My farm is my business

Partnership and Value Expansion (PAVE)

Project for Inclusive Seed System in Pakistan

Report of Discussions with Female and Male Farmers January 2019









Background

In Pakistan, 75 per cent of seed is uncertified and sold through informal channels. Most of this uncertified seed does not meet minimum quality standards, resulting in poor yields. The PAVE Pakistan project aims to increase participation of 3,600 male and 400 female smallholder farmers in the Sheikhupura/Gujranwala districts in Punjab. Working in the seed value chain, the project's aim is to improve the skills and expertise of smallholder farmers to improve crop yields and income. The project duration is from November 2017 to April 2020.



Introduction

During January 2019, MEDA's Associate Director for Monitoring and Impact Measurement, conducted sixteen group discussions with more than 250 female and male smallholder farmers of the PAVE Pakistan project in Gujranwala and Sheikhupura districts. In addition, individual interviews and feedback sessions with participating smallholders and host/anchor farmers (indirect clients) were also conducted. These discussions were held to seek female and male smallholder farmers' perspectives about their participation in the PAVE Pakistan project in terms of its effectiveness. Female smallholder farmers were asked questions about the extent to which the project contributed to their economic empowerment.

The platform during these sessions was also used to create awareness about gender, environmental sustainability and the concepts of community champions, entrepreneurship and the Sustainable Development Goals (SDGs). Engro staff responded to participants' questions about various technical aspects related to agricultural practices, especially the importance of certified seed, and apprised participants about future project activities.



Project Implementation

Female and male smallholder farmers learned about the project and its various activities through Engro staff who visited these villages on a frequent basis. Engro has been working in the area since 2013 and has established its reputation which has motivated many farmers to participate in the project. Female and male farmers expected that through the project they would learn new agricultural techniques that could help in increasing their knowledge, skillset, productivity, income, entrepreneurial literacy and quality of life.

What kind of activities have you participated in (or benefited from) so far?

A Focus on Technical Assistance

The main activity that Engro has conducted so far is the technical assistance component of the project. Information sessions are conducted with individual farmers and farmers' groups to impart knowledge and skills about the use of certified seed, seed production and Best Crop Management Practices (BCMP). Engro has recruited female and male seed officers and community mobilizers who contact farmers on a frequent basis, while executing a training plan based on crop seasonality (wheat, rice and vegetables). Engro has also educated smallholder farmers on certified seed (wheat, rice and vegetables), provided vegetable seeds to female farmers, and conducted on-farm training on kitchen/home gardening which will lead to seed saving techniques.

How have you benefited from various project activities?

Increased Agricultural Knowledge and Skills

Farmers reported increased agricultural knowledge and skills because of their participation in the PAVE Pakistan project. Female and male participants learned the importance of certified seed for wheat, rice and vegetables. Many farmers used the latest seed varieties for their crops. Participants also reported keeping their own seed for future use. Although the project is still one year away from completion, some male farmers have already sold seed to other farmers (a few farmers who were interviewed have sold seed to Engro). **6 6** We learned how to grow vegetables, how to use certified seed; we did not have such knowledge prior to the project.

Female Farmer

6 6 We learned that certified seed leads to greater productivity.

Female Farmer

We were using noncertified seed which has a lot of impurities. Engro motivated us to use certified seed.

Advanced Knowledge about Certified Seed and Crop Management

Farmers gained increased knowledge about certified seed, seeds production, rouging (weeding of off-type plans), use of pesticides, weedicides and land preparation. Previously, farmers were making excessive use of low-quality pesticides which were not effective in killing pests and weeds. Engro staff guided farmers about appropriate types of high-quality pesticides, weedicides and effective methods of spraying for maximum results. Female and male farmers also learned about the importance of applying timely and balanced fertilizers and optimum number of plants that should be transplanted in a given area by leveling the fields.

Profitability Through Crop Diversification

Farmers reported diversifying their crops at Engro's advice. A couple of farmers, for instance, were growing maize in addition to wheat and rice. Women have started growing various kinds of vegetables such as peas, pumpkin, summer squash, fenugreek leaves and gourds. Some farmers used vegetables for household consumption, while others sold them in the market and reported better profit margin than other crops. The added benefit of vegetables is that one can harvest multiple cycles of crop before the last cycle produces seed.

In an area where Rice-Wheat is the major cropping pattern, new cropping schemes such as short duration Rice-Peas, short duration Rice-Peas-Tinda (Gourd) were introduced. Many farmers adopted the new patterns and saw improvements in revenue and profitability.

Adopting Conservation Agriculture Techniques

Finally, some farmers reported adopting resource conservation techniques i.e. best crop management practices (BCMPs) that helped them save money and time. Female and male farmers saved money by making judicious use of pesticides, fertilizers and water. A male farmer informed us that he was now using 50% less water by following Engro's recommendations of Alternate Wetting & Drying (AWD)/Light Irrigations.



6 6 In this project, we learned about the importance of levelling of fields, use of certified seeds, use of pesticide, fertilizers, and weeding. We use balanced fertilizers now. Previously we simply used urea, now we use potash and DAP.

Male Farmer

6 6 Because of Engro's awareness, we grow peas and other vegetables and opened a vegetable shop in the village.

Female Farmer

6 6 One acre of Tinda Gourd crop gave me profit equal to the profit that I usually get from four acres of Wheat.

Male Farmer

6 6 Because of PAVE Project trainings, I started growing peas instead of wheat, and got almost double the profit versus wheat. I produced peas seeds, kept some quantity for my next season's sowing and sold some volume to the fellow farmers in my village and in the adjacent villages. Now, I do it like a business.

To what extent are you satisfied with the activities that the project has conducted?

Female and male farmers expressed their satisfaction with project activities conducted so far. The PAVE Pakistan project is filling a gap by providing allencompassing technical guidance to female and male smallholder farmers in an area where agricultural extension is limited. These are the words of a male farmer: '*The PAVE Project has empowered me. Training provided by Engro is of good quality. The project is not just educating farmers but empowering them*'. Farmers noted that Engro provided answers to all their agriculture-related queries. Project participants indicated that there were many benefits of the project for them and they were viewed as role models by other farmers due to the increased knowledge and skills gained through the project. **6 6** The way ENGRO seed officers told us about the use of certified seed was very helpful and easy to understand.

Female Farmer

6 6 I saved a lot of money by adopting Engro guidance about the use of pesticide, water, etc.

Male Farmer

6 6 We benefit from the project. That's why we come here whenever we are called upon by Engro for a meeting. If we didn't have any benefit, we won't be coming to these meetings.



Project Impact

Increased Productivity

Female and male farmers reported increased productivity because of using certified seed and adopting new agricultural practices. On average, productivity for rice and wheat crops increased by 5-10% with some farmers experiencing much higher growth '*Our productivity for rice has increased from 30-35 maunds/acre to 40-45 maunds/acre*' said one female farmer. A male farmer reported growth in wheat productivity from 35-40 maunds/acre to 45-50 maunds/acre with the use of a certified seed and a new variety. Farmers also reported increased vegetable production per acre, especially of peas, after using quality certified seed as guided by the PAVE staff. A few farmers noted that they were able to sell their wheat and rice produce at a higher price because of its improved quality due to low moisture.

Increased Income and Assets

With increased productivity and cost saving, farmers earned more income which has contributed to their quality of life. Project participants indicated that vegetable profitability was much higher than rice or wheat. A female farmer, for instance, noted that she earned more than PKR 100,000/acre by growing and selling round melon. This increased income from crop is followed by seed cultivation in the last harvest cycle which can be saved for personal use or commercial sale. Another female farmer reported a profit of PKR 100,000/ acre for selling summer squash. Project participants made use of increased income in various ways. Many farmers acquired more assets such as buying or renting more land, buying livestock and other agricultural equipment such as a tractor, fodder cutting machine and sprinkler. Some participants improved their housing (e.g. from mud to cemented) and bought household items such as a microwave, television and fridge. With increased income from vegetable production, a few female farmers were able to buy more clothes for themselves and their children.

Impact on Children's Education

Farmers spent more money on their children's education. Many female and male farmers indicated that now they could afford to send their daughters and sons to better schools and colleges. Increased income also helped farmers to marry off their children, especially daughters, because farmers could pay for their dowry.

We have more income that resulted into marrying off our children and educating our children in good schools and colleges. My son is now studying in Superior College, which is a private college.

Female Farmer

6 6 Previously, I could not even think of buying a bicycle. Now I am thinking of buying a car after my profits in peas.

Greater Financial Independence

With increased income, female and male farmers paid off their debts and reported greater financial independence as they did not have to borrow on credit for their farming business. They became less dependent on 'dealers' (i.e. middlemen) who charge high commission and interest rates.

Impact on Youth

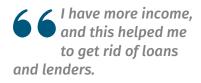
Another important impact of the project is that rising productivity and income motivated farmers to adopt agriculture as their profession. Some of the educated youth were also attracted to farming enterprises. A few male farmers noted that now they considered farming as a business, and are thinking more about productivity and profitability.

Impact on Health and Nutrition

Project participants highlighted health and nutrition outcomes of vegetable farming. Some farmers sell vegetables in the market but most, especially female farmers, use vegetables for their household consumption. In their view, household members now eat fresh vegetables and stay healthy.

Positive System Level Effects (Spillover effects)

During discussions, we also learned about early signs of other farmers 'copying' project participants' behaviour (i.e. use of certified seed). For instance, one male farmer noted: 'Other people in the neighbouring villages now ask us how to use certified seed, how to grow vegetables. Female and male farmers indicated that they would continue using knowledge and skills that they have gained through the project. Therefore, the results that the project has produced can be deemed sustainable.



Male Farmer

6 6 If farmers practice agriculture as enterprise or business, only then they can be successful.

Male Farmer

6 6 The awareness that Engro created will help us sustain beyond the life of the project. We would not need Engro as we will have necessary skills and knowledge to use certified seed.

Male Farmer

We'll continue using skills and knowledge that Engro has imparted. Now it has become a habit [use of certified seed].



Contributing Factors

In de-briefing meetings with Engro staff, various factors were identified that contributed to achieving positive outcomes. These factors include:

Local community organizers:

The project has recruited local community organizers in each district who live in the area and have a strong understanding of local context and issues. These community organizers are helpful in holding community meetings and act as a liaison between female and male farmers and Engro staff.

Frequent visits by seed officers:

Engro has hired a female and a male seed officer for each district who visit target villages on a frequent basis (on average every two weeks) and hold meetings with female and male farmers. These seed officers have established rapport with local farmers and provide technical assistance on the use of certified seed through individual and group sessions.

Use of anchor farmers:

'Anchor' farmers are relatively big landlords (holding more than 15 acres) and have space to host community meetings. These farmers are not direct beneficiaries of the project, but they are instrumental in spreading project information to the wider community. At times, these anchor farmers provide their compound space to hold farmer meetings.

Engro's reputation:

Engro has been working in the area since 2013 and has established its reputation among the community members. Farmers recognized that Engro's previous initiatives yielded positive results for them and are more inclined to participate in the PAVE Pakistan project.



Suggestions

Project participants offered suggestions for the PAVE Pakistan project that will help in further improving their farming business and income.

Continue providing technical assistance to farmers:

As stated above, farmers appreciated the knowledge and skills gained through the project and expressed an interest to continue receiving more information and technical knowledge.

Organize laser levelling training:

Many male farmers noted that they did not have knowledge and skills on how to level their fields for land preparation. Some tried using laser levelling but had not been successful and, therefore, suggested that the project should organize such trainings.

• Provide equipment and training on how to clean and grade seed: Many farmers, particularly male farmers, wanted the project to provide grading equipment so they could clean their seed from impurities. They suggested forming farmers' groups so that group members could share the equipment.

Explore possibilities to facilitate access to finance:

Farmers reported challenges in accessing finance. Currently, many of them are dependent on dealers (traders) who charge 15-20% interest or commission in addition to several duties on fuel and other items. A male farmer explained that a he would receive only PKR 800-900 for a bag of rice worth PKR 1,300 if he had to sell that to a dealer. Formal banks charge up to 14% interest rate, but banking services are difficult to access. Moreover, formal banks only provide loans to those who own land, leaving out the farmers who rent land. Participants suggested that the project should explore possibilities of providing access to affordable finance.

Support farmers in soil and water testing:

Many farmers reported difficulty in soil and water testing. They have to go to the district headquarters to get their soil tested. Engro could consider providing 'testing kits' to select farmer groups. These kits may not be a replacement of laboratory testing but will provide an idea to farmers about soil and water conditions.

• **Provide concise weather related and other technical information:** Engro could explore establishing weather stations and relaying weatherrelated information to participating farmers via SMS. This will strengthen Engro's existing technical assistance to farmers. SMS could also be used



to send other technical information to farmers, including culturally appropriate messages about gender equality, health and safety, and environmental sustainability.

Provide off-season vegetable seed:

Many women noted that off-season vegetables had higher profitability, but they did not know how to grow off-season vegetables and lacked access to specialized seeds. Engro should train women how to grow offseason vegetables and how to store vegetable seed.

Identify 'Community Champions':

MEDA and Engro discussed identifying female and male 'Community Champions' and providing them with advanced training on gender, health and safety, and environmental sustainability. They would then sensitize other farmers on these issues. The Community Champion idea should be run as a pilot in a few select villages and could be rolled out to the entire area after assessing results of the pilot initiative. MEDA could help Engro in developing criteria for identifying Community Champions.



Women Economic Empowerment (WEE)

We discussed various WEE related dimensions with female farmers which are described below.

Access to Resources/Assets

Female farmers reported increased knowledge and skill about growing vegetables. Some women had greater understanding of the use of certified seed for wheat and rice crops.¹ Women had increased access to land for growing vegetables. Some had very small plots adjacent to their houses where they were growing various vegetables for household consumption. While the majority of women used vegetables for household purposes, some sold their produce locally and earned profit. Female farmers who were selling produce reported contributions to household income and getting increased recognition by household and community members for their economic contribution.

Gender Division of Labour

Women perform household chores as well as support their male household members in farming activities, including rice and wheat production. Age is an important determinant for division of labour; older women who have adult sons have less to do because their daughters-in-law are responsible for most of the chores. Some male farmers reported helping their wives by fetching firewood, getting kids ready for school, dropping and picking up their children from school. Both female and male participants noted that men who help their wives by making tea or cooking would not admit this in public because they would feel 'ashamed'. Similarly, a typical wife in the area would not want her husband to be performing household chores (e.g. cooking, washing dishes) because this would make her feel inexperienced in performing those tasks and it would be frowned upon by her family and community members.

Female participants indicated that although their engagement in vegetable growing had increased their workload, they were happy because it brought them more money, provided them with fresh homegrown vegetables and gave them an opportunity to go outside the house. The implication for the • Previously, they [the men] were saying women are not working. Now we contribute to household income.

Female Farmer



6 6 The workload of women [by growing vegetables] has increased but we know how to manage it; we are actually happy.

¹ Based on the project design the initial production of vegetable crop will lead to vegetable seed production in the last harvest using a graduating approach.

project is to sensitize community members, especially men, so that they value women's household work and share responsibilities with women at home. In addition, the project can explore women-friendly technologies that would help women save time (e.g. twin-wheel hoe and cono-weeder). Female farmers who sold vegetables received increased recognition by household members, thus boosting their self-esteem.

Decision Making

No significant influence on decision making was noted due to the project within or outside the household. Heads of households, who are usually men, continue to make most decisions. This is not surprising considering the short duration of the project. Some female and male farmers indicated that husband and wife make joint decisions, however, most economic decisions are made by men. For instance, all decisions related to selling and buying inputs and crops are made by men. As is the case in gender division of labour, age plays an important role in decision making; older women, especially those who have sons, have more power in decision making than younger women. It is hoped that with increased income and gender sensitization, women will become more self-confident and, in the long run, will have a greater role in decision making. However, we should not expect this kind of change within the life of the two-and-a-half-year project, as such change takes continued effort to counter sociocultural norms. We make joint decisions in most cases; however, community related issues are settled by males. Inside the house, decisions are made either jointly or by women.

Female Farmer

6 6 Routine household decisions are made by women, but decisions related to spending and other financial matters are made by men.



Freedom and Autonomy

Women are dependent on men financially. Men also control women's mobility. Female farmers noted that they had to seek male members' permission to go outside and they could not go to market or other public places alone i.e. they must be accompanied by other women, children or male members of their family. However, older women have more freedom in terms of visiting others and going to public places. One of the major achievements of the project is that now women can come to Engro's meetings and trainings, which was not the case a year ago. Men have now started accepting women's economic role and are accepting of women growing doing cultivation on their own.

Suggestions

All female farmers wanted Engro to continue organizing meetings and trainings for them and support them in growing vegetables and storing seed. In their view, things are changing, and men have started to accept women's economic contribution. They suggested raising awareness among men about gender equality by emphasizing the importance of women's work at home and outside. With Engro support in growing vegetables, we are now self-reliant. We don't have to wait for men, so they come and bring something for us to cook. It also provides us an opportunity to go outside the home.

Female Farmer

• There is a need to raise awareness among men about gender and importance of women's work. Women's work should not be considered as "mean" or cheap. We should tell community members about women's roles and engage youth











