

**PROGRAM-FOR-RESULTS INFORMATION DOCUMENT (PID)  
CONCEPT STAGE**

Report No.: PIDC118305

<b>Program Name</b>	Strengthening Markets for Agriculture and Rural Transformation in Punjab (SMART Punjab)
<b>Region</b>	SAR
<b>Country</b>	Pakistan
<b>Sector</b>	Agriculture
<b>Lending Instrument</b>	PforR
<b>Program ID</b>	P162446
<b>Borrower(s)</b>	Ministry of Finance, Government of Pakistan and Government of Punjab
<b>Implementing Agency</b>	Department of Planning and Development, Government of Punjab
<b>Date PID Prepared</b>	March 23, 2017
<b>Estimated Date of Appraisal Completion</b>	October 13, 2017
<b>Estimated Date of Board Approval</b>	December 19, 2017
<b>Concept Review Decision</b>	

**I. Introduction and Context**

1. **Pakistan’s economy has made significant progress towards strengthening macroeconomic and financial stability and resilience.** Pakistan’s economy is catching up to its regional neighbors with GDP growth reaching 4.7 percent. The outlook for FY18/19 is moderately higher growth.

2. **Pakistan continues to face daunting development challenges.** Even though the poverty headcount has fallen from 64.3 percent in FY02 to 29.5 percent in FY14, inequality (measured as the share of the bottom 40 percent in total GDP) has increased somewhat over the past decade and a half.<sup>1</sup> Rural poverty remains about double urban poverty (35.6 percent versus 18.2 percent in FY14<sup>2</sup>) and also decreases less rapidly. Important explanatory factors for these phenomena include lagging growth in agriculture, inadequate rural infrastructure and connectivity to markets, weak governance and institutions, and limited access to finance. Lagging growth in agriculture is not only affecting Pakistan’s overall economic growth but also rural incomes and job creation.

3. **The Government of Pakistan has placed agriculture sector development and water efficiency at the forefront of its development agenda.** An annual GDP growth rate of 6 percent

<sup>1</sup> In Punjab, income growth of the bottom 40 percent as compared to the upper 60 percent is faster in periods of lower growth but slower in times of more rapid growth.

<sup>2</sup> Poverty patterns in Punjab province are comparable if at somewhat lower levels – i.e. 15.7 percent and 30.2 percent for rural respectively urban poverty. Given that two-thirds of Punjab’s population live in rural areas, the poor in Punjab are concentrated in rural areas.

or more will require a greater focus on agriculture, improved integrated water resources planning, governance, and resilience. Pakistan's agricultural sector is at a critical junction now that self-sufficiency in wheat has been achieved. Achieving food security has long underpinned sector policies, investment priorities and public expenditures. Important considerations for future growth for the sector include: (i) rapid shift to high-value agriculture products; (ii) a significant, yet largely unexploited, comparative advantage for a number of these products providing opportunities for generating export revenues and creating jobs; and (iii) ensuring enhanced resilience of agricultural production systems to climate change.

4. **Moving forward, innovation efforts should aim at improving the competitiveness of the agriculture sector, including through restoring on-farm productivity and improving efficiency and quality along the post-harvest value chain.** From being among the best in the world in the 1980s, sector total factor productivity (TFP) growth in Pakistan is now the lowest among South-Asian comparators. At 0.18 percent of agricultural GDP, Pakistan's public expenditures on agricultural research are lowest in a region which is already lagging in this respect compared to other regions.

5. **Agriculture remains a key contributor to the Punjab economy but growth is lagging.** Comprising the sub-sectors of crops, livestock, fisheries and forestry, agriculture accounts for 26 percent of Punjab's GDP and 40 percent of employment. Punjab accounts for more than half of Pakistan's total GDP and population and is home to 15.8 million total households, of which 60% are rural. Agriculture growth is on a declining trend, from 3.3 percent over the last decade to below 3 percent during 2011-2015 and negative growth in FY16 (-0.18%). Both crop and livestock productivity are low and yield growth is largely flat. Agriculture growth in Punjab is held back primarily by significant intervention by the Government of Punjab (GoPunjab) in both input and output markets, and a pattern of public spending on agriculture characterized by domination of subsidies, estimated at US\$1.5 billion in Punjab for FY17 or 3 times the regular investment allocation for agriculture in the provincial Annual Development Program (ADP). Subsidies are largely of a regressive nature and generate significant negative environmental externalities, and are nearly exclusively focused on major crops rather than high-value agriculture (HVA). Other causes include limited adoption of modern technologies, poor service delivery, inefficient water delivery and pricing, and poorly functioning agricultural markets. In addition, current policies create strong disincentives to diversify.

6. **Punjab's agriculture sector needs a paradigm shift to unlock future opportunities for growth.** The negative consequences of low yields and poor yield growth in agriculture extend from low farmer incomes to large tracts of land locked up in low value agriculture. There is a high potential pay-off associated with re-allocating public expenditures and associated policies towards best potential investments for outcomes, with a focus on reforms in wheat, irrigation, fertilizers, and marketing, plus concomitant investments in improved service delivery, agricultural R&D, and insurance.

7. **The rural non-farm sector in Punjab is of great importance to Punjab's economic growth but remains underdeveloped.** Farm households in Punjab on average earn almost half their income from non-farm activities. But poor access to and high cost of finance, inefficient markets, low levels of skills, insufficient power, and a weak enabling environment are key constraints hindering the growth of the rural non-farm sector. 77% of total rural non-farm

employment remains informal. Female labor force participation in rural Punjab is 33% compared to over 70% for men.

8. **The Government of Punjab has shown commitment to transform the agriculture and rural sectors.** The GoPunjab recognizes that increasing productivity with a focus on supply chain development and value addition would require improved competitiveness in agriculture marketing and trade, and a conducive climate for private investment. The GoPunjab passed a revised Seed Act in 2015, and produced a draft Draft Plant Breeders Act in 2015 and a revised Produce Marketing Act in 2012. It also produced a draft Integrated Water Policy and provides support to high-efficiency irrigation systems with financing from the World Bank. Moreover, the GoPunjab is implementing a considerable rural roads program and aims at strengthening rural institutions through the Punjab Rural Support Program. The Chief Minister of Punjab has constituted a Steering Committee for agricultural and rural transformation, including senior Cabinet members and heads of Departments, advisors to the Chief Minister, academia, private sector representatives, and World Bank staff.

9. **The proposed Program is fully aligned with the World Bank’s Country Partnership Strategy (CPS) (FY2015-2020) objectives of private sector development and inclusion, and the Bank’s twin goals to end extreme poverty and promote shared prosperity.** The SMART Punjab PforR will assist the GoPunjab’s program aimed at promoting crop and livestock productivity, private sector engagement in farm and non-farm businesses, deregulating crop and livestock markets, and enhancing resilience. By promoting private investments, the program will lead to more and better jobs— especially for women and youth – thus contributing to reducing underemployment and poverty. It will also contribute to enhancing sustainability and resilience in the sector. The Program will specifically support Outcome 2.2: “Increased Productivity in Farms”, Outcome 3.1: “Increased Financial Inclusion for micro, small and medium enterprises (MSMEs) and Women”, Outcome 3.2: “Reduced Vulnerability for Groups at Risk”, Outcome 4.1: “Improved Public Resources Management” and Outcome 4.4: “Adoption of Performance and Transparency Mechanisms in Selected Institutions.”

10. **A PforR is considered to be the most suitable instrument for the SMART Program.** The PforR instrument provides an ideal vehicle for prompting required behavioral changes by introducing performance-based incentives to ‘reward’ provincial and lower levels for improvements in agriculture management. A PforR disburses against agreed-upon results indicators verified through a credible verification mechanism, and as such focuses on measurable actions, outputs and outcomes through more sustained collaboration supported by a parallel program of technical assistance and disbursements over a number of years.

## **II. Program Development Objective(s)**

11. The development objective for the Program (hereinafter the “Program Development Objective” or “PDO”) is to support SMART policies, institutions and investments for a more productive, more value adding and more resilient agriculture to the benefit of smallholder farmers and agro-entrepreneurs in rural Punjab (including women).

12. As such the Program will contribute to the higher level objectives of the Punjab Growth

Strategy which is to catalyze Punjab GDP's growth led by the private sector.

13. Proposed PDO level indicators are as follows:

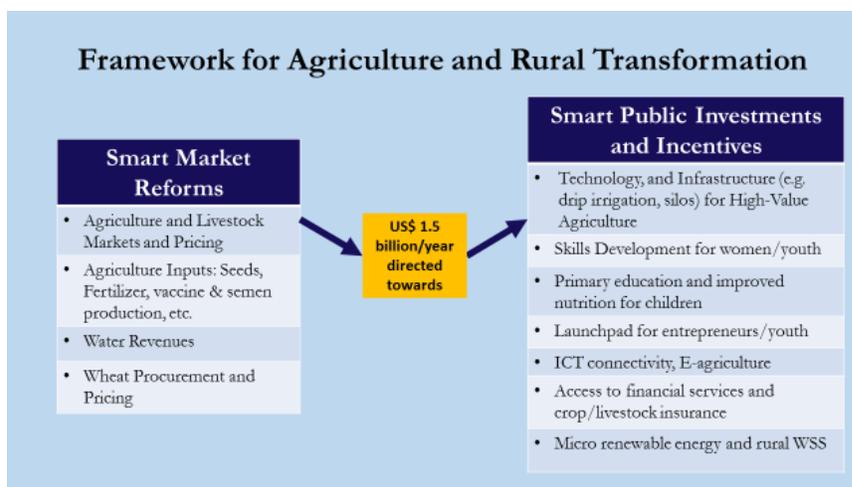
- (i) *Increased productivity of crop and livestock smallholder farmers (of which X% women).* This first key result will be measured by improved crop and livestock yields.
- (ii) *Increased value addition.* This will be measured by changes in the area under high value agriculture and turnover of rural MSMEs supported by the Program (of which X% led by women).
- (iii) *Improved resilience.* This will be measured by number of farmers covered by agricultural insurance and percentage of irrigation M&R expenses covered by *abiana*.

14. The SMART PforR will focus on three key Results Areas that are closely aligned to the SMART government program. Each of these Results Areas will involve a specific combination of policy reforms, institutional strengthening and public investments.

Results Area 1: Increased productivity for crop and livestock smallholder farmers. This first key result will be achieved through support to SMART reforms in the policy regime governing the farm and non-farm sectors leading to a reorientation of public expenditures from subsidies towards targeted investments aimed at increased productivity, shift towards high value agriculture commodities, improved water efficiency, productivity and management, deregulation of farm and non-farm markets, and further development of value chains. Improved targeting of remaining subsidies forms a key part of this program result. Interventions will span policy aspects of diversification to high value commodities including phasing out of wheat procurement; removing price caps on milk and meat products; improve agricultural marketing; promote agriculture research and innovative extension; improve animal health care and breeding; and promote private services delivery, smallholder-based dairy operations, quality inputs and skills development.

Results Area 2: Increased value addition. Allocations to agriculture should increase substantially through utilizing some of the resources released as a result of policy and institutional reforms. Improved public investment targeting will be achieved by strengthening the planning process underpinning the allocations in the ADP and providing performance incentives for participating departments and the private sector to develop and implement policies and investments that aim to stimulate agriculture growth, promote post-harvest management and value chains, and improve food safety. Implementation of SMART will especially require high-level coordination among the major departments driving agriculture, livestock, irrigation and MSME development in the province (see Figure 1 below) and the improved policy regime. The SMART framework will also promote these public investments to be made in partnership with the private sector to increase their leverage, relevance and efficiency. To alleviate access to finance constraints in the private sector, a matching grants scheme will be developed with special emphasis on including women entrepreneurs to further stimulate private sector investments in both the farm and non-farm rural economy. The fund would focus on commercial activities that are matched by the benefitting companies and share the investment risk, leverage private sector funds, and ensure a wider social impact, such as drawing smallholder farmers into HVA value chains.

**Figure 1 SMART Framework for Agriculture and Rural Transformation**



**Results Area 3: Sustainability and improved resilience to climate change and natural disasters.**

To preserve its poverty and shared prosperity gains, the Punjab needs to make concerted efforts at adaptation to conserve its water resources and build resilience. The third key result will be achieved through support to improved agricultural insurance products and extended coverage, improved water pricing and groundwater management, and improved irrigation infrastructure M&R contributing to higher water efficiency, productivity and security. The PforR will support strengthening the institutional capacity of, and trans-sectoral linkages between, key public institutions responsible for agriculture and rural. Institutional strengthening and change also imply a reorientation of the functions of public institutions away from direct market interventions towards control and enforcement.

**III. Program Description**

15. The core of the Government’s program towards agriculture and rural transformation is articulated in section 3.4 of the Punjab Growth Strategy 2018 “Improving Productivity in Agriculture and Livestock” and Chapters 6 (“Improving Agricultural Productivity and Market Access”) and 7 (“Focusing on Livestock and Dairy”) of the same document. The Government’s vision is further described in the Punjab Agriculture Sector Plan 2015 and the Punjab Livestock & Dairy Development Policy 2015. The Punjab Skills Sector Plan 2018 and the Punjab Industries Sector Plan 2018 are also relevant in defining the Government’s program.

16. The Government has envisioned stimulating growth in agriculture by facilitating productivity, enhancing resilience, increasing competitiveness in agriculture marketing and trade by providing a conducive climate for private investment, and improving supply chains and value addition. The Government’s vision is operationalized through seven focus areas (called “Strategic Components”) listed in Table 1 below.

17. The Government’s program is supported by a capital budget for agriculture and irrigation of US\$3.25 billion over five years (FY15 to FY19), out of which US\$1.3 billion is allocated to agriculture. Funds already spent during FY15 and FY16 amount to US\$0.38 billion, leaving approximately US\$2.8 billion for planned expenditures during the remaining period. Funding from the SMART PforR would contribute another US\$0.3 billion. In addition, the GoPunjab

spends an estimated US\$1.5 billion each year on subsidies in the agriculture sector, part of which is expected to be diverted towards investments in the sector. The GoPunjab is also allocating an additional US\$950 million over FY17 and FY18 through the Kissan Package.

18. SMART Punjab will support selected parts of the GoPunjab's program by helping the Government to bring transformational change in the agriculture, livestock, water resources (surface irrigation and groundwater) management, and the rural non-farm sector with a focus on increasing productivity, improving the functioning of markets including food safety, supporting the rural non-farm economy, and enhancing resilience and inclusiveness over a five-year period. The activities supported under SMART support Strategic Components 1, 2, 4, and 5 of the Government program. A preliminary set results indicators (including Prior Results, DLIs and other (non-disbursement linked) results indicators) for SMART Punjab for each Results Area is outlined in Table 2. These have been agreed upon with the Government.

19. The Bank will disburse funds to the GoPunjab through the Planning and Development Department (P&D) based on the submission of consolidated, verified information on program performance against the DLIs. P&D will then be responsible for the release of funds to participating Departments following the agreed Program Fund Flow Guidelines. P&D will arrange for Independent Verification Arrangements (IVA) for conducting results verification, including detailed technical audits that will verify the degree of achievement of each DLI. The verification agency will report their results to P&D, other participating Departments and the Bank as the basis for disbursement.

**Table 1. Summary of Government program and PforR**

Item	Government of Punjab program	PforR
Title	Punjab Growth Strategy 2018 Punjab Agriculture Sector Plan 2015 Punjab Livestock and Dairy Development Policy 2015 Punjab Skills Sector Plan 2018 Punjab Industries Sector Plan 2018	Punjab Strengthening Markets for Agriculture and Rural Transformation (SMART) Program
Objective	To facilitate productivity, increase competitiveness in agriculture marketing and trade by providing a conducive climate for private investment, and improving supply chain and value addition	To support SMART policies, institutions and investments for a more productive, m value adding and more resilient agricultur the benefit of smallholder farmers and agr entrepreneurs in rural Punjab (including women)
Focus Areas	Strategic Components: 1. Improving crop and livestock productivity 2. Development of value chains 3. Better use of energy 4. Increasing high-value agriculture 5. Improving land resources and environment and climate change mitigation 6. Increasing cultivated area 7. Regulatory and institutional changes	Results Areas: 1. Increased productivity for crop and livestock smallholder farmers 2. Increased value addition 3. Sustainability and improved resilience climate change and natural disasters
Financing	The program is being financed under the	US\$300 million over five years

Medium Term Development Framework with an investment of US\$3.252 billion in Agriculture, Livestock and Irrigation; US\$1.213 billion in Farm to Market Roads and US\$1.5 billion annually in subsidies

**Table 2. SMART Punjab Disbursement-linked Indicators**

<b>Results Areas</b>	<b>Disbursement Linked Indicators</b>	<b>Implementing Agency</b>
<b>Results Area 1:</b> Increased productivity for agriculture and livestock smallholders (of which X% women)	<b>DLI#1 - XXX farmers access fertilizer subsidies through e-vouchers</b> <ul style="list-style-type: none"> <li>E-voucher-based subsidy for potash fertilizer implemented<sup>3</sup></li> <li>E-voucher-based subsidy for DAP and urea fertilizer implemented</li> </ul>	Agriculture Department
	<b>DLI#2 - Provincial crop and livestock research and extension systems revitalized</b> <ul style="list-style-type: none"> <li>Board of Directors of the Punjab Agriculture Research Board revamped including private sector representatives<sup>4</sup></li> <li>A total amount of US\$ YYY / x% of AgGDP (quantified by year) allocated to research of which xx% channeled through competitive research grants with private sector participation</li> </ul>	Agriculture Department  Livestock Department  PARB  P&D
<b>Results Area 2:</b> Increased value addition (area under high value agriculture and turnover of rural MSMEs supported by the Program, of which X% led by women)	<b>DLI#3 - Deregulation of Wheat and Livestock Markets</b>  <b>Wheat:</b> <ul style="list-style-type: none"> <li>Punjab Agriculture Policy notified by GoPunjab<sup>5</sup></li> <li>Wheat procurement system abolished</li> <li>Strategic grain reserve of 1 million MT established</li> <li>Food Department restructured to focus on food safety and management of strategic wheat reserve</li> <li>At least 50% of freed-up fiscal resources used to support farmers' transition towards High Value Agriculture (HVA)</li> </ul> <b>Livestock:</b> <ul style="list-style-type: none"> <li>Price cap on meat removed<sup>6</sup></li> <li>Price cap on fresh milk removed</li> </ul> <b>Agricultural Marketing:</b> <ul style="list-style-type: none"> <li>Draft Agriculture Produce and Modernizing Markets</li> </ul>	Agriculture Department  Food Department  Department of Industries

<sup>3</sup> Proposed as Prior Result

<sup>4</sup> *Ibid*

<sup>5</sup> *Ibid*

<sup>6</sup> *Ibid*

	Act approved and notified <sup>7</sup>	
	<b>DLI#4 - US\$XXX awarded in matching grants</b> <ul style="list-style-type: none"> <li>• Matching grants scheme for Agri-business, post-farm value chain segments and MSMEs with YY% awarded to women</li> </ul>	Agriculture Department  Industries Department  P&D Department
<b>Results Area 3:</b> Sustainability and improved resilience to climate change and natural disasters	<b>DLI#5 - Abiana increased to Rs XXX/acre/year by 2021</b> (through series of increases starting in 2018)	Irrigation Department  Agriculture Department
	<b>DLI#6 - Agricultural Insurance: XXX farmers covered by agricultural insurance by &lt;year&gt;</b>	Agriculture Department

20. The proposed Program is being designed in coordination with existing programs of the implementing departments including P&D, Agriculture Department, Food Department, Livestock Department, Irrigation Department, Industries Department and Finance Department. The institutional arrangements under the Program will be aligned with the structures of the GoPunjab. At the central level, P&D will coordinate implementation of the Program through a dedicated Program Implementation Unit within the Punjab Public Management Reform Program (PRMP).

**IV. Initial Environmental and Social Screening**

21. **Environmental Safeguard Management.** The Punjab Environmental Protection Act 1997 (amended in 2012) is the principal legislative tool empowering the GoPunjab for the protection of the environment. Supporting regulations also exist - most notably the Pakistan Environmental Protection Agency Review of Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) Regulations (2000). In addition, National Environmental Quality Standards (NEQS) define the maximum permissible limits for emissions, effluents, vehicle exhausts, ambient air quality, noise and drinking water. Institutional arrangements are also in place in the form of the Punjab Environmental Protection Agency (EPA), supported by a District Officer (Environment) in each district in the Province. However, environmental governance remains poor and is causing public health impacts and resource depletion. Issues with environmental governance include weak implementation of environmental laws, and insufficient focus on monitoring, environmental data collection and analysis, and reporting/ information dissemination. Specific environmental regulatory frameworks, if available, at the level of the implementing entities will be assessed during preparation.

22. **Social Safeguard Management.** A social assessment will be conducted across the project area to ascertain social impacts and recommend mitigation measures. Attention will be

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<sup>7</sup> Ibid

paid to social and environmental sustainability of the Program; social exclusion and marginalization particularly of vulnerable groups, including women, minorities, landless tenants and sharecroppers, communities in remote areas, and the poor in general; labor issues including public and worker safety; conflicts (social and institutional) that may arise as a consequence of proposed reforms and investments; and any potential land acquisition.

**23. Environmental and Social Impacts and Risk Mitigation of Program Activities.** Policy reforms and infrastructure investments supported by the Program are expected to have environmental and social impacts. These are considered moderate to substantial, given the objective of improving crop and livestock productivity and increasing investment in farm and non-farm MSMEs. Examples of cumulative impacts that can potentially develop from the combined impacts of more than one activities under the Program, especially in absence of diligent implementation of project mitigation measures, might include, amongst others: (i) increased use of chemical fertilizers which will have downstream impacts, including water contamination and eutrophication of water sources; (ii) reduced water to downstream users due to an irrigation structure whose design has not taken into account other irrigation structures in the same watershed; and (iii) increased sedimentation of the natural water bodies and valleys; (iv) possible contribution of rural roads rehabilitation to soil erosion; and (v) land conversion. The Program design will exclude the construction of large scale agriculture facilities and will avoid issues related to land use as well as impacts on natural habitats and physical cultural. No risks are expected on workers or communities if sound environmental management practices are adopted.

**24. If properly managed and mitigated, environmental and social impacts are not expected to be detrimental or cumulative in the long-term.** On the other hand, many reforms and infrastructure investments (particularly in irrigation systems, ground water management and agricultural management in general) might result in environmental enhancement and natural resources management improvements if they mainstream environmental aspects in their design. The management of these effects will be addressed through the preparation of an environmental and social systems assessment (ESSA) using Bank guidelines for the PforR financing instrument. The ESSA will review systems for managing environmental and social risks, with a particular focus on the capacity and systems to manage risks associated with the menu of reforms and infrastructure investments of the EPD/EPA, Planning and Development Department (P&D), Agriculture Department, Food Department, Livestock Department, water resources (Irrigation) Department, Industries Department and Finance Department, as well as other institutional structures of the GoPunjab that might be aligned to the Program. P&D will coordinate implementation of the Program through a dedicated Program Implementation Unit within the Punjab Public Management Reform Program (PRMP). The capacity of this unit to manage environmental aspects will be also assessed.

**25. The critical mitigation measures identified in the ESSA will be incorporated into the PAP and may also be reflected in DLIs.** In those cases where it is applicable, implementing agencies will be required to conduct an IEE or EIA for activities under the Program and obtain approval from the provincial EPA. The specific mitigation measures will be included in the respective environment and social instruments, as per the existing environmental management system and processes in Punjab province. Stakeholder consultations will be an integral part of these assessments.

26. **ESSA Disclosure.** Prior to appraisal, the draft ESSA will be disclosed alongside the PID with a summary of ESSA findings and recommendations. Consultations will be held with relevant stakeholders on the draft (and proposed specific actions, if necessary) before or during appraisal, and recommendations received will be incorporated in the final ESSA.

**V. Tentative financing**

Borrower/Recipient:		
IBRD		\$300 m
IDA		
Others (specify)		
	Total	\$300 m

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