Dairy farming helps in poverty alleviation and supplements other income generating activities. The dairy farms are located in the peri-urban areas of the major cities to meet the demand of milk. The farms are established without scientific planning for building, roads, water supply and drainage. The author has worked with the farmers as a PhD scholar, Herd Health Researcher and currently as a Professor. The farmers are taking care of 57 million dairy animals in Pakistan, valuing approximately Rs.1.5 trillion and contributing to the national economy, about Rs.1.2 trillion per annum (US$1 = Rs.60). Peri-urban dairy farms are owned by Gujars. Establishment of the traditional dairy farms is based upon opportunity cost-invested by their ancestors. The investment made by the ancestors and the rising levels of unemployment compel the farming families to stick to the business. The farmers try to continue the business without calculating the financial inputs and the production has been reported to recover only 75% of the cost. The farmers have developed social norms through interaction with the technical, development and marketing agents. Training needs have been discussed for the farmers, entrepreneurs, scientists, veterinarians, technicians and women.

**Keywords:** Dairy farms, buffaloes, norms, enterprises, training

**INTRODUCTION**

As a part of the agricultural production system, dairy farming is a prerequisite to alleviation of poverty. It supplements other income generating activities to eradicate poverty and create adequate opportunities for enhanced rural and peri-urban employment, income generation and economic access to food. The horizontal expansion in dairy farming is still in progress. The increasing human population of the urban areas, the rising income levels and the awareness about need of animal proteins in human diet, has resulted in increasing demand for milk and meat. This demand for food items and the rising levels of prices, calls for expansion of dairy and livestock industry.

**Social norms at dairy farms**

Social norms are shared values and expectations which vary from one society to another and from one situation to another. Norms range from crucial taboos, such as those against incest or cannibalism, to trivial customs and traditions, such as the correct way to hold a fork. Norms play a key part in social control and social order. Dairy farm provides a unique environment for development of special social norms. The dairy farms are located in the peri-urban areas of the major cities to meet the demand of milk of the urban populations. The farms are established without scientific planning for construction of buildings, roads, water supply and drainage and other requirements of the people and the dairy operations. The farmers are taking care of 57 million dairy animals (cattle and buffaloes) in Pakistan, approximate value being Rs.1.5 trillion and contributing to the national economy to the tune of Rs.1.2 trillion per annum. But they do not get the desired contribution from the society.

**Living standards**

Peri-urban dairy farms are usually owned and managed by Gujars, the dairy farmers, their families and the hired labor. Their living standard is low due low profitability of the farms. The high and non-regulated cost of inputs and state-controlled lower price of the products make the profit margin low. Lack of state-subsidy and hostile marketing system bulldoze enterprises. Under such circumstances the living standard of the dairy farmers is definitely deteriorated. The farmers have little chance to send their children to better educational institutions, which usually are expensive. The children discontinue their education after passing 10th class at school. A so-called self employment is provided to the children by their parents at the dairy farms and their potential for better contribution to the society is wasted.

**Investment behavior**

Establishment of the traditional dairy farms is based upon opportunity cost, instead of new investment. The huge investment made by the ancestors of the farming family and the rising levels of unemployment compel them to stick to the business, willingly or non-willingly. The farming family tries to continue the business without calculating the financial inputs and products, and the products have been reported to recover only 75% of the cost of productivity. Under such type of income levels the dairy farmers possesses no capital to invest in strengthening their
business. The traditional peri-urban dairy farmers survive under miserable conditions for decades or their business is squeezed to a smaller size or total extinction. The status of non-investment make the operations inefficient and resultantly the production cost further increases, making the profit margin further narrower.

**Interaction with R&D agencies**

Dairy farmers remain away from development agencies as they don't consider these agencies as supportive to their operations. Personal engagement of some farmers with specific agencies results in productive linkages. However, majority of the farmers have no access to them. Usually, farmers expect material support from the development agencies and usually ask for free medicine, etc. They do not believe in messages that their production can be increased and cost of production may be decreased through better practices. Advisory services are considered useless and the farmers are not interested in listening to lectures of experts. Organization of farmers is faced with constraints because farmers do not trust each other. In addition, they are reluctant from sparing time for meetings and discussing problems. Non-government organizations have established little interaction with the dairy farmers. The dairy farmers are intensively involved in their business and the feeding and management of animals hardly allow them to spare time for interaction with R&D organizations.

Research institutions and the universities approach the dairy farms for their specific activities and farmers do cooperate with them because such activities possess some in-built support mechanism for the farmers, like provision of drugs for parasitic control, feed supplements and therapeutic services or building some special units or installation of cattle crushes. Farmers' issues are analyzed and reported through such interventions. However, these relations do not continue for longer periods due to shorter life span of the activities. The Dairy Pakistan and Agribusiness Support Fund are targeting at selected big farms and selected state institutions, but with little involvement in the existing dairy production business. The author was invited by two successive chief ministers of NWFP to develop a plan for translating the state resources into a business network but the attempts failed due to its non-compatibility with the peculiar nature of the institutions. The Livestock and Dairy Board has been reconstituted at national level and may come up with a viable road map for improving the dairy farms.

**Interaction with veterinary practitioners**

Civil veterinary hospitals are approached when an animal gets sick. Treatment at hospital is not very effective as the officials try to satisfy the owners psychologically and irrational procedures are adopted like injection of a 15 ml antibiotic at three sites instead of one. The drugs used are substandard and cheaper, usually non-registered. Such treatment is of no benefit to the animal's health and production. The public sector veterinary hospitals have got no special services package for satisfying needs of the commercial farmers. Private veterinarians or veterinary assistants provide technical support to the sick animal for a varying level of cost. Good practitioners are not available to many of the farmers. The officials are part time practitioners and usually work in public sector organizations. As the outcome of the private practice is a matter of prestige for the practitioner, they try to provide good quality service and their demand is high at the private dairy farms. Skilled farm workers (quakes, non-qualified practitioners) practice treatment of diseases especially in buffaloes. They are trusted by the traditional farmers and the treatment cost is also negligible. Indigenous knowledge is used in this type of practice. However, most of the time, such practice results in serious damage to animal health and production which is of no use. The main constraint in health and production management is that the farmer is only worried when his animal shows severe clinical symptoms of a disease or mortality occurs; while he fails to notice the hidden losses associated with mismanaged health, fertility and nutrition.

**Interaction with markets**

Dairy farmers have to interact with market for procurement of inputs and sale of products. The marketing system is hostile to the farmer and attempts to get benefits out of his business without providing support and productive inputs. Resultantly, all the market forces around the dairy farm get wealthier while the dairy farmer gets poorer and ultimately, is compelled to abandon his business. Buffaloes are supplied to the farms by dealers on very high interest rates, sometimes exceeding 50% per year. The amount has to be returned in installments, which come from sale of the milk. Half of the amount earned from sale of the milk is spent on paying the installment while about half if paid to feed dealer, remains very little with the farmer for household expenditure. The quality of animals and feed supplied to the dairy farm is usually inferior as the farmer has no other option to
select better items due to lack of cash amount. A limited number of milk plants are available in the region; however, their support to the farmer is questionable as they work purely on the basis of profit making instead of supporting the farmers. The little profit margin in NWFP has discouraged the milk companies to install processing plants in this province. The dairy farmers are supposed to sell their milk at government approved rates. The price control committees have nothing to do with assessment of the production cost or ensuring the prices and availability of farm inputs.

Farmers' training needs

The farmers usually are born at the dairy farm and possess a rich experience in the traditional customs and techniques. They become used to the farm life which is beneficial as well as harmful for their capacity development. On one side, they are exposed to the various farming procedures and they develop the patience of how to live and work at a farm. But on the other, they become used to the existing traditional techniques and are afraid of changing the status quo and bringing new technology at their farm. The farmers must be sensitized for converting "dairy farming" into "business enterprises". The first thing would be shifting from opportunity cost to real investment in materials and services. In dairy farming, they invest a little and earn a little. But in business enterprises more investment is made and more profit is earned. Investment would be needed in getting better animals, high quality veterinary services, feed materials and efficient marketing agents. These inputs would definitely enhance the farm cost, but would lead to enhanced production, better products quality, and better market opportunities. Human resource development programs, offered by training institutions, banks, technology centers and management development centers, often bypass these entrepreneurs. Making available entrepreneurial training programs for these producers is a need. In designing these programs, a two-way process is necessary, whereby supporting institutions and entrepreneurs engage in continuous dialogue. The supporting institutions may be educational and research organizations, financial institutions and business support agencies like SMEDA. Such dialogue is essential, specially for remotely based dairy farming units where isolation and past neglect impose severe constraints on current skills maintenance.