

ENHANCING THE CAPACITIES OF FARM WOMEN



Women do play an important role in crops such as wheat and they really value information if it is provided to them. Surabhi Mittal and Vinod Hariharan explore the gender roles and decision making in wheat farming in India, based on empirical data in this blog

CONTEXT

In India as per the agricultural census, one third of the agricultural cultivators, both farmers and laborers are women. Their participation in agriculture is rapidly increasing because of multiple factors but the prime reason is out-migration (temporary or permanent) of male members of the family in search of alternative avenues for income, thus leaving the women of the household to be fully involved in agriculture.

In the case of wheat cultivation, it is generally perceived that all the operations in wheat production are carried out by men and the women have only a secondary role in it. A wheat survey conducted by CIMMYT in 2014 covering 1022 households in three states of India; Haryana (335), Bihar (357) and Madhya Pradesh (330) however revealed several new insights on their roles in different operations.



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To understand women’s participation in various activities, we calculated the average number of days women spend on a particular operation in wheat production and also compared it with men’s contribution for the same in the household. We found that, women’s share of contribution of labour to wheat production is lowest in Haryana and highest in Bihar. In Bihar and Madhya Pradesh, women are mainly engaged in seeding and fertilizer application while in Haryana and Bihar it is weeding and irrigation. Harvesting is an important activity in all the three states where women are actively involved. Overall table below presents the average time spent in wheat production, disaggregated by gender.

Table 1: Average Time spent (days per acre) by men and women in wheat production

		Haryana (335)	Bihar (357)	Madhya Pradesh (330)
Men	Hired Labour	4.37	10.24	3.14
	Family Labour	6.67	22.44	4.52
	Total	11.04	32.68	7.67
Women	Hired Labour	0.67	14.37	3.92
	Family Labour	7.26	25.92	4.33
	Total	7.93	40.29	8.25

Note: Figures given in the parenthesis are the number of households in each State.

Source: Authors calculation from CIMMYT wheat value chain survey, 2014.

WOMEN’S ROLE IN DECISION MAKING

Though women spend a substantial amount of time in agriculture, what is her role in decision making? The literature review revealed that women are not playing an important role in decision making, though she is an active participant in farming. This is attributed to her lack of education and low decision making power within the household. (Mehtar, 2014). Studies argue that men remain the key decision makers in crop production and marketing. In the survey we also found that, almost all the decisions related to the use of technology and marketing of produce were primarily taken by men. However, decisions on storage and consumption were found to be mostly taken either by men alone or jointly with women in the household.

In Haryana, a large proportion of households responded that most of the decisions are taken by men. In Bihar and Madhya Pradesh there are evidences of joint decision making but trends vary among different agricultural activities. However, percent of households that reported women only taking the decisions was negligible. The households that reported such instance were usually women headed households where men have either migrated or where men are too young to take decisions.

Lack of information?

Why women are not taking decisions though they play several roles in farming? Is it the social cultural barriers or inability to make decisions? When we discuss these issues in detail with the farmers in villages (which are mostly men) their usual response is that women did exactly what

men told them to do as women don't get information about agricultural technologies. Because of this reason, they "lack technical know-how" on farming.



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Women in farming households, also feels the same. So if we are keen to improve their decision making skills on farming issues, they should also have equal access to information. Studies show that women are usually left out by information providers due to institutionalized socio-cultural barriers, low literacy levels, low involvement in decision making and their hectic daily schedules.

M(OBILE) SOLUTION IN BIHAR AND HARYANA

CIMMYT-CCAFS programme initiated the project "*M(obile) solution*" in Bihar and Haryana (Box 1) to specifically address this issue of information asymmetry. The project has taken special efforts to ensure that it is inclusive - where not only women from women headed households but also women from male headed households were included in information transfer as voice message on climate smart technologies/ practices, weather agro advisories etc.

Initial analysis of the data collected from the pilot study of the project carried out in Bihar and Haryana has thrown up interesting results. Nearly 1,100 farmers received about 325 messages over a period of 9 months between 2013 and 2014. Feedback was randomly sought from 510 farmers, nearly 16 percent of whom were women. These feedbacks were collected through systematic paper survey that helped to identify the type of information that farmers were using and action taken on then along with quantification of the impact if visible. The feedback

Box: 1 M(obile) Solution

The project is working with local partners like Kisan Sanchar limited, IKSL, Farmers cooperatives of some of these villages and also the state agricultural department, KVKs and national research institutes and universities to provide climate information and agro advisories to farmers. As part of promoting climate-smart approach to farming, the couple are subscribed to *M(obile) Solution*.

It offers an alternative model of information dissemination that incorporates farmers' feedback by creating an information loop that not only pushes information, as traditional climate information services do, but also pulls back information from farmers. Farmers are delivered information in form of voice messages on their mobile phones on weather, climate smart technologies and practices, seed, nutrient management, livestock management, pest management etc.

Farmers have access to helpline numbers to contact back for detailed or follow-up questions. These queries are also used as feedback to develop the agro-advisory messages. The field staff of the project and partner organizations also interacts with the farmers from time to time to understand the usability of advisories, action taken and impact. Farmer to farmer messages are also transmitted, if benefits or threats faced by some farmers need to be passed on to other farmers in that geographical area. All these efforts helped to create a feedback loop for more timely, usable and actionable agro advisories.

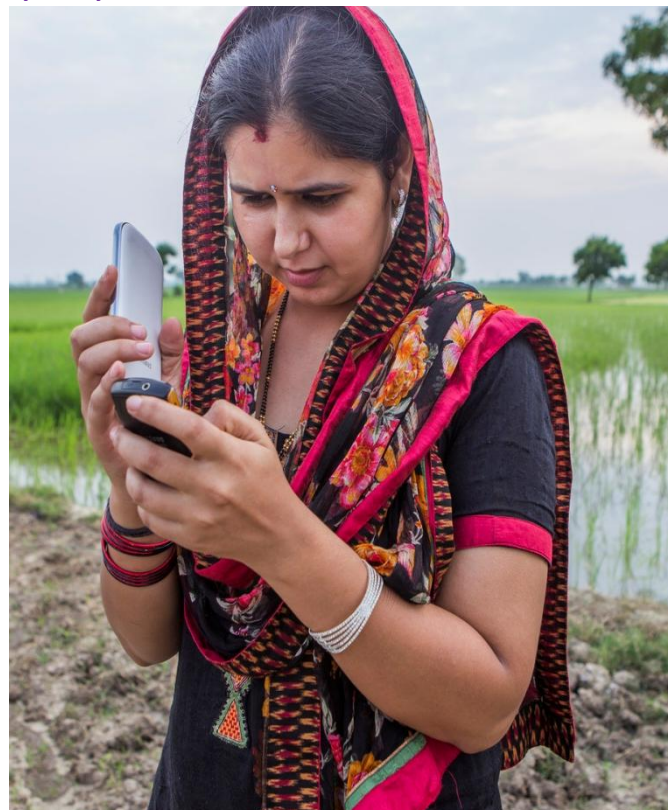
also included information about what information farmer do not find useful or is inconsistent. This helped to develop the priority plan and customization according to villages and districts

The most interesting observations from the study are as follows:

Need for Information: During the initial survey on information needs, women farmers responded that they are interested in messages linked with pest management and weather information only. But when they started receiving these information on their mobile phones, they showed increasing interest to receive information on related technologies and practices and also information on livestock management This means the demand for information keeps evolving and one has to continuously assess demand to provide the needed information.

Use of information: Within the project team, there were apprehensions initially that that women might not value this information as they are not the decision makers. But actually what we observed was that women do value these information. This is clearly revealed from the equitable listening rate to the messages that women farmers have in

"I have the right to know, to be aware of what is happening"
says Ruby Mehla, a woman farmer from Karnal



two contrasting states. In the study we had around 13.75% women farmers of which almost 70 percent were listening to the messages that they received on their mobile phones as voice messages. Their listening rate was on average 44 seconds per message almost equivalent to their male counterparts. They were listening to almost 88.9 percent of all the messages delivered which made them informed and aware about climate smart practices, weather information, seed information and pest management.

Gains from information: Many women farmers, particularly in the study villages in Karnal (Haryana) though not directly engaged in farming were spending the same amount of time as male farmers in listening to the full voice message. This is a good indicator of their interest in the information provided, although it is yet to be seen, if this translates into greater participation and decision-making in agriculture. The feedback received from female farmers clearly revealed that they appreciated the awareness they got on climate-smart agriculture practices and issues related to climate change. Several of them noted that they often shared the information with other women who were not part of the project.

Overall benefits: With the dissemination of information, it is observed that farmers have become more aware about these technologies and have started recognizing the value of information on weather delivered to them. They shared anecdotal evidences as to how precise and timely weather based agro-advisories have helped them to take informed decision about use of inputs during the sowing season based on which they have saved the irrigation and the cost on pesticides and weedicides. Women farmers have become more aware about climate smart technologies and they feel empowered with access to information. Moreover, where ever possible they were taking action as well.



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LESSONS FOR EXTENSION

1. It is imperative that extension services should target the entire family and not just male farmers.
2. To reach women, it is important to understand how information services can overcome existing barriers, keeping in mind the existing social and cultural context
3. Voice messages in local language through mobile phones offers new opportunities to reach women farmers and women in male headed farming households
4. Provision of information on all aspects related to agriculture (not merely on operations which they are currently involved with) can potentially increase womens' ability to do farming better and also enhances their decision making capacities.

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