

SUMMING UP: POLICY AND INVESTMENT PRIORITIES FOR AGRICULTURE AND THE RURAL ECONOMY IN PAKISTAN

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For Pakistan a vibrant agricultural sector and rural economy are essential to improving the welfare of its people and for overall economic growth and development. The country's history attests to this. From independence in 1947 through the 1980s, Pakistan's agricultural sector played a central role in the economy, in terms of overall output, employment, and external trade, and helped put Pakistan on a solid growth trajectory beginning as early as the 1950s. Much of the country's initial economic success was due to the historical Indus River basin accord with India in 1960, which opened the way for the construction of the Tarbela Dam and other major irrigation investments that subsequently enabled Pakistan to take advantage of fertilizer-responsive, high-yielding varieties of wheat and rice during the Green Revolution of the late 1960s and early 1970s. Yields and output grew remarkably during this period, increasing both the availability of major food staples, particularly wheat, as well as cotton that in turn drove substantial expansion in Pakistan's textile industry, providing the country with a critical source of foreign exchange earnings.

Although agriculture is no longer the largest sector of Pakistan's economy today, it remains a major source of income for Pakistan's rural poor and an important driver of the rural nonfarm economy where there is untapped potential for pro-poor growth (Chapter 12). Unfortunately, the agricultural sector's underperformance in recent decades attracts precisely the wrong kind of attention to its problems. Once central to Pakistan's economic policy and development plans, the agricultural sector has a role in policy debates, particularly at the federal level, that has dwindled. Declining public investment over time, especially in infrastructure, irrigation, and agricultural research, combined with changes in demographics, markets, and international trade, has contributed to stagnation in the agricultural sector. Without sufficient policy attention, needed new investments in rural infrastructure

(roads, irrigation, electricity, markets, communications) or rural public services (nutrition, health, education, and sanitation) have little chance of being made.

Symbolic of this downward progression of the policy attention given to agriculture and the rural economy was the national Planning Commission's 2011 Framework for Economic Growth, in which agriculture was virtually ignored in favor of urban growth, connectivity, competitive markets, trade openness, and better government. While the framework addressed some of Pakistan's needs, the clear omission of agriculture suggested that agriculture—and therefore food insecurity, malnutrition, and rural poverty—were merely *local* issues that had been devolved to the provinces under the 18th Amendment.

Importantly, the Framework for Economic Growth came up against many of the same shortcomings that limited the impact of many past strategies and policies for agricultural development and the rural economy, from the land reforms introduced in the late 1950s to the detailed recommendations of the National Commission on Agriculture in 1987. Successive governments simply have been unable to operationalize national strategies and policies because they have used highly aggregated targets without giving due attention to how Pakistan's socioeconomic and agroclimatic diversity affects investments made under these strategies and policies. Had Pakistan's federal and provincial governments developed more detailed subsector priorities, allocated more resources commensurate with these priorities, monitored program implementation more closely, and revised programs when performance fell short of plans and expectations, the account set forth in this book might have been far more positive. And, more importantly, the welfare status of rural Pakistan might have been far better than it is today.

Today, there is an opportunity for a new approach to improving the agricultural sector and the rural economy. The government's latest strategy, Vision 2025, released by the Planning Commission in 2014, goes some distance in reintroducing agriculture and food security into the national policy dialogue. Meanwhile, provincial governments now have a stronger mandate to chart their own courses and secure resources for agricultural development processes that may be more transparent, accountable, and responsive to the needs of rural constituents (Chapter 9). Of course, the question remains as to whether good intentions will translate into actionable policies, greater allocation of resources, and coherent plans for implementation, monitoring, and evaluation.

It is possible to return Pakistan to a state with high levels of agricultural growth and where real progress is made in reducing poverty (Chapter 3).

However, growth and development can no longer rely on the intensive exploitation of Pakistan's natural resource endowment (Chapters 2 and 4) and market interventions that are difficult to roll back once they have outlived their usefulness (Chapter 7). And while continued efforts to improve and expand the application of modern science and technology to agriculture remain necessary, they will not be sufficient (Chapters 5 and 6). Much has changed in Pakistan: the landscape of domestic politics, the international environment, and the understanding of the causes of poverty and sources of growth. Increasingly, growth and development in Pakistan hinges not only on the aggregate numbers of crop production and per capita gross domestic product (GDP), or on the reach of the country's public services and social safety nets but also on investments in human and social capital, in social and economic institutions, and in governance structures and systems that empower people to make their own choices and pursue their needs and aspirations. These issues have been severely overlooked in the discourse on agricultural and economic policy in Pakistan to date.

Achieving higher growth rates, accelerating poverty reduction, and empowering Pakistan's rural population will require—as a basic first step—in-depth analyses to ensure that policies and investments address current constraints. At its most basic level, this requires good data, and transformation of sound analysis based on such data, into implementable policy steps. It also requires better monitoring and evaluation for the purposes of fine-tuning, replicating, and scaling up public policies, investments, and programs to encourage agricultural-sector growth, productivity improvement, and poverty reduction in Pakistan.

This also means moving beyond aggregate production statistics to more in-depth studies of higher-quality data on the causes, impacts, and constraints associated with technological change, better rural governance, public-service provision, and improvements in the health and nutrition of the population, especially women and children (Chapters 8 and 10). Such work would also inform policy to proactively address and anticipate continuing changes in the forces that will drive agriculture and rural poverty outcomes. Bringing rigorous analyses to bear on policy design and decision making would help to create an enabling environment that allows both competitive markets and the provision of public goods and services to revitalize agricultural growth and improve the prospects for food security and poverty reduction. Similar analyses could also help ensure that new and existing policies and regulations do not distort economic incentives or open the door for elite capture—two problems that continue to plague Pakistan's fragile economy (Chapters 2 and 9).

New Drivers of Agricultural-Sector Growth and Rural Development

There is great value in thinking more specifically about these priorities. The future of Pakistan's agricultural sector and welfare of the country's poor over the next two to three decades likely will be shaped by major drivers of change and the policy response to them. These drivers include (1) climate change and the management of a diminishing natural resource base; (2) agricultural productivity growth; (3) rapid urbanization and the development of value chains that link value-added production with urban markets; (4) developments in international markets, trade, and macroeconomic policy; (5) progress in improving the current poor health, nutrition, and educational outcomes in the rural population; and (6) the response to governance challenges posed by political instability and conflict. Designing appropriate policies to address these issues is not a simple task, as these policies must take into account factors such as the time horizon along which the effects of policy changes accrue, the urgency with which policy makers and society at large are affected, and the extent to which the effects of policy changes are specific to small or large populations, markets, or agroecologies. Most importantly, efforts to address these issues require a sustained commitment to policy reforms, coupled with the resources and capacity needed to operationalize and implement policy reforms. With levels of commitment, resources, and capacity varying so widely across the country and between different levels of government, concerted attention to these issues is critical to Pakistan's agricultural sector and the poor.

Long-term climate change and short-term weather shocks loom large in Pakistan, particularly because of the semiarid climate in much of the country and the heavy reliance of the agricultural sector on irrigation. The Indus River basin system is in need of major investments in water storage and distribution, including canal rehabilitation and maintenance. Proposed investments, such as the Diamer-Bhasha Dam, appear to have high economic returns (Chapter 4). Substantially greater investments in water storage, surface irrigation, drainage, and improvements in the efficiency of water use will be required over the next few decades to maintain the availability of water, minimize the devastation of major flood events, and increase the returns to water use. Without these investments, output from Pakistan's agricultural sector is likely to become increasingly erratic over time, and may experience an overall deceleration of growth, particularly if average temperatures gradually rise, the snow pack in the Himalayas diminishes, and rainfall variability increases, as is forecast in many climate change models. Funding these investments, implementing construction projects while ensuring the rights of displaced people,

and effectively maintaining the system should be among the highest priorities of the federal and provincial governments.

Over the next several decades, Pakistan will also need to build up the resilience of its agricultural sector. The worst-hit areas may be the arid and semiarid agroecologies of Federally Administered Tribal Areas, Khyber Pakhtunkhwa, Punjab, Sindh, and Balochistan Provinces; the flat and poorly drained flood-prone areas of lower Punjab and Sindh; and the coastal areas, where overexploitation of underground water sources and intrusion of seawater are creating salinity problems for aquifers along irrigated coastal areas. With these threats looming over Pakistan's agricultural sector, science and technology will need to play an even more significant role than they have to date. This means setting priorities and ensuring that the scientific community has the right tools with which to design policies and allocate resources to solutions that have high probabilities of success and can affect technological change among large numbers of farmers and rural communities. Greater investment in agricultural research and extension is needed, not only to maintain and increase yields but also to build tolerance to abiotic stresses such as droughts, floods, heat, and cold, and to strengthen resistance against pests and diseases—both new and emerging. Improved organizational structures and incentives for researchers and extension agents could help reinvigorate Pakistan's agricultural science and technology system. Better regulation of seed markets and stronger incentives to encourage private investment in research and development could also speed dissemination of improved cultivars, hybrids, transgenics, and other products that could increase yields or the value of crops to consumers or could reduce yield variability, losses to biotic and abiotic stress, or costs of production (Chapter 5). Improvements in delivery of veterinary services for smallholders can have particularly large payoffs given the importance of livestock in the incomes of the rural poor.

Funding for these public expenditures could be found by significantly reducing expenditures on domestic procurement, storage, and distribution of wheat, which accounted for PKR 24.84 billion in 2012/2013 (Chapter 7). Substantial savings could be achieved by reducing the level of annual domestic procurement, eliminating the subsidy on sales of government wheat to flour mills, reducing the level of government stocks, and planning for subsidies on wheat imports in the event of domestic shortfalls in years of high international prices. Similar funds could be found by significantly reducing the subsidies received by the fertilizer industry and reallocating those resources into research and extension efforts designed to improve soil fertility management (Chapter 6).

Given that Pakistan is also urbanizing rapidly, agricultural policy makers need to capitalize on the diverse dietary preferences that accompany city life. Demand patterns are likely to change not only in areas traditionally classified as urban centers (which account for about one-third of Pakistan's population) but also in peri-urban areas near large cities (which account for another one-third of the population). These growing urban centers are already providing market opportunities for agriculture, particularly for high-value, perishable products such as fruits, vegetables, dairy, and meat. But significant public and private investments are needed to ensure that farmers and rural entrepreneurs can benefit from this demand. This means investing in more stable electricity services, reliable transportation networks, and other hard infrastructure needed to build modern supply chains that include cold storage facilities, quality assurance systems, and other services. These investments promote productivity growth in the rural nonfarm economy (for example, agro-processing) and are also highly pro-poor, especially in rural areas outside the peri-urban areas closer to major urban centers (Chapter 12).

Public investment in soft infrastructure is also needed. This means reforming the regulations that govern how commodities are brought to market and who brings them, with the aim of reducing the direct costs of marketing agricultural products and the transaction costs for both farmers and consumers associated with participating in markets (Chapter 7). There are success stories of partnerships between farmers, traders, and local government in local economic clusters that have focused on a small set of commodities (for example, citrus fruits, vegetables, and dairy in Punjab) and overcome many of these constraints. More successes on this scale would go a long way to improving the efficiency and profitability of agricultural value chains in Pakistan.

Moving forward, the competitiveness of Pakistan's agricultural products in domestic and international markets will depend on a strategic combination of technology and infrastructure, on the one hand, and appropriate price incentives for investment and production, on the other hand. This was partly demonstrated in the late 1980s with policy changes—exchange rate adjustments, changes in wheat and sugarcane procurement prices, and the gradual withdrawal of the government from direct interventions in cotton and rice markets—that greatly reduced the taxation on agricultural products. Today, the possibility of real exchange rate appreciation, linked to inappropriate policy responses to inflation and balance of payments problems, remains a major threat to the profitability of Pakistan's tradeable agriculture. Although the implications of real exchange rate appreciation go far beyond the agricultural sector, adverse effects for the agricultural sector, including adverse effects on

efforts to promote exports of citrus and livestock products, could be especially damaging.

Looking beyond Economic Policy

The economic policies and investments recommended above are essential to increasing productivity and reducing poverty in Pakistan (Chapters 3 and 12). But future progress will depend on more than just good economic policy and strategic investments in science, technology, infrastructure, and markets. Solutions to Pakistan's challenges demand a far more complex and nuanced approach to poverty reduction and welfare improvement. The persistence of poverty—particularly rural poverty—in Pakistan remains the single most complex challenge facing the country. Today, a lot more is known about not only the contribution of social safety nets to development but also the contributions to development of social equity, gender equality, individual empowerment, community participation, and good governance. All of these elements must be central elements of Pakistan's growth and development agenda if progress is to be made.

High rates of agricultural growth may have only modest effects on rural employment and the welfare of the poor in Pakistan if growth is concentrated mainly on larger farms (Chapter 2). Without a broad-based growth strategy, downstream growth linkages arising from higher farm incomes and consumption expenditures may accrue mainly to enterprises and better-off households producing nonagricultural goods and services in urban centers. Further, in addition to broad-based economic growth, rapid improvements in the welfare of the poor will require direct interventions: expanded, well-targeted social safety nets; improved health and education service delivery; and an expansion of hygiene and sanitation infrastructure in rural areas (Chapters 8 and 10). These direct interventions should be accompanied by efforts to encourage dietary changes away from the consumption of fats and sugars and toward the consumption of more micronutrient-rich and diverse diets (Chapter 3).

In this context, concerns about gender equality need to be reiterated (Chapter 10). In today's policy discourse, too little attention is being given to the role of women in Pakistan's rural society and economy, their entrapment in low-productivity rural activities, and their disempowerment in economic and social aspects of day-to-day life. There are many well-documented factors that explain their deprivation: for example, low levels of skills; educational, health, and nutritional attainment; and male out-migration that adds to the burden of women who remain on the farm. Major investments in healthcare

and education can also significantly improve the welfare of the rural poor. Improving access to basic health services could potentially have a major effect on nutrition, health, and infant mortality with massive implications for the productivity of the labor force. There is currently wide variation in access and outcomes across regions and ethnic groups, suggesting a need for adequate funding to subnational governments as well as programs and interventions that are well suited to local conditions and cultures.

But across this social policy landscape, insufficient attention is being paid to the impact of the gender norms, governance systems, and judicial processes that should provide women with the means to make decisions that improve their welfare and that of their households and communities. In particular, greater attention must be given to improving access to social, economic, and legal services for women, to involve women in the design and implementation of development programs, and to gear the political and administrative systems to be more responsive to gender issues. Only with greater emphasis on the human dimensions of Pakistan's economic woes, particularly in the country's vast rural areas, will progress be made.

Some of these issues are being addressed in various social protection and rural development programs in Pakistan. The Zero Hunger Program launched in 2012, the Pakistan Integrated Nutrition Strategy of 2013, and initiatives such as the Water, Sanitation, and Hygiene program and the Scaling-Up Nutrition program are important efforts to address poverty, health, and nutrition. Similarly, the Benazir Income Support Program and the Pakistan Poverty Alleviation Fund provide social protection services to the poor—both with an explicit mandate to focus on the welfare of poor women—and strive to ensure that those who are excluded from the wider growth process are given access to resources and opportunities. Community-driven development initiatives such as the National Rural Support Program and its counterparts in each province are helping to integrate rural communities into national development activities and empowering them to pursue their own development objectives. An array of microfinance programs aim to extend credit and savings services to rural households, many of them specifically targeted toward female entrepreneurs, who would otherwise be overlooked by the formal financial system. The community organizations that these initiatives foster and nurture contribute to building greater resilience among the rural households that are so vulnerable to the recurring shocks that affect their lives and livelihoods.

With a stronger focus on better targeting, participation, and graduation, these social protection programs and community-driven development

programs can be central to Pakistan's poverty reduction strategy. And with more—and more rigorous—evaluation of their contribution, program designs can be refined to concentrate on what types of interventions work, for whom, and at what cost, opening the door for scaling up to ever larger numbers of communities, households, and individuals throughout Pakistan. But even with these improvements, more needs to be done beyond the limited scope of social protection programming. Greater improvement is needed in the overarching governance systems and socioeconomic institutions that influence every dimension of rural livelihoods in Pakistan.

Finally, it is important to reflect on the difficult security situation in Pakistan. Insecurity and the threat of violence affect the day-to-day life and livelihoods of people in many parts of the country, taking an enormous toll in terms of human lives and suffering. Security concerns inhibit basic economic activities in both agricultural and nonagricultural sectors. Fighting and civil unrest destroy human lives and physical capital. They also discourage productive investments, both domestic and foreign, that can increase incomes and welfare in the medium-term. This includes discouraging or even preventing investments in education either through threats of violence, destruction of schools, or denigration of aspirations of individuals, thereby lessening their efforts to invest in their own educations (or in productive businesses).

How best to remedy these problems is a complicated question. Social and economic development cannot occur in conflict-ridden areas throughout Pakistan without a major reduction in violence, a significant increase in political stability, and efforts to address the psychological and social trauma associated with instability and violence. Only when these basic functions are fulfilled can efforts to reduce poverty, create employment opportunities, and provide essential public services make a contribution. And only then will people reestablish their confidence and trust in the state and abide by rules and norms that are required for a productive and progressive society to flourish.

Conclusions

Pakistan's agricultural sector has enormous potential. Tapping this potential, however, will require higher levels of investment and some major reforms to public policy. This includes policies designed to address long-standing issues relating to land ownership, irrigation infrastructure, fertilizer markets, and the science required to provide farmers with improved cultivars and other technologies. It also calls for close scrutiny of policies on domestic input and commodity markets, international trade and macroeconomic policy, and the

consequences of policy reforms for Pakistan's agricultural sector. Finally, more attention must be given to policies and programs that can directly influence both the provision of public services for health, education, and social protection and the intrahousehold decision-making process that affects gender relations and how scarce household resources are allocated to ensure welfare. Provided that there is political stability and security, these policies and investments can enable Pakistan not only to boost overall economic growth but also to enhance food security at the national and household levels and significantly improve the welfare of the poor.