Housing				
1	Enough floor space in the shed	6.67%	-	93.33%
2	Proper construction of floor	6.67%	-	93.33%
3	Proper drainage and minimum dampness of floor	-	-	100%
V. Marketing				
1	Obtaining loans from banks instead of local money lenders	20%	-	80%
2	Purchasing animals after observing and milking	73.33%	-	26.67%
3	Timely culling of unproductive stock	60%	-	40%

Table 2 .Adoption of Various Animal Husbandry Practices in Kozhikode district **(**N=15)

	I. Nutrition Practices	**Continued adoption**	**Discontinued**	**Not adopted**
1	Feeding concentrates in relation to production	33.33%	-	66.67%
2	Feeding Extra concentrates from 6 months of pregnancy	33.33%	-	66.67%
3	Feeding concentration for growing animals in production	66.67%	-	33.33%
4	Feeding enough green grass	100%	-	-
5	Continuous supply of clean drinking water	100%	-	-
6	Feeding enough concentrates to Heifers	66.67%	-	33.33%
II. Management				
1	Daily removing of dung from cattle shed	100%	-	-
2	Record keeping / Keeping of AI receipt to known date of AI and possible date of calving	-	-	100% (100%)
3	Pre milking udder cleaning	100%	-	-
4	Post milking teat dipping	(93.33%)	-	(6.67%)
5	Regular milking of animals	(100%)	-	-
6	Drying the cow minimum 2 months prior to parturition	(100%)	-	-
III. Disease Control				
1	Vaccination every 6 months against F.M.D	(100%)	-	-
2	Seeking Veterinary aid for ailments	(100%)	-	-
3	Regular deworming of animals	(66.67%)	(16.67%)	(16.67%)
4	Isolation of sick animals	-	-	(100%)
IV. Housing				
1	Enough floor space in the shed	-	-	(100%)
2	Proper construction of floor	-	-	(100%)
3	Proper drainage and minimum dampness of floor	-	-	(100%)
V. Marketing				
1	Obtaining loans from banks instead of local money lenders	(16.67%)	-	(83.33%)
2	Purchasing animals after observing and milking	(83.33%)	-	(16.67%)
3	Timely culling of unproductive stock	(83.33%)	-	(16.67%)

districts, majority of the respondents were male. All the respondents from Kozhikode and Kannur belonged to the Paniya tribe, whereas in Wayanad, majority were from the Kurumar (53.33 %) tribe. Largest family size was noticed in Wayanad and the least in Kannur district. Around half the respondents in all the three district were literate. The respondents from Wayanad had more number of cattle and poultry, whereas those from Kozhikode and Kannur had more number of goats. Majority of the respondents from Wayanad used plastic sheets for roofing and wood for floor of the sheds for their animals, whereas most of the respondents in from Kozhikode (73.33%) and Kannur (67%) had no shed at all.

In the case of adoption of various animal husbandry practices in Wayanad district, maximum adoption was noticed in the case of feeding of green grass and supplying clean drinking water, cleaning of udder before milking, regular milking and drying of the cow two months prior to parturition, seeking veterinary aid for ailments, isolation of sick animals and purchasing animals after observing milking. Poor adoption was noticed for practices with regard to housing. Proper drainage and measures to ensure minimum dampness of floor were not adopted. Only 6.67 percentage had adopted practices regarding floor construction and maintaining enough floor space. Majority (60 %) of the respondents approached local money lenders for loans

Most of the respondents in Kozhikode district to continued adopt feeding of green grass , supplying clean drinking water ,daily removal of dung, pre milking udder cleaning, post milking teat dipping, regular milking , drying of cow two months prior to parturition. The FMD vaccination, purchasing animals after observation and milking and timely culling of animals and seeking veterinary help for ailments. Housing practices were not adopted. In case of marketing all respondents making adopted purchases after observing and milking the animal. Timely culling of animals was also adopted to greater extent. Majority of the respondents depended on local money lenders for loans rather than banks .

In the case of Kannur district, Maximum adoption was noticed in the case of feeding of concentrates to growing animals, feeding enough green grass and giving clean drinking water, pre milking udder cleaning, regular

Table 3 . Adoption of Various Animal Husbandry Practices in Kannur district (N=15)

	I. Nutrition Practices	**Continued adoption**	**Discontinued**	**Not adopted**
1	Feeding concentrates in relation to production	(20%)	(6.67%)	(73.33%)
2	Feeding extra concentrates from 6 months of pregnancy	-	(6.67%)	(93.33%)
3	Feeding concentrate for growing animals in production	(86.66%)	(6.67%)	(6.67%)
4	Feeding enough green grass	(100%)	-	-
5	Continuous supply of clean drinking water	(93.33%)	-	(6.67%)
6	Feeding enough concentrates to Heifers	-	(6.67%)	(93.33%)
	II. Management			
1	Daily removal of dung from cattle shed	(6.67%)	93.33%	(100%)
2	Record keeping / Keeping of AI receipt to known date of AI and possible date of calving	-	-	-
3	Pre milking udder cleaning	(100%)	-	(93.33%)
4	Post milking teat dipping	(6.67%)	-	-
5	Regular milking of animals	(100%)	-	-
6	Drying the cow minimum 2 months prior to parturition	(100%)	-	
	III. Disease Control			
1	Vaccination every 6 months against F.M.D	-	-	(100%)
2	Seeking Veterinary aid for ailments	-	(100%)	-
3	Regular deworming of animals	-	-	(100%)
4	Isolation of sick animals			(100%)
	IV. Housing			
1	Enough floor space in the shed	-	-	(100%)
2	Proper construction of floor	-	-	(100%)
3	Proper drainage and minimum dampness of floor	-	-	(100%)
	V. Marketing			
1	Obtaining loans from banks instead of local money lenders	-	-	(100%)
2	Purchasing animals after observing and milking	(73.33%)	-	(27.77%)
3	Timely culling of unproductive stock	(40%)	-	(60%)

milking of animals and drying cow two months before parturition. Feeding extra concentrate during pregnancy and to heifers was not adopted. So also record keeping of AI and post milk teat dipping, FMD Vaccination, deworming, isolation of sick animals and lending money from banks instead of local money lenders were adopted to a lesser extent. Low adoption noticed w.r.t to housing practices. All the respondents approached local money renders for loans instead of bank.

The present study reveals that majority of the respondents were male and less than 40 years of age. The respondents from Wayanad had more number of cattle and poultry, whereas those from Kozhikode and Kannur had more number of goats. From three districts, feeding green grass and giving clean drinking water were adopted continuously and where as concentrate feeding with respect to production and in pregnancy were adopted to a lesser extent in these three district . In management aspect, maximm adoption was noticed with regard to pre milking udder cleaning , regular milking and drying of cows 2 month prior to parturition. AI receipt keeping was practiced only in Wayanad district. In case of disease control, noticed most of the respondents noticed sought veterinary aid for ailments and in cases of isolation of sick animals continuous adoption was noticed in Wayanad only. Poor adoption was noticed in housing practices. Majority of the respondents had adopted the practice of purchasing animals after observing and milking. Chandra, S. et al (2005) reported that there was a significant and positive correlation between adoption of improved practices in goat keeping with education, family educational status and communication source.

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