



E-ISSN: 2278-4136  
P-ISSN: 2349-8234  
JPP 2018; 7(4): 2848-2849  
Received: 25-05-2018  
Accepted: 30-06-2018

#### Poonam Sharma

Associate Professor, Division of Food Science & Technology, Sher-e Kashmir university of Agricultural Sciences and Technology of Kashmir, Shalimar, Jammu & Kashmir, India

#### Irfan Bisati

Assistant Professor, Directorate Extension, Sher-e Kashmir university of Agricultural Sciences and Technology of Kashmir, Shalimar, Jammu & Kashmir, India

#### Hilal Malik

Assistant Professor, Directorate Extension, Sher-e Kashmir university of Agricultural Sciences and Technology of Kashmir, Shalimar, Jammu & Kashmir, India

#### Chesti MH

Assistant Professor, Directorate Extension, Sher-e Kashmir university of Agricultural Sciences and Technology of Kashmir, Shalimar, Jammu & Kashmir, India

#### Correspondence

##### Poonam Sharma

Associate Professor, Division of Food Science & Technology, Sher-e Kashmir university of Agricultural Sciences and Technology of Kashmir, Shalimar, Jammu & Kashmir, India

## A study on drudgery reduction tools and implements for farmwomen through women empowerment cell, SKUAST-Kashmir

Poonam Sharma, Irfan Bisati, Hilal Malik and Chesti MH

#### Abstract

Rural women play a major role in country's economy through their active participation in agricultural activities. A study to equip farm women technologically for reducing their drudgery and enhancing their productivity was carried out to collect the required information on various agro based women drudgery reducing technologies transferred and farm women response to the innovative technologies. It was revealed that Women empowerment cell, SKUAST-Kashmir is playing a vital role in disseminating agri-technologies and thereby helping the farm women to aware the latest technical knowledge and developing new skill related to agriculture farm tools and implements. Agriculture technology is changing rapidly and high lightening the importance of documenting innovative technologies in agriculture would help in accelerating the agriculture production and also in improving the socio-economic conditions of the farming community.

**Keywords:** farm women, innovative technologies, agriculture tools and drudgery

#### Introduction

Ergonomics is a science that works for easing the task of farm women by equipment, knowledge and surroundings that will suit each worker (Rajendran and Reddy, 2013) [4]. It helps the farmers to solve the problems involved in performing various agricultural operations. Agriculture being an important occupation for the rural people in Jammu & Kashmir region has potential for development. Need based training programmes are being conducted by the State Agricultural Universities and Krishi Vigyan Kendra's in various disciplines such as horticulture, food processing, vermicomposting, apiculture, sericulture and others for farm women in J&K state. Women participate in various agricultural operations such as seeding, transplanting, weeding fertilizer applications, plant protection harvesting processing selling and looking after animals., Further, women being overburdened with so much workload both on farm and at home, they usually neglect their health.

Drudgery is generally conceived as physical and mental strain, agony, monotony and hardship experienced by the human beings while all of women in this regard suffer the most due to heavy burden of drudgery on them. So the need of the day is to empower the farmwomen through technology to have high efficiency in their work output and reduce drudgery through women friendly farm tools and implements. The drudgery prone condition leads to various health problems and mechanical hazards which create physical fatigue and low productivity.

Farm women are not always aware of the improved tools and implements. There is need to update the technical knowhow and to train the farmers, farmwomen and rural youth in scientific farming. To assess the knowledge of farm women on various technologies transferred and their acceptability by the farming community with beneficial impacts. Keeping in view, this paper aimed at empowering rural women by promoting drudgery reducing devices in farm activities by way of adopting innovative technologies in agriculture.

#### Material and Method

Srinagar block was selected purposively due to higher number of agriculture and allied training programs organized by women empowerment cell in this block. Out of them 3 villages were purposely selected and a total of 60 rural women were trained by the women empowerment cell at Directorate of Extension, SKUAST-Kashmir during 2014- 2017 on various aspects of agro based farm tools and implements technologies through Division of Agricultural Engineering SKUAST-Kashmir. An interview schedule was used as the research instrument to collect relevant information from beneficiaries on various innovative technologies to reduce drudgery of farm women developed in agriculture and their transfer in

rural villages for women empowerment. The drudgery experience was judged on the basis of five point scale from the respondents on the basis of very difficult (5), difficult (4), moderately difficult (3), easy (2) and very easy (1). Data was analysed using statistical tools and techniques.

### Result and Discussion

Women do many of the most of the difficult farm tasks in India. The farmwomen perform agricultural tasks with old age traditional tools since gender friendly appropriate tools are either not available or insufficient in number or unawareness. A number of approaches and interventions have been identified to increase women's participation in both extension and training. Improving women's access to higher agricultural education and opportunities to benefit from innovative agri-

technologies is possible through education and capacity building of farmwomen.

Through training, the potential of women farmers in contributing to development efforts could be developed and harnessed which also might result to an increase in their self-confidence and feeling of self-worth. Building their capacities is also a means of empowering them. Behera *et al.* (2014)<sup>[1]</sup> reports that there is an increase in production of the different crops after adoption of the improved package and practices in the KVK adopted village.

Agro based technologies provide opportunity to the individuals or group of skilled persons to become successful entrepreneur. It has been found that that the technologies adopted result in higher productivity, enhanced incomes and reduction in drudgery and development of self confidence among women.

**Table 1:** Transfer of Innovative Technologies in agriculture tools and implements for farm women empowerment

S. No	Activities	Improved technology	Drudgery experience	Overall Mean Score
1	Cutting /harvesting	Improved sickle		2.0
2	Maize shelling	Tubular maize Sheller		2.8
3	Maize shelling	Powered maize sheller		2.0
4	Sowing	Wheel hand hoe		2.7
5	Reheating food	Low cost food warmer		2.5
6	Grinding	Dal Mill		2.3
7	Picking	Fruit picker		2.8
8	Weeding	Cono weeder		2.0
9	Grading	Manually operated walnut grader		3.0
10	Grading	Motorized walnut grader		2.2
11	Shelling	Peddle operated walnut dehuller		2.0
12	Cracking	Walnut cracker		2.5

Awareness about various innovative agriculture techniques farm tools and implements and drudgery experience of respondents is presented in Table 1 showed that most of the respondents used integrated farming system and perform various intercultural activities. Findings revealed that respondents were aware of introduced technologies in agriculture about tools and implements to reduce drudgery. The results of the study indicated that their drudgery experience ranged from overall mean score of 2.0 to 2.8 rating as easy while performing selected activities with the improved technologies as compared to adopted traditional methods except manually operated walnut grade with overall mean score of 3.0 rating as moderately difficult activity. This further indicates that the vocational training programs may be devised on these training aspects to make aware of farm women on the technical knowhow and capacity building in farm tools and drudgery reducing devices.

It clearly shows that majority of women also found that with the help of modified technology the work output was more than traditional techniques. Barakha *et al.* (2018)<sup>[2]</sup> reported that adoption of improved technology using hanging grain cleaner for cleaning activity resulted in increased efficiency, work out put and reduce drudgery. Similar findings were reported on comparing energy expenditure of farm women during performing agricultural activities in traditional practices and by using drudgery reducing tools their energy expenditure decreased by using hand ridger, sickle and maize sheller the outcome increased almost ten folds by using each tool (Surabhi *et al.* 2016)<sup>[5]</sup>.

### Conclusion

Women are backbone of agricultural workforce because they perform more than eighty percent of farm activities. Most of the agricultural activities performed by women involve lot of physical strain which adversely affect their work efficiency

and working in a particular posture for longer duration of time causes fatigue and maintain same posture beyond certain limit of time for years causes muscular-skeletal disorders in the body. Women should be educated about the benefits of farm implements and trained in use and maintenance of farm machinery, custom hiring of implements and repair and maintenance of improved equipment's and skill up gradation training programs on women friendly tools for drudgery reduction. The empowering strategies would need to be further sharpened to make them effective and result-oriented. The gender friendly farm equipment's are most important in reducing drudgery of farmwomen particularly the hand held small equipment must be developed to increase productivity with safety and comfort in agriculture.

### References

1. Behera SK, Maharana JR, Acharya P. Transfer of Technology through KVK for the tribal farmers in Hilly Areas of Koraput District in Indian J of Hill farming. 2014; 27(2):34-37.
2. Barkha Sharma Shilpi Verma, Pandey SK, Patidar Jagdish. Drudgery reduction for increasing efficiency of farmwomen using hanging grain cleaner: A case of eco-friendly method in wheat cleaning and grading Int. J Curr. Microbiol. App Sci. 2018; 7(1):1600-1647.
3. Tara N, Negi V. Rural women involvement in selected entrepreneurial activities. Adv. Res J Soc. Sci. 2012; 3(1)63-67.
4. Rajendran Poornima, Lokanaadha Reddy. Ergonomics in Agricultural Education, Discourses International Multidisciplinary Journal, 2013. ISSN: 1(1):2321-1075.
5. Singh Surabhi, Santosh Ahlawat Sarita Sanwal, Ahlawat TR, Gora Alok. Drudgery reduction of farm women through improved tools. International J of Agriculture Sciences volume. 2016; 8(14):1242-1249.