

Problems And Policy Issues Of Livestock Raising In Nepal

Chakrapani Luitel*

INTRODUCTION

Nepalese economy is agro-based and crop farming and livestock raising are interrelated each other. Input output relationship of these two have been proved as the complementary and indispensable sub-sectors of the economy. Livestock has played significant role in the household and national economy. Agriculture perspective plan for twenty years, which has inacted in recent past, highly appreciated this sector for sustainable economic development.

Livestock is important component of agriculture, it provides cash income to household and power and manure for crop production. Most of the rural households, any size of landholding, receive substantial amount of cash income by selling livestock production and live animals. Milk, meat hides, wool are good source of income, albeit, influenced by various types of socio-economic factors. Milk and meat are high qualities food item in Nepalese kitchen. Animal asset is regarded more liquidity than other assets, so it can be a good source of security in the sense that they can be sold during the time of crop failure in order to meet the family requirement. In spite of this great significance of livestock, in the household and national economy, it is not free from various problems.

LIVESTOCK NUMBER: TREND AND DISTRIBUTION

Livestock and crop farming are interrelated and has been recognised as the significant feature of the Nepalese economy. Ruminants and poultry are owned by small holders, who are scattered through out the country where the arable land can be found. Most of the rural people, and to some extent urban also, have raised different species of livestock, but the numbers and types they keep have been influenced by size of land holdings, ethnicity, agro-ecological zones, construction of roads, availability of livestock species and access to market for live animals and its production.

* Mr. Luitel is lecturer, Dhankuta Multiple Campus, Dhankuta, Nepal.

Table 1

Livestock And Poultry Number And Trend To Nepal

(No. In '000)

Fiscal year	Cattle	Buffalo	Sheep	Goat	Pigs	Fowl/Duck
1984/85	6357	2839	785	4882	442	9187
1985/86	6372	2891	808	5016	456	9588
1986/87	6363	2918	837	5090	476	9825
1987/88	6343	2952	873	5211	516	10119
1988/89	6285	3003	910	5302	548	10516
1989/90	6281	3013	892	5324	574	13499
1990/91	6255	3044	906	5367	592	13951
1991/92	6246	3058	912	5406	599	13886
1992/93	6237	3073	911	5452	605	13993
1993/94	6546	3176	914	5525	612	14249
1994/95	6838	3278	919	5649	636	14467
1995/96	7008	3302	859	5783	670	14937
1996/97	7025	3362	670	5922	724	15992

Source: 1. Agricultural Statistics of Nepal 1992/93 Agricultural Statistics Division, MOA/HMG.

2. Statistical Information on Nepalese Agriculture 1996/97, Agricultural Statistics Division, MOA/HMG.

The Table 1 depicts that there are 7025 thousand cattle, 3362 thousand buffaloes, 670 thousand sheep, 5992 thousand goats and 15992 thousand fowl and ducks. Cattle and buffaloes are mainly raised for milk and power to till. Buffaloes provide meat in addition to milk and draft power. Cattle population, according to the estimation of Ministry of Agriculture (1997) is increasing over the years. In the Fiscal Year 1984/85 there were 6357 thousand cattle and it is increased by about 10.5 percent in the Fiscal Year 1996/97. Buffaloes population is increased by 18 percent during the period 1984/85- 1996/97. Goat population is increased by 21 percent but sheep number is decreased by 14.6 percent during the same period. Fowl and duck population has increased by about 74 percent in this period. Buffalo, goat, sheep and fowl and duck are important sources of meat but about two third share is constituted by buffaloes.

Livestock and poultry are distributed throughout the country where people are settled. Most of the species except duck are concentrated in the

hill region. The terai region has lowest share of sheep population due to climetic condition i.e. high temperature is unfavourable for sheep (Table2).

Table 2

**Livestock And Poultry Distribution By Ecological Belt In Nepal
In 1996/97**

Species	Mountain	Hill	Terai	Total
Cattle	825827 (11.8)	3429753 (48.8)	2769195 (39.4)	7024775
Buffalo	304537 (9.1)	1918722 (57.0)	1139176 (33.9)	3362435
Sheep	348319 (40.0)	390173 (44.9)	131090 (15.1)	869582
Goat	831799 (14.1)	3389461 (57.2)	1700696 (28.7)	5921956
Pigs	89613 (12.4)	413320 (57.1)	220680 (30.5)	723613
Fowl	1243076 (8.0)	8974417 (57.6)	5359032 (34.4)	15576525
Duck	11250 (2.7)	81578 (19.6)	322930 (77.7)	415758

Source: Statistical Information in Nepalese Agriculture 1996/97, Agricultural Statistics Division, MOA/HMG.

SOME PROBLEMS IN LIVESTOCK RAISING

Livestock raising has a long history but the related problems have not been removed out with root, inspite of huge amount of investment, government efforts and technology importation. Government, through plan process, has tried to remove these problems but successes are far behind the targets set. Most of the farmers, either with land holding or without land holding have raised different species of livestock but production and productivity level is far below and cannot meet the requirement of the households and nations and sometimes minimum cost too. Farmers due to their necessity, want to have high level of production and productivity but are restricted by various constraints. Following are the prominent constraints on livestock raising .

Inadequate Delivery of Livestock Health Services

Health of animals is one of the important aspect. It directly affects on production, productivity, life expectation and economic value of livestock wealth. But the situation of health facilities in Nepal is not satisfactory. Governments in past and present have tried to provide animal health facilities but most of the farmers are far from their reach. Shortage of manpower, inadequate supplies of vaterinary services and medicines and equipment at rural level, lack of training to farmers are

responsible for poor health condition. Government has tried to control and eradicate the endemic diseases with external support but has not been succeeded till now. Due to this situation, farmers have to bear heavy losses in every year. Dominance of inaccessible areas due to difficult topography has compounded this problem. Livestock health care centres are established in various parts of the country at private and government level but the charge required to get services is beyond the affordable capacity of poor farmers. In this situation no significant change is visible inspite of government efforts.

Lack of Long-Run Appropriate Policy

Long run and clear policy and strategy is necessary for sustainable development of livestock sector. For this deep and exact study about present situation is necessary. Breed improvement, scientific management, eradication of endemic diseases and commercialisation of live animals and livestock products require a appropriate and adoptable policy. Due to the immense biodiversity, Nepal is favourable for various types of livestock species. These are scattered throughout the country making specific features of the locality. The situation of micro variation requires local base specific policy. But this lacks in the country. Till now government has not launched specific and beltwise appropriate strategy to reach the target groups. Farmers are not aware about the commercial production. Due to poor infrastructure development situation there is difficult to affect the farmers activities. Government has made some strategy through livestock master plan but financial scarcity germinate suspects in its success. Various livestock and related projects in the past have been completed but achievements are far below than targets set.

Poor Management

Livestock management is concerned with the care, shed, management and feeding techniques. Effective and appropriate use of collected input require good and appropriate management practices. It affects significantly on production and productivity of animals. But management system of livestock in Nepal is not scientific. Lack of training for livestock care to farmers, involvement of child and old person for livestock care, shortage of fodder and grazing land and increasing unproductive stock due to social and religious factors are responsible in this regard. Management techniques varies by households within close areas. This situation is unfavourable to exploit the potentialities of livestock. The dominance of poor management, instead of scientific one has resulted to have low performance in short run and breed degradation in the long run.

Poor Breed Stock

In spite of having a long history in livestock raising, there is dominance of poor stock throughout the country. They have low productivity, far below than exotic one. Government has tried to supply some exotic high yielding animal breeds but they are common and familiar only in limited areas. The cost return gap is very narrow which indicates less profitability. Non-commercial production has again compounded this problem in all ecological belts. Some practices towards the breed improvement programme have been carried out but achievements are far behind the targets set.

Inadequate Fodder

Fodder situation is significant determinant of livestock raising. This is supplied from various ways such as grazing, crop residue, concentrates, tree fodder and forest grasses. Various studies, conducted till now regarding the fodder situation reveal that Nepal is trapped in fodder shortage situation. Seasonal feed balance situation reflects the acute shortage in all ecological region. The uneven feed balance situation has affected on livestock production and productivity.

Some standard oat factories are established in limited urban areas but distribution situation is not wide spreaded. Poor transport facilities and low level of farmers income due to non-commercial production system have shrunked the distribution network and purchasing abilities of farmers.

Capital Deficiency

Most farmers of rural areas are relying with low level of income and that barely meet the consumption demand. In this situation they are unable to afford high prices for exotic and improved varieties of livestock which provide high yield. Some institutions are established to provide loan but mortgage provision of lending has limited its expansion. Farmers with little or no land cannot receive loans for purchasing animals. Fragmentation of land has lead low value ownership which is not sufficient to get loans. This has deprived the farmers from getting credit facilities. In such a situation, livestock raiser without sufficient landholding cannot purchase fodder and pay for stock, which results shortage in off seasons. In this situation, either they want to sell their animals or to purchase expensive fodder, which results reduction in profit.

Marketing Problem

Marketing is one of the important aspect of the livestock raising. Marketing facilities provide incentive for production activities. In the absence of regular, stable and secured marketing facilities, producer always have to depend upon the local traders, who often exploit them severely.

The market and marketing of livestock and livestock product are influenced by social, cultural and physical factors which have influenced internal market. In the terai belt, there is Indian dominance and has created unfavourable situation for Nepalese traders. Most of the livestock products such as milk, meat are perishable and these require advance technology to preserve for long duration. But the technological status of the country is backward in nature, and producers have to sell their products as soon as possible to reduce loss at unsatisfactory prices. Similarly, geographical structure and landlocked location of the nation has been one of the obstacle in the expansion of market. Poor road facilities, and communication network has compounded this problem.

Lack of Supporting Services

Livestock raising in Nepal is a private activity but requires various supporting services. Illiteracy, ignorance, regional disparities and other various socio-cultural values have deprived the farmers from the identification of one another activities. In this situation educational activities from public sector like demonstration of improved breeds, production and distribution of basic requirement are needed. In the recent years exhibition of livestock products and animals have been initiated but they are confined to district headquarter and accessible areas which cover limited number of farmers. These activities, though, have shown positive impact but, due to limited participation of farmers, overall development is lagging behind. Livestock farms are established in different parts of the country but are suffered by various constraints, such as financial resource, manpower and other factors. Research activities on livestock development are enhancing but implementation aspect of the stations are ineffective.

Socio-Cultural Values

Livestock raising is influenced by various social and cultural values. Pig, hen and some other species are regarded untouchable. Cows, bulls-cattle slaughtering is prohibited by law which results the increment of unproductive animals. The increasing unproductive animals are responsible in depleting the fodder resources. Heavy demand for ploughing animals due to lack of mechanisation in agriculture hinders to raise the exotic

breeds. Most of the farmers want to keep animals with multi objectives. In this situation, implementation of policy forgetting only one aspect may not be fruitful.

Women play significant role in livestock management but are illiterate. Effective policy to activate them has not been formulated. In this situation policy impact may not reach at grass root level.

SOME POLICY ISSUES IN ITS DEVELOPMENT

Nepal, as it has been proved as the agro-based economy, has to adopt some special measures for livestock development. It has various constraints which are hindering for achieving the targets set. If this sector is to be developed properly, making a measure for sustainable development, the following policy should have to be implemented.

Integrated Approach

Crop farming and livestock raising are two vitally related aspects of the Nepalese agriculture since long. In such a scenario, compartmentalised policy in these sector does not help each other. Most of the peasants hold some land with some ruminants and poultry and are dependent to each other in various ways. Livestock and crop farming are input of each other and failure of one seriously affects the other.

Crop farming provides crops residue which is the main base of livestock fodder. Unirrigated crop-land provides grazing land at off-seasons where as irrigated provides green fodder, to some extent at scarce time. In turn from livestock sector crop farming receives manure in the form of dung and urine, power for corpping. Geographical setting of land has allowed to use animal as ploughing power over machines and its importance is compounded by the status of manpower. In this situation, separation of livestock and crop farming means deprivation of ploughing power of peasants which may seriously hamper agricultural productivity and income level of rural people.

Modernisation of agriculture sector requires overall development of prevailing sub-sectors. The chain relationship between livestock raising and crop farming should be identified. The extent of policy integration should be examined under the detailed profiles of local and shedding areas.

Livestock has significant relation with forestry. As livestock is based on forest it can be the reliable means to protect the forest resources too. Cowdung, either by drying or through biogas technology can be used as fuel

which may be substitute of firewood. In our country where firewood has significant place in household cooking fuel can be replaced by livestock dropping. In such a reality, forestry, crop farming and livestock raising should be integrated in the long-term policy framework.

Breed Improvement

Poor quality stock is one of the important obstacle of Nepalese livestock sector which provides low yield and services. Genetic improvement is required to produce high yielding animals of different varieties. Improvement in strategy and technology helps to preserve the genetic potentials from being extinct. For this artificial insemination and crossing of breeds between two potential can be adopted. Artificial insemination requires high technology which is costly and inadequate in developing countries. Lack of transportation facilities, inadequate electrification, inefficient manpower and with other various problems, it has limited scope in Nepalese context. In this situation cross breeding between different potentials is easy and adoptable. It does not require high technology and can be operated in rural areas. Most of the farmers keep some varieties and little efforts of government would be sufficient to initiate this programmes. In Nepal, where acute shortage of manpower is reality, it can be operated with the help of local raiser, under the supervision of low status experts.

Health Services

Health, which affects on the production and genetic structure of livestock is one of the important aspect. It affects on productivity, service capability and genetic structure of animals. In such a situation livestock health should be regarded as the unavoidable task in livestock development activities. Careful attention has been given to improve the health condition of livestock in Nepal but achievements are far behind the targets set. Adoption of modern treatment system is copied from western industrialised countries. This helps to improve the health condition of livestock, but due to the affordable capacity of the Nepalese peasants, it has not been popular and adoptable in rural areas. In this situation either they have to forgo or bear a high cost treatment of their animals by taking loans from neighbours or relatives.

Nutrition and Fodder Improvement

Fodder and nutritional problems have been seen as the main obstacles in the extension of livestock raising. Various studies conducted by academicians and policy makers have revealed the unfavourable food balance situation in all ecological regions, and is compounding with the increment of livestock number in the succeeding years. Increment of livestock number is not so bad, but due to prohibition on cows, bulls-cattle slaughtering and other various socio-economic causes unproductive animals increment which are viable to produce only dung and urine and value of those are far below than required inputs. For raising the productivity of animals, quality development practices need to be emphasised rather than on numbers.

Meeting the growing demand for pasture and fodder is quite difficult within the limited resource base framework. In this situation exploration of quality stock for high yield and ways to use efficiently the by-products of crops farming should be assessed. Technical services and arrangement of training programmes are of utmost important in this regard. Nutritious value of fodder is affected by preparation techniques, feed system and combination. Most of the farmers are inefficient to optimise the nutritive value of available fodder and hay. In this situation training to the farmer is utmost essential. Stall feeding should be promoted, so that transfer of endemic diseases can be controlled and optimum use of available resources may be possible. Training to the farmers for fodder preservation for off seasons is necessary where perennial fodder availability is impossible. Plantation of fodder trees on fallow and steepy land, where crop cultivation is difficult, should be initiated at the public and private level.

Management Practices

Techniques of livestock management plays significant role in its production and product processing . It affects on genetic potentials of animals in the long run. Modern management practices are still beyond the reach of small and marginal farmers. The present available technologies are difficult to adopt due to various reasons. First of all most of the farmers cannot afford it. Secondly, they cannot get services and materials in time and at reasonable prices. Thirdly, these are unstable to the local environment. Fourthly, the lack of knowledge and training for handling is another handicap.

In this situation, the policies framed for improving the management practices must be suitable to the specific local needs and they must be adoptable and easy to handle. It requires local skill development and

exchange programmes in rural areas. This helps to generate income on the one hand and reduces the loss and livestock raising cost on the other. For the training of the people, various agencies such as co-operative leader, peasant programmes, non-government government and organisations should be activated.

Supporting Services

Farmers are reluctant to adopt new methods of livestock raising unless profitability is proved. They are generally immobile due to various causes and they have not seen new techniques adopted in another areas. In such a situation, government support is necessary. Exhibition, demonstration, and field trips help the farmers to make aware to change their livestock raising patterns. Establishment of livestock and livestock product markets, prices and awards and supply of modern inputs motivate them to adopt modern methods. Technician services such as J.T., J.T.A., may be fruitful to raiser and in the long run they will be able themself to look after their livestock in scientific ways.

As the people of Nepal are poor, they cannot afford for improved breeds which are generally of higher value. They require expensive oats, and food management and so on but farmers do not have enough budget to meet the necessary requirement. In this situation, they have to be supported by credit facilities of long term and short term. Most of the rural farmers either willingly or unwillingly have to accept loan from local merchants on the condition of high interest rates. This high cost reduces the profits of the farmers and problems remains as it is. To make them free from these money lenders, government would have to be prepared for providing cheap credit through institutions, agents and agencies.

CONCLUSION

Livestock raising is the significant component of the Nepalese economy. It has great value in the economic and social life of the people. It helps to generate the income and employment. In spite of its great significance, problems related to its development have not been removed. Various government programmes have been launched but the situation has not been emancipated from the trap. If the problems related to it are rooted out, it can be an agent for sustainable economic development and may have wide and significant impact on the economy.

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