



# Animal husbandry: Livelihood security of small and marginal farmers in India

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Animal husbandry playing very important role in poverty alleviation in rural area. It also important for rural economy as supplementing family incomes and generating gainful employment particularly among the landless, labourers, small and marginal farmers and women's. India supports approximately 18 per cent of the livestock population on 2.5 per cent of its geographical area (Forest survey of India, 2000). The livestock sector contribute national economy in terms of gross domestic product is 4.1 per cent (BAHS, 2014). As many as 75 million women are engaged in the livestock sector as against 15 million men. In India about 72 per cent of the rural population, 57 per cent of the householders keep livestock as important source of income. In rural area of country 73 per cent peoples have their own livestock (Chawla *et al.*, 2002). Indian people get about 20 per cent of their total income from livestock (Vandana, 1996). Over the last two decades, livestock sector has grown at an annual rate of 5.6 per cent, which is higher than the growth of agricultural sector (3.3%). Delgado *et al.* (1999) reported

that global milk and meat production will rise from 568 to 700 million tones and 233 million tonnes (2000) to 300 million tonnes (2020). Livestock sector not only provides essential protein and nutritious human diet through milk, eggs, meat etc but also plays an important role in utilization of non-edible agricultural by-products. Livestock also provides raw material/by products such as hides and skins, blood, bone, fat etc. Livestock in mixed farming plays a vital role in the economic development and life of farmers in India. In our country livestock provides major additional contribution to agriculture through draft power, fuel, manure and as fertilizer. Besides, animal products such as meat, milk and eggs provide the much required nutrition to rural population and are also a source of supplementary cash income.

## Importance of livestock for people :

Livestock sector provides milk, meat, egg and wool for human. Hides, hair, wool and leather etc. are the main source of income. Bullocks are mainly used for the drought purpose in rural area. Mostly the cattle is used as the drought purpose about 70 per cent othe animals like buffalo, camel, donkey, mule contribute about 29 per cent, 054 per cent, 0.51 per cent and 0.10 per cent in total drought power (Singh, 2013). Along with the agriculture operation livestock are very helpful for transportation purpose in the plane as well hilly area.

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Animals dung and other waste materials are used for the compost making which are used in the agriculture to increase the productivity of land. In some parts of the country animals are also used for the sports and recreation purpose. Agriculture sector also provide employment to a large number of people in country.

### Role of women's in rural livestock sector :

Most of the animal farming activities such as fodder collection, feeding, watering, and health care, management, milking and household-level processing, value addition and marketing are performed by women. Rathinam (2010) stated that the womens plays important role for livelihood promotion. A total of 93 per cent employment in dairy production by womens (World Bank, 1991).

### Progressive dairy farming :

Dairying farming generates plenty of jobs for rural people. India has achieved the distinction of becoming the largest milk producing country in the world. At the beginning in 1950-51 in India's milk production was 17 million tons now it increased to about 132 million tons in 1011-2012. The milk production increased from 127.9 million tonnes in 2011-12 to 132.4 in 2012-13 registering a growth of 3.5 per cent (BAHS,2014). It contributes close to a third of the gross income of rural households and in the case of those without land, nearly half of their gross income. The dairy sector supports around 10 million

members / farmers through one lakh co-operative societies existing in the country. The operation flood programme, which was launched during 1970, organizing dairy farmers' co-operatives in rural areas and linking them with urban consumers created a strong network for procurement, processing and distribution of milk over a lakh villages in rural area. Bullock cart has been one of the predominant modes of transport in rural India. Around 12-16 million bullock carts are used in transportation and providing employment to an estimated 20 million people.

### Goat: Poor man's cow :

Goat raising is one of the important agricultural enterprise particularly in rural parts of our country. Goats provide a dependable source of income to 40 per cent of the rural population below the poverty line in India and to many who do not possess any land. So goat rearing is the backbone of the economy of small and landless farmers in India. It is also known as insurance against crop failure and provides alternate source of livelihood to the farmers all year round. Goats play an important role in income generation, capital storage, employment generation and improving household nutrition. Goat farming has been recommended as the best choice for the rural people in developing countries because of the low investment, wide adaptability, high fertility and fecundity, low feed and management needs, high feed conversion efficiency, quick pay-off and low risk involved. Goats

**Table 1: Distribution of livestock holdings in India (2002-03)**

Category	Landless <0.002ha	Marginal 0.002-1.0 ha	Small 1.0-2.0 ha	Medium 2.0-4.0 ha	Large >4.0 ha	All
%households	31.2	47.1	11.2	6.2	3.4	100.0
<b>Distribution of livestock, %</b>						
Bovine	0.6	51.3	21.2	15.0	11.9	100.0
Ovine	2.1	61.5	15.7	9.6	11.0	100.0
Poultry	4.4	62.7	17.4	6.8	8.6	100.0
Pigs	3.2	76.6	12.0	5.6	3.0	100.0

Source: NSS Report No. 493, Livestock ownership across operational land holding classes in India 2002-03, Ministry of statistics and programme implementation, GOI

**Table 2 : Female labour employment as per cent total employment by different sector**

Sr. No.	Sector description	1983	1993-1994	1999-2000
1.	Livestock production	64.9	70.8	70.6
2.	Crop production	37.6	37.5	37.0
3.	Fishing	17.8	15.7	11.9
4.	Agriculture services	24.9	43.9	38.9
5.	Non-farm	24.8	23.1	21.6

play an important role in income generation, capital storage, employment generation and improving household nutrition.

### Sheep: Mobile bank of rural family :

Sheep make a valuable contribution to the livelihood of the economically weaker sections of the society. A number of rural-based industries use wool and sheep skins as raw material. The wool industry provides employment to about 3 million people and earns more than 2000 million of foreign exchange. Sheep manure is an important source of soil fertility, especially in southern states. There are certain nomadic tribes like Raikas in Rajasthan and Bhakharwals in Kashmir whose main occupation is sheep raising. The return come quickly as lambs may be marketed eight months after the ewes are bred.

### Swine :

Swine farming is beneficial for the rural area. The pig farming constitutes the livelihood of rural poor belonging to the lowest socio-economic strata so it provides employment opportunities to seasonally employed rural farmers and supplementary income to improve their living standards. Raising pigs is a particularly important livelihood for smallholders in north-east states (3.8 millions) India. The pig's population in the rural and urban areas is 91 per cent and 9 per cent, respectively. Apart from providing meat, it is also a source of bristles and manure. The pig gives quick return to the farmers because they have a faster growth rate and can attend a market weight of 70-80 kg. in 7-8 month or earlier. But in present time in our country people not preferd the pork because of social taboo.

### Poultry farming :

Poultry is one of the fastest growing segments of the agricultural sector in India today. Over 5 million people are directly or indirectly engaged in poultry sector, apart

from numerous small poultry keepers in rural and tribal areas of the country. India is the third largest egg producing country. Egg production has increased from 21 billion numbers in 1990-91 59.84 billion numbers in 2009-10. The per capita availability of egg was 5 eggs per annum during the period 1950-56 but the per capita availability of eggs reached 58 eggs per annum in the year 2012-13 (BAHS,2014). Rural Poultry Sector though contributing nearly 30 per cent of the national egg production. Poultry farming as a tool to increased food security and accelerated poverty reduction as the majority of the poor keep some poultry birds.

### Ongoing programs for rural development :

A differentiated approach of providing extension and input services would be necessary to for livestock production systems and species. The dairy co-operative network in the country includes 177 milk unions covering 346 districts and over 1,33,000 village. Livestock insurance for all types of production systems and species is important for all type of livestock farmers. A loan from NABARD is available for starting livestock farming. For obtaining bank loan, the farmers should apply to the Commercial, Co-operative or Regional Rural Bank in particular area.

The facility of the Kisan credit cards is helpful for all livestock farmers. Central Poultry Development Organizations have been promoting development of poultry through providing quality chicks for poultry, duck, turkey, emu, quail and guinea fowl birds. Training programme of trainers, farmers, women beneficiaries, poultry organizations, NGOs, banks, co-operatives and foreign trainees etc. Support to rural people by Swaranjayanti Gram Swarajgar Yojana (SGSY) with particular emphasis on group formation of women and the weaker sections. Presently ATMA are confined to improving livestock production. There is a need to strengthen ATMA with AH experts to co-ordinate various extension and training activities. Establishment of "Women Livestock

**Table 3 : Commercial, co-operative or regional rural bank in particular area**

Live stock farmers	% households reporting income from livestock	% share of livestock in total income
Marginal	62.4	14.9
Small	65.8	15.7
Medium	70.3	13.8
Large	78.1	12.2
All	64.9	14.4

Source: Planning commission, 2011

Producer Associations” is helpful for facilitating credit, insurance and other inputs and marketing services. KVKs in different districts for education of farmers and up gradation of skills of the farmers and field guides. Different para-vets, NGOs and other development organizations helping the farmers in economic livestock production. ICAR participates directly for rural livestock development by and make available the low input assets, funding, training programme and low input animals and birds.

### LITERATURE CITED

Chawla, N.K., Kurup, M.P.G. and Sharma, Vijay Paul (2002). State of the Indian Livestock Farmers and the Indian Livestock Sector: A Status Paper. Indian Institute of Management, Ahmedabad, 2002.

Delgado, C., Rosegrant, M., Steinfeld, H., Ehui, S. and Courbois, C. (1999). *Livestock to 2020: The Next Food Revolution*. Food Agriculture and Discussion Paper No. 28. International Food Policy Research Institute, Food and Agriculture Organization,

International Livestock research Institute.

Forest Survey of India, (1997), *State of Forest Report*, Govt. of India, NEW DELHI, INDIA.

Rathinam, Raja (2010). Productivity enhancement in dairying from the poorest of the poor. *Indian Dairy.*, **62** (3):98-103.

Singh, V. (2013). Draught animal power in agriculture. ICAR Hand book of animal Husbandry. 4<sup>th</sup>Ed. 1312-1322pp.

Vandana, S. (1996) New Livestock Policy- A policy of Ecocide of indigenous cattle breeds and policy of Genocide for small farmers. Dr. ILse Kohler-Rollefson, League for Patorial Peoples and endogenous Livestock Development, Germany.

World Bank (1991). A World Bank Country Report: Gender and Poverty in India, World Bank, Washington, D.C., U.S.A.

### ■ WEBLIOGRAPHY

BAHS (Basic Animal Husbandry Statistics) (2014). Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India. April, 2014. <http://www.dahd.nic.in>.

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