

ROLE OF LIVESTOCK IN THE ECONOMY OF BALOCHISTAN WITH SPECIAL REFERENCE TO SHEEP AND GOAT

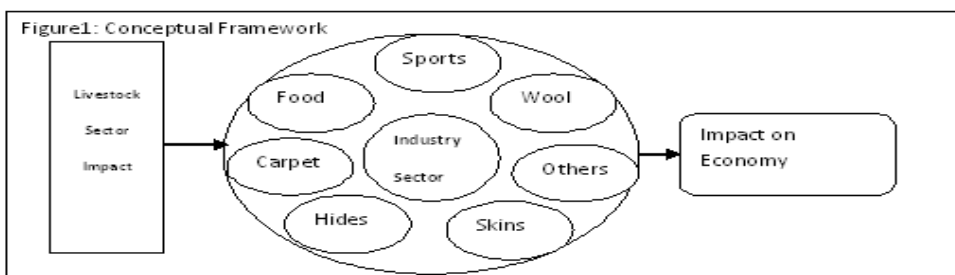
Commerce

Muhammad Shafiq*

ABSTRACT

Agriculture is a major part of the economy of Balochistan. Agriculture economy of Balochistan is divided into cropping, cash crops, fruits, fisheries and livestock. Major portion of the province GDP comes from livestock sector. This paper is an attempt to measure the role of livestock in the economy of Balochistan with special reference to sheep and goat. Since, there is low rainfall in the province; hence, its population has no other massive agriculture activity than to involve in livestock rearing business. Additionally low rainfall does not allow keeping large ruminants for commercial basis. Ultimately, small ruminants are reared in most of the part of Balochistan. Livestock provides the largest source of income in the Provincial agriculture economy. People mostly keep sheep and goats, but also have some other livestock as well such as: cattle, donkeys, camels and poultry etc. Livestock sector has potential to support the livelihood of the rural population. Women, in particular, are active in the sector in terms of milking and milk processing, clearing the abodes, preparing the fodder and looking after diseases through traditional healing. Each member of the family works in livestock rearing activities. Therefore, these all factor provide tremendous potential to livestock sector to flourish in major part of Balochistan.

Key Words: Economy, small Ruminants, Balochistan, Livestock



* Assistant professor Department of commerce, University of Balochistan, Quetta.

INTRODUCTION

Major part of Balochistan is highly arid zone of Pakistan. Last population survey, which was held in 1998, revealed that 6.5 million people reside in Balochistan and the total area of 348,189 Square kilometers, which is 43% of the country. As compare to other provinces of Pakistan, the population of Balochistan is comparatively low and scattered. It is due to its natural climate and vast rangelands, which encompasses dried and barren land. There are few rainfalls in the major areas of Balochistan. It is still far behind from industrialization then other parts of the country. Livestock production is the largest sector in the economy of province. In the present awesome situation, it is impossible that without giving the proper attention to livestock, the dream of economic development of the rural masses can come true and the expected upsurge in this sector cannot be envisaged in the country especially in Balochistan. Development of the livestock sector is paramount for the small landholders, landless livestock owners and farmers. This dream can become reality through the development of the livestock sector. Rural farming of sheep and goat can be established by the use of technologies that is cost effective, efficient, practicable, and most appropriate to indigenous conditions of Balochistan. Livestock has a pivotal role in the economy of Balochistan. As ill luck would have it, practical aspect lacks and inconsistent planning has aggravated the sector in the province.

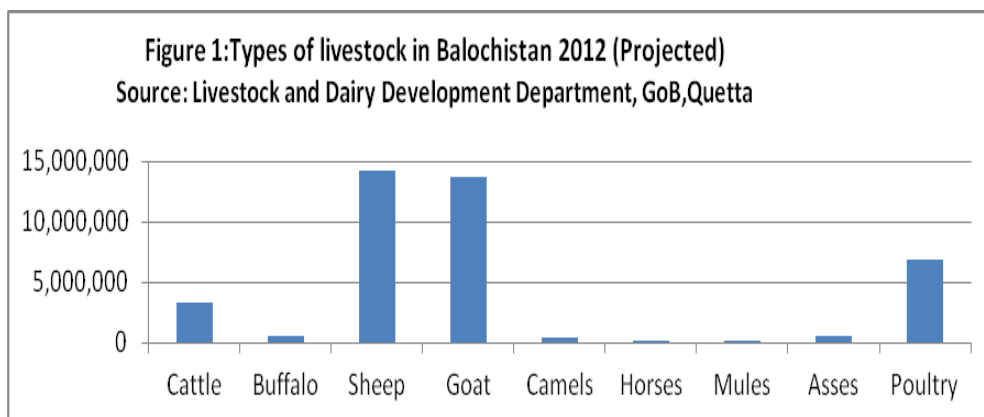
The need of food is fulfilled by different sources which mostly supplied from the surrounding markets of Balochistan and Sindh. The requirement of meat of the city is also procured from the markets of Sindh, Balochistan and sometimes also from Afghanistan. Beef, Mutton, Poultry, Eggs and Open Milk are the main products of livestock. There is huge gape of demand and supply of major livestock products. Due to lack of rainfall, the livelihood of people depends upon the livestock rearing activities. However, it is mainly focused on the rearing of sheep and goat for business purpose. Since, it has been long standing business of inhabitant of Balochistan; therefore, they are adapt in it, and can perform very well. It is another fact that people are accustomed to traditional livestock practices i-e they rear small ruminant for the livelihood or to earn some profit. As matter of fact, small ruminants have great potential for the economy of Balochistan. It is estimated that livestock contributes 40 to 52 per cent to the agriculture economy every year (Livestock and Dairy development Department, GoB, Quetta, 2013)

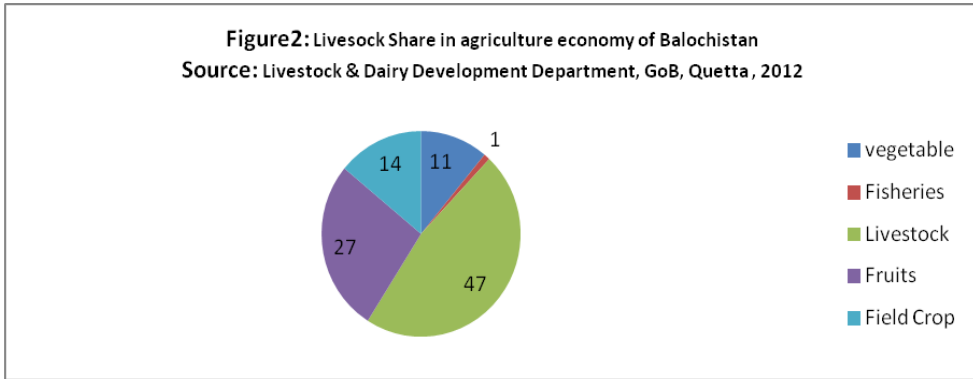
Table No.1 shows the Major livestock since 1996 to 2012 (Projected) and its per cent of increase with comparison to 1996, as given below:

Table No.1

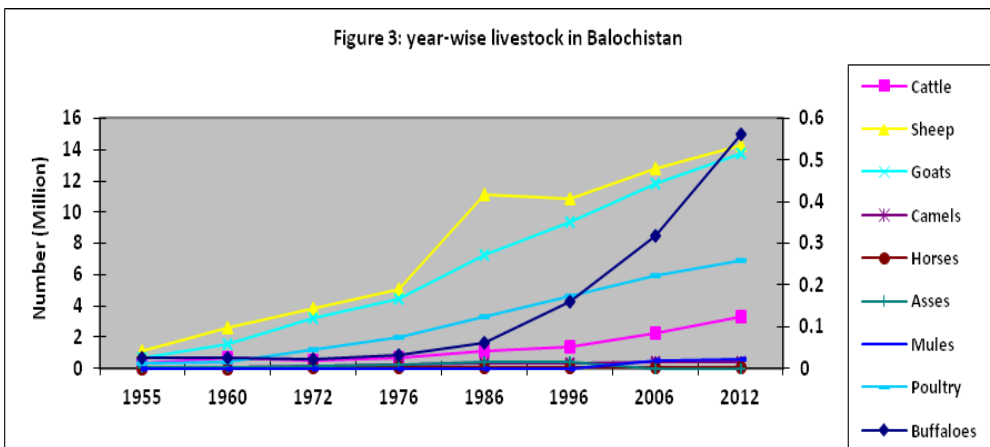
Type	1996	2006	Net Increase from 1996 to 2006	% 2012 (Proj)	Net % Increase from 1996 to 2012
Cattle	1.341	2.254	168.0835	3.348	249.66
Buffaloes	0.161	0.3199	198.6957	0.562	349.07
Sheep	10.841	12.804	118.1072	14.248	131.43
Goats	9.369	11.785	125.7872	13.735	146.60
Camels	0.339	0.379	111.7994	0.415	122.42
Horses	0.043	0.059	137.2093	0.077	179.07
Asses	0.383	0.006	1.56658	0.011	2.87
Mules	0.006	0.472	7866.667	0.544	9066.67
Poultry	4.637	5.911	127.4747	6.885	148.48

In table No. 1, the population of every type of livestock in increase, which is the example of potential in livestock and the interest of the people in this sector. Cattle and Buffaloes are increasing due to increase in demand of milk product, hence, the number of private dairy forms are increasing all over the Balochistan. However, it cannot reach to the consumers in remote areas from the dairy forms and consequently huge loss has to be suffered in terms of waste of milk or its products.





In the above figure 2 it is crystal clear increase in Small ruminants in the year, 2012, projected). It depicts the potential of small ruminants in livestock of Balochistan. We can increase not only the number of livestock but also the quality of livestock by putting the sector on modern tips and techniques. Still it is not declared industry, even the potential is huge and there are number of markets available in the region already.



Livestock is an important source of livelihood for the majority of the rural population. It generates income for flock owners, but it is also a major source of nutrition. For nomadic families livestock is the main source of income. Most of the nomadic families and housing units of rural areas have herds of 15 to 20 ruminants (Buzdar et al., 1989). Prices of small ruminants are not fixed. It depends upon the production, demand and supply, size and quality of the ruminant. People cut the wool of sheep twice a year and sell it in the local market. Women and children are also involved in keeping the herds of small ruminants (Iqbal. 1999,). Hence, livestock sector plays a significant role in the

economy of Balochistan. It is an important source of livelihood and a major source of income for livestock owners.

Livestock is source of income for the inhabitants of the Balochistan for centuries. In Balochistan there are significant number of sheep and goats. Management of goats is comparatively easy. Poultry keeping is a household affair. Almost every house in rural areas raises poultry, using eggs and meat for themselves and/or for guests. Sometime one can sell them at the market in towns. This will be great contribution to the economy of Balochistan, if proper attention is paid though systematic way. Most importantly, we have to come out of the shield of speeches and paper work. As repercussion, the economy of the province will be potentially significant which will ultimately contributing handsome earnings to the country as well.

Table No. 2 the Production Status in Balochistan 2007-12

<i>OCATEGORY</i>	<i>Present status, 2007</i>		<i>Projected future statues in 1212</i>	
<i>Item</i>	<i>Quantity</i>	<i>2007(Rs Billion)</i>	<i>Quantity</i>	<i>2012 (Rs. Billion)</i>
<i>1. MEAT</i>	<i>234490 Metric Ton</i>	<i>55.77</i>	<i>320040 Metric Ton</i>	<i>75.746</i>
<i>2. MILK</i>	<i>2.278 Billion Liters</i>	<i>68.34</i>	<i>3.086 Billion Liters</i>	<i>92.58</i>
<i>3. WOOL AND HAIR</i>	<i>11.66Million KG</i>	<i>7.03</i>	<i>16.2866Million KG</i>	<i>10.36</i>
<i>4. HIDES AND SKINS</i>	<i>8.111Million Numbers</i>	<i>6.3565</i>	<i>16.351 Million Numbers</i>	<i>10.47417</i>
<i>5.poultry Broiler</i>	<i>11.36 Million KG</i>	<i>0.568</i>	<i>26.28 Million KG</i>	<i>1.314</i>
<i>6. poultry Layer</i>	<i>7.026 Million Dozen</i>	<i>0.814</i>	<i>16.218 Million Dozen</i>	<i>1.882</i>
<i>8. Edible Offal</i>	<i>8.111</i>	<i>1.018</i>	<i>16.351</i>	<i>1.360</i>
<i>TOTAL</i>		<i>139.328</i>		<i>190.40217</i>

Source: Director, Animal Health, Department of Livestock and Dairy Development Balochistan,2011

POTENTIAL OF LIVESTOCK FOR INVESTMENT

Livestock is such an important sector of Pakistan particularly of Balochistan that every part of this is saleable in the market. Hence, it is immensely important for the dwellings of the Province. Livestock development in Balochistan should be aimed at providing the people of the province wholesome livestock products at competitive prices along with exploring export market in Gulf and South East Asian countries and use livestock as a tool for poverty reduction in the whole country.

Futures prospects and major areas of investments in Balochistan livestock are as below:

INVESTMENT OPPORTUNITIES AT GWADAR SEA PORT

Completion of Gwadar deep sea port is paramount for the development of the province especially includes the development of livestock and dairy development. Sizeable chunks of state land has reserved for livestock providing grantee for development of farms in command areas of Mirani Dam, Pat feeder and Kachhi canal to produce pure bred livestock. Similarly, suitable areas should also be reserved as salvage cattle/ buffalo farms to save previous stock from being slaughtered when these animals no longer maintain dry animals in cities and towns till they are again impregnated.

COMPLETION OF MEGA PROJECTS DAM/ CANAL

With the completion of agriculture mega projects especially in water and power sectors, there are good chances that modern husbandry practices could be employed in this sector. Merani dame of 36,000 acre, Subkzai dam having 14,000 acres, Kachhi canal has 700,000 acre while Pat feeder canal will further bring 200,000 acres additional under plough which will be blessing to the areas of the province (Livestock & Dairy Development Department, 2006).

EXPORT OF ORGANIC MEAT

Export of animals reared on natural grazing as organic farm animals. Mutton of the indigenous breeds is preferred over the other breeds of country because of its taste and tender fiber. Almost all the animals rely on the rangelands for acquiring their nutritional needs, which gives a unique taste to their meat. If modern husbandry interventions introduced, this sector has a lot of potential to serve as protein source and food security not only for the people of Pakistan but also to be exported to earn foreign exchange.

ESTABLISHMENT OF FEEDLOT FOR EXPORT

It has been proved through a number of fattening trials that fattening of sheep and goats is economical in Balochistan if fattened animals are either sold on special occasions or exported to Gulf States alive. Private sector can step into this business for massive profit taking.

MEAT PACKAGING INDUSTRY

After successful evolution of the Balochistan Nari Master, now there is a great potential for the establishment of meat packaging industry in the province. The Government in its trade policy for 1998-99 has allowed the export for fifteen food items including live animals, beef and mutton, blood meals and meat meals, bran and fodder, hides and skins, wet blue lather and so on (Baig, 2005). It will be great addition to the staggering economy of Balochistan if steps are taken to right direction for the establishment of meat industry. This meat industry will be a significant to the economy of Balochistan.

PROCESSING OF SKIN AND HIDES

Balochistan is very famous for its hides and especially for skin. Unfortunately there is no tannery in Balochistan and even coming from Afghanistan and Iran are taken to Sindh and Punjab provinces for processing. Mostly these large tanneries operate efficient modern process and techniques and require quality raw material. The by-product of food animals includes wool, skin and hides. This is another potential investment of livestock business in Balochistan.

OSTRICH FARMING

In Balochistan, some of the zones like Khuzdar, Kalat, Nushki, Jaffarabad, Musakhail and Zhob have got tremendous potential for establishment of ostrich farming. Ostrich breeding centers and export processing units to maximize foreign exchange through export of Ostrich meat and other products. Its meat in the international market priced is about 11-12 US Dollar per Kg. Rate of hide is 10 US Dollar per square feet (Livestock & Dairy Development Department, 2006). Hides are used in shoe making, ladies purse, watch strips, belts and etc. It will also promote foreign investment in non-conventional areas, serve as international market for most of the Muslim countries of Middle East, Central Europe like; France, Germany, Netherlands, UK, Belgium, Switzerland and Scandinavian countries.

SAUSAGE INDUSTRY

The quality of the local animal's intestine is very high. At the moment the intestine which is required for the sausage is exported to the Europe and other countries. To earn foreign exchange, there is a great potential for this industry, keeping in view; the additional use of different herbs and spices for better taste in the sausage for export.

WOOL INDUSTRY

Wool is one of the most important products of livestock, if it is developed in right direction by using the scientific and systematic methods; there is attractive business opportunity for common man without making huge cost (Anjum, 1995). Presently there is no woolen mill in Balochistan which could process the wool for its value added products before export/ sale to other agencies outside the province since all the wool produced in Balochistan is almost of carpet quality. Expansion and strengthening of cottage industry like carpet making would be more beneficial.

ESTABLISHMENT OF MILK PASTEURIZATION PLANTS

With the more crossbred cows in and around Quetta and Pishin areas, and the milk available in Nasirabad area, there should be no problem and milk can be collected through establishing milk-chilling centers at strategic points. This would also trigger production of more milk by peri-urban dairy units when assured market/outlet for milk would be available to them round the year. It will indirectly help the landless farmers to rear more dairy animals of improved variety for better income and livelihood.

MILK AND DAIRY PRODUCTS

A milk processing plant called UHT which was set up at Quetta was disinvested and privatized after its completion for better operation in the Private sector (Livestock & Dairy Development Department, 2006). The firm, unfortunately, has still not been able to put the plant into operation for want of raw milk on economic prices in and around Quetta. With the more crossbred cows in and around Quetta now and milk available in Nasirabad area, there should be no problem and milk can be collected through establishing milk-chilling centers at strategic points.

MODERN SLAUGHTER HOUSES

There is a good scope for development of the meat industry which should include approach to encourage a gradual upgrading of the traditional slaughter trade through provision of upgraded and improved

slaughter techniques, hygiene and sanitation while saving handling losses of valuable by-products such as hides, skins and blood (Afzal, 1998). The private investor should be encouraged to take on lease or through outright purchase of slaughterhouse set up by the government at Quetta.

PROPAGATION OF BEEF BREED

There is a great potential for the beef production as cattle farms especially in the canal-irrigated areas of the province. In this context, Balochistan has already developed a tremendous beef breed called Balochistan Nari-master (Wagenaar *et al.*, 1997). This crossbred of Australian drought master and indigenous Bhagnari breed of Balochistan at its beef research center Sibi. The department is on initial stages to analyze the breed scientifically and evolving the ways to expand it. The live weight of Nari-Master Bull is about 850 Kg (Livestock & Dairy Development Department, 2006).

POULTRY SECTOR

Balochistan government may also consider providing some incentives to private sector desirous of setting up breeding farms, hatcheries poultry, processing plants and feed mills. About 80% of rural families including those of nomadic transhumance or sedentary keep 5 to 10 hens and one or more cocks (Afzal, 2003). Most are indigenous low yielding molting local type. Birds live by scavenging and on household wastes. Cockerel and adult females who have finished laying are eaten or sold, although rural poultry keeping is not very productive and remunerative; it is attractive to rural families because it involves little cost. According to 1996 livestock census the number of rural chicken is more than 406 million which can be still more than 100% of exotic poultry birds kept in commercial farming enterprises (Livestock & Dairy Development Department, 2006). The major problems in rural poultry arise from diseases and epidemics. This normally wipes out entire of village poultry population, during the last two decades increasing number of adapted improved breed like Dokki, Fayoumi (Egyptian breed) and Mini-red have been introduced with better performance and acceptability in rural environment. There are not a many commercial poultry enterprises in Balochistan except few medium to large layer and boiler farms concentrated in Hub area of Lasbela district in view of close proximity to major market of Karachi and some at district headquarters of the province (Livestock & Dairy Development Department, 2006).

ESTABLISHMENT OF FEED MILLS

There is only one feed mill operating at Quetta in private sector (Ahmed, and Alvi, 1988). Most of the coarse grains are available within the province. Vegetable protein and cereal by-products are bought from other provinces of Sindh and Punjab. The climate of Quetta is however, cold and dry. Hence, it is most suitable for long storage of feed.

DISCUSSION

Livestock is very important segment of Balochistan, hence, all products impact on the economy of Balochistan. Every part of livestock is used to satisfy human needs and desires' role regarding the common man life in Balochistan can easily be measured. Production from livestock sector include: milk, beef, mutton, poultry meat, wool, bones, fats, eggs, hides and skins. Balochistan provides the major share of mutton to the country but there are number of constrain which do not let it to increase its share as compare to other food items. Due to steep shortage of supply, and increasing demand, prices are very high. This has made mutton unaffordable to the middle and poor class. By increasing the production, prices can be stable and make it approachable to every class of society. Milk is an important product of livestock, which accomplish the need of people. Now there are significant number of cattle, buffaloes and sheep and goat that are kept for dairy purpose. Fresh liquid milk produced in few peri-urban dairy units in different towns of the province (Mohyuddin and Wahla, 1994). There is some seasonality in the production of milk. In winter, milk supply increases because of calving pattern of buffaloes and cows, leading to decrease milk prices in rural areas. Beef can be obtained from cattle, buffaloes and camel but cattle are the main source of beef production to meet the market demand. Cattle population of Balochistan is growing steadily at the rate of 1% per year for the last ten years. 10% of total population is marketed to slaughtered houses (Wagenaar *et al.*, 1997), which is not enough to meet the demand of the dwellings. Balochistan Nari-Master (BNM), the first Pakistani beef breed developed by the scientists of livestock department Balochistan with collaboration of Government of Australia. Poultry production has emerged as a good substitute of beef and mutton. Its significance can be estimated from the fact that almost every family in rural areas and every fifty family in urban areas are associated with poultry production activities in one way or the other (Ministry of Food, Agriculture & Livestock: Livestock Wing, 2005). Hide and skins are also very significant for the economy of Balochistan. Production of hide and skins in the province is poor in quality due to lack of flaying techniques. There is no tannery in

Balochistan; therefore, huge amount of revenue is drained out of province. The quality of skin is also lowered due to the fact that many cuts are left over the skin due to improper shearing. Sheep are the source of wool production and used for further consumption. As wool is an important by-product of sheep farming activity and basic input for warm cloth and carpet industry, however, there is acute need for sheering technique and to establish sheering centre next to the livestock markets. The Kooka, Kachhi and Pak-Awasi breeds are the most promising for wool production. These are medium-sized, but Kachhi can produce some milk as well. More than 2.0 kg per annum fleece can be obtained from them. The Kachhi and Pak-Awasi have good staple length of more than 7.0 cm. Pak-Awasi and Kooka have more than 60 per cent true wool fibers (Livestock Balochistan, sub strategy, 1996). Offal is also productive value. Proper management can give a handful profit for businessman. In remote rural areas of Balochistan, cattle, donkeys, and camels are used as replacement of vehicle. That's why the population is on increase. Production of farmyard manure is also valuable product can be sold to some value.

ANALYSIS

Population of every type of livestock in Balochistan has increased to impressive numbers, which exhibit the potential in livestock and the interest of the people in this sector. Cattle and Buffalos are increasing due to increase in demand of milk product, hence, the number of private dairy forms are increasing all over the Balochistan. However, it cannot reach to the consumers in remote areas from the dairy forms and consequently huge loss has to be suffered in terms of waste of milk or its products. In the same way, the increasing demands of meat products. There are number of small ruminants, produced in the province is not enough for consumption, hence, the prices of red meat in on hike. There is also huge demand for meat products in the neighbouring courtiers i-e Iran, Afghanistan, Central Asian States and UAE etc. Balochistan can capitalize these opportunities by facilitating the livestock holders to enter in this business.

CONCLUSION

Balochistan is a backward province of Pakistan due to several certain reasons. One of the ways to bring it up to the level of other provinces of Pakistan is to provide indigenous support to the common people in their traditional field of earning. Hence, a dwelling of the province is engaged with agriculture from centuries. Since, cropping is not easy for the

residents here, so, they have opted the rearing of livestock for their living. Now, the livestock is the main stay for the people here but they are not earning profit and benefits from the livestock, as they deserve. There are several constraints, which are the main hurdles to get them their rightful share of benefit in terms of financial benefit, social or any. Goats are bred for meat, dairy and trade. Breeding of small ruminants is done in traditional ways. Government hardly pays any attention to the promotion of small ruminants breeding still has unexplored potential for the sector. There is enough grazing land and labour (children and elderly people) available. Poultry farming is a women's task. They sell the eggs and chickens on nearby markets or to middle men to obtain some additional income, who resell them on markets available. In that way poultry farming provides a source of income to the lower and middle class population in urban and rural areas. The poultry sector in the district has been growing especially in rural areas. The underdevelopment of the livestock sector is a major development issue. People are informally familiar with the breeding and looking after of small ruminants and poultry. The promotion of the livestock sector, particularly small ruminants can increase the income level of the lower and middle classes of society. Development of grazing facilities within Balochistan should have a high priority as a major development issue as due to inadequate grazing possibilities the livestock has to migrate to Sindh which causes much financial loss to livestock owners and also cause contagious diseases among livestock. The participation of women in this sector can be further enhanced by the provision of small loans and of training, preferably imparted by females. The Livestock Development Department appears to be providing satisfactory livestock treatment and vaccination services. But due to high cost the livestock owners are unable to buy proper medicines. In view of the large number of its livestock population, the Department in Balochistan probably needs more staff, veterinary units, and logistics than available at present. An extended coverage of veterinary services would lead to quick improvements in milk and meat yields and thus make a substantial addition to livestock holders' income. Also required are livestock marketing improvements. In view of its importance, the livestock sector should be studied in a greater depth for bringing out development issues and problem solving approaches.

SUGGESTIONS

- Introduction and processing of organic mutton meat.
- Producing offspring of Balochistan Nari Master

- Use of Gwadar port as hub for export purpose
- Establishment of by- product industry
- Establishment of small crushing mills of agriculture wastes all over Balochistan
- Increase in animal production and health facilities
- Procurement of training
- Stress on pedigrees of livestock
- Establishment of modern slaughter house
- Declaration of Balochistan as mutton producing zone with all must facilities
- Arrangement of incentives in the form of credit or subsidies
- Involvement of private sector in animal health and production programs
- The capital investments required to invest in livestock business
- need to create a team of women extension livestock workers
- Exercising the role of the public sector and private sector
- Encouragement of market competition
- Formulation of demand-driven strategies to markets premises
- Best use of scarce livestock resource in the rangeland
- Decision to establish livestock as an industry and Balochistan as mutton producing zone
- Independence of regulatory bodies for livestock promotion and affairs

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