New Extension Model for Small Holder Dairy Farmers in Pakistan

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Abstract

The objective of the study is to demonstrate the effect of improved extension services on adoption rates of small holder dairy farmers in Pakistan. Preliminary results indicated significantly higher adoption rates when extension services were provided using the whole family approach compared to the simple approach after one year of both phases. In conclusion, this study indicates that improved extension services have a significant impact on adoption rates of small holder farmers.

Key words: Extension services, Dairy, Adoption rate, Small holder farmer

Introduction

Pakistan, like many developing countries, has an agrarian rural based economy. Livestock is a major contributor to the national (12%) and agricultural (50%) economy (Pakistan Economic Survey, 2006). It is estimated that around 70% of the dairy households in Pakistan still operate under conditions of subsistence by maintaining herds of three or four animals (Burki et al., 2005). The productivity of livestock is still lagging behind its potential level. In order to meet the requirements of a rapidly growing population, dairy production needs to be increased. This can be done by adopting modern techniques of dairy farming. New technologies developed by researchers are disseminated. Thus the major objective of this study is to demonstrate the effect of new extension model on adoption rates of small holder dairy farmers in Pakistan.

Materials and Methods

Australian Centre for International Agricultural Research (ACIAR) research project was commenced with the aim of increasing dairy production through improved extension services. Small dairy farmers having 4-10 (buffalo and/or cattle) for production were the main target group for this project. During the first phase of the project a simple approach of extension targeting male farmers was used. During the second phase of the project a whole family approach targeting all family members was utilized. A number of innovative ways of extension have been adopted including the use of video practices, demonstration plots, problem based learning, stage drama, radio and TV shows to improve the effectiveness of the program. Benchmark data were collected on whole farming systems from 228 farmers during
the first phase and 292 farmers during the second phase of the project. Subsequently, at the end of every year data have been collected to monitor the impact of these initiatives on the rate on the rate of extension message adoption.

**Statistical analysis**
Adoption rates between the whole family approach and simple approach after one year of both phases were analyzed using a Chi-square test. Similarly, adoption rates of various modules at the start and after one year of project phase-II were analyzed using a Chi-square test.

**Results and Discussion**
To our knowledge this is the first report which clearly describes the effect of improved extension services on adoption rates of small holder farmers in Pakistan. Higher adoption rates were achieved when we introduced a whole family (male, female and children) approach compare to simple approach relative to the traditional male only approach to extension. An effective extension program with participation by the whole family is highly desirable to enhance farm productivity. Many organizations aiming at improving small holder dairying fail to appreciate this fact and ignore women and children in their training and skills development programmes. Women normally cannot leave their home and families for a few days to participate in training programmes and usually require female trainers for effective communication. Thus during the second phase of the project we arranged parallel sessions for women and children co-ordinated by women trainers. This approach, along with training of the male farmers resulted in higher adoption rates.

**Conclusion**
Preliminary results indicate that improved extension services have a significant impact on higher adoption rates of small holder farmers in Pakistan.

**References**
