

Reviving agricultural growth: Part - V

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Mechanization, technology and advisory services: one of the major constraints facing small holders is the lack of resources and knowledge about modern practices to adapt techniques of production using mechanization.

The intensity of the use of machinery and implements by large farmers is one of the factors responsible for the wide differential in the productivity attained on their farms compared to that on small farms. A number of agritech companies have sprung up in the country but they are also mostly catering to the well-to-do and educated farmers, thus causing anxiety that this will further widen the productivity gap.

The challenge is how to use the expertise and technology offered by these companies for benefitting small farmers. Can public-private partnership that has been successfully applied in the health and education sectors be deployed here? The large workforce in the various provincial government departments of extension, mechanization etc have proved to be a burden on the exchequer with little benefits to the intended target group of farmers.

The local tractor industry has been protected from competition from imports and government support to the industry has benefited large farmers disproportionately. As the industry has now completed the deletion programme successfully, they should be able to compete with imported tractors of wide variety and horsepower.

Daska had at one time become a cluster for making agriculture implements and equipment through imitation, mostly in the informal sector and on a small scale. What is its current capability status and how can this and similar clusters elsewhere be strengthened by evolving into a hub for producing implements catering to the needs of the small farmers?

Laser leveling, pneumatic planters, transplanting machines, harvesters and threshers can add to farmers' profitability, increase efficiency, conserve water use, and reduce harvest timing so as to freeze the field for planting other crops.

As small farmers cannot afford to purchase these machines or mechanized equipment, the private sector should be given incentives to form mechanization service provider units to rent out, repair, maintain, operate different kinds of machines and parts to farmers for cost recovery basis. As the net margin rises, farmers would be inclined to use these services. Targeted agriculture credit and warehouse receipt systems should be extended for this purpose. Rural support institutions such as NRSP, AKH UWAT and microfinance banks can play a leading role in promoting this activity and setting up advisory services.

Agriculture universities can, making use of their research findings, disseminate these by training small farmers periodically through these organizations, responding to their concerns and resolving their specific problems. Partnerships between academia, research institutions, private service providers, financial institutions and rural support organizations will generate synergies with a positive impact on the rural economy as well as national agricultural productivity.

Universities and research institutes have agronomists, entomologists and agriculture engineers who can collect primary data and carry out empirical studies in different agro-climatic zones by establishing contacts and interactions with these farmers.

The state of Pakistan's agricultural report 2023 has documented the success story of poultry, based on the introduction of technologies right along the value chain. State-of-the-art facilities are installed at some 70 per cent of the parent stock farms and about 60 per cent of broiler farms making the poultry farming sector globally competitive.

The success of the poultry industry demonstrates that investments in technology bring scale, reduce cost, make agri-commodities more affordable

for the public and make export competitive. This lesson needs to be replicated on a sector-wide basis.

Labour shortages for farming in some parts of the country are becoming quite visible due to migration – especially among the educated youth. Instead of throwing them out to the streets of urban areas to fend for themselves, these young, educated persons can be trained as drivers, machine operators, mechanics, technicians for machinery service providers. This would to some extent ease the unemployment problem, upgrade the level of technical skills so essential for future economic development, and slow down rural urban migration.

To promote mechanization and encourage mechanization service providers, the government should allow import of quality machinery, and parts for agriculture sector duty free for a limited period. Banks should provide fixed term 5–6-year term loans to these machinery and technology service providers to acquire the machinery. They can pay back these loans by recovering rental instalments from the farmers. When scale expands, the private sector and foreign brands would be able to manufacture some of these machines and equipment locally with backward and forward linkages also getting a firm hold over time.

Public policy interventions: the nature and application of public policy interventions in agriculture and rural economy has created perverse incentives and market distortions while leaving a number of critical measures such as liberalization of agricultural marketing, digitization of land records, titles and promotion of land rental market unattended.

Public policy intervention in wheat and sugarcane demonstrates the market distortions that disrupt transmission of price signals to the farmers and consumers.

Pre-determined procurement price, public procurement target, release of wheat and issue price at subsidized rate to flour mills, administrative control on retail prices have been practised for quite some time but have failed to achieve the desired result.

Large farmers are the main beneficiaries of public procurement as they are influential and possess substantial marketable surplus. Small farmers have to save a large portion of produce for subsistence and dispose of the remaining balance at distress prices to offset the loans they had taken for inputs from the arhthis below the fixed prices.

Urban consumers do not get atta at the fixed retail price and have to supplement purchases from the parallel market at higher prices. The government has to pay subsidies out of the budget and also incur heavy debt from the bank on commodities operation – storage, transportation, financing, etc. As local prices of atta are subsidized and much below international prices, there is smuggling to neighbouring countries while the price differences between local and imported price is borne by the government. Scarce foreign exchange is utilized on import and shipping of wheat well above the gap in domestic consumption and production. In this bargain, everyone is worse off except large farmers, food department officials and flour mill owners.

A more rational approach would be for the government to get out of the mandatory procurement business, build up strategic reserves and release them in lean months or when there is volatility in the market. This would save billions of rupees and allow the market forces to determine producer and consumer prices. Households below the poverty line can be subsidized through BISP by either raising the amount of unconditional cash transfer or linking up the points of sale for retail shops with the National Economic and Social Registry for subsidized sale to the target groups.

The private sector should be allowed to enter international trade to equilibrate the supply and demand in the domestic market. Once the government gets out of the wheat procurement, storage and distribution business, those savings can be diverted towards investment in R&D in agriculture by the public-private sector and universities.

Agriculture marketing companies are relics of the past and have stymied the growth of marketable surplus. One of the most important reforms to make the agriculture sector efficient, remunerative for the farmers, competitive for the consumers and responsive to the changing demand pattern has to be in the

area of agriculture marketing. The present collusive marketing system where petty officials of agricultural departments and cartels of arhthis or middlemen are causing havoc to both consumers as well as producers will have to be dismantled.

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