International Journal of Science, Environment and Technology, Vol. 2, No 3, 2013, 404 – 409

ISSN 2278-3687 (O)

STUDIES ON THE SOCIO ECONOMIC PROFILE AND CONSTRAINTS FACED BY THE FARMERS REARING JERSEY X SAHIWAL COWS IN CHITTOOR DISTRICT OF ANDHRA PRADESH

[1]A. Reddy Varaprasad, [2]T. Raghunandan, [3]M. Kishan Kumar and [4]M. Gnana Prakash

[1]Part of the MVSc thesis submitted to Sri Venkateswara Veterinary University, Tirupati

[2]Senior Scientist (LPM) and Head, Livestock Research Institute, College of Veterinary Science, Rajendranagar, Hyderabad

[3]Senior Scientist, Dairy Expermental station, LRI, College of Veterinary Science, Rajendranagar, Hyderabad

[4]Associate Professor, Department of Animal Genetics and Breeding, College of Veterinary Science, Rajendranagar, Hyderabad

Abstract: Among the 190 farmers interviewed, 35.26 and 67.37 per cent of the farmers had dairying as main and subsidiary occupation respectively. Majority were (32.63%) farmers holding 4.5 to 9 acres of land. Majority (77.35) of farmers possessing land were growing perennial non-legume fodders but not legumes. The family size ranged from 2 to 12 with an average of 4.58. Constraints faced by the farmers are low price paid by the procurement agencies per liter milk, high cost and non availability of feed ingredients, high incidence of repeat breeding, lack of sufficient grazing land, non availability of vaccines in time, non availability of adequate medicines in hospitals and incidence of Theileriasis and Mastitis were the major health constraints.

Introduction

Chittoor District of Andhra Pradesh has 1.10 million cattle, out of which 0.56 million are Jersey X Sahiwal crosses. Progeny Testing Programme was started in the year 1987 in Chittoor district and at present most of the cattle are stabilized at 50% Jersey X Sahiwal level. This breed is considered to be drought and disease resistant, average milk yielder and well adapted to management conditions of Chittoor district. However, there is a dearth of information on the socio economic conditions prevailing among the farmers rearing these cows . Hence in the present study the socio economic profile and constraints faced by the farmers rearing Jersey x Sahiwal cows in Chittoor district were studied.

Materials and Methods

A total of 190 farmers from 8 mandals in and around Chittoor where the Progeny

*Received April 12, 2013 * Published June 2, 2013 * www.ijset.net*

Testing Programme is going on since two decades were interviewed, for collection of data on socio economic profile of the farmers rearing Jersey X Sahiwal cattle. The data on the socio economic profile of the farmers such as main and subsidiary occupation, family size, land holding, area under fodder crops and livestock holding were collected by utilizing the interview schedule.

Based on land holding, the farmers were divided into Landless (no land), marginal (< 2.25 acres), small (2.25 to < 4.5 acres), medium farmer (4.50 to < 9 acres) and large farmer (> 9 acres). Based on family size, the farmers were categorized into small (1-5) and large families (> 5 members). Based on the number of dairy animals, the farm families were classified in to those holding small (1-5) and large (> 5) herds.

To elicit correct perceptions of constraints faced by the farmers in rearing cross bred cattle, a total number of 12 constraints were identified on the basis of a pilot survey, formal and informal discussions by direct contact and impressions of the respondents. These observations were also judged and selected on the basis of available literature.

Results and Discussion

It is observed that among the selected farmers, 58.42 percent had agriculture as main occupation, 35.26 per cent had dairying as main occupation, 2.12 per cent farmers were doing business and 4.2 per cent were agricultural laborers. It was noted that 67.37 per cent of the farmers had dairying as their subsidiary occupation while remaining 32.63 per cent are doing agriculture as subsidiary occupation. Rao and Rao (1983) reported that higher percentage of farmers (83) had agriculture as their main occupation while George *et al.* (2000) and Prasad *et al.* (2001) observed that a higher percentage of farmers (50.46 and 64, respectively) had dairying as their main occupation and in general, opined that profitability and reliability made majority of the farmers to take up dairying. Majority of the farmers had dairying as their subsidiary occupation in the present study and this finding is in agreement with the observations of George *et al.* (2000).

It is observed from the results that majority of the respondents had medium land holding. Among the selected farmers, 4.74, 27.89, 27.36, 32.63 and 7.37 per cent were landless, marginal, small, medium and large farmers, respectively. About 89 per cent of the dairy farmers in the study area belong to small, marginal and medium farmer category and only 7.37 percent are large farmers, indicating the importance of dairying in upliftment of rural poor. This is in accordance with the findings of Padma (1987), Atkins (1988), Ingole *et al.* (1988) Narmatha (1994) and Sabitha Kumari (1995). Large farmers were found to adopt

dairying as a supplementary enterprise. Subrahmanyeswari (1997) too reported similar findings.

The family size of the farmers in the study area averaged 4.58 with a minimum of two and maximum of twelve per family. This is lower than the observation of Rao (1986). The decrease in the family size is in tune with the general trend and due to the increased health status and purchasing power when compared to olden days. It was observed that in majority of the cases (83.16 per cent), dairy animals are maintained by all the family members collectively.

Among the selected farmers who are having land (exclusive of land less dairy farmers), 77.35 per cent were growing various fodders and 22.65 per cent were not. Generally farmers of this district, they them self take the animals for grazing and tethering is the common practice. Majority of the farmers (68.6 per cent) were growing Andhra Pradesh Bazra Napier -1 (APBN-1) fodder variety and remaining farmers were growing CO-3 and to a little extent Para grass is cultivated. Prasad (1989) reported that 32.83 percent of the farmers are growing fodder crops in Chittoor district of Andhra Pradesh, which is very low compared to the present findings. This increase of the fodder cultivation is due to the awareness of the farmers about the improved management practices and the intense extension activities taken up by the Department of Animal Husbandry in the district such as supply of fodder seed and regular supply of perennial folder slips in co ordination with DRDA, DWMA etc in the area. More over, the irregular monsoons in the district made the farmers to switch from agriculture to dairying.

The most pressing problem for all categories of milk producers was found to be the price that the farmers received for milk, which ranged from Rs.16.00 to 18.00 per liter. Feed and fodder shortage, high cost and non-availability of concentrate mixtures were the other pressing constraints. The farmers expressed a strong feeling that the price of milk that the farmers are getting was not remunerative by any stretch of imagination. It is quite natural and genuine that the farmers expressed the price as major constraint in the days where a liter of water, which is a natural resource, is sold at a higher price than milk. In Chittoor district, private and public sector cooperative societies used to coexist. However, during the last decade the cooperatives have become defunct probably because of government apathy and the greed of private milk trading organizations. As a result, the farmer has become unorganized and the milk market has become a buyer's market where the private people fix the price. Restoration of cooperatives and strengthening the farmers' unity would be the

likely solution. Feed and fodder shortage arose as a result of drought which occurs more often in this area. However, the Government did respond to tide over the situation in terms of establishing temporary cattle camps where the cattle were offered fodder till the situation improved. Since only few centers were organized, all the farmers could not avail the facility.

Every year the prices of feed and feed ingredients had been on the rise without corresponding increase in milk price. This was a top ranked problem for all milk producers. Hitherto the cooperative societies used to supply concentrate mixture at subsidized prices for its members. This was a service which the farmers sorely missed.

The fee collected for A.I. @ Rs.30.00 per dose turned out to be next constraint for small milk producers. Till few years ago the fee that was charged for A.I. was just Rs.2.00 for the first dose and free for subsequent doses, if necessary. A phenomenal increase by 15 fold was one thing that the farmers found it hard to digest. Moreover, there were no free subsequent doses in case the first dose failed. The farmers' plea is to reduce the price to a reasonable level and restoring the facility of free service for II and III doses. However, the point that needs to be underlined is that the Government feels, the present fee collected is reasonable as they have to maintain breeding bull stations, processing cost of semen, cost of liquid nitrogen, establishment expenses, etc. To overcome this problem, Government may subsidize the cost and keep the price at affordable levels, as artificial insemination would bring about genetic improvement of cattle, thereby increasing the milk yield which results in the economic development of rural India which contributes for the GDP.

As the district is draught prone and there is scarcity of water it is usual practice to take the cows for grazing and 75.26 per cent of the farmers said that lack of sufficient grazing land is one of the major constraint. Very few farmers (25.79 per cent) were feeding green fodder to their animals *ad libitum* Small farmers preferred food and other nonfood commercial crops as they were more concerned to meet family food requirements and could not afford to allot even a minimum area for fodder crops. Though this is a self made constraint yet there can be a solution if the community grazing lands were protected and if the farmer is prepared to part with his land for fodder crops on assured remunerative price for milk.

Soaring prices of veterinary medicines and vaccines was yet another problem to the milk producers. Since the high yielding crossbreds were comparatively more susceptible to diseases than local cattle, the need for treating these animals arose more frequently. With the rising prices of medicines, the farmers felt that the expenditure which was imminent was on a higher side.

Repeat breeding in crossbred cows was also reported as a common problem for all the categories of farmers (72.63 per cent) and anestrum to some extent. This appeared to be an inevitable problem with exotic inheritance as well as inadequate feeding and mineral deficiency, as perceived by field veterinarians. In general, exotic breeds have low genetic resistance for diseases more particularly with regard to gynecological problems. Genetic improvement of resistance to diseases and development of package of practices to overcome the deficiencies in management relevant to ground realities should solve the problems.

Non-availability of medicines (92.10 per cent) and vaccines in time was another constraint reported by the respondents. The reason that can be attributed was budgetary constraints. Acharya (1984) outlined the major constraints in milk production enhancement in our country as inadequate feed availability and health cover and neglect of crossbred male calves. Rao (1986) reported that the high cost and non-availability of feed, lack of facilities to sell milk in small quantities and irregular payment as some of the problems encountered by the farmers in the adoption of crossbred cows.

Sivanarayana (1990) underlined lack of knowledge on breeding practices like heat detection, pregnancy diagnosis, non-availability of inputs like balanced concentrate mixture, lack of grazing facilities and lack of knowledge on cattle insurance as the constraints in the adoption of dairy practices. Mian *et al.* (2001) found that inadequate supply of feed and fodder, non-availability of grazing land, inadequate veterinary services, high transaction cost and complex procedure of loan disbursement were the constraints faced by the dairy farmers.

Summary

Among the 190 farmers interviewed, 35.26 and 67.37 per cent of the farmers had dairying as main and subsidiary occupation respectively. Majority were (32.63%) farmers holding 4.5 to 9 acres of land. Majority (77.35) of farmers possessing land were growing perennial non-legume fodders but not legumes. The family size ranged from 2 to 12 with an average of 4.58. The major constraints faced by the farmers are low price paid by the procurement agencies per liter milk, high cost and non availability of feed ingredients, high incidence of repeat breeding and lack of sufficient grazing land.

LITERATUTE CITED

[1] Acharya R M 1984: Constraints in milk production enhancement in Souvenir of the Diamond Jubilee Celebrations of NDRI, India.

[2] Atkins P J 1988: India's dairy development and operation flood. Indian Dairy man 40(9): 515-524.

[3] George Varghese, Mohanachandran Nair S R and Koshy P George 2000: Current trends in rural dairying. Proceeding of the International Conference held in Thrissur, Kerala, India 790-797.

[4] Ingole N P, Saigaonkar P B and Kothekar M D 1988: Adoption of improved animal husbandry practices by owners of cross bred cattle under ICDP. Indian Journal of Extension Education 24 (3 & 4): 59-62.

[5] Mian M R U, Haliun M A and Jabbar M A 2001: Economics of dairy farming under livestock credit programme of BKD in a selected area of Mymensingh district. Bangladesh Journal of Training and Development 14 (1-2): 89-98.

[6] Narmatha N 1994: A study on the role of women in poultry farming, M.V.Sc. Thesis TANUVAS, Madras, Tamilnadu.

[7] Padma M 1987: An assessment of the nature and type of participation of women in rice cultivation practices in agriculture with special reference to T & V system in Andhra Pradesh. M.Sc (Ag.) Thesis Andhra Pradesh Agricultural University, Hyderabad.

[8] Prasad R M V, Rao G N and V Jayaramakrishana 2001: Analysis on milk production from buffaloes. Indian Veterinary Journal 257-259.

[9] Prasad V S 1989: Performance of dairy cows under village conditions. M.V.Sc thesis, Andhra Pradesh Agricultural University, Hyderabad.

[10] Rao G 1986: Entrepreneurship and growth of enterprises in industrial estates. Deep and Deep Publications, New Delhi. p.76.

[11] Rao G N and Rao M R 1983: A note on milk production in rural area of Andhra Pradesh. Paper presented at the Dairy Industry Conference, Madras.

[12] Sabitha Kumari 1995: Developmental priorities of rural women of Chandpur village in Medak District of A.P. M.Sc. (H.Sc.) Thesis Andhra Pradesh Agricultural University, Hyderabad.

[13] Sivanarayana G 1990: An analytical study on adoption of improved practices among small and marginal farmers of diversified farming in Guntur district of Andhra Pradesh. M.Sc. (Ag.) Thesis, Andhra Pradesh Agricultural University, Hyderabad.

[14] Subrahmanyeswari B 1997: A study on the entrepreneurial behaviour of rural dairy women in Chittoor district of Andhra Pradesh. Thesis M.Sc. (Ag.), Acharya N.G. Ranga Agricultural University, Hyderabad.