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Empowering women in summer pulse production

V. K. Singh*, A. P. Singh, S. N. Yadav and Prince Bharati

BAIF Development Research Foundation, Bihar-800023, India

✉ Corresponding author*: vkbaif [at] gmail.com

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ABSTRACT

A woman is the nucleus of the family, particularly, in rural India and almost fifty percent of the population is being discriminated at all fronts. Entrepreneurship development is the only possible ways to empower women group. To this end, BAIF Munger organized training on summer moong production technique for women groups in BAIF's office, district Munger with the help of KVK Munger scientist under TARINA project. The study was conducted in 2 villages of Munger districts of Bihar during 2016-2017 to design a framework for empowering farm women with improved pulse production technologies. A total of 46 farm women were randomly sample selected for the study of knowledge improvement of women. Knowledge improvement of women farmers after training was highest in the subject matters like seed treatment which increased from 30 % to 91% , irrigation from 23 to 78%,fertilizer application from 30 to 82%,land preparation from 30 to 80% , picking from 40 to 89% ,insect and pest control from 29 to 77% ,manure application from 23 to 70%,threshing from 42 to 88 % respectively. Majority of women farmers expressed limited availability of quality seeds and lack of information on suitable improved varieties as the major problems. After harvesting of crops, production data was collected. The women farmers got 1.4 to 1.6 qt of pulse grain in 0.25 acre area.

Key Words: India, Summer pulse, Technology, Training and Women empowerment

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I. Introduction

In India, rural women significantly contribute to the farm economy (Santra and Kundu, 2001) by working as independent producers (de Haen et al., 2003) where agriculture partners sharing the work and responsibilities and also as agricultural laborers (Bati and Singh, 1987). But regardless of

these contribution, women are not involved actively in many activity of the agriculture production systems (Shiva,1999).

A woman is the nucleus of the family and they are the solution of poverty. In rural India, almost 50% of the population is being discriminated at all fronts. Agriculture development in Bihar suffers from physical, infrastructure, technology and institutional based constraints. Land holding at family level is being divided into small pieces. The area between Patna and Munger is situated over water of Ganges, commonly known for Tal area, where pulses are grown in Rabi season mainly. Time has changed now. Farmers are looking for diversification in farming system and assessment also says that they are in need of technology and empowerment through skill development. In rural part of India, more than 80% of women populations are involved in agriculture for their livelihood. As we know women empowerment is the solution of poverty and entrepreneurship development is the only possible way to empower women.

Bihar ranks nine in terms of production with a contribution of 0.52 million tons to the national pulse pool. It is the third most populous state sharing 2.8 percent of geographical area and 8.6 percent population of India (Singh et al., 2016). However, the area under pulse crops is decline in the state due to low productivity and largely attributed to relatively higher profitability of rice and wheat as comparison to legumes (Malik, 1994).

Ensuring the higher rate of adoption of the improve pulse production technologies among the women pulse growers may result in marked increase in the pulse availability in India. Developing the capacities of farm women for application of improved pulse production technologies is important. This could make them technologically empowered, this issue becomes subject of attention in rural areas of India. Empowerment of farm women with appropriate need based oriented technological options could be one of the strategies to rise the pulse production and productivity in India. Initiating largescale training and extension programmes with special emphasis on need base interventions in the summer pulse production areas of different districts of Bihar may be instrumental for realizing high adoption of pulse production technologies resulting in increased availability of pulses in state and also country. The study was conducted to design and propose the theoretical framework for technological empowerment of women farmers for summer pulse production, based on the analysis of their involvement and their technological needs.

II. Materials and Methods

The study was conducted in two villages, i. e., Raghunathpur and Matadih, Munger district of Bihar during 2016-17 under Technical Assistance and Research for Indian Nutrition and Agriculture (TARINA) project being implemented by BAIF Development Research Foundation. To design a framework for empowering farm women with improved pulse production technologies, villages were selected based on the area where conditions are suitable for pulses cultivation such as upland and availability of 0.25 acre of land at household level. Fourty six women were randomly selected for the study of knowledge improvement of women with questionnaire (see appendix). Time to time, training on summer Moong production techniques was given to women group in BAIF-TARINA office and demonstration were done on plots in Munger with the help of KVK, Munger scientists.

Table 01. Activity wise number of beneficiary

Activity	No of training/ exposure/ demonstration	No of beneficiary
Training	3	46
exposure	1	46
Demonstration	5	46

Good quality of seed, i. e., samrat variety, was introduced based on the recommendation of Bihar Agriculture University, Bihar, India. Hand holding support was given on production technologies, such as land preparation, manure application, fertilizer, seed treatment, seed sowing, irrigation, insect-pest control, picking and threshing. Production data was recorded individual women farmer

wise before giving training and after harvesting of the crops for impact analysis. The selection of participants was done through women interest group and background information collection of farmers related to cultivable land, cropping pattern, knowledge and skills etc. The activity was selected on the basis of need, suitability and feasibility for the individual and community level. To measure the knowledge, we developed questionnaire as a tool and applied it at as a pre and post test with forty six targeted women.

III. Results and Discussion

Women farmer knowledge, which was 30% before training on land preparation reached up to 80% after training. Similarly, in case of manure application, it increased up to 80% from initial 23%. The fertilizer application knowledge increased from 30% to 82% after training programs (Figure 01).

Women who were involved in the training programs were having only 12% of knowledge in seed treatment, 32% in seed sowing techniques and 24% in timely irrigation application, while after training, we estimated that the knowledge percentage reached at 91%, 76% and 78% respectively (Figure 02).

In case of insect pest control related to Moong cultivation, knowledge percentage was 29%, in picking techniques it was 40% and in threshing it was only 41% before the training, while after intervention, knowledge percentage increased, i.e., reached 78% in insect-pest control, 88% picking techniques and 88% in threshing (Figure 03). In case of grain production of moong, the production increased from 6.8 qt/ha to 14 qt/ha. All package of practices for demonstration were done at farmers fields in the presence of all women farmers.

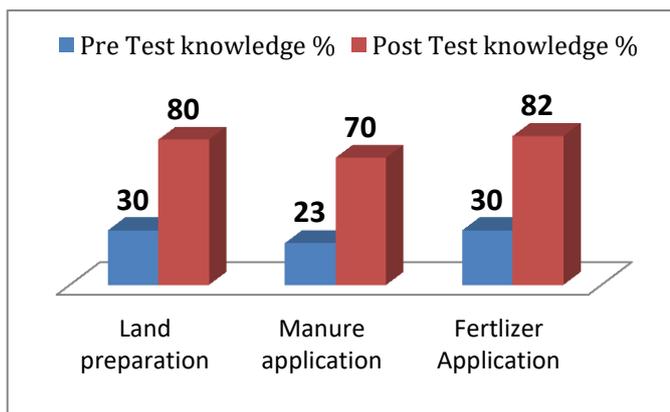


Figure 01. Comparison of pre and post knowledge test for soil treatment.

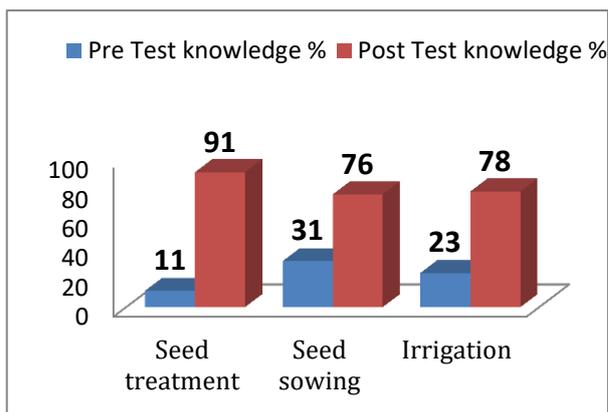


Figure 02. Comparison of pre and post knowledge test for seed treatment.

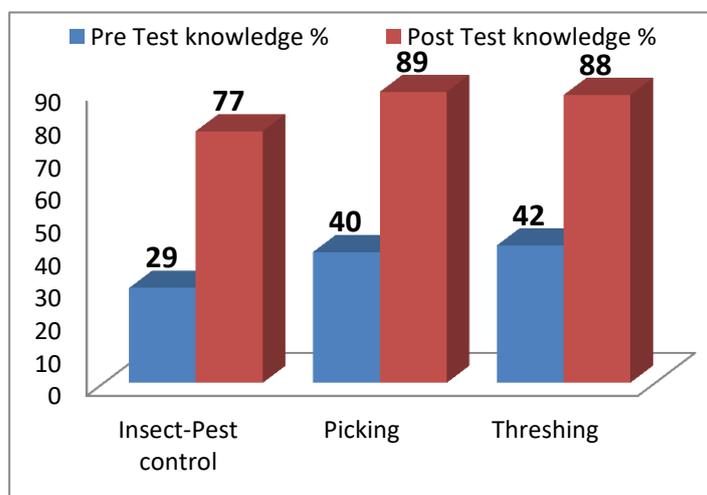


Figure 03. Comparison of pre and post knowledge test for inter-culture in pulse crops.

Women are were reluctant to actively participate because of some reasons like male domination at family, village level and farm level. Male migration is also one of the important challenges in this area because of which women work load and responsibility increase and they are not allocating sufficient time for such type of work.

IV. Conclusion

It is possible to increase the summer moong production considerably after proper step wise training and introduction of technology for women farmers that eventually contribute towards knowledge development. Regular supervision and monitoring by subject matter specialists at farmers fields could increase productivity greatly. The findings of this study require further consequent studies before precise conclusion.

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APA (American Psychological Association)

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