



## CASE STUDY – Project PAVE

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**Project PAVE - Partnership & Value Expansion for Inclusive Seed System in Pakistan**, aims to broaden and diversify the seed procurement base for rice, wheat and vegetables seeds for Engro Fertilizer's seed business while improving livelihoods for smallholder farmers. The Project PAVE team is working with 4,418 smallholder farmers (18% of which are women), training them in seed growing techniques to become part of the seed supply chain.

Engro Fertilizers Limited is a subsidiary of Engro Corporation and a renowned name in Pakistan's Fertilizer industry. It was incorporated in 2009. Engro Fertilisers firmly believes in bringing positive change to the communities all across Pakistan where our businesses are based.

**Social Issue** Smallholder farmer disadvantage

### Business Opportunity

Diversifying Engro's seed procurement base through training smallholder farmers, thereby increasing their income and improving farming practice

### Social Value Creation

- Greater diversification in farming practice (increased income) for 4000+ families
- Over 700 women trained in farming and vegetable seeds
- Increased sustainability and adaptation in farming practice
- Rural entrepreneurship

### Business Value Creation

- Over 330 smallholder farmer suppliers, diversifying Engro's supplier base
- Increased income for farmers
- Over 100 farmers starting their own enterprises (individual as well as village-based)

**Partnerships** Engro Fertilizers, MEDA Canada, DFAT Australia



## The Opportunity

In Pakistan, 70 to 80 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. This project was developed and selected to increase participation of male and female smallholder farmers in the Sheikhupura and Gujranwala districts in Punjab in the seed value chain, and to improve their skills and expertise to improve smallholder farmers' crop yields and income.

Social issues addressed through Project PAVE:

- Exclusion of smallholder farmers from industry opportunities because of their inadequate farming knowledge about modern farming practices and small landholdings.
- Lack of aggregation of smallholder farmers, which contributes to their low value in farming communities and markets
- No/low participation of women in the seed sector
- Lack of knowledge and exposure to modern farming techniques results in low motivation to adopt improved practices
- Lack of awareness of the importance of using certified seed
- Lack of compliance and awareness of HSE practices in farming - excessive use of water, lack of knowledge on resource conservation, pollution generation

Engro has influence with smallholder farmers, who represent an opportunity to diversify Engro's (and others) seed supplier base, which was limited to fewer larger farmers. Improving smallholders' capacity and integrating them into the wider farming market recognises their economic potential, and farmers benefit from increased income. The economic integration of women also elevates their status in society and leads to increased spending on healthcare, nutrition and education.

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*“At Engro Fertilizers, our goal is to promote food security in Pakistan by empowering smallholder farmers to implement sound agricultural practices, and to equip them to overcome barriers of entry in the marketplace. PAVE is a much-needed initiative in this direction.”*  
- Nadir Salar Qureshi,  
CEO of Engro Fertilizers

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## The Strategy

Engro's PAVE Project helped to overcome these problems by training and educating 4400 smallholder farmers on Best Crop Management Practices (BCMPs) and certified seed production. As a result, more than 55% of participating farmers have reported using certified seeds for their crops and adapting modern farming practices, enabling them to improve yields of regular wheat and rice crops and subsequent incomes. Additionally, over 500 farmers have been trained as expert seed producers and entrepreneurs who grow wheat and rice as seed crops and then sell it at a premium price to seed companies like Engro and to other farmers in the rural area. This has helped Engro to broaden its seed procurement base and contributed to the overall improved production of quality seed in Pakistan.

Working with individual smallholders' farms is not financially viable for many commercial businesses, due to high logistical costs. There were also no protocols for inspection of scattered and fragmented plots of the smallholders by the Federal Seed Certification Department. To overcome these issues, smallholders under PAVE have been aggregated into Learning Alliances and seed supplier groups of 20-30 farmers each. As a result, they have been transformed into economically feasible (workable) units for Engro to procure and convenient spots for government inspection institution (FSCRD - Federal Seed Certification and Registration Department).

Comprehensive and customised training modules, including on farm trainings, exposures and demonstrations, build capacity of these Learning Alliances (Seed Supplier Groups) on the seed production cycles of wheat and rice. More than 120 active farmers have been trained as Master Trainers and community champions to keep educating other farmers on an ongoing basis.

## Results - Value Creation for Business and Society

Over the course of this project, Engro seed sale for paddy increased by more than 50% and wheat seed sale almost doubled. Engro has procured about 690 Tons (6% of total procurement) of high-quality paddy and wheat pure seed from these farmers in last two seasons.

Growing awareness and demand for certified seed is contributing towards the growth of the seed sector as a whole as well. Farmers improved their wheat and rice yields by at least 10%, with a notable improvement of 10-15% increase in their profitability.

Out of these 4400+ smallholders, including over 700 women, 52% switched over to certified seed use within first year of the project (against a target of 50% till the end of the project in two years). This number continues to increase as farmers visibly witness the benefits of certified seeds in yields and crop quality. In addition to direct beneficiaries, spill-over effects of the project include 8,000+ in project and nearby villages.

*'As a result of the project activities, the demand for Engro's seeds was so high in the project areas that Engro's seed got booked in advance of the start of the season.'*



**Social outcomes:**

- Crop diversification resulting in increased income. New cropping scheme includes vegetables which is more profitable.
- Farmers are being trained on sustainable techniques
- Increased knowledge on crop diversification (leading to additional income)
- 700+ women are receiving training on seed production, vegetable farming, kitchen gardening and vegetable seed production
- Increased sustainability of the rural ecosystem by developing master trainers and community champions from the same villages
- Women’s economic empowerment
- Successful participatory R&D with smallholders

**Business outcomes:**

- Over 330 farmers now seed suppliers of Engro
- Over 120 of these farmers now train other farmers in their practices and have been trained intensively to start their own seed business as ‘Village Based Seed Enterprises’
- Instead of using home kept grains as a seed, farmers now make and process their own seed to sell at premium rates
- Enhanced brand value of Engro
- Increased income for farmers to further improve their purchasing power to buy other products offered by Engro

**Lessons Learned, Challenges and Outlook**

- Instead of just working with big farmers for seed multiplication, small scale farmers can be the best partners in terms of their loyalty and high level of field presence.
- Skills and trainings are important for both male and female farmers, but for females first we must show confidence in their abilities, which in turn builds their self-assurance to change circumstances of their own, and families.
- At a community level, we have seen a visible spill-over effect as nearby villages have approached us to be part of the project after they have seen and adapted some of the better farming practices of PAVE farmers.
- Use of anchor farmers: ‘Anchor’ farmers are relatively big landlords 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.

