Session 2. Justification and components of a functional milk recording scheme

What are the benefits that the farmers receive from the recording activity? Where does this activity exist?

The opinions are listed according to the priority assigned by the participants:

1. Milk recording activities make it possible to select animals which in turn leads to production of improved animals. Thus, milk recording and selection make available improved animals in the country.

2. Information provided through milk recording activities on individual animals or a group of animals on milk production, fat yield, growth, reproduction, etc. helps farmers in management and decision-making.

3. Farmers have the opportunity to sell some of their stock as breeding stock and get a much better price.

4. Farmers receive technical advice on feeding, health-care, reproduction and husbandry practices from the recording staff on their regular visits to the farmers’ place.

5. Farmers participating in recording activities also receive the service of artificial insemination (mainly important for the smallholders that cannot afford to raise their own bulls).

6. In some cases farmers receive incentives in the form of free concentrates, medicines, etc.

Who pays the cost of recording activities? Where does this activity exist?

In most cases the governments meet 80 to 100 percent of the recording costs. In Bulgaria, the Government covers only 30 percent of the costs; in India (Gujarat State), the Government is not involved at all, the cost of recording is met by the farmers indirectly through their milk cooperative from the income generated from sale of their produce.
What were the major constraints that have been faced in order to implement the milk recording activity?

1. Farmers do not understand why production of their animals needs to be measured regularly by some external agency and are often suspicious about outsiders visiting their farms. They also do not want other farmers to know about productivity levels of their farm.

2. The establishment of a recording system requires identification of animals. Identification is expensive both for the devices to be applied and for the cost of the staff required for application.

3. In countries where the illiteracy rate is high (Bangladesh, Pakistan), it is impossible to rely on farmers for recording operations; in such cases more staff is needed for recording activities.

4. In some countries, smallholders are scattered in the countryside, far away from each other (Bangladesh, Nepal). The recording staff wastes a lot of time and spends a lot on petrol, driving miles and miles to record a few animals. Recording costs increase proportionally to the distance between the farms.

5. Lack of finance is the major constraint in initiating and sustaining recording activities (the major constraint in points 2, 3 and 4 above is availability of funds).

6. In Thailand and Viet Nam there is not much demand for buffalo milk; consumers do not drink milk because of some social, traditional reasons. As production of milk is not important, the importance of milk recording is also not that important.

How the constraints have been overcome in the countries where the recording activity has been initiated and sustained?

1. In cases where the Government recognises the importance of milk recording for increasing productivity of animals, they take full responsibility of supporting milk recording activities. Financial constraints in such cases have been overcome by financial support from governments.

2. Cooperation of the farmers could be obtained as in the case of Iran and Italy by providing useful information on production and reproduction at individual animal level and herd level for improving management of their farms.

3. In smallholder situations, cooperation of the farmers could be achieved by providing information that is relevant to them; for example, in India in the situation where farmers have just one or two animals, the
information available to farmers on the performance of individual animals may not be that important, but if the information on performance of all animals in the village is given, it becomes very relevant to an individual farmer as he compares the performance of his animals with other animals in the village and decides on the management of his own animals.

4. Cooperation of the farmers in the recording activity have often been obtained by giving them incentives in the form of free concentrates, free medicines and low cost semen doses, etc. (India, Iran).

5. By obtaining adequate funds from national or international agencies to initiate the recording system and possibly to provide part of the operational costs for an agreed period. Once the system is running, costs could be paid proportionally by beneficiaries.

Benefits provided by the milk recording systems include:

1. Animal recording is a prerequisite for any serious effort to develop livestock production at farm, industry or national level.

2. Data collected through recording activities can be used for:
   - extension services (feeding requirements, reproductive patterns, health-care) at farm and industrial level;
   - estimation of breeding values, selection of bulls and bull mothers at farm level and national level;
   - once data have been entered in a national database, they could be used for planning improvement strategies for buffaloes in the country.

1. No genetic improvement scheme can be implemented without milk recording.

2. Through regular visits of milk recorders, farmers receive technical advice on breeding, feeding, management and health-care of their herds.

Constraints were overcome by:

1. Increasing awareness of the benefits of milk recording to farmers (through meetings and discussions with the farmers organized by governments, cooperatives and research institutions).

2. Stimulating competitiveness between farmers.

3. Providing incentives: free concentrates, vaccines and semen doses.

Conclusions
4. Providing useful information (productive, reproductive parameters).

5. Financial constraints were solved by:
   - Government support to meet the majority of the costs; in such cases the system works (80 percent of cases); if the Government supports only a very small portion of the costs then the system collapses (Bulgaria);
   - farmers’ cooperatives fully pay the recording costs by retaining the cost of recording from milk revenue. Here farmers indirectly pay the cost of recording (India).

Suggestions

Evolve simplified, low frequency recording systems to cut down the recording costs.

- application of simplified recording schemes: milk samples taken by the owner; alternate am/pm; bimonthly; trimonthly; once per lactation after testing the reliability of the system;
- record milk volume (no fat and protein);
- employ the extension staff more efficiently;
- consider village animals as one herd to cut down reporting costs.