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Knowledge Assessment of Farm Women About Selected Agro-Based Enterprises in Jhalawar District of Rajasthan

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Abstract

The present study was undertaken to assess the initial knowledge and after training and intervention knowledge of farm women about selected agro -based enterprises. The study was undertaken in Jhalawar district of Rajasthan. The sample consisted of 141 farm women of 13 active SHGs. The initial knowledge of the respondents about technology aspect for four enterprises i.e. orange squash, orange face pack, mehendi and henna was nil. The respondents had initial knowledge about cleaning of the coriander and its grinding, however the respondents did not know the importance of grading for commercial purpose. After training and intervention all the respondents acquired the knowledge about the technology of all the enterprises.

Key words : Agro-based enterprises, Knowledge, After training, After intervention.

Women are vital to a productive work force in Indian economy. Nearly 84% of all economically active women in India are engaged in agricultural and allied activities. In Indian agriculture, women continue to share a number of farm operations with men. Based on 2001 census 19.5% women were working as cultivators and 17.6% as agricultural laborers. More women than men figured among marginal workers who were from landless, marginal and small farmer families. Emerging data suggest that greater number of women in India is not simply housewives but farmers, too, Besides agriculture, women have major share of work in animal husbandry and dairy. Thus, broadly farm women perform economic, home making, caring and nurturing roles. Despite, multiple roles of women in agriculture and home, their work is generally underestimated and undervalued. The status of rurals women is much lower than that of their male counterparts largely because of customary male dominance in the society and lack of opportunities for training. Being illiterate and ignorant, they have no access to new technologies in agriculture leading to livelihood security. The strides in science and technology have yet to make an impact on rural women. They still use age old and inefficient implements and their workload is back breaking. Poor nutrition further leads to poor health which deprives them at times, of quality of life and a sense of wholesome life. Therefore, technological exposure for empowering rural women in an integrated manner through active learning is a major concern in Indian rural society. Women's role in agriculture and food security confirms that they need to be empowered to undertake their task effectively. Some of the indicators of empowerment of women are personal security, rule of law, freedom of expression, political participation, equality of opportunity, access to quality education, entrepreneurship avenues, health and nutrition and access to technological interventions. There is a strong and genuine need to free the women from under productive task and augment the productivity of their work as a means of accelerating the development process through technological empowerment.

Methods

Pre- and post-research design was used to conduct the study in Jhalarapatan panchayat samiti of district Jhalawar, Rajasthan. This panchayat samiti was purposely selected because Krishi Vigyan Kendra, Jhalawar was performing various developmental activities in this panchayat samiti. One of the important activity was establishment and promotion of income generating activities through formation of women self help groups. All 13 active SHGs having 141 members were included in the sample of the study. Since

Table 1. Distribution of respondents by their knowledge about orange squash enterprise before and after training and after intervention. N = 141.

Aspects	Initial knowledge f	(%)	After exposure f	(%)	After intervention f	(%)
1 Technology						
Ingredient & method of preparation	0	0.0	139	98.6	141	100
2 Major equipment Used						
Juicer	1	0.7	141	100	141	100
Filter	3	2.1	138	97.9	141	100
Bottle sealing machine	0	0.0	140	99.3	141	100
3 Estimation of Quantity						
3 kg oranges will provide approximate 1 lit juice	0	0.0	141	100	141	100
4 bottles of 750 ml in 3 kg oranges (1 lit juice)	0	0.0	141	100	141	100

Jhalawar is rich in coriander, orange, mehandi cultivation, hence researcher found processing and value addition of these could be the most suitable for income generation training which was organized for cleaning, grinding, packaging and marketing of whole coriander and its powder. Intervention period was given for one year to solve their problems and establishing the enterprise and their knowledge was assessed for six selected agro-based enterprises viz., orange squash, orange face pack, coriander whole and coriander powder, mehendi henna for hair.

Results and Discussion

In this study information about initial knowledge of the respondents in selected enterprises and their upgradation due to training and intervention was assessed. The initial knowledge of the respondents and gain were also assessed with respect to marketing, cost estimation, labeling and packaging.

Knowledge was assessed about different components of each enterprise which were technology, equipment and cost estimation of final product. Tech-

Table 2. Distribution of respondents by their knowledge about orange face pack enterprise. N = 141.

Aspects	Initial knowledge f	(%)	After exposure f	(%)	After intervention f	(%)
1 Technology						
Ingredient & method of preparation	0	0.0	141	100	141	100
2 Major Equipment Used						
Grinder	25	17.7	141	100	141	100
Chakki	141	100	141	100	141	100
Packaging machine	0	0.0	139	98.6	141	100
3 Estimation of Quantity						
1 kg face pack powder in peels of 3 kg oranges and other ingredients	0	0.0	132	93.6	141	100

Table 3. Distribution of respondents by their knowledge about whole coriander enterprise. N = 141.

Aspects	Initial knowledge f	(%)	After exposure f	(%)	After intervention f	(%)
1 Technology						
Cleaning	141	100	141	100	141	100
Grading						
Three Gradings of coriander using sieves to get uniform size of seeds in each grade	3	2.1	141	100	141	100
The first and 2nd grade seeds will have added money value because of good quality	0	0.0	141	100	141	100
2 Major Equipment Used						
Sieves for grading	25	17.7	141	100	141	100
Packaging machine	0	0.0	141	100	141	100

nological aspect included the ingredients and method of preparation of a product. Knowledge about major equipment used in production of a product was determined in second component while under the third component, knowledge of respondents about estimation of quantity of final product in a given amount of raw material was assessed.

According to Mohanty (1) empowerment is a process, which helps people to gain control over their lives through raising awareness, taking action and working to exercise greater control. In other words, empowerment facilities change and enables a person to do what one wants to do. Empowerment is the feeling that activates the psychological energy to accomplish one's goals.

Orange Squash

Table 1 shows the knowledge of respondents about orange squash enterprise. Data reveal that the respondents had no initial knowledge about technology of orange squash i.e. about preparation of the squash. It was because none prepared orange squash either for home consumption or for commercial purpose.

According to Srinath and Thangannai (2) the features of empowerment are self perception, perception of role of women in society, decision making, economic independence, innovativeness, desire to improve the present living condition, attitude towards group action and communication behavior.

However, many respondents knew that orange squash can be prepared from oranges. When asked why they did not prepare it even for home consumption, the women showed no interest because their orange orchards were given on contract. Secondly, the women also said that they did not know the technology of preparing orange squash. Since the technology was not known to the women they also did not know the equipment used for orange squash preparation and estimation of quantity. Further, almost all the respondents acquired knowledge about all the aspects i.e. technology (98.6%) equipment (98-100%) and estimation of quantity (100%) after training. While 100% of respondents exhibited correct knowledge after intervention. This means training coupled with the interest of learning a new technology and intervention helped the respondents to acquire the knowledge.

Orange Face Pack

Table 2 depicts knowledge of respondents about orange face pack enterprise. The respondents did not possess initial knowledge about the technology of orange face pack as no one had heard about it. Even no one was aware about the use of orange peels for cosmetic purpose. The major equipment required is grinding machine. In villages, chakki is traditional grinding equipment used for grinding cereals, pulses

Table 4. Distribution of respondents by their knowledge about coriander powder enterprise. N = 141

Aspects	Initial knowledge f	(%)	After exposure f	(%)	After intervention f	(%)
1 **Technology**						
Cleaning and fine grinding	141	100	141	100	141	100
Sieving to obtain uniform and fine powder	74	52.5	141	100	141	100
2 Major Equipment Used						
Grinder	25	17.7	141	100	141	100
Chakki	141	100	141	100	141	100
Packaging machine	0	0.0	141	100	141	100

and other dry foods and material, hence all respondents reported that chakki can be used for grinding orang peels. Electric miexer cum grinder was also known to 17% of respondents. While packaging machine was unknown to them. As the respondents did not know about this technology, they were unable to estimate the quantity from given amount of raw material. After exposure to the training, 93—100% of respondents acquired knowledge about different aspects i.e. technology (100%), equipment (98-100%) and estimation of quantities (94%). All the respondents acquired knowledge about different aspects after intervention.

Whole Coriander (Seeds)

In this enterprise knowledge about importance of grading procedure and equipment required for cleaning and grading were assessed because maximum benefit can only be achieved by maintaining higher quality standards through cleaning and grading. Table 3 shows that no one was aware of the importance of grading as the usual practice was to collect produce from fields, dry it and sale as such in krishi upaj mandi. The major equipment required for cleaning, grading and packaging were sieves of different mesh and packaging machine. The data show that about 18% of respondents knew about sieves while none had knowledge about packaging machine. All the respondents acquired knowledge of major equipment used for the purpose after training and intervention. However, all the respondents did know that cleaning and destoning of coriander would improve its quality and fetch more money. While grading the coriander seed by sieves was know to only 3 respondents. After exposure to the training almost all the respondents acquired knowledge about the technology.

Coriander Powder

Table 4 indicates the knowledge of respondents about coriander powder enterprise. This enterprise does not require special technology and equipment. All the respondents were already aware of exposure to the training about cleaning and grinding while 52% of respondents mentioned that the powder should be fine and not coarse.

Traditional equipment chakki was known to all the respondents. While 17% respondents were able to mention mixture cum grinder for making powder. None was aware of packaging machine to pack the coriander powder. After exposure to the training and intervention, 100% of respondents acquired knowledge about different aspects of coriander powder making as an enterprise. A useful concept of empowerment described by Verma (3) is that of transformatory potential. The crucial element in transformatory thinking is the need to transform women's position in such a way that the advance will be sustained. Equally important is that women should themselves feel that they have been the agents of transformation, that they won this new space for action themselves. But it is also important that they realize that each step taken in the direction of gaining greater control over lines, will throw up other needs,

Table 5. Distribution of respondents by their knowledge about mehendi enterprise. N = 141.

Aspects	Initial knowledge f	(%)	After exposure f	(%)	After intervention f	(%)
1 Technology						
Drying of leaves in shade	2	1.4	141	100	141	100
Grinding of dry leaves	141	100	141	100	141	100
Ingredient and method of preparation	0	0.0	138	97.9	141	100
Fineness of the powder	2	1.4	141	100	141	100
2 Major Equipment Used						
Grinder	25	17.7	141	100	141	100
Chakki	141	100	141	100	141	100
Packaging machine	0	0.0	141	100	141	100
3 Estimation of Quantity						
3 kg Mehendi leaves and other ingredients will prepare 1 kg mehendi powder	0	00	137	97.2	141	100

other contradictions to be resolved by them. The assumption behind transformatory potential is that the process of women working together and solving problems on a trial and error basis, of learning by doing and also learning to identify other and forging alliances when needed, will lead to empowerment, both collective and individual.

Mehendi (Hand Decoration)

Technological aspects of mehendi included drying of leaves in shade, grinding of dry leaves, ingredients and method of preparation and fineness of powder. Table 5 shows that only two respondents knew that leaves should be dried in shade as they were preparing instant mehendi by grinding fresh green leaves (without mixing any ingredient). None of the respondents were aware of mixing of citric acid in mehendi powder for good color. Very few respondents initially knew about grinding machine while packaging machine was not known to anyone. As dry mehendi leaves were not common in use for home consumption, the respondents were unable to estimate the quantity of dry mehendi powder from given amount of raw material.

After exposure to the training and intervention almost all the respondents (97—100%) acquired knowledge about technology, equipment and estimation of quantity from given amount of raw material.

Henna (for Hair Coloring)

Table 6 reveals that only two respondents knew that leaves should be dried in shade while all the respondents knew about grinding of dry leaves. None of them was aware of ingredients and method of preparation of henna and its application. This was because dry mehendi leaves were not popular in use. Further use of mehendi for hair coloring was also not common. None knew about sieves and packaging machine. Before exposure none of them was able to estimate the quantity of final product from given amount of raw material. After training and intervention, 100% of respondents acquired knowledge about henna technology aspect, equipment required and estimation of quantity from given amount of raw material. Young (4) reported that farm women need to be empowered to enable them to play their role effectively in agriculture and food security. Some of the indicators of empowerment of women are freedom of expression, equality of opportunity, access to quality education, entrepreneuship amongst women and technological empowerment. There is strong and genuine

Table 6. Distribution of respondents by their knowledge about henna enterprise. N = 141.

Aspects	Initial knowledge f	Initial knowledge %	After exposure f	After exposure %	After intervention f	After intervention %
1 Technology						
Drying of leaves in shade	2	1.4	141	100	141	100
Grinding of dry leaves	141	100	141	100	141	100
Ingredient and method of preparation	0	0.0	128	90.8	141	100
Sieving by use of fine mash sieve/ fine cloth	2	1.4	141	100	141	100
Application of henna powder	-	-	141	100	141	100
2 Equipment						
Grinder	25	17.7	141	100	141	100
Chakki	141	100	141	100	141	100
Packaging machine	0	0.0	141	100	141	100
3 Estimation of Quantity						
1 kg Henna can be prepared by adding prepared by adding 1½ kg Mehendi leaves and other ingredients	0	0.0	128	90.8	141	100

need to free the women from under productive task and augment the productivity of their work as a means of accelerating the development process through technological empowerment.

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