Call to Action!

AGRI CONNECTIONS 2024

Re-orienting Pakistan's Agriculture for Food Security, Export-led Growth, and Poverty Reduction

by Pakistan Agricultural Coalition

Pakistan needs a serious upgrade of its agriculture. Pakistan's agriculture sector has consistently been neglected by policy makers as a source of sustained growth. Their slim argument that agriculture contributes a small portion of GDP ignores the stark reality that more than 75% of Pakistan's exports are linked to outputs of agriculture (cotton, rice, leather, fruits and vegetables, etc.). Decades of neglect have resulted in Pakistan importing the agri-commodities it grows: most notably, cotton for its export-leader textile industry, wheat and pulses as food staples, and edible oils for cooking. Pakistan also imports dozens of products that result from processing of agri-commodities which are not being produced in Pakistan due to lack of quality and standardization in agriculture. These avoidable imports and the depreciating Pakistani rupee have contributed to the devastatingly high food inflation which is pummeling Pakistan's poor. It is time to develop Pakistan's agriculture as a pillar of export-led growth, food security, and poverty reduction. But a major shift in policy approach is required to achieve this.

The critical shift required: 'government-led' to 'private sector-led'. For too long, agriculture has been considered a sector that government has to lead and administer with food security as the only policy goal. The new approach must be: agriculture is a growth sector with immense potential for exports and import substitution through (i) much greater output at the farmgate, and (ii) much greater value addition to agri-commodities by agri-businesses. But the transformation of agriculture requires investment and skills that are beyond the capacity of government and individual farmers. This is why Pakistan's corporate sector, its broader business community, and the international private sector must be brought in for growth in agriculture. Agriculture requires a re-orientation from being government-led to being private sector-led. And the theme must be to attract large-scale private investment to all elements of agriculture to achieve not only food security but also export-led growth and poverty reduction.

The Government of Pakistan has already commenced this shift. The government's Special Investment Facilitation Council (SIFC) has identified mining, agriculture, and IT as priority sectors. Among these, agriculture is the most widely integrated into the mainstream Pakistani economy. Agriculture investments have significantly lower ticket sizes than mining. And agricultural growth helps the poor much more widely than both mining and IT. And agriculture is the fastest path to higher exports: in Pakistan's largest export value chain—textiles—every additional dollar's worth of cotton grown at farms leads to at least $3.50 in exports and saves a dollar of cotton that is being imported.

The SIFC initiative dove-tails well with the realization emerging from the pandemic among Pakistan's corporate players that they must diversify into agriculture—the sector even the lockdowns did not stop. With the economic impact of the Russia-Ukraine war, there is strong interest from global and regional players to invest in new agricultural prospects for food security. These trends and the SIFC present a unique opportunity for Pakistan to develop its mainstream agriculture sector. SIFC is addressing one of the greatest risks to large-scale investment in agriculture: reliable access to large tracts of land on long-term leases along with some guarantees of protection.

Beyond this, Pakistani and international investors will likely need the same solutions as Pakistan's farmers have needed for decades: quality seed, mechanization, timely water availability, access to finance, climate risk mitigation, links to modern agri-markets, vaccines and disease-free zones for livestock, cool chains, connection with agri-businesses, etc.

I. Building the seed industry. For increasing productivity, quality seed has pride of place among agri interventions. Pakistan's seed laws and regulations date back to the 1970s when the involvement of the private sector in seed was considered unlikely and government institutions were given primacy in all links of this value chain. It played its role for a couple of decades but has not been able to bring great benefit to farmers over the past couple of decades. The vast majority of seed sold in the country is completely informal and without any investment in research or industrial processes. And only a handful of seed companies even resemble a modern seed company. So, farmers have to take immense risk in trying any new seed offered to them.

The importance of quality seed is demonstrated best by the tripling of maize yields and six-fold increase in maize output in Pakistan as farmers large and small adopted hybrid maize seed since 2001. That year, the government introduced a framework for hybrid seed imports and this benefitted farmers in maize, rice, vegetables, etc. This shows that seed is the great equalizer—it gives the small farmer the same foundation for growth as the large farmer. But for non-hybrid seeds (which dominate Pakistan's agriculture), reputable seed companies do not feel comfortable in giving their genetic material to the federal seed certification agency for fear of pilferage of their valuable intellectual property. As an example, this risk is addressed through a truth-in-labelling regime in developed countries like the United States and developing countries such as India. This replaces 'command-and-control' regulation with facilitative regulation. Pakistan must shift this legal and regulatory framework for seed to level the playing field for reputable private seed companies. Farmers will be the biggest beneficiaries of this shift.

II. A national market for standardized agri-commodities. The World Bank and other donor institutions have focused on reform and upgrade of Pakistan's wholesale agriculture markets. For a host of reasons, this decades-long effort has not met with the success that was expected. It may be suitable to focus on a national export-focused market infrastructure which runs in parallel to the nation's traditional wholesale markets. In recent years, IFC has made a massive effort in this direction to set up the Electronic Warehouse Receipts (EWR) regime in which Pakistan's leading private groups have invested to create an enabling entity. But this enabling entity needs a new species of formal-sector warehousing companies to flourish as guided by IFC in many developing countries. Prospective equity investors harbor perceptions of risk related to the policy regime for storage of essential food items like wheat. Such roadblocks which can be removed to kickstart warehousing investment across the country because more agri output will certainly require more warehousing capacity. Reduction of post-harvest losses with mechanical drying and silo storage can be the fastest route to higher exports from agriculture. With this, the indigenization of silo manufacturing can prove to be relatively less difficult than indigenization of farm machinery.

III. Precision agriculture requires 'precision water'. The big-picture issues of water are relatively well understood: reduction in wastage of good water, proper drainage of bad water (and flooding), and the need to safeguard the Indus aquifer (which is now providing half of the water used in agriculture). But from the perspective of individual farmers, corporate agriculture or service providers, the timing of water delivery is as important as the quantity of water delivered. Agriculture is an extremely time-sensitive business so water delayed is literally water denied. Pakistan's irrigation system is completely in the public sector and it needs a historic upgrade to allow precision agriculture to become widespread. Finally, the issues of water quality are also rising to the top with greater scrutiny in export markets.

IV. Protection from climate risks for farmers. Climate unpredictability is only expected to rise. Climate risks are first and foremost risks to agriculture. With 93% of Pakistan's freshwater resources going to agriculture, climate risks such as floods, droughts, excessive rain, heatwaves, etc., are all risks to livelihoods in agriculture. The World Bank introduced modern crop insurance for small farmers to Pakistan under its SMART program in Punjab but it has run into some hurdles. Meanwhile, based on successful pilots conducted by Pakistan's private sector with global firms for insure-tech and re-insurance, the Government of Sindh is developing a similar program for crop insurance after the historic floods of 2022. Today, there is also broad consensus in banking and insurance circles that Pakistan's agri-insurance regime needs serious upgrade and scale-up. Therefore, it is proposed that these initiatives by provincial governments be scaled up to deliver social protection in all provinces with a permanent annual outlay for covering the insurance premium for small farmers (as practiced globally for small farmers).

V. Learn from poultry. Poultry is actually an unsung success story of Pakistan's agriculture sector. Over the past four decades, the private sector has led the immense growth of poultry in Pakistan with the associated massive growth in poultry feed manufacturing and maize cultivation. The government was somehow convinced at key junctures in this period to facilitate new technology and announce policy measures in a timely manner. Today, 95% of Pakistan's poultry is grown on commercial farms and the best farms can compete internationally.

The import of better and better genetic material from the global markets for poultry has been one of the key drivers of this growth. And the corresponding additions of improved feed to match the birds' better genes are a story of eco-system development.

VI. Developing dairy. In dairy, the dynamics are completely different from poultry. Eighty percent of Pakistan's dairy animals are with smallholder farm families with 3-6 animals of mixed breeding. The majority of the rest are with often informal commercial farmers with mostly mixed breeds and some imported animals. There are a couple of dozen 'corporate dairy farms' with genetically verified imported animals. Improvement of genetics among the animals with small farm families is a key priority as is the facilitation of modern inputs to feed. A number of experiments have yielded the mechanisms for achieving this—they now await scale-up. For meat and milk exports, disease free zones with associated processing investments are critical. Indigenization of vaccine development is another priority.

VII. Building machinery service providers. Eighty-eight percent of Pakistan's farms are smaller than five hectares (12.5 acres). But these small farms account for fifty-five percent of acreage under cultivation. As in many Asian countries to the east, it is difficult for such small farms to afford machinery. Therefore, small-scale farm machinery service providers crop up everywhere but with rudimentary skills, no access to finance, and old machines. Some leading private players of Pakistan have entered this space to serve rice farmers.

Funding and skills must reach service providers in public-private partnerships. Private parties must be encouraged to invest the estimated $1.4 billion needed for transplanters and harvesters for Pakistan's entire rice crop (of which two-thirds is exported). With this market size, it is time to start talking indigenization of farm machinery with global manufacturers—achieved recently in Vietnam.

VIII. A new financing model for agriculture. The potential of agriculture to help Pakistan out of its current difficulty cannot be realized without attracting investment into agriculture. But less than 20% of Pakistan's farmers have direct access to bank credit. Banks indicate that climate risk mitigation tools like crop insurance can help and they have begun to invest a little bit in this. But the scale of the jump that is needed for Pakistan means that this cannot be achieved with credit alone. Equity investments in agriculture projects by leading business groups of Pakistan as well as abroad need to become a normal course of business. And this will require a package of incentives to address the concerns of equity investors. A vehicle for directing carbon credits to farming is another way to bring funding to Pakistan's agriculture sector as it adopts better practices.

IX. Reducing post-harvest losses in horticulture to increase exports. Post-harvest losses in fruits and vegetables are estimated at forty or fifty percent depending on the value chain. But this sector is fragmented at the production level (small farmers), fragmented at the wholesale market stage (small traders), and fragmented at the export stage (relatively small exporters). This means that Pakistan's fruits and vegetables fetch lower prices, have mixed branding, and rarely meet the phytosanitary requirements of premium markets. It is clear that cool chains right from the farmer location to the port/airport or processor's facility is required—not just a single cold store. The ideal way to achieve it is to secure the involvement of international buyers of fruits and vegetables to become the off-taker. The investment can be anchored on such an off-take commitment. A number of leading agri-businesses have invested in in-house cool chains but these are becoming too large for them to manage in-house. This indicates a potential internal market for a national cool chain investment as well.

X. Promoting processing of agri-commodities. The finest examples of agriculture in Pakistan are often found linked to visionary private agri-businesses which have conducted backward integration with farmers growing their main inputs. The examples cited most often are PepsicoLays for potato cultivation, RafhanMaize/Ingredion for maize, PTC for tobacco, Nestle for milk, JDW for sugarcane, etc. This experience must be replicated as widely as possible by encouraging agri-businesses to invest comfortably in rural areas, strengthening linkages between farmers and farmer groups with agri-businesses, etc.

The way forward

As a primary sector, Pakistan's agriculture sector needs to grow at 4 percent per annum for the national economy to grow at 7-8 percent per annum. Over the recent 15-year period, real GDP growth of agriculture has been in the range of 2.2 to 2.6 percent per annum. Within agriculture, livestock (which accounts for a little over half of agri GDP), has led the way with 3 to 3.6 percent growth per annum while the five major crops (wheat, cotton, rice, maize, and sugarcane) have been laggards at 1.1 to 1.2 percent annual growth. Other crops, particularly fruits and vegetables, have had a comparatively uneven ride. This is why greater attention needs to be paid towards the building blocks of growth for the major crops as well as horticulture. But this does not mean that poultry, dairy, and fisheries do not hold growth potential.

Agriculture is ready to become a real dynamo for Pakistan's economic growth through exports and the leading private investors of Pakistan are taking a strong interest in agriculture as well. Some are already ahead because they do not have a choice. Exporters of value-added textile products are seeing that their global buyers may reduce buying their products unless their cotton is sustainably grown and fully traceable. So, they have begun investing in traceable and sustainable cotton cultivation projects. Rice exporters are seeing a lot of room for Pakistani rice in global markets so they have not only invested in selling hybrid rice seed to farmers but also in service provider companies for farm mechanization. It is time to transition to regenerative agriculture.

Pakistan's highest macro-economic priority is to increase exports and reduce imports. And to achieve this, the enabling policies and institutional direction to support private investment in agriculture are the need of the day. This paper has presented 'no regrets' measures to this end. It is now time for action!

Pakistan Agricultural Coalition's Agri-Connections 2024 conference and expo is the perfect platform to commence action on these priorities.