

A close-up photograph of a hand holding a cluster of white cotton bolls. The background is a vast field of golden wheat and cotton plants under a bright, hazy sky. The text is overlaid on the image in three stacked rectangular boxes.

**PRODUCING  
MORE WITH LESS:**

FATIMA GROUP  
IN WHEAT AND  
COTTON

# Producing more with less: Fatima Group in wheat and cotton

What happens when a leading conglomerate thinks about making a bold attempt to address Pakistan's macro-economic imbalances on the strength of its standing in agriculture? Fatima Group is making such a bold attempt with a focus on increasing wheat and cotton yields.

## Thinking beyond the bottom-line

Established in 1936, Fatima Group is one of Pakistan's most diversified and rapidly growing conglomerates with three fertilizer plants producing 2.6 million metric tons. Fatima Group's experience in fertilizer sales has provided them with the foundation to expand into the agro-industry and tackle national agricultural challenges. The foundation of Fatima Group's recent activities in agriculture is the company's commitment to addressing Pakistan's food security and trade deficit challenges. The most notable result is the group's dedication to leveraging key crops like wheat and cotton to bridge this gap. Cotton and wheat are Pakistan's expertise, they say, but we are importing them. With these two crops, they believe the food security and economy issues can be solved. Fatima Group is now focusing beyond growth projections to address these macro level issues by going to the root of the problem: the seed.

## Targeting Seed Innovation

Fatima Group aims to leverage seed technology to significantly increase yields and exports along with import substitution. At present, Pakistan produces about 28 million tons of wheat at an average of 32 maunds per acre with about 22 million acres of land under wheat production. Through seed innovation and fertilizer management alone, the per acre yield can increase to over 55 maunds resulting in another 20 million tons of wheat. This additional wheat is the first domino in unlocking the solution to the country's food security and trade deficit problem.

The Fatima Group has been designing ways of doing more with less. Any increase in yields stemming from the same area of land will allow Pakistan to use any additional land that may be freed up without a loss to yields and revenues. Fatima Group believes that hybrid seeds are the key to unlocking wheat's cascading potential. Fatima Group's hybrid wheat seeds have shown promising results; for instance, in 2022, over 200 acres in Khanewal planted with the hybrid F1 wheat seed variety achieved an average yield of 55 maunds per acre compared to the country average of about 32 maunds per acre. The company is confident based on its pilots using these F1 varieties, that are reusable for 2-3 crop cycles, that the additional millions of tons of wheat at the national level could be the answer to the country's trade deficit problem.

The Fatima Group has leveraged its networks to research and develop these innovations and pilots with F1 wheat varieties have been operational for 3-4 years with technical assistance from scientists at the University of Sydney, Australia. Last year, these seeds were planted at the commercial level and this year about 80 farmers are working with the seed. The Fatima Group believes that the resulting increase in yields will allow for flexibility of a few million acres of land being available in the winter season for oil seeds and early cotton varieties.

Agriculture cannot outwit nature and its patterns, of course. The crop cycles must follow the season's rules or suffer poorly. Wheat and oil seeds are competing crops, i.e., they share the same cropping season. And the availability of land that may be able to accommodate oil seeds without impacting wheat output could be a game changer. F1 hybrid wheat varieties allow for bringing an interesting player with immense export potential into the mix: edible oils. Canola seeds can be planted in November on the land that could be freed up during the wheat season. The crop cycles of canola and early cotton are such that the early cotton variety can be planted following canola harvest in February. The implications of planting canola on such volumes are far reaching for the country's USD 4-5 billion oil import bill.

Currently, the country is earning about USD 20 billion from textiles, but with innovation, this figure could double. To achieve this, the cotton industry must graduate beyond the current figures of production of 7-8 million bales to an achievable 14 million bales. The Fatima Group is concentrating on research and development in seed technology to close the yield gap in cotton as well. In March 2023, Fatima's early cotton varieties yielded 35 maunds per acre, demonstrating the benefits of advanced seed technology and optimized planting schedules. This early cotton variety is being planted has the potential for even higher yields potentially doubling the country's cotton exports. The early maturing varieties have the potential to save the crop from the deadly monsoon impacts as well.

There is also international interest, particularly from African countries, in exploring these hybrid seed varieties that can serve as the entry point to scaling this up at a corporate level where it is bound to contribute most at a significant scale. At present the company is aiming to get the F1 hybrid wheat seed to farmers and corporate players through a corporate collaboration on about 1 million acres. Improved wheat productivity could free up land for export-oriented crops, contributing to both import substitution, increased textile exports and bolstering food security.

## Developing an environment for corporate farming

Weather, water and land are God's bequest and we have to do the right things to leverage them. With this guiding principle, the company recognizes the urgent need to bring the 18 million acres of fallow lands into productive use and mitigate water scarcity through innovative farming practices. The main challenge lies in water management. Currently, Pakistan's irrigation system loses 30% of the water it draws from the Indus River Basin through inefficient practices like flood irrigation on farms. Corporate farming offers a solution by implementing advanced irrigation technologies and efficient water management practices through its collaborative nature and appetite. By reducing water wastage and

optimizing production costs, corporate farming can significantly enhance agricultural productivity and sustainability demonstrating the true business potential of agriculture.

The Fatima Group has been a leading advocate for policies conducive to corporate farming and a secure investment environment. The challenge now is to create an enabling environment that makes corporate farming possible. Policy support is essential for this transformation. To address this, the Special Investment Facilitation Council (SIFC) and the Ministry of National Food Security and Research (MNFSR) are collaboratively developing a comprehensive document. When large SIFC projects are implemented, they must be bankable, ensuring that investments are secure for the long term.

The agricultural sector in Pakistan urgently needs skilled professionals in both agricultural techniques and IT. Currently, meeting these demands often requires hiring expertise from abroad which comes with significant costs. Developing local talent is essential not only for cost efficiency but also for long-term sustainable growth. Infrastructure development and supportive environmental policies are also crucial for the success of corporate farming initiatives. The government's role in facilitating these aspects is essential to enable private sector growth and enhance overall agricultural productivity across the country.

## Looking Forward

Fatima Group's commitment to innovation, seed research and development, corporate farming, and high-value crops demonstrates its potential to transform Pakistan's agriculture sector. By leveraging research and development, optimizing resource use, and advocating for supportive policies, the company aims to address food security challenges, boost exports, and drive economic growth.