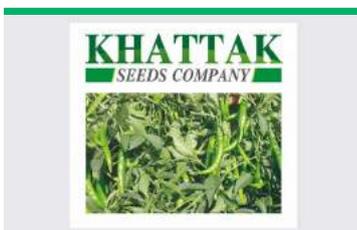




Increasing Access to Cucumber Farming in Pakistani Households

Khattak Seeds Company

Supporting Khattak Seeds Company to increase the productivity of small cucumber farmers by providing information on vertical farming.



The Company

Khattak Seeds Company (KSC), a local input supplier, was established in 1983 in Akora Khattak, Khyber Pakhtunkhwa. At first, the business only supplied local seeds to farmers in the region. Now, in addition to supplying hybrid vegetable seeds, KSC also sells pesticides, fertilisers and low plastic tunnel materials. KSC has a 35% market share in the cucumber seeds market of Akora Khattak.



The Context

Akora Khattak - in Nowshera district - provides the right climatic conditions for vegetable production. The landholdings in the area are small and landlords mostly lease out their land to small and/or landless farmers who pay the lease, incur all production costs and retain the profits from farming that land. Cucumber is the key cash crop in this vegetable belt. Farmers here enjoy a competitive edge over other farmers as their produce reaches the market when there is no competition from other parts of the country, resulting in higher prices.



The Challenge

However, yields in this area are as low as 15-20 tons per acre compared to 60-70 tons per acre in Punjab, where farmers use plastic tunnels and better seed varieties for cucumber production. In Akora Khattak, there is a lack of awareness on the benefits of seed varieties and techniques, such as vertical farming. Farmers in the area were using the land inefficiently and thus producing lower yields and vegetables of lower quality.



The Solution

MDF partnered with KSC to increase the productivity of small cucumber farmers by providing them with information on vertical farming.

In order to increase the adoption of vertical farming, an extension program was developed, and demonstration farms were established for information dissemination to cucumber farmers.

MDF also supported KSC in engaging a technical adviser to train field officers, who would then disseminate information on best practices for vertical farming to farmers. Furthermore, MDF assisted the partner to develop a video to disseminate information to other farmers. The video covered the different stages of plant growth during the season to spread information on best practices to farmers.

As a result of better yields and improved quality of produce, farmers sold more at higher prices, thereby benefitting from increased incomes. This also led to better utilisation of land and increased production of a better-quality crop, resulting in an increase in farmers' profitability.

The increase of plant population per unit area also increased the quantity of seed, fertiliser and pesticides used and resulted in increasing profitability of KSC. This resulted in other business input companies in the area reaching out to KSC farmers to adopt improved practices. Farmers hired more labour on-farm, leading to increased jobs.

The Results



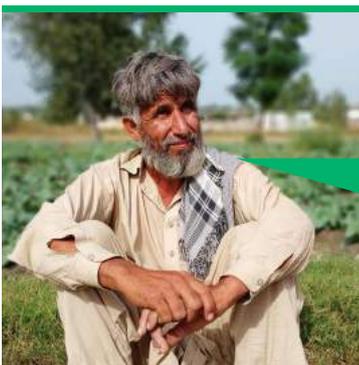
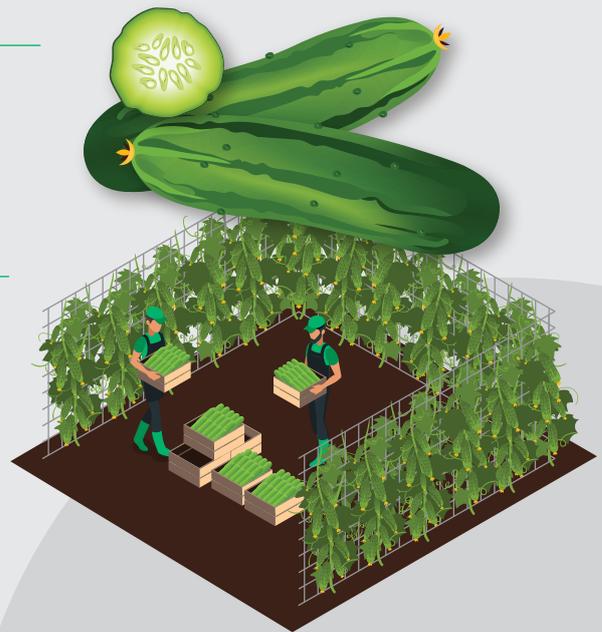
539 farmers earned an additional income of **USD 2020** per year on an average.



1400 on-farm laborers hired by farmers using KSC products.



4 additional dealers in the area have increased their stock of vertical farming seeds due to increased demand in the area.



Quote from the field

Rahim Ullah, a cucumber farmer who is using vertical farming in Amirabad, said:

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An adoption of vertical farming has improved the quality of my cucumbers and also increased the yields, leading to an increase in income for myself and my family.

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