



Completion Report

Project Number: 33364
Loan Number: 2171-PAK (SF)
September 2012

Pakistan: Agribusiness Development Project

CURRENCY EQUIVALENTS

Currency Unit – Pakistan rupee/s (PRs/PRs)

		At Appraisal	At Project Completion
		30 April 2005	31 March 2011
PRs1.00	=	\$0.0168	\$0.0114
\$1.00	=	PRs59.36	PRs87.56

ABBREVIATIONS

ADB	–	Asian Development Bank
ASF	–	Agribusiness Support Fund
BDS	–	business development services
DALPMG	–	Department of Agriculture and Livestock Product Marketing and Grading
FSCRD	–	Federal Seed Certification and Registration Department
GDP	–	gross domestic product
GlobalGAP	–	Global good agricultural practices
GPU	–	germ plasm unit
HPU	–	horticulture production unit
LDDDB	–	Livestock and Dairy Development Board
MINFA	–	Ministry of Food and Agriculture
NAP	–	national agribusiness policy
NAPHIS	–	National Animal Plant Health Inspection Service
PCR	–	project completion report
PFI	–	participating financial institution
PHDEB	–	Pakistan Horticulture Development and Export Board
PHDEC	–	Pakistan Horticulture Development and Export Company
PICC	–	project implementation coordination committee
PIO	–	project implementation office
PMU	–	project management unit
PPMS	–	project performance monitoring system
PSC	–	project steering committee
RRP	–	report and recommendation of the President
RSP	–	rural support program
SBP	–	State Bank of Pakistan
TOT	–	training of trainers
WTO	–	World Trade Organization

NOTES

- (i) The fiscal year (FY) of the Government and its agencies ends on 30 June. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2000 ends on 30 June 2000.
- (ii) In this report, "\$" refers to US dollars.

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BASIC DATA

A. Loan Identification

1.	Country	Pakistan
2.	Loan Number	2171
3.	Project Title	Agribusiness Development Project
4.	Borrower	Islamic Republic of Pakistan
5.	Executing Agency	Ministry of Food and Agriculture
6.	Amount of Loan	SDR20.165 million
7.	Project Completion Report Number	1335

B. Loan Data

1.	Appraisal	
	– Date Started	25 January 2005
	– Date Completed	4 February 2005
2.	Loan Negotiations	
	– Date Started	28 March 2005
	– Date Completed	30 March 2005
3.	Date of Board Approval	19 May 2005
4.	Date of Loan Agreement	14 June 2005
5.	Date of Loan Effectiveness	
	– In Loan Agreement	12 September 2005
	– Actual	09 January 2006
	– Number of Extensions	1
6.	Closing Date	
	– In Loan Agreement	31 March 2011
	– Actual	30 September 2011
	– Number of Extensions	0
7.	Terms of Loan	
	– Interest Rate	1% per annum during the grace period and 1.5% per annum thereafter
	– Maturity (number of years)	32 years
	– Grace Period (number of years)	8 years

8. Disbursements

a. Dates

Initial Disbursement	Final Disbursement	Time Interval
08 June 2006	30 September 2011	63 months
Effective Date	Original Closing Date	Time Interval
09 January 2006	31 March 2011	63 months

b. Amount (SDR'000)

Category or Subloan	Original Allocation	Last Revised Allocation	Amount Canceled	Net Amount Available	Amount Disbursed	Un-disbursed Balance
Equipment	585.50	244.37	341.13	244.37	206.85	37.52
Vehicles	585.50	153.66	431.84	153.66	146.81	6.85
Agriculture Support Fund	-	79.76	(79.76)	79.76	78.11	1.65
Farmers enterprise group formation	1,200.30	937.06	263.24	937.06	874.05	63.01
Agribusiness enterprise support	6,407.83	4,232.11	2,175.72	4,232.11	2,784.57	1,447.54
Training, workshops, and awareness campaigns	846.00	225.23	620.77	225.23	32.82	192.42
Consulting services	2,797.00	1,347.19	1,449.81	1,347.19	1,256.79	90.40
Technical services, studies, and surveys	390.00	60.09	329.91	60.09	47.74	12.35
O&M and administration	6,635.00	3,089.77	3,545.23	3,089.77	2,776.41	313.36
Interest charge	520.00	520.00	-	520.00	190.96	329.04
Unallocated	197.88	641.00	(443.12)	641.00	-	641.00
Total	20,165.00	11,530.23	8,634.77	11,530.23	8,395.10	3,135.14

10. Local Costs (Financed)

- Amount (\$ million)	10.60
- Percent of Local Costs	55
- Percent of Total Cost	49

C. Project Data

1. Project Cost (\$ million)

Cost	Appraisal Estimate	Actual
Foreign Exchange Cost	8.30	2.39
Local Currency Cost	40.70	19.20
Total	49.00	21.59

2. Financing Plan (\$ million)

Cost	Appraisal Estimate	Actual
Implementation Costs		
Borrower Financed	6.90	8.60
ADB Financed	30.20	12.70
Other External Financing	11.10	-
Total	48.20	21.30

IDC Costs		
Borrower Financed		
ADB Financed	0.80	0.29
Other External Financing		
Total	49.00	21.59

ADB = Asian Development Bank, IDC = interest during construction.

3. Cost Breakdown by Project Component (\$ million)

Component	Appraisal Estimate	Actual
A. Base Cost		
1. Agribusiness support service provision	23.80	12.46
2. Agribusiness finance development	4.50	0.00
3. Agribusiness capacity building	10.50	1.08
4. Agribusiness policy formulation and enabling environment development	0.60	0.00
5. Project management support	7.40	7.76
Subtotal (A)	46.90	20.30
B. Contingencies		
1. Physical contingencies	1.30	0.00
2. Price contingencies	0.00	0.00
Subtotal (B)	1.30	0.00
C. Interest During Construction	0.80	0.29
Total	49.00	21.59

4. Project Schedule

Item	Appraisal Estimate	Actual
Date of Contract with Consultants		
Agribusiness Support Services Consultants	Jul 2006	Apr 2006
Agribusiness Finance Development Consultants	Apr 2006	Jul 2008
Equipment and Supplies		
Dates		
First Procurement	Jan 2006	Nov 2006
Last Procurement	Dec 2007	Jun 2008

5. Project Performance Report Ratings

Implementation Period	Ratings
	Development Objectives and Implementation Progress
From 1 January 2006 to 31 December 2006	Satisfactory
From 1 January 2007 to 31 December 2007	Satisfactory
From 1 January 2008 to 31 December 2008	Satisfactory
From 1 January 2009 to 31 December 2009	Satisfactory
From 1 January 2010 to 31 December 2010	Satisfactory
From 1 January 2011 to 30 September 2011 ¹	Potential Problem

Source: ADB project performance reports and eOperations databases.

D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members ^a
Fact-finding	23 Nov–2 Dec 2004	3	27	a,b,c
Appraisal	25 Jan–4 Feb 2005	5	32	a,c,d,e,f
Inception	27 Jul – 4 Aug 2005	5	40	g,h,i,j,j
Inception/review	30 Mar–5 Apr 2006	3	15	g,h,j
Contact/consultation	24–26 Jul 2006	1	3	k
Special review	2–3 Oct 2006	1	2	k
Special loan admin	13–15 Mar 2007	1	3	k
Special project admin.	11–14 Aug 2007	2	8	h,l
Special project admin.	6–17 Dec 2007	2	16	m,n
Mid-term review	6–29 May 2008	3	59	m,o,p
Review	27 Jul–3 Aug 2009	3	24	m,h,q
Project completion review	11–28 Nov 2011	3	27	p,r,s

^a a = principal project economist, b = agribusiness development specialist (consultant), c = agribusiness finance specialist (consultant), d = counsel, e = country economist, f = programs officer, g = project economist, h = project implementation officer, i = project implementation specialist, j = SSTA consultant, k = project specialist (rural development and finance), l = project administration unit head, m = rural development specialist (agribusiness and marketing), n = rural development economist, o = senior rural development specialist, p = project analyst, q = assistant project analyst, r = principal natural resources and agriculture specialist, s = project completion review consultant.

Source: ADB back-to-office reports.

¹ Effective 1 January 2011, the project performance report system was replaced by the Oracle-based eOperations Projects database. The new system no longer provides separate ratings of development objectives and implementation progress and instead gives an overall project rating.

I. PROJECT DESCRIPTION

1. In 2005, when the Asian Development Bank (ADB) approved the Agribusiness Development Project, commercial agriculture and agribusiness development in Pakistan was constrained by poor energy, transport, and storage infrastructure, as well as weak sector institutions, policies, and governance practices.¹ Access to modern technology and to financial and business development services was inadequate. The project was designed to address constraints to development of the sector and to exploit domestic and export market opportunities for agribusiness to increase economic growth and rural employment. The project was to help realize these opportunities by (i) improving the managerial, production, and processing skill levels of entrepreneurs and farmers to ensure the production of good quality raw material and uniform, high standard products; (ii) support increased agribusiness lending by participating financial institutions (PFIs), which would allow stakeholders to exploit the market opportunities; (iii) reorienting government institutions to facilitate agribusiness development through public–private partnerships; (iv) making the policy, regulatory, and financial environment more responsive to private sector needs, thus encouraging producers and entrepreneurs to invest in agribusiness; and (v) establishing the framework and standards necessary for the country’s agribusinesses to comply with increasingly stringent international standards. While the project was to focus primarily on horticulture and horticultural business, it also included interventions to improve the institutional framework and support for selected enterprises in the livestock and dairy subsector.

II. EVALUATION OF DESIGN AND IMPLEMENTATION

A. Relevance of Design and Formulation

2. The project was consistent with and was included in ADB’s country strategy and program for Pakistan for 2002–2006, which noted the agribusiness sector’s potential contribution to economic growth and poverty reduction. The project design closely followed the design formulated by a project preparatory technical assistance (TA) from ADB.² The impact and outcome objectives in the design and monitoring framework were overly ambitious and lacked concise, readily quantifiable targets. Originally, two ministries were to be involved—the Ministry of Food, Agriculture, and Livestock, which was to be the executing agency, and the Ministry of Commerce.³ This increased to three during implementation when the Ministry of Livestock and Dairy Development was formed in 2009, a change that posed potential ownership and coordination difficulties. At least two of the project’s capacity building subcomponents involved significant institutional and policy reform, which had implications for the levels of consultation, executive management, and time that would be required during project implementation. Only minor changes were made during implementation to improve the relevance of the project. These included the establishment of provincial and special areas liaison offices so that the Agribusiness Support Fund (ASF) that was created under the project would have representatives closer to its potential client base. The ADB midterm review recommended that the project management unit (PMU) be moved from Islamabad to Lahore, which would have placed management closer to the main client base of the project and reduced operating costs but this was not done.

3. The project preparatory TA work began in January 2004 and concluded in August 2004. It supported two competitive advantage studies carried out under separate contracts in 2005 to

¹ ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Islamic Republic of Pakistan for the Agribusiness Development Project*. Manila.

² ADB. 2002. *Technical Assistance to the Islamic Republic of Pakistan for Preparing the Agribusiness Development Project*. Manila.

³ The executing agency was the former Ministry of Food, Agriculture and Livestock (MINFAL). In 2009 a new Ministry of Livestock and Dairy Development was established. MINFAL subsequently became the Ministry of Food and Agriculture (MINFA).

coincide with loan processing. The study covered Pakistan's four provinces. The initial TA design had a very wide scope but ADB and the executing agency later agreed that the primary focus would be the horticulture subsector and that the livestock and dairy subsectors would also be studied but on a limited basis. The TA would have led to a more implementable design if it had carried out more in-depth analysis of the institutions that were to be involved in the eventual project. Given the repeated emphasis on the importance of the private sector, the study lacked sufficient analysis of why private sector institutions would be more effective than government institutions. Although frequent reference was made in the study report to value chains, the project design that resulted from the TA adopted too broad an approach that was likely unmanageable instead of selecting a limited number of export-oriented value chain links for attention and effective implementation. The competitive advantage studies were satisfactory.

B. Project Outputs

4. The performance targets from the design and monitoring framework in the report and recommendation of the President (RRP) and the project's actual achievements are in Appendix 1.⁴ The intended and actual outputs under the project's five components are detailed in paras. 5-18.

Component 1: Agribusiness Support Service Provision

5. This component was to facilitate increased access by agribusiness enterprises to business development services (BDS). This was to be achieved by providing financing to eligible services for capacity building in technical, managerial, financial, and marketing skills. The ASF was to be established to provide funds to eligible agribusiness enterprises, farmers, research and extension service providers, and BDS providers. To support the entry of small farmers into agribusiness, the ASF was to finance 100% of the cost of establishing farmer enterprise groups, using nongovernment organizations as service providers. With the support of nongovernment organizations, 2,000 farmer enterprise groups were formed by project completion against a target of 1,250. The groups represent over 20,000 farmers and 1,949 of them received BDS support for establishing microenterprises, compared with the target of 1,250. The ASF has provided funding to 471 existing and 115 start-up enterprises against targets of 360 and 345, respectively. The ASF said the significant shortfall in funding start-up enterprises resulted from the non-implementation of a partial credit guarantee scheme envisioned under the project, which limited access to the capital needed. The ASF also funded (i) 11 demand driven research projects, against a target of 25 projects; (ii) 29 private sector agriculture extension projects, against a target of 14; and (iii) 80 BDS providers, against a target of 100. A total of 712 training and capacity building programs were conducted for the 80 BDS providers, which included individuals, companies, and organizations.

Component 2: Agribusiness Finance Development

6. This component aimed to develop financial services for agribusiness enterprises that did not have ready access to them, with a particular emphasis on providing them credit. The project was to help participating financial institutions (PFIs) develop an understanding of the potential agribusiness finance market and to enhance their capacity to undertake agribusiness lending. The result of this component was to be expanded agribusiness lending through establishment of commercially viable agribusiness loan portfolios by 3–5 select PFIs, including qualified and experienced staff. The State Bank of Pakistan (SBP) was the implementing agency for this component. The PFIs were expected to mobilize their own resources for agribusiness lending. The SBP recruited an international finance expert for 6 person-months to build awareness and assess the strategy and capacity of a number of local financial institutions that it considered suitable for rural banking and financing training programs that would enhance their capacity to understand and undertake agribusiness lending. The input was

⁴ The original DMF was revised as part of the ADB-wide eOperations DMF retrofit exercise in 2011.

successfully delivered in 2006. The SBP signed a consultancy contract in June 2008 for the provision of training to the PFIs but the consultant later withdrew, citing the contract's force majeure clause due to a deteriorating security situation in Pakistan and the September 2008 bombing of the Marriott Hotel in Islamabad. Protracted negotiations by both the SBP and ADB with the firm that had ranked second in the bidding were unsuccessful because its bid price was nearly twice that of the winning company. With limited time remaining for project implementation, the executing agency followed the recommendation of the project steering committee (PSC) not to restart the recruitment process. In addition, a proposed partial credit guarantee facility that was to be established under a separate ADB project to support agribusiness lending by the PFIs was not implemented.⁵ As a result, this component's expected outputs did not materialize.

Component 3: Agribusiness Capacity Building

7. The component was to (i) support the rationalization, restructuring, and coordination of the agencies and offices in the Ministry of Food and Agriculture (MINFA) that were concerned with alignment with World Trade Organization (WTO) regulations and international product standards; (ii) promote the development of market information provision by the public and private sectors; (iii) strengthen the capacity of Department of agriculture and livestock product marketing and grading (DALPMG) in export quality certification; (iv) strengthen the Federal Seed Certification and Registration Department (FSCRD) in seed and planting material certification; (v) facilitate implementation of project activities in the horticulture sector, including the provision of training to strengthen the capacity of various agribusinesses; and (vi) support the establishment of a livestock and dairy development board (LDDDB) as a corporate entity to enhance and expand activities in the livestock sector.

8. **Rationalization and restructuring.** The project supported the intended rationalization, restructuring, and coordination of the National Animal Plant Health Inspection Service (NAPHIS) and the economic, trade, and investment wing of MINFA, and the DALPMG. A consultant prepared a report with recommendations for MINFA rationalization and restructuring. The report included a strategy for institutionalization of food safety and for the allocation of functions and responsibilities through NAPHIS. Several ADB missions identified a need to complete this process by creating a competent authority and functional relationships between the three departments. In 2008, ADB recommended revising the consulting contract to include an assessment of the institutional framework for food safety, the functions of NAPHIS, and the functional roles of the DALPMG and the economic, trade and investment wing. MINFA never acted on this recommendation.

9. **Market information.** The market information subcomponent aimed to promote the provision of market information by the private sector. This effort was to focus initially on the 11 wholesale markets in the country and the major export markets for fruit and vegetables. The DALPMG would continue to provide market information for those products the project would not cover. Project inputs were to include the provision of equipment for both the private sector service provider and for 11 market committees. The project was to finance the provider's foreign exchange operating costs fully for 4 years, as well as 100% of the local costs in the first year and a declining percentage of these costs in each of the next 3 years. After 4 years, the provider was expected to finance operations from the sale of market information. Similar financing was to be given to market committees, except that it was to be provided by the government. How the committees were to be financed after the end of the project was not made clear and no details were provided in the RRP on how a private sector provider or providers might be contracted.

⁵ This facility was to have been supported by the ADB-financed Small and Medium Enterprise Sector Development Program. ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Islamic Republic of Pakistan for the Small and Medium Enterprise Sector Development Program*. Manila.

10. In the event, no firms interested in providing this service could be identified. This subcomponent did not receive the attention it required because there was no specific assignment of responsibility for its implementation. In addition, ADB review missions reported well into project implementation that the DALPMG staff was unsure about what was expected. It is likely the financial risk that a private sector firm would face by entering a largely new market was a significant deterrent. Collecting prices on a grade basis would have required that grade standards be formulated and introduced to the market level collection process before a provider could have been confident that good quality base data would have been available. Market information equipment was procured but retained by the DALPMG, largely because it said that it would have been impossible to provide loan financed goods to a private sector provider even if one had been contracted. Project support for this subcomponent was withdrawn in mid-2008.

11. **Export quality certification.** This activity was to strengthen the capacity of the DALPMG in export quality certification by (i) providing international training for key DALPMG staff; (ii) revising and updating national quality standards to make them consistent with international standards; (iii) upgrading the DALPMG's export certification centers; and (iv) introducing international standard operating procedures for sampling, inspection, and quality monitoring systems. International quality inspection services either through the DALPMG or the private sector were to be in place by 30 June 2007. This was to be accomplished by upgrading seven laboratories and revising 26 export standards to meet WTO/Codex Alimentarius requirements.⁶ By project completion, only two of the seven laboratories had been upgraded and 24 of the 26 standards had been revised and updated to international compliance standards. However, none of the 24 revised standards prepared under the project are being applied to Pakistan's food exports because the Cabinet removed the mandate for export certification from the DALPMG prior to loan approval and governments since then have taken no action to put them into force. ADB recommended in 2008 that MINFA facilitate restoration of the certification scheme by the DALPMG but the executing agency did not do so. Both DALPMG and MINFA were abolished under the 18th Amendment to the Constitution in 2011 and it remains unclear whether the federal and/or provincial governments will ever approve or implement the revised export standards.

12. **Seed and planting material certification:** The project aimed to strengthen the FSCRD. The outputs were to be (i) establishment of a practically based, efficient, and effective FSCRD with testing facilities located in all major commercial production areas; (ii) restoration of farmer confidence in the production by public and private sector nurseries and seed producers of quality propagating materials; (iii) creation of a local industry to produce selected varieties of vegetable seed; (iv) improvement in the quality of all planting materials; and (v) registration of fruit nursery producers and establishment of a producers' association to promote their activities. The FSCRD faced two key issues. The main one was the lack of germ plasm units (GPUs) to support the seed and planting material certification scheme. Without the GPUs, the material certification could not be implemented and the private sector would not have access to improved germ plasm. During the 2008 project midterm review, the FSCRD and ADB agreed that GPUs would be established in Punjab, Sindh, and Balochistan provinces.⁷ However, the agreement was not implemented by project completion. In addition, severe staffing constraints hampered the FSCRD efforts to achieve the subcomponent objectives in full. Despite these challenges, FSCRD support for the testing and provision of improved germ plasm under the project has been generally successful. Seven existing testing laboratories were upgraded and two new laboratories were established. Five standards were developed for plant material, 29 fruit varieties were registered, over 65,000 fruit plants were certified, training was conducted for 629 persons on the fruit plant certification scheme, and 124 fruit tree

⁶ Codex Alimentarius is a collection of internationally recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production, and food safety. Compliance with its provisions is not mandatory but they are the de facto reference standard used by the WTO in dispute resolution procedures.

⁷ A GPU already existed in Khyber Pakhtunkhwa province.

nurseries were registered. No progress was made on either the introduction of a plant variety rights scheme or an association for nursery owners.

13. Pakistan Horticulture Development and Export Board. With support from training coordinators of the provincial implementation offices (PIOs), the training coordinator of the horticulture production unit (HPU) of the Ministry of Commerce was to organize training to (i) develop agribusiness curricula and course content; (ii) strengthen the capacity of private sector trainers and the institutions or service providers that would provide training to entrepreneurs; (iii) improve technical and managerial skills in agribusiness enterprises; (iv) improve product output, quality, uniformity, and continuity of supply at the farm level; and (v) provide agribusiness training to provincial and special area staff. By project completion, the Pakistan Horticulture Development and Export Board, which subsequently became the Pakistan Horticulture Development and Export Company (PHDEC), had (i) developed 7 manuals for the training of trainers (TOT), (ii) trained 40 principals, (iii) conducted 120 TOTs for the faculties of government commerce colleges, (iv) carried out 80 TOTs at vocational training institutes, (v) managed the training of over 2,000 beneficiaries, and (vi) trained nearly 600 beneficiaries in technical subjects.⁸ The HPU's production of training materials was delayed due to late disbursement of funds by the PMU and slow consultant support in the preparation of manuals. In addition to its training responsibilities, PHDEC was required to help implement activities in the horticulture subsector and facilitate interaction with agribusiness enterprises. This included a promotional campaign to stimulate awareness of project activities. PHDEC had mixed success in this effort due mostly to a lack of senior management leadership in the HPU. By project completion, PHDEC had participated in the development of provincial and special areas horticulture policies. However, other outreach or promotional efforts were less successful.

14. Livestock and Dairy Development Board. The subcomponent supported the establishment of the Livestock and Dairy Development Board (LDDDB) as a corporate body to (i) coordinate national and provincial activities in the livestock and dairy subsector, (ii) promote investment in the sector, and (iii) promote livestock as the primary vehicle for poverty reduction among small and landless farmers, especially women. The subcomponent objectives were achieved. The LDDDB was established as a Section 42 company registered and incorporated by the Securities and Exchange Commission of Pakistan with a 15-person board of directors, including 9 from the private sector and 6 from the public sector, and a 43-member general body. From January 2007, when it became functional, to project completion, the LDDDB undertook six projects.⁹ The projects, which received financing from the government, supported farmer groups, including separate male and female groups and mixed gender groups. The LDDDB prepared a draft sustainability plan but it was not endorsed due to the division of the former Ministry of Food, Agriculture and Livestock into two separate ministries in 2009, with the LDDDB falling under the new Ministry of Livestock and Dairy Development. This development, along with the loss of the LDDDB's chief executive officer and the June 2011 devolution of the Ministry of Livestock and Dairy Development because of the 18th Amendment to the Constitution further delayed action on the sustainability plan. The LDDDB's continued existence is now uncertain due to public administration changes under the constitutional amendment.

⁸ Upon its incorporation in 2009 as a not-for-profit company pursuant to Section 42 of the Companies Ordinance, the Pakistan Horticulture Development and Export Board became the Pakistan Horticulture Development and Export Company.

⁹ The six projects include the following: (i) Milk Collection, Processing and Dairy Production and Development Program; (ii) Livestock Production and Development for Meat Production; (iii) Improving Reproductive Efficiency of Cattle and Buffalo Smallholders Production System; (iv) Improving Dairy Production in Pakistan through Improved Extension Services; (v) Feasibility Study for Progressive control of Foot and Mouth disease in Pakistan; and (vi) Poverty Reduction through Smallholders Livestock and Dairy Development.

Component 4: Agribusiness Policy and Enabling Environment Development

15. This component was to develop policies and an enabling environment appropriate for the development of private sector-led agribusiness. This was to include national and provincial interventions to (i) redefine roles and responsibilities in the sector; (ii) strengthen the regulatory framework and, in particular, align it with international standards; and (iii) create effective public-private partnerships to promote sector development. The planned output was to be an improved agribusiness policy and enabling environment accomplished through approval and implementation of a national agribusiness policy (NAP), provincial horticulture policies, and related actions by 31 December 2006. While a NAP framework was developed, it was not approved by the now defunct MINFA. Horticultural policies were prepared for seven provinces or special areas but only Khyber-Pakhtunkhwa and the Federally Administered Tribal Areas have approved and adopted their policies. Gilgit-Baltistan and Azad Jammu and Kashmir submitted their policies to the federal government for approval but that is still pending. In early 2010, draft horticulture policies for Balochistan, Punjab, and Sindh provinces were submitted to the respective chief ministers for review but no action has resulted. As the output of the project's support for the development of the regulatory framework and the establishment of quality and certification requirements for local products that aligned international standards, the subcomponent was to deliver amendments to at least four laws and to disseminate information to relevant stakeholders in the public and private sectors.¹⁰ Although an international consultant spent 4 months reviewing the legislation and proposed amendments, MINFA has not submitted the revised acts to Cabinet or Parliament for ratification.

Component 5: Project Coordination and Management Support

16. **Project coordination.** The loan agreement required the establishment of a PSC and project implementation coordination committee (PICC) that was to meet semiannually throughout the project. The PSC and PICC met regularly only during the project's first year, when they addressed start-up issues. The PSC did not meet for 2 years before a meeting in October 2009, when the PICC also met for the first time since July 2008. These meetings were held to deliberate key recommendations that had been made by an ADB review mission in August 2009 to improve project performance and that had later been reinforced in a meeting between staff of ADB's Pakistan Resident Mission and the secretary of MINFA in October 2009. The recommendations included (i) hiring staff to fill numerous vacant positions in the PMU; (ii) increasing staff salaries to ensure retention of existing staff; and (iii) relocating the PMU to Lahore, a move that ADB recommended to bring it closer to major project implementing agencies, such as the ASF and PHDEC, and accelerate project activities. By project completion, the government had taken no action on these recommendations. The inaction of the two committees severely impeded project implementation and compromised project success.

17. **Project management.** The project experienced repeatedly management problems despite commitments made by the executing agency to ADB to resolve them. There was a high turnover of key project staff. The project had three directors during the first 2 years of implementation. The HPU had no regular manager and the PMU had no full-time deputy directors for either finance and administration or monitoring and evaluation. Insufficient staffing was also a problem for the PMU, the PIOs, and the implementing agencies and especially affected the FSCRD. The staffing complement of 309 required for the project was never achieved. At the end of July 2008, 29% of all established posts in the PMU, the HPU, and the PIOs were vacant. The vacancy rate for professional staff was 43%. This problem remained largely unsolved at project closure. The PMU staff also received insufficient training in ADB procurement and disbursement guidelines and procedures. This resulted in procurement problems and withdrawal applications that were prepared incorrectly and led to

¹⁰ The laws to be amended included (i) the Pakistan Plant Quarantine Act (1976), (ii) the Federal Seed Certification Act (1976), (iii) the Agricultural Produce (Grading and Marketing) Act (1939), and (iv) the Pakistan Animal Quarantine (Import and Export of Animals and their Products) Act (1985).

delays in ADB replenishment of imprest accounts. The PMU experienced irregular counterpart funding. The release of counterpart funds was not timely and often less than required. In addition, no assignment account for counterpart funds was opened until 2009. There was also inadequate coordination between the PMU and key implementing agencies. The PMU was located in Islamabad, while key implementing agencies were located in Lahore. The ADB midterm review recommended that the PMU be relocated to Lahore to enhance overall project coordination. However, the executing agency did not take timely action on this recommendation. In October 2009, the PSC agreed to the move, but the executing agency did not follow through with it.

18. The PMU resources were also stretched. The PMU was mandated by the executing agency to implement a separate PRs1 billion block grant program which the government linked to the ADB-financed project. This spread the PMU's tight resources even more thinly.¹¹ The PMU's monitoring and reporting systems were weak. No project performance monitoring system (PPMS) was established, due in part to the lack of appropriate PMU staff to manage this process—for example, no deputy director for monitoring and evaluation. The consultant assigned to assist the PMU with PPMS establishment performed poorly. The critical baseline assessment for the project was only completed in early 2009. The submission of quarterly progress reports by the PMU was irregular and the quality of the reports was poor. In addition, neither PHDEC nor the LDDB submitted progress reports or audited financial statements to ADB.

C. Project Costs

19. The project's appraised cost was \$49.0 million, including taxes and duties, of which \$8.3 million (17%) was to represent the foreign currency cost and \$40.7 million (83%) the local cost. Financing was to come from a \$31.0 million ADB loan from the Asian Development Fund (covering 63.3% of the overall cost); \$6.9 million from the government (14.1%); \$10.4 million from agribusiness enterprises (21.2%), including members of farmer enterprise groups; \$0.6 million from private sector institutions (1.2%); and \$0.1 million from contributions from the beneficiaries. At completion, costs totaled only \$21.59 million, or 44.1% of the envisaged and approved amount. ADB financed \$12.99 million (60.2%) of the actual costs, the government financed \$4.26 million (19.7%), and agribusiness enterprises contributed \$4.34 million (20.1%), of which farmer enterprise groups contributed about half. There were no expenditures by private sector institutions and beneficiaries. Appendix 2 shows the project costs at completion by component. The main reasons for the underutilization of project funds were the complexity of the project design (para. 2), ineffective implementation arrangements (para. 22), the PMU's inadequate capacity and the resultant implementation delays, and limited ownership of the project by the executing agency (para. 27). In addition, expenditures expected under the agribusiness finance development component did not materialize because the consulting firm engaged to implement it did not mobilize due to the poor security situation in Pakistan at that time (para. 6).

D. Disbursements

20. Disbursements lagged generally behind the project design schedule. Except for component 5 (project management), where the actual disbursement was 105% of the estimated component cost at appraisal, disbursements were lower than estimated because the other components could not be implemented fully as appraised (paras. 8, 10, 13 and 15). Component 2, projected at appraisal to represent 9.2% of total project, was not implemented (para. 6). Total disbursement of the approved

¹¹ The government increased its financing by about \$17.6 million from the \$6.9 million agreed at loan negotiations to a total of about \$24.5 million. The additional financing was to be allocated to provinces and special areas on a block grant basis for activities similar to those being financed under the project. No changes were made in project management staffing, despite the total investment cost rising by about 34%. As a result, the project director was involved in considerably more work than originally envisaged, which in turn resulted in a de facto reduction in the time allocated to the management of the agreed project.

ADB loan was only \$12.99 million, including \$0.29 million in interest during construction, or 42% of the approved loan amount. Imprest account procedures were used for payments to contractors under individual contracts valued at less than \$100,000. Direct payments were made to the consultants, contractors, and suppliers for bills exceeding \$100,000. The original project design provided for establishment of four imprest accounts for the use of the ASF, MINFA, PHDEC, and the SBP. During project implementation, ADB approved a minor change in implementation arrangements to open an imprest account for the LDDDB and eight second-generation imprest accounts for the PIOs and the HPU. However, the executing agency did not proceed with opening the second-generation imprest accounts. All imprest accounts, except for the account with the SBP, were used. The disbursement procedures were efficient and ADB's processing of withdrawal applications was timely but inadequate capacity and frequent turnover of the staff of the executing and implementing agencies adversely affected disbursement and presented a persistent problem throughout implementation. It is important to note that concerned PMU staff received their first training by ADB on ADB disbursement procedures only in 2009—3 years after loan effectiveness. This was also an important reason for the delays in disbursements. Appendix 3 shows the projected and actual annual contract awards and disbursements for the project.

E. Project Schedule

21. The loan was approved on 19 May 2005. The loan agreement was signed on 14 June 2005 and became effective on 9 January 2006. At appraisal, the project was to be implemented over 5 years with a loan closing date of 31 March 2011. Actual project activities ceased on 31 December 2010 and the loan account was closed on 30 September 2011. Appendix 4 shows the actual and appraised implementation schedules. Implementation during the first year was expected to include putting the project management and implementation structure into place, establishing the ASF, setting up and implementing the monitoring and evaluation system, conducting planning and capacity building activities, contracting and mobilizing consultants, and starting work on policy formulation and creating the enabling environment. Subsequent years were to focus on the regulatory environment (during years 2 and 3), and on capacity building and training, ASF activities, and project management. The capacity building and training activities, policy formulation and creation of the enabling environment, recruitment of consultants, studies such as the baseline survey, and the establishment of the PPMS were delayed from the start. By the midterm review in May 2008, when about 50% of the loan period had elapsed, overall project progress in terms of loan funds disbursed was estimated at only 15%. The implementation schedule envisaged at appraisal was unrealistic and, ultimately, unachievable. Preparation of the schedule should have used a critical path approach in light of the project's complexity and its reliance on the success of many interdependent parts to achieve its overall objective.

F. Implementation Arrangements

22. The complex project design included an equally complex implementation arrangement. The project originally included two federal ministries. This increased to three in 2009 with the creation of the Ministry of Livestock and Dairy Development (para. 2). It also had six implementing agencies (the ASF, the SBP, PHDEC, the LDDDB, the FSCRD, and the DALPMG). The implementation structure included one PMU to be located with DALPMG, an HPU to be located in the Ministry of Commerce, and seven PIOs that were to report to the HPU (one for each of the four provinces and each of the three special areas). Problems with these implementation arrangements due to a lack of coordination between the PMU, the PIOs, and the implementing agencies were clear from the beginning. The loan inception mission noted that the implementation arrangements were not being followed. The PIOs were reporting to the PMU instead of the HPU. The mission noted that this shifted the management functions away from the private sector back to the public sector through the PMU at MINFA. Given this development, ADB agreed with the executing agency that the PIOs would report administratively to the PMU but that the agribusiness specialists would report

functionally to PHDEC or the LDDDB. Implementation arrangements were further complicated by the dispersed nature of project interventions. ADB did not provide the project administration manual to the PMU until 2009. This delay contributed to implementation problems.

G. Conditions and Covenants

23. While most loan covenants were complied with, several were not. Examples of loan covenants only partly complied with include those requiring borrower assurance of project participant compliance with schedule 6 of the loan agreement, submission of audited accounts by the implementing agencies, submission of quarterly progress reports, timely establishment and staffing of the PMU, timely meetings of the PSC and PICC, adoption of the national agribusiness policy and horticulture policies by the provinces and special areas, submission to the Cabinet and Parliament of amended federal laws aligned with the borrower's WTO commitments, and the timely provision of requisite counterpart funds. Covenants not complied with at all included but were not limited to requirements for (i) the borrower's timely establishment of a gender-disaggregated PPMS, (ii) submission to ADB of the borrower's project completion report, (iii) submission to ADB of progress reports and audited financial statements from PHDEC and the LDDDB, and (iv) the majority of the SBP covenants. Appendixes 5 – 8 provide the status of compliance with loan and project covenants.

H. Consultant Recruitment and Procurement

24. The project included two consulting services packages. The first consulting package included 3 contracts: (i) agribusiness support fund promotion and project management and studies, (ii) agribusiness capacity building and agribusiness policy and regulatory framework development, and (iii) agribusiness finance awareness building and monitoring. ADB recruited the consultants for the first two contracts. MINFA conducted the negotiations during two rounds. The first round was held 1–2 December 2005 and the subsequent round of negotiations took place 18–21 January 2006, with the contract being signed on 15 April 2006. The SBP recruited the consulting firm for the third contract, which was signed on 9 July 2008, after protracted negotiation. The second consulting package, which was to include 3–5 performance-based contracts, did not materialize. At project completion, 39.44 person-months of international and 102.52 person-months of national consultant inputs was provided, compared with the appraisal projections of 221 person-months of international and 128 person-months of national inputs. The consultants were recruited in accordance with ADB Guidelines on the Use of Consultants. Appendix 9 provides a summary of consulting services provided under the project.

25. The project was to include procurement of equipment and vehicles at an estimated cost of \$3.2 million. This was to be done through multiple contracts awarded using national competitive bidding but the actual procurement of vehicles did not meet these requirements. Most of the awards did not comply with the provisions of the loan agreement (schedule 4, para. 6), which required the borrower to seek prior approval of the award of all contracts under national competitive bidding. In one case, a lowest-price bidder was not considered for a contract for imported vehicles. In other instances, bids were invited for the supply of vehicles of a particular company. ADB disallowed payments for all procurement where the relevant ADB guidelines were not followed. As a result, disbursement from the ADB loan for equipment was \$0.315 million and only \$0.230 million for vehicles against the original allocation of \$0.900 million for each of the two categories.

I. Performance of Consultants, Contractors, and Suppliers

26. Given the large number and fragmented nature of many of the inputs, coordination of consultant services proved to be difficult. ADB agreed that a national consultant could be hired to assist with in-country coordination, which had a positive impact on consultant performance. However, delays by the government in responding to consultant outputs led, in some instances, to

less than ideal phasing of inputs. Several consultant outputs were not completed or were completed behind schedule and personnel changes were frequent. Overall, the performance of consultants was less than satisfactory, although implementation delays, security concerns, and inadequate government support all worked against a high level of consultant performance.

J. Performance of the Borrower and the Executing Agency

27. The borrower and executing agency experienced significant challenges in supporting effective implementation of the project. From its inception, the project faced problems exemplified by discrepancies between the project management structure presented in the loan agreement and that of the approved PC-1.¹² These discrepancies undermined the private sector orientation of the project and persisted throughout implementation. Project coordination and management was poor and key project implementation decisions were not implemented. Compliance with loan covenants was less than satisfactory. The executing agency did not provide adequate support for key project components designed to build capacity and to develop an effective policy regime and enabling environment to improve the agribusiness sector. Nor was there support for the work of consultants that was critical to the success of these components. The borrower's lack of support to the project was demonstrated by its failure to (i) approve secondary imprest accounts, (ii) approve the national agriculture policy framework, (iii) submit amended relevant laws to the Cabinet and Parliament, and (iv) provide adequate counterpart funds for project execution. The borrower also failed to prepare a project completion report. Overall, the performance of the borrower and executing agency is rated *unsatisfactory*.

K. Performance of the Asian Development Bank

28. ADB fielded regular missions in the early stages of the project to resolve administration and contracting issues and no significant delays in approvals are evident for this period. Mission frequency declined after the May 2008 midterm review, which lessened ADB's ability to ensure that agreements reached at the time of the review were implemented promptly. This was particularly significant given that the poor project implementation progress made it obvious that the review recommendations would need regular follow-up. The next ADB mission came only in August 2009. The fact that the project had four different ADB project officers over 5 years was unsatisfactory in view of the project's complexity and almost certainly meant that some aspects of implementation did not receive adequate attention. This complexity also made ADB's failure to finalize the project administration manual a particularly serious omission. Implementation was made all the more challenging by a lack of clear, quantifiable indicators in the project's design and monitoring framework (DMF), the late completion in early 2009 of the baseline assessment, and the absence of the PPMS (para. 18). ADB's follow-up on the failure of the PMU and the implementing agencies to submit regular and timely quarterly progress reports was ineffective (only the ASF regularly submitted quarterly progress reports). ADB also did not adequately follow up with the PMU and implementing agencies on submission of audit reports and on compliance with loan and project covenants.

29. ADB provided small-scale technical assistance to expedite (i) project implementation, and (ii) the establishment of the ASF.¹³ The primary tasks were to (i) identify key personnel from the private sector that could be recruited by the project; (ii) work with the executing and implementing agencies, the Ministry of Finance, and the SBP to determine financing and loan disbursement arrangements; (iii) begin the procurement of project equipment and establishment of facilities; (iv) identify accounting companies for an independent audit; (v) prepare the memorandum of the ASF's articles

¹² PC-1 refers to Planning Commission Document 1, which is the Project Appraisal Report prepared by the borrower.

¹³ ADB. 2005. *Small Scale Technical Assistance to the Islamic Republic of Pakistan for Agribusiness Development Project Implementation Support*. Manila

of association, standard operating procedures, business plan, and code of conduct for the board of directors and staff; and (vi) identify potential project and ASF staff and potential candidates for the ASF board of directors. Ultimately, however, this effort was not effective. ADB also provided training on procurement and disbursement procedures in 2009 but this was insufficient and too late to be of much value. Overall, the performance of ADB is rated *unsatisfactory*.

III. EVALUATION OF PERFORMANCE

A. Relevance

30. The Agribusiness Development Project is rated *partly relevant*. The project's relevance was supported by the fact that world markets have been demanding that agricultural products meet higher quality standards and that increasingly sophisticated domestic consumers are expecting attention to be paid to food safety, packaging, and traceability. It was also supported by the continued expansion in the demand for such products in both export and domestic markets. However, it would have been more relevant had it had a narrower focus that took into account the government's limited implementing capacity. The project was consistent with and was included in ADB's country strategy and program for Pakistan for 2002–2006, which recognized that the agribusiness sector had the potential to contribute to economic growth and poverty reduction. Only minor changes were made during implementation to improve the relevance of the project. These included the establishment of provincial and special areas liaison offices so that the ASF could get closer to its potential client base. ADB made attempts to move the PMU from Islamabad to Lahore but the government did not act on the recommendations.

B. Effectiveness in Achieving Outcome

31. The project is rated *ineffective*. It was classified in the RRP as a general intervention in the agriculture and natural resources sector. The outcome was to be a competitive and sustainable agribusiness sector. As few of the planned outputs, needed to deliver this outcome, were achieved, it is unlikely that the outcome targets (albeit difficult to measure) have been met. A strong contribution to the intended outcome was made by outputs of the agribusiness support service provision component, largely through the provision of ASF matching grants for both farm and off-farm activities. The uptake of grants for research was limited, however. Other ASF grants helped business development service providers improve the quality and relevance of such services as product inspection and certification. Provision of extension services was also supported through grants although only limited progress was made on developing an independent, private sector extension service. Farmer group formation was supported by grants. These groups were then able to access further grants to help them adopt new crops and production methods and thereby improve their productivity. Linkages between farmer groups and the formal off-farm agribusiness system remain weak, however.

32. Apart from the provision of awareness building activities, the agribusiness finance development component was ineffective and did not contribute to the project's intended outcome. This meant that access to lending products specifically tailored to the requirements of agribusinesses remained limited, which made it difficult for these firms to become more competitive. The inability of such firms to access agribusiness finance is thought to have reduced demand for agribusiness support service grants because these companies lacked funds to finance their share of possible grant-supported activities, plus capital costs. Outputs from the agribusiness capacity building component were frequently delayed, varied in quality, and were generally below expectations. An important output, although inadequately described in the RRP, was to be restructuring and improved coordination in MINFA. A restructuring plan was prepared by consultants but never considered by the ministry. The proposed private sector-managed market information system did not eventuate as no potential private sector provider expressed interest. Only limited

improvements were made to export quality certification systems for horticultural products and the proposed department-wide refresher training was not implemented. A small range of improved planting material is now available through the FSCRD certification system but financial sustainability of this organization is not guaranteed. No progress was made on the introduction of a plant varieties rights act.

33. PHDEC could not deliver all of the training outputs for which it was responsible and fell particularly short in providing farmer field school events. It was not very effective in coordinating project activities at the provincial and special areas levels either, due in part to staffing limitations at the senior level for much of the project period. This, together with staff vacancies at the PIOs, limited the ability of PHDEC to fulfill its role of vetting and referring potential grant clients to the ASF. The LDDDB was established as planned and was successful in attracting both government and donor funding for a number of projects. Overall, the contribution to outcome of this component was limited. MINFA was initially very supportive as the executing agency but in general failed to provide the environment required for effective delivery of project activities from the midpoint of implementation onwards.

34. Two main outputs were envisaged from the agribusiness policy and enabling environment development component: (i) a national agribusiness policy and provincial and special areas horticulture policies, and (ii) an improved legislative framework with emphasis on the certification and inspection requirements for international trade. Neither was achieved in full. An NAP framework was developed but was not approved by the former MINFA and only two of the provincial and special area horticultural policies formulated under the project have been approved and adopted. Project-redrafted legislation is still to be submitted to Cabinet and Parliament.

C. Efficiency in Achieving Outcome and Outputs

35. No economic evaluation was carried out at appraisal on the grounds that the mix of production enterprises could not be estimated with any certainty. At PCR preparation there was very little information available about the without-project situation and the benefits expected from the broad range of proposed interventions. No PPMS was established (para. 18) nor did the Government prepare a PCR, further limiting the availability of information about the performance of project participants. Therefore only a partial *ex-post* economic evaluation was carried out using the limited data available from ASF for farm production activities financed by the project. Efficiency has also been considered from the viewpoint of process.

36. Using a single enterprise gross margin applied to all of the 1,949 ASF-supported farmer groups and allocating about 65% of total economic investment costs to these activities, the economic internal rate of return at completion is estimated at 4%, well below the economic opportunity cost of capital of 12%. On this basis, the project is rated as *inefficient*. Details are shown in Appendix 10.

37. Process efficiency - overall coordination and support for project implementation was poor. The steering committee and various coordination committees met infrequently, especially during the second half of the project, and failed to give the necessary guidance and support to managers. Process efficiency was further limited by the involvement of two, and ultimately three, federal ministries. The PMU was unable to sustain an appropriate level of implementation support, with the result that many outputs were either late or not delivered. This situation was exacerbated by the decision of the government to add significantly to the size of the project and the PMU's work without a concurrent increase in management support. A change in government during implementation and deterioration in the security situation added to process difficulties. Process efficiency was satisfactory at the implementation unit level, however, particularly in the ASF and, to a lesser extent,

the FSCRD. PHDEC was unable to maintain the required level of staffing in the HPU or consistent senior management support. This resulted in poor subproject identification, screening, and coordination. The LDDDB's processes were, in general, satisfactory. Process is rated as *inefficient*.

38. Overall, the project is therefore rated as *inefficient*.

D. Preliminary Assessment of Sustainability

39. For the limited outcome to be sustained, several conditions need to be met. Section 42 companies established under the project must find revenue sources other than the government and donors. Policy and regulatory processes developed under the project need to be institutionalized and operational funding for the agencies responsible to implement them must be secured. The FSCRD needs more operational autonomy and the ability to charge fees for services and access to elite germ plasm. Agribusiness and horticulture policies need to be adopted and publicized. Legislative amendments need to be passed. Companies that received grants under the project require a stable political, regulatory and trading environment if they are to continue to operate profitably.

40. By the time of the PCR mission, the ASF had already secured development partner funding that will allow it to continue providing services at a level similar to that delivered under the project. The ASF's governance and management processes appear robust and this, combined with donor financial support, should ensure its sustainability over the next few years. Recent government attempts to liquidate the LDDDB have distracted the company from its efforts to secure alternative funding and have led to the loss of already committed donor financing that would have helped it transition from project support to financial independence. Its future is uncertain. PHDEC is also struggling financially and its survival is not assured. Under the project, existing FSCRD laboratories were upgraded, two new laboratories were established, new germ plasm units were created, and nurseries were registered. However, budget provision for the operation and maintenance of these facilities is still to be institutionalized. To reduce its dependence on recurrent budget provisions, fees should be charged for many of the department's services that are of a commercial nature and directly benefit producers. The project is rated *less likely* to be sustainable.

E. Impact

41. At appraisal, the impact was expected to be a 30% increase in the contribution of agribusinesses to gross domestic product (GDP) between 31 December 2005 and 30 September 2010. Verification of impact is difficult because what constituted an agribusiness was not defined in the RRP and agribusiness and other sources of agricultural production are not reported as separate components of agriculture's contribution to GDP in the national accounts. Agricultural GDP increased somewhat over the project period but it is unlikely the project contributed significantly to this due to the lower than anticipated project investments. The ASF has reported that prices for some products exported by project beneficiaries have risen due to improvements in product quality that arose from the adoption of improved processing and storage techniques. In the longer term, yield and quality benefits and higher incomes are likely to result from project-supported plant propagation initiatives.

42. No targets were set for impact contribution at the beneficiary household level. Following design changes approved during implementation, 2,000 farmer groups comprising about 20,000 households were formed, of which 1,949 eventually took up grants. This compared with an initial target of 1,250 groups. Survey work commissioned by the ASF toward the end of the project showed

that, on average, household incomes rose due to project supported farm-level activities.¹⁴ Other financial benefits are described in Appendix 10. If these changes are sustained, there will be a broader impact across rural communities through expenditures on inputs and services. The project anticipated no environmental issues at appraisal and none arose. Some environmental benefits are expected from improved use of farm inputs, although care will be required in the disposal of used plastic sheeting from greenhouses provided under the project. Improvements in process technology will reduce waste and improve process efficiency.

IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

A. Overall Assessment

43. The project is rated *unsuccessful*. The design was complex, lacked focus, was overambitious in many ways, and involved too many agencies. These shortcomings contributed to a failure to produce the envisaged outcome. Implementation management and coordination was weak and arrangements were not based on a sound assessment of institutional capability. A key target output—the development of agribusiness-specific lending programs—was not delivered. Training outputs, in general, fell short of expectations. Institutional strengthening and policy work was compromised by delays, government failure to ratify the results or put them into effect and a potential loss of benefits due to government reorganization after project closure. Doubts remain over the sustainability of many project initiatives.

B. Lessons

44. The project provided several key lessons:

- (i) A thorough analysis of institutional capacity is required during the design process. The state of inter-institutional linkages and the possible effect on project implementation of weaknesses and difficulties with these linkages also needs to be considered.
- (iii) Policy-related work—which in this project involved preparation of a national agribusiness policy and provincial and special areas horticultural policies—will almost invariably take longer than expected and consume a disproportionate share of management resources during implementation.
- (iii) Consultancy output for policy work needs to be very specifically defined. For example, should the output be a policy framework or a complete, agreed and adopted policy. If the latter, it must be made clear and agreed with the borrower who is to sign off on the policy document.
- (iv) Attempting to work along the whole value chain from farm production to market (either domestic or export), as this project attempted to do, will almost certainly be more difficult than concentrating on a few key links.
- (v) It is essential that the objectives in the RRP be adequately reflected in operational plans. There is little evidence, for example, that vertical integration in the value chain was facilitated by the project.

¹⁴ Lahore University of Management Sciences. 2010. *Program Evaluation of the Agribusiness Support Fund: Estimating the Effects of Treatment on Farmer Groups, Agribusinesses and BDS Market in Pakistan*. Lahore.

- (vi) Developing a private sector-driven market information system in a country where government is the dominant or possibly the sole existing provider of such information is likely to be a complex, time-consuming process and one that may require some form of income guarantee for the private provider or providers.
- (vii) Agreement should be obtained from the borrower during loan negotiations on the use of project funds to provide equipment and services to wholly private sector firms.
- (viii) A clear strategy to exit from support for agencies or offices established under projects needs to be defined at the outset by firmly establishing whether the entity is expected to have a continuing role post-project and, if so, how its operations are going to be financed.

C. Recommendations

1. Project Related

45. **Further action or follow-up.** The PCR recommends the following follow-up actions: (i) The new Ministry of Food Security and Research should ensure that the product quality standards revised during the project are published on a website and that institutional arrangements are put in place to ensure that they remain current; (ii) over the next 1-2 years, the ASF should carry out case studies of firms in the non-farm part of the value chain to assess the financial value of the types of interventions financed under the project; (iii) revised financial arrangements are required for FSCRD to ensure that laboratories financed under the project can remain operational. These should involve an increase in regular budget provision or charging for services. To put FSCRD operations on a more secure financial basis, development of partnerships with private sector seed and planting material suppliers should be a priority objective; and (iv) preparation and implementation of sustainability plans are urgently required for both the LDDDB and PHDEC.

46. **Additional assistance.** Further work is required in the areas of legislative change, harmonization of policies and standards with internationally accepted standards, and formulation and adoption of an appropriate institutional structure, possibly under the Ministry of Commerce, to facilitate provision of the government support necessary for agribusiness growth.

47. **Timing of the project performance evaluation report.** The project performance evaluation report should be done at the end of 2014. This would allow sufficient time for institutional sustainability issues to be resolved and for the outcome at the processor and exporter levels to be assessed.

2. General

48. The project was overly ambitious. Trade policy, policy reform, institutional restructuring, financial products development, horticulture, livestock, small farmers, large farmers, processors and exporters, service providers, training, standards development and certification were some of the subject areas and beneficiaries involved. Two ministries were to participate. The impact and outcome statements and targets were too broad. Rather than a “more competitive and sustainable agribusiness sector,” a more achievable target outcome for this project would have been “progress towards improved agribusiness sector performance.” Rather than the sweeping approach adopted, a more practical design for this project, at least for implementation purposes, would have been to select two or three agribusiness commodities with strong export potential for priority consideration and to focus then on addressing key constraint areas where a reasonable chance existed to achieve quantifiable results.

PERFORMANCE INDICATORS AND ACHIEVEMENTS

Design Summary	Performance Indicators/Targets (Primary Target)	Revised Targets during Implementation	Achievements at Project Completion
Impact Growth in the agribusiness sector is improved	<p>Increased contribution of agribusiness to gross domestic product by 2010 compared to the baseline of Dec 2005.</p> <p>The number of new and expanded agro-enterprises increased by 2,000 by 2010 compared to baseline Dec 2005.</p> <p>Employment generated by agribusiness increased by 100,000 person-years by project completion.</p>		<p>The contribution of agribusiness to GDP is not reported separately. Fresh fruit and vegetable export values increased from about \$168 million in FY2006 to \$560 million in FY2011.</p> <p>115 agribusiness enterprise startups were supported and 417 existing agribusinesses strengthened by the ASF. 80 business development service providers were supported. The number of new enterprises formed was seriously constrained by the failure of the agribusiness finance component.</p> <p>PCR mission estimates are for annual incremental on-farm and farm supporting services employment generation of approximately 5,500 person-years. Some projects have given priority to employing women, especially the landless. An evaluation of the farmer group program found a 139% increase in employment on target farms.^a No data available for off-farm activities.</p> <p>Employment generation was seriously constrained by the failure of the agribusiness finance component.</p>
Outcome More competitive and sustainable agribusiness sector	<p>Domestic and export sales volume of agribusinesses and agro-enterprises increased by 5% per year over baseline of 31 December 2005.</p>		<p>No project-specific sales data are available. Fruit export volumes for Pakistan as a whole rose from 343,000 tons in</p>

^a Lahore University of Management Sciences. 2010. *Program Evaluation of the Agribusiness Support Fund: Estimating the Effects of Treatment on Farmer Groups, Agribusinesses and BDS Market in Pakistan*. Lahore.

Design Summary	Performance Indicators/Targets (Primary Target)	Revised Targets during Implementation	Achievements at Project Completion
	<p>Postharvest losses in terms of value of production reduced by 20% in year 2010 compared to December 2005 baseline.</p> <p>Volume of PFI lending to agribusiness exceeds 10% of total PFI loans by 30 September 2010 over baseline of 31 December 2005.</p>		<p>FY2007 to 466,000 tons in FY2009, an increase of 35%. Fresh vegetable exports almost doubled in volume over the same period to 425,000 tons. It is impossible to measure the contribution of the project to these changes.</p> <p>No data is available on this indicator.</p> <p>No project specific agribusiness lending by PFIs was carried out. No information is available about changes in total PFI lending for agribusiness over project period.</p>
<p>Output 1 Agribusiness support service provision enhanced</p>	<p>Availability and quality of business development services, agricultural extension and research, and training provided to agribusiness service providers improved by 30 September 2010 over baseline of 31 December 2005.</p> <p>Note: This output was to be delivered in full by the Agribusiness Support Fund.</p>		<p>No without-project indicators are available for quality or quantity of services. Most ASF outputs appear to have been incremental.</p> <p>Business development services provided included support to 471 existing agribusinesses, 115 startup enterprises, 80 business development service providers, and 29 extension service providers.</p> <p>More than 3,000 farmers, consultants, and agricultural professionals trained in agribusiness principles.</p> <p>Eleven research and development projects were supported.</p> <p>Capacity building support was given to 10 nongovernment organizations to establish farmer enterprise groups.</p> <p>Business development support was provided to 2,000 farmer enterprise</p>

Design Summary	Performance Indicators/Targets (Primary Target)	Revised Targets during Implementation	Achievements at Project Completion
			groups (initial objective 1,250 groups), comprising about 20,000 members.
Output 2 Improved access to and delivery of agribusiness financing	PFI's agribusiness units meet increased agribusiness lending targets contained in their business plans by September 2010.		No PFI agribusiness units were established and no project-specific agribusiness lending was carried out.
Output 3 Enhanced public and private sector capacity to provide services to agribusiness producers and entrepreneurs	<p>Ministry of Food, Agriculture and Livestock (MINFAL) departmental coordination improved, and restructuring implemented by 30 June 2007.</p> <p>Department of Agricultural and Livestock Product Marketing and Grading (DALPMG) quality inspection service in place (or private sector alternative), improved, and up to international standards by 30 June 2007.</p> <p>Producers receive improved horticultural germ plasm by 30 June 2008. Note: This output was to have been delivered by FSCRD.</p> <p>Private sector-led LDDB functioning effectively by 31 December 2006.</p>	<p>Targets not shown in RRP DMF included 300 milk production groups formed and 300 milk-chilling centers established.</p>	<p>Consultative functional analysis was completed but the reorganization plan remained in draft form by project completion. No reorganization was implemented.</p> <p>24 of 26 existing product grade standards were revised but not implemented. Two of 7 certification laboratories were upgraded. Most training was not carried out, including international refresher training for DALPMG staff. The service was not up to international standards by 30 June 2007 or by project close.</p> <p>No improved germ plasm had been distributed by 30 June 2008. A limited quantity of citrus germ plasm was distributed by project close. FSCRD established or upgraded 9 testing laboratories, 5 standards were developed for plant material (pip fruit, stone fruit, mango, citrus, and guava), 29 fruit varieties were registered, over 65,000 fruit plants were certified as true to type, 629 persons were trained on plant certification, and 124 nurseries were registered.</p> <p>LDDB was established on 23 August 2005 and functioning effectively by 31 December 2006. However, its continued existence is uncertain as</p>

Design Summary	Performance Indicators/Targets (Primary Target)	Revised Targets during Implementation	Achievements at Project Completion
	Private sector market information system developed.	<p>The following performance targets were not included in the DMF but were agreed with ADB during project implementation. PHDEC training outputs: 7 training of trainers manuals, 40 principals trained, 120 faculty members of government commercial colleges trained in TOT, TOT training for 80 faculty teachers of vocational training institutes, beneficiary management training (for 2,016 persons), beneficiary technical training (3,022 persons), farmer field school events to train 25,000 farmers.</p>	<p>described in the main text.</p> <p>270 milk producer groups formed, 150 milk chilling centers established and dairy production and milk handling training provided for 4,159 farmers.</p> <p>7 TOT manuals were produced, 40 principals were trained, 120 members of government commercial college faculties and 80 from the faculties of vocational training institutes were trained in TOT, beneficiary management training was provided for 2,194 persons, and beneficiary technical training was given to 596 persons). No farmer field school events were held.</p> <p>The system was not developed due to lack of interest by the private sector.</p>
<p>Output 4 Improved agribusiness policy and enabling environment</p>	<p>National agribusiness policy and four provincial horticulture policies and related action plans approved and implemented by 31 December 2006.</p>	<p>Amendments to 4 laws covering product quality and certification. Note: This Performance target was not included in the DMF but agreed during implementation:</p>	<p>A national agribusiness policy framework was developed but the policy document is incomplete and not implemented.</p> <p>Four provincial and three special areas horticultural policies were prepared. Policies approved in FATA and KP, with ratification outstanding for the 5 remaining policies.</p> <p>Amended laws were reviewed by MINFA but are yet to be presented to Cabinet or Parliament.</p>

Design Summary	Performance Indicators/Targets (Primary Target)	Revised Targets during Implementation	Achievements at Project Completion
Output 5 Effective project management support provided	Project management unit (PMU), PHDEB horticulture unit (HPU), and provincial management offices (PMOs) functioning effectively by 31 March 2006.		<p>The PMU was established and functional by January 2006.</p> <p>The HPU established and functioning effectively by April 2006.</p> <p>Seven provincial and special areas implementation offices (PIOs) were established by June 2006. Two (Punjab and Balochistan) were established in August and November 2006, respectively. All were functioning effectively by November 2006.</p> <p>At the end of July 2008, 29% of all established posts in the PMU, HPU and PIOs were vacant. For professional staff, the vacancy rate was 43%. This remained largely unchanged until project closure.</p> <p>The monitoring and evaluation system, which was to be established by 30 June 2006, never became fully functional.</p> <p>Required progress reporting was inadequate and government did not prepare a project completion report.</p>

ASF = Agribusiness Support Fund, DALPMG = Department of Agricultural and Livestock Product Marketing and Grading, FATA = Federally Administered Tribal Areas, FSCRD = Federal Seed Certification and Registration Department, FY = fiscal year, GDP = gross domestic product, HPU = Horticulture Production Unit, KP = Khyber Pakhtunkhwa, LDDDB = Livestock and Dairy Development Board, MINFA = Ministry of Food and Agriculture, MINFAL = Ministry of Food, Agriculture and Livestock, PCR = project completion review, PFI = participating financial institution, PIO = project implementation office, PMU = project management unit, TOT = training of trainers

Source: ADB Project Completion Review Mission estimates.

PROJECT COSTS

Table A.1: Project Cost by Financier
(\$ million)

Source	As appraised				At completion			
	FC	LC	Total	%	FC	LC	Total	%
Asian Development Bank	8.30	22.70	31.00	63	2.39	10.60	12.99	60
Government	0.00	6.90	6.90	14	0.00	4.26	4.26	20
Agribusiness enterprises	0.00	10.40	10.40	21	0.00	4.34	4.34	20
Private Sector institutions	0.00	0.60	0.60	1	0.00	0.00	0.00	0
Beneficiaries	0.00	0.10	0.10	0	0.00	0.00	0.00	0
Total	8.30	40.70	49.0	100	2.39	19.20	21.59	100

FC = foreign currency, LC = local currency

Sources: ADB project completion review mission, ADB loan financial information system.

Table A.2: Summary of Project Cost by Components
(\$ million)

Item	As appraised			At completion		
	FC	LC	Total	FC	LC	Total
A. Base Cost						
1. Agribusiness support service provision	1.40	22.40	23.80	0.19	12.27	12.46
2. Agribusiness finance development	2.70	1.80	4.50	0.00	0.00	0.00
3. Agribusiness capacity building	1.90	8.60	10.50	0.03	1.05	1.08
4. Agribusiness policy formulation and enabling environment development	0.20	0.40	0.60	–	–	–
5. Project management support	0.90	6.50	7.40	1.88	5.88	7.76
Subtotal (A)	7.10	39.70	46.90	2.10	19.20	21.30
B. Contingencies						
1. Physical contingencies	0.40	0.90	1.30	0.00	0.00	0.00
2. Price contingencies	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal (B)	0.40	0.90	1.30	0.00	0.00	0.00
C. Interest Charge during Implementation	0.80	0.00	0.80	0.29	0.00	0.29
Total	8.30	40.70	49.00	2.39	19.20	21.59

– = data not available, FC = foreign currency, LC = local currency.

Sources: ADB project completion review mission, ADB loan financial information system.

Table A.3: Detailed Project Cost by Components
(\$ million)

Component	At Appraisal			At Completion		
	Local	Foreign	Total	Local	Foreign	Total
A. Agribusiness Support Service Provision						
1. Agribusiness support fund	20.95	0.00	20.95	10.07	0.19	10.26
2. Agribusiness support fund establishment & operation	1.43	1.44	2.87	2.20	0.00	2.20
Subtotal (A)	22.38	1.44	23.82	12.27	0.19	12.46
B. Agribusiness Finance Development						
1. Phase 1: Awareness building	0.00	0.08	0.08	–	–	–
2. Phase 2: Capacity building	1.82	2.64	4.47	–	–	–
Subtotal (B)	1.83	2.72	4.55	–	–	–
C. Agribusiness Capacity Building						
1. MINFAL restructuring & coordination	1.73	0.55	2.28	–	–	–
2. PHDEB strengthening	0.63	0.09	0.72	0.24	0.02	0.26
3. DALMPG export certification	0.60	0.33	0.93	0.16	0.00	0.16
4. FSCRD strengthening	2.12	0.51	2.62	0.30	0.00	0.30
5. Market information system	1.00	0.06	1.06	–	–	–
6. Agribusiness training delivery						
a. Curriculum development	0.26	0.11	0.37	–	–	–
b. Training of trainers & service providers	0.37	0.25	0.63	–	–	–
c. Entrepreneur training	0.64	0.00	0.64	–	–	–
d. Farmer training	0.49	0.00	0.49	–	–	–
Subtotal (6)	1.77	0.36	2.13	0.11	–	0.11
7. Livestock & dairy development board establishment	0.76	0.02	0.78	0.25	0.01	0.26
Subtotal (C)	8.61	1.92	10.52	1.05	0.03	1.08
D. Agribusiness Policy & Enabling Environment Development						
1. Agribusiness & horticulture policy formulation	0.39	0.15	0.54	–	–	–
2. Regulatory framework & international standards compliance	0.01	0.07	0.08	–	–	–
Subtotal (D)	0.40	0.22	0.62	–	–	–

Component	At Appraisal			At Completion		
	Local	Foreign	Total	Local	Foreign	Total
E. Project Management Support						
1. Project management						
a. Project management unit	1.69	0.37	2.06	4.20	0.12	4.31
b. Provincial project management offices	4.75	0.49	5.24	0.97	0.00	0.97
Subtotal (1)	6.44	0.85	7.30	5.17	0.12	5.29
2. Studies, consulting & miscellaneous support	0.09	0.02	0.11	0.71	1.76	2.47
Subtotal (E)	6.53	0.88	7.41	5.88	1.88	7.76
Total	39.74	7.18	46.91	19.20	2.10	21.30
Physical contingencies	0.94	0.36	1.30	0.00	0.00	0.00
Price contingencies	0.01	0.00	0.01	0.00	0.00	0.00
Interest during implementation	0.00	0.77	0.77	0.00	0.29	0.29
Total Project Cost	40.69	8.31	48.99	19.20	2.39	21.59

– = data not available, DALMPG = Department of Agriculture and Livestock Product Marketing and Grading, FSCRD = Federal Seed Certification and Registration Department, MINFAL = former Ministry of Food, Agriculture and Livestock, PHDEB = Pakistan Horticulture Development and Export Board
Sources: ADB project completion review mission estimates, ADB loan financial information system.

ANNUAL CONTRACT AWARDS AND DISBURSEMENTS
(\$ million)

Period	Contract Awards			Disbursements		
	Projected (\$ million)	Actual (\$ million)	Actual v/s Projected (%)	Projected (\$ million)	Actual (\$ million)	Actual v/s Projected (%)
Q1 2006	0.00	0.00		0.00	0.00	
Q2 2006	1.95	2.20		0.25	0.81	
Q3 2006	0.00	0.00		0.08	1.09	
Q4 2006	0.00	0.12		0.10	0.08	
Subtotal	1.95	2.29	117	0.43	1.98	460
Q1 2007	0.22	0.32		1.16	0.53	
Q2 2007	0.70	0.34		0.99	0.34	
Q3 2007	3.50	0.30		0.80	0.53	
Q4 2007	1.55	0.34		0.95	0.60	
Subtotal	5.97	1.30	22	3.89	1.99	51
Q1 2008	0.00	0.65		0.00	0.39	
Q2 2008	2.30	0.87		0.25	0.94	
Q3 2008	0.20	0.45		0.50	1.38	
Q4 2008	0.00	0.15		0.50	0.00	
Subtotal	2.50	2.12	85	1.25	2.71	217
Q1 2009	1.55	1.98		1.30	0.40	
Q2 2009	1.02	0.62		0.90	0.66	
Q3 2009	1.31	0.00		0.95	0.67	
Q4 2009	0.83	0.00		0.67	0.95	
Subtotal	4.71	2.59	55	3.82	2.68	70
Q1 2010	0.80	2.71		0.70	0.33	
Q2 2010	0.80	0.00		0.63	0.50	
Q3 2010	0.80	0.00		0.50	0.56	
Q4 2012	0.32	0.00		0.00	0.20	
Subtotal	2.72	2.71	100	1.83	1.59	87
Q1 2011	0.00	1.94		3.56	0.31	
Q2 2011	0.00	0.00		0.00	1.02	
Q3 2011	0.00	0.08		0.00	0.73	
Q4 2011	3.56			0.00	0.00	
Subtotal	3.56	2.03	57	3.56	2.05	58
Total	21.74	14.75	61	14.77	12.99	88

Source: ADB loan financial information system.

IMPLEMENTATION SCHEDULE AT APPRAISAL AND ACTUAL

Component	2005	2006	2007	2008	2009	2010	2011
	Pre-Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
1. Agribusiness Support Services							
ASF and appraisal unit established							
ASF disbursement							
2. Capacity Building for Agribusiness Finance							
PFI identified and selected							
PFI capacity and awareness building							
3. Capacity Building for Agribusiness							
DALPMG export quality certification							
DALPMG market information service							
FSCRD laboratories							
FSCRD registration and certification							
LDDB establishment							
LDDB activities							
Curriculum and training manual development							
TOT for farmer field schools							
FFS events							
Legends							
■	As appraised						
■	As completed						
■	Incomplete task						
///	Activity continued beyond loan closing date						
	Activity done before project period.						

Component	2005	2006	2007	2008	2009	2010	2011
	Pre-Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
School management training							
TOT skills training in processing							
TOT training in World Trade Organization and TQM							
Management training for beneficiaries							
International training							
4. Policy Formulation and Enabling Environment							
National agribusiness policy preparation and approval							
Provincial horticultural policies preparation and approval							
Regulatory framework and international compliance							
MINFAL departmental coordination							
5. Project Implementation and Studies							
PMU and PIO establishment							
Monitoring and evaluation established and implemented							
Studies							

ASF = Agribusiness Support Fund, FFS = farmer field schools, FSCRD = Federal Seed Certification and Registration Department, LDDB = Livestock and Dairy Development Board, MINFAL = Ministry of Food, Agriculture, and Livestock, PFI = participating financial institution, PIO = project implementation unit, PMU = project management unit, TOT = training of trainers, TQM= total quality management .

Legends

- As appraised
- As completed
- Incomplete task
- Activity continued beyond loan closing date
- Activity done before project period.

STATUS OF COMPLIANCE WITH LOAN COVENANTS

Covenant	Reference in Loan Agreement	Status of Compliance
In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause the implementing agencies to perform, all obligations set forth in Schedule 6 to this Loan Agreement.	Article IV, Section 4.01	Partly complied with
The Borrower shall (i) maintain, or cause the implementing agencies to maintain, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than 6 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of this Loan Agreement as well as on the use of the procedures for imprest account/statement of expenditures), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.	Article IV, Section 4.02 (a)	Partly complied with Audit accounts of the LDDDB and PHDEC were not submitted to ADB.
The Borrower shall enable ADB, upon ADB's request, to discuss the Borrower's financial statements for the Project and its financial affairs related to the Project from time to time with the Borrower's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Borrower unless the Borrower shall otherwise agree.	Article IV, Section 4.02 (b)	Complied with
Without limiting the generality of Section 6.05(a) of the Loan Regulations, the Borrower shall furnish, or cause the implementing agencies to furnish, to ADB quarterly reports on the carrying out of the Project and on the operation and management of the Project facilities.	Article IV, Section 4.03	Partly complied with Quarterly progress reports were not regularly submitted.
The Borrower shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the Loan, and any relevant records and documents.	Article IV, Section 4.04	Complied with
The Borrower shall take all action which shall be necessary on its part to enable SBP to perform its obligations under the Project Agreement, and shall not take or permit any action which would prejudice its ability to perform such obligations.	Article IV, Section 4.05	Complied with
MINFAL shall be the Project Executing Agency and responsible for overall Project coordination and monitoring.	Schedule 6, para. 1	Complied with
Implementing agencies responsible for the different components under the Project shall be as follows: (a) Upon its incorporation as a not for profit company, ASF shall be responsible for the implementation of Component 1(b) of the Project; (b) SBP shall be responsible for the implementation of Component 2 of the Project; (c) PHDEC shall be responsible for the implementation of Component 3(e) of the Project; (d) Upon passage and coming into effect of the act to establish LDDDB as an autonomous statutory agency or its incorporation as a not for profit company, LDDDB shall be responsible for the implementation of Component 3(f) of the Project; and	Schedule 6, para. 2	Complied with

Covenant	Reference in Loan Agreement	Status of Compliance
(e) MINFAL shall be responsible for the implementation of the other components of the Project.		
Within three months of the Effective Date, the Borrower shall establish a Project Management Unit (PMU) at DALMPG to be responsible for Project management and the implementation of Project activities, coordinating consultant inputs, reporting, and monitoring and evaluation. The PMU shall be headed by a Project director who shall oversee the day-to-day Project implementation. The Project director shall be assisted by the following staff: (i) two deputy Project directors for monitoring and evaluation, and finance and administration, (ii) a policy, institutional, and regulatory specialist, and (iii) the necessary support staff, including an accountant. The Project director shall be recruited by MINFAL following open and competitive selection process with qualifications and experiences satisfactory to ADB. The Borrower shall ensure that throughout the implementation of the Project, there shall be a counterpart staff to act as Project coordinator to assist the Project director in the management of the Project.	Schedule 6, para. 3	Partly complied with PMU remained understaffed most of the time. The staff turnover was very high due to low salaries.
The Borrower shall establish a Project Steering Committee (PSC) chaired by the secretary, MINFAL with the Project director as the secretary. The PSC shall convene at least once every six months. The other members of the PSC shall comprise the joint secretary MOF, the joint secretary of the Ministry of Commerce, the joint secretary of the Ministry of Industries, the director of agricultural credit of SBP, the chief executive of PHDEB and the chief executive of SMEDA. The relevant authorities in the each Province and Special Area shall nominate the representatives from their respective Province and Special Area as PSC members. The PSC shall also include one agribusiness representative (i) from the federal chamber of commerce, (ii) from each Province to be jointly nominated by the respective provincial chambers of commerce and the chambers of agriculture, (iii) to represent the entire Special Areas, and (iv) from the farmers associations in Pakistan. Upon appointment, the chief executive of LDDDB shall also be included as one of the members of the PSC	Schedule 6, para. 4	Partly complied with The PSC was required to meet at least once every 6 months but met only six times through the 6 year project period. The last PSC meeting was held in 2010.
The functions of the PSC shall be to (i) provide overall guidance and supervision on the implementation of the Project, (ii) facilitate coordination among the participating agencies, (iii) guide and facilitate on matters related to policy, strategy, implementation and regulatory framework of the Project, (iv) review and approve annual and other operational plans and budget of the Project, including any adjustments thereof, and (v) receive and review progress and implementation reports from the various implementing agencies and to provide them with priorities, guidelines and directions for their operations under the Project.	Schedule 6, para. 5	Partly complied with The PSC's guidance on policy and strategic issues was lacking throughout.
Within one month of the Effective Date, the Borrower shall establish a Project Implementation Coordination Committee (PICC). The director general of DALPMG who is concurrently the agriculture and livestock marketing advisor of MINFAL shall chair the PICC. The members of PICC shall comprise the Project director, the Project coordinator, representatives of SBP, FSCRD, the PHDEB, the PIOs, PFIs, the private sector, the Provinces and Special Areas. Upon recruitment, the ASF general manager shall also be included as one of the members of the PICC. The committee shall meet at least every 6 months. The functions of the PICC shall be to address and resolve implementation issues including to advise the PMU on technical matters and the PSC on policy matters.	Schedule 6, para. 6	Partly complied with The PICC did not meet as required. It met only once after July 2008.
Within six months of the Effective Date, the Borrower shall ensure that Project Implementation Office (P10) shall have been established	Schedule 6, para.7	Complied with

Covenant	Reference in Loan Agreement	Status of Compliance
in each Province and Special Area. The functions of PIO shall be (i) to promote the Project's concepts, (ii) to create awareness of and identify potential clients of the ASF, (iii) to identify potential areas of Project intervention, and (iv) to interface with existing and prospective agribusiness enterprises, and respond to their specific needs. Each respective PIO shall be headed by a coordinator with agribusiness experience in the private sector and assisted by an agribusiness specialist, finance and administration manager and training coordinator. Within six months of the Effective Date, each of the PIO coordinators shall have been recruited. The PIO coordinator shall report to the head of the horticulture unit within PHDEB and coordinate with the horticulture and livestock coordination committee within each respective Province and Special Area		
Within three months of the Effective Date, the Borrower shall ensure that Provincial Coordination Committees for Horticulture and/or Livestock (PCC) shall have been established in each Province and Special Area to coordinate Project activities in each Province and Special Area, as appropriate. The secretaries of agriculture and livestock within the respective Province or Special Area, as applicable, shall chair the PCC. The respective PCC shall comprise the PIO coordinator, representatives of the planning and development, finance, industries, agriculture, and livestock departments, the private sector, farmers associations, other concerned agencies such as FSCRD, PHDEB and upon its establishment or incorporation, LDDDB.	Schedule 6, para. 8	Complied with
Within six months of the Effective Date, the Borrower shall establish a horticulture unit within PHDEB to support Project activities in horticulture and hortibusiness. A horticulture agribusiness manager recruited from the private sector, to the satisfaction of ADB, shall head the unit assisted by a training coordinator and finance manager. The unit head shall coordinate with the Project director in the PMU.	Schedule 6, para. 9	Complied with
The tasks of PHDEB within the Project shall be to (i) identify potential members of the provincial horticultural policy task forces and to provide them with technical direction and advice, (ii) identify, in association with the PIO, potential recipients to the cost sharing grants managed by the ASF, (iii) identify enterprises, farmer group enterprises and processors to determine training and extension, and research needs, and organize their trainings, or assist them to forward grant applications for private sector led research and extension to the ASF, (iv) identify farmer groups, exporters, packers, and processors that wish to become internationally compliant, and assisting them to obtain Project support, either through training or utilizing cost sharing grants managed by the ASF, and (v) collaborate closely with the Project horticulture and hortibusiness consultants to support their activities.	Schedule 6, para. 10	Complied with
Within fifteen months of the Effective Date, the Borrower shall either (i) submit to its cabinet for approval and submission to Parliament a bill to establish PHDEB as an autonomous statutory agency or (ii) incorporate PHDEB as a not for profit company pursuant to Section 42 of the Companies Ordinance. Upon either, the passage and coming into effect of the act establishing PHDEB as an autonomous statutory agency or its incorporation as a not for profit company pursuant to the Companies Ordinance, PHDEB shall be responsible for promoting horticulture development and exports of the Borrower.	Schedule 6, para. 11	Complied with
PHDEB shall, upon passage and coming into effect of the act to establish PHDEB as an autonomous statutory agency or the incorporation of PHDEB as a not for profit company pursuant to Section 42 of the Companies Ordinance, enter into a Project Agreement with ADB and performance agreement with MINFAL.	Schedule 6, para. 12	Complied with

Covenant	Reference in Loan Agreement	Status of Compliance
Within twelve months of the Effective Date, the Borrower shall either (i) submit to its cabinet for approval and submission to Parliament a bill to establish LDDDB as an autonomous statutory agency or (ii) incorporate LDDDB as a not for profit company pursuant to Section 42 of the Companies Ordinance. Upon either, the passage and coming into effect of the act to establishing LDDDB as an autonomous statutory agency or its incorporation as a not for profit company pursuant to the Companies Ordinance, LDDDB shall be responsible for promoting the development of the livestock and dairy sectors of the Borrower.	LA, Schedule 6, para. 13	Complied with
LDDDB shall, upon passage and coming into effect of the act to establish LDDDB as an autonomous statutory agency or the incorporation of LDDDB as a not for profit company pursuant to Section 42 of the Companies Ordinance, enter into a Project Agreement with ADB and performance agreement with MINFAL	Schedule 6, para. 14	Complied with
Within six months of the Effective Date, the Borrower shall ensure that the general manager of ASF shall have been recruited through an international recruitment process	Schedule 6, para. 15	Complied with
Within six months of the Effective Date, the Borrower shall ensure that the Memorandum and Articles of Association, and other required documents to obtain the certificate of incorporation of ASF shall have been finalized.	Schedule 6, para. 16	Complied with
Within nine months of the Effective Date, the Borrower shall ensure that the ASF shall have been incorporated as not-for-profit company under Section 42 of the Companies Ordinance, with its board of directors comprising eight members (five from the private sector and three from Project-related government agencies)	Schedule 6, para. 17	Complied with
Immediately following its incorporation, the Borrower shall ensure that the ASF shall (i) enter into a Project Agreement with ADB and a performance agreement with MINFAL, (ii) adopt a business plan, standard operating procedures which shall incorporate the principles of equitable participation of women and conflict of interest rules, and a code of conduct for staff and members of the board of directors acceptable to ADB, and (iii) establish an imprest account.	Schedule 6, para. 18	Complied with
Within two months following its incorporation, the Borrower shall ensure that ASF shall form an appraisal panel which shall appraise all applications made for the cost- sharing grant facility. The appraisal panel shall consist of five members including the general manager of ASF.	Schedule 6, para. 19	Complied with
SBP shall enter into a performance agreement with MINFAL. Within four months of the Effective Date, the Borrower shall ensure that SBP establishes the selection criteria for the selection of PFIs eligible to participate in Component 2(a) of the Project. The selection criteria of the PFIs eligible to participate in Component 2(b) of the Project shall be established prior to the complete implementation of Component 2(a) of the Project.	Schedule 6, para. 20	Complied with
Within six months of the Effective Date, the Borrower shall constitute a task force in each Province and, as appropriate, in Special Area, with no more than four members and the majority of the members shall be from the private sector, to formulate horticultural development policies for Sindh, Punjab, Balochistan and in each Special Area, as appropriate, and to review the existing policy in North West Frontier Province	Schedule 6, para. 21	Complied with
Within three months of the Effective Date, the Borrower shall establish a task force to develop a comprehensive national agribusiness policy based on a participatory and consultative approach	Schedule 6, para. 22	Complied with

Covenant	Reference in Loan Agreement	Status of Compliance
<p>Within one year of the Effective Date, the Borrower shall adopt the national agribusiness development policy, and the horticulture policies in each Province and Special Area, as applicable, formulated under the Project.</p>	<p>Schedule 6, para. 23</p>	<p>Partly complied with</p> <p>The national agribusiness policy framework was developed. Drafts of provincial horticulture policies were developed. Horticulture policy feedback workshops were conducted in provinces and special areas to put the policies into approval or legislative process. The national policy was not adopted.</p> <p>Only Khyber-Pakhtunhwa and FATA have approved and adopted their horticulture policies. Gilgit-Baltistan and AJK submitted their policies for approval by the federal government, which has not taken action. In January 2010, Punjab, Sindh and Balochistan provinces submitted their drafts to the respective chief ministers for review but no further action has been reported.</p>
<p>Within two years of the Effective Date, the Borrower shall submit to its cabinet for approval and submission to Parliament the amendment of the relevant federal laws to be aligned with the Borrower's WTO commitments without prejudicing the negotiating position of the Borrower in the WTO negotiation rounds. The relevant federal laws mentioned above shall include (i) the Pakistan Plant Quarantine Act (1976), (ii) the Federal Seed Certification Act (1976), (iii) Agricultural Produce (Grading and Marketing) Act (1937), and (iv) Pakistan Animal Quarantine (Import and Export of Animals and their Products) Act (1988).</p>	<p>Schedule 6, para. 24</p>	<p>Not complied with</p> <p>Review of the acts and laws was undertaken but they were not submitted to the Cabinet or Parliament. No further action is reported.</p>
<p>The Borrower shall ensure that throughout the implementation of the Project, adequate budgetary allocations of the required counterpart funds are made, approved, and released in a timely manner to ensure proper Project implementation.</p>	<p>Schedule 6, para. 25</p>	<p>Partly complied with</p> <p>Adequate counterpart funds were provided to the project through FY2008. From FY 2009 onward, counterpart funds declined steeply due to the country's difficult fiscal situation.</p>
<p>Within six months of the Effective Date, the Borrower shall prepare</p>	<p>Schedule 6,</p>	<p>Not complied with</p>

Covenant	Reference in Loan Agreement	Status of Compliance
and submit for ADB approval the first year work plan of the Project.	para. 26	The first work plan was shared with ADB's SSTA consultant but not submitted to ADB for approval.
Within nine months of the Effective Date, the Borrower shall establish a gender-disaggregated Project performance management system as agreed with ADB. Within six months of the Effective Date, the detailed plan for gender disaggregated monitoring performance for ADB's review and concurrence shall be finalized and the baseline survey shall be completed.	Schedule 6, para. 27	Not complied with No gender-disaggregated PPMS was established. The baseline survey was completed in early 2009. However, no further surveys were done to gauge the project performance.
The PMU shall collect information, and prepare quarterly and annual progress reports for ADB, including annual benefit monitoring reports. Within 3 months of Project completion, MINFAL shall submit to ADB a Project completion report providing a detailed evaluation of the progress on Project implementation, costs, consultants' performance, social and economic impacts, and other details as may be requested by ADB.	Schedule 6, para. 28	Partly complied with Quarterly reports were submitted but not on a regular basis. No annual reports were submitted to ADB. The borrower's PCR was not submitted
Without limiting the generality of Section 4.02 of this Loan Agreement, the Borrower shall ensure that the agencies implementing the Project shall prepare and maintain separate accounts for Project-related disbursements. PMU shall establish an audit review process and commission financial and performance audits of the MINFAL, SBP and PHDEB by an acceptable audit agency in accordance with auditing standards acceptable to ADB. Upon its incorporation as a not for profit company, ASF shall establish similar audit procedures using auditing firms associated with internationally recognized firms, in accordance with auditing standards acceptable to ADB. Certified copies of the audited accounts, financial statements and performance audit reports shall be submitted to ADB in English within six months of the end of each fiscal year, and shall include an audit with a separate opinion on the use of the imprest account and statement of expenditure procedure. PMU shall be responsible for consolidating the accounts and report for submission to MINFAL and ADB.	Schedule 6, para. 29	Partly complied with Audited accounts and financial statements of the EA and ASF were submitted to ADB. PHDEB audit reports were not submitted to ADB. No performance audit of the EA or any of the IAs was undertaken.
ADB and the Borrower shall jointly review the Project semi-annually to assess the implementation progress of the Project.	Schedule 6, para. 30	Partly Complied Only one review was conducted after the May 2008 mid-term review. That review was in July 2009. No additional reviews were undertaken after July 2009 until the PCR mission in Nov 2011.
ADB and the Borrower shall conduct a mid-term review at the third	Schedule 6,	Complied

Covenant	Reference in Loan Agreement	Status of Compliance
year of the Project. The review shall include a comprehensive evaluation of the Project progress. The mid-term review shall, as necessary, include the recommendation for adjustments to the Project scope, activities, and associated financial reallocation. These periodic reviews shall draw upon information provided by the Project performance monitoring system.	para. 31	
The Borrower shall ensure that the Project shall not cause any involuntary resettlement and negative impact on indigenous people. The Borrower shall also ensure that none of the Loan proceeds shall be utilized for land acquisition purposes	Schedule 6, para. 32	Not applicable There was no land acquisition under the project.
The Borrower shall ensure that women shall be actively engaged and benefit from the various activities under the Project. This shall be done through various interventions, including but not limited to, (i) the formation of women-only groups with access to the cost-sharing grant facility managed by the ASF, (ii) the development of women-only farmers' groups to encourage formation of women-operated farming and processing enterprises, and (iii) the inclusion of substantial number of women to participate in training activities conducted under the Project.	Schedule 6, para. 33	Complied with Female participation was good under the agribusiness support services component, with women making up approximately 40% of all farmer groups. Women were also involved in LDDB projects.

ADB = Asian Development Bank, ASF = Agribusiness Support Fund, DALPMG = Department of Agricultural and Livestock Product Marketing and Grading, FATA = Federally Administered Tribal Areas, FSCRD = Federal Seed Certification and Registration Department, FY = fiscal year, HPU = Horticulture Production Unit, IA = implementation agency, KP = Khyber Pakhtunkhwa, LDDB = Livestock and Dairy Development Board, MINFA = Ministry of Food and Agriculture, MINFAL = former Ministry of Food, Agriculture, and Livestock, PCC = project coordination committee, PCR = project completion review, PFI = participating financial institution, PICC = project implementation and coordination committee, PIO = project implementation office, PMU = project management unit, PSC = project steering committee, SBP = State Bank of Pakistan

Source: ADB project completion review mission estimates.

**STATUS OF COMPLIANCE WITH PROJECT COVENANTS BY
AGRIBUSINESS SUPPORT FUND**

Covenant	Reference in Project Agreement	Status of Compliance
ASF shall carry out the Project with due diligence and efficiency, and in conformity with sound administrative, financial, engineering, environmental and governance practices.	Section 2.01 (a)	Complied with
In the carrying out of the Project and operation of the Project facilities, ASF shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to ASF.	Section 2.01 (b)	Complied with
ASF shall make available, promptly as needed, the funds, facilities, services, equipment, land and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project.	Section 2.02	Complied with
In the carrying out of the Project, ASF shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB.	Section 2.03 (a)	Partly complied with Some procurement of goods and services was undertaken without ADB's prior approval.
Except as ADB may otherwise agree, all goods and services to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 and Schedule 5 to the Loan Agreement. ADB may refuse to finance a contract where goods or services have not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	Section 2.03 (b)	Not complied with Procurement of some of the vehicles and the contracting of Lahore University of Management Sciences were not undertaken in accordance with the loan agreement.
ASF shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to ADB. ASF shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.	Section 2.04	Not applicable No construction work was undertaken through the project.
ASF shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for insurance of Project facilities to such extent and against such risks and in such amount as shall be consistent with sound practice.	Section 2.05 (a)	Complied with
Without limiting the generality of the foregoing, ASF undertakes to insure, or cause to be insured, the goods to be imported for the Project and to be financed out of the proceeds of the Loan against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such goods.	Section 2.05 (b)	Not applicable Nothing was imported under the project.
ASF shall maintain, or cause to be maintained, records and accounts adequate to identify the goods and services and other items of expenditure	Section 2.06	Complied with
ADB and ASF shall cooperate fully to ensure that the purposes of the Loan will be accomplished.	Section 2.07 (a)	Complied with
ASF shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement, or the accomplishment of the purposes of the Loan.	Section 2.07 (b)	Complied with

Covenant	Reference in Project Agreement	Status of Compliance
ADB and ASF shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, ASF and the Loan.	Section 2.07 (c)	Complied with
ASF shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the goods and services and other items of expenditure financed out of such proceeds; (iii) the Project; (iv) the administration, operations and financial condition of ASF; and (v) any other matters relating to the purposes of the Loan.	Section 2.08 (a)	Complied with
Without limiting the generality of the foregoing, ASF shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following quarter.	Section 2.08 (b)	Complied with
Promptly after physical completion of the Project, but in any event not later than three (3) months thereafter or such later date as ADB may agree for this purpose, ASF shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by ASF of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.	Section 2.08 (c)	Not complied with The final report was provided to ADB during the PCR mission in November 2011 after a 5-month delay.
ASF shall (i) maintain separate accounts for the Project and for its overall operations; (ii) have such accounts and related financial statements (balance sheet, statement of income and expenses, and related statements) audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; and (iii) furnish to ADB, promptly after their preparation but in any event not later than 6 months after the close of the fiscal year to which they relate, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of the Loan Agreement as well as on the use of the procedures for imprest account/statement of expenditures), all in the English language. ASF shall furnish to ADB such further information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.	Section 2.09 (b)	Complied with
ASF shall enable ADB, upon ADB's request, to discuss ASF's financial statements and its financial affairs from time to time with the auditors, appointed by pursuant to Section 2.09(a) hereabove, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of ASF unless ASF shall otherwise agree.	Section 2.09 (b)	Complied with
ASF shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the Loan, all other plants,	Section 2.10	Complied with

Covenant	Reference in Project Agreement	Status of Compliance
sites, works, properties and equipment of ASF and any relevant records and documents.		
ASF shall, promptly as required, take all action within its powers to maintain its corporate existence, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its business.	Section 2.11 (a)	Complied with
ASF shall at all times conduct its business in accordance with sound administrative, financial, environmental, and governance practices, and under the supervision of competent and experienced management and personnel.	Section 2.11 (b)	Complied
ASF shall at all times operate and maintain its plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound administrative, financial, engineering, environmental, governance and maintenance and operational practices.	Section 2.11 (c)	Complied with
Except as ADB may otherwise agree, ASF shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.	Section 2.12	Complied with
Except as ADB may otherwise agree, ASF shall apply the proceeds of the Loan to the financing expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all goods and services financed out of such proceeds are exclusively in the carrying out of the Project.	Section 2.13	Complied with
ASF shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of its Charter and shall afford ADB an adequate opportunity to comment on such proposal prior to taking any action thereon.	Section 2.14	Not applicable No changes to the charter of the ASF were proposed.

ADB = Asian Development Bank, ASF = Agribusiness Support Fund.

Source: ADB project completion review mission estimates

COMPLIANCE WITH PROJECT COVENANTS BY LIVESTOCK AND DAIRY DEVELOPMENT BOARD

Covenant	Reference in Project Agreement	Status of Compliance
LDDDB shall carry out the Project with due diligence and efficiency, and in conformity with sound administrative, financial, engineering, environmental and livestock management practices.	Section 2.01 (a)	Partly complied with Most of the time, LDDDB affairs were controlled by the government. For more than 2 years (2009–2011), LDDDB operated without an official CEO. The LDDDB could not operate as an independent, private, not-for-profit company.
In the carrying out of the Project and operation of the Project facilities, LDDDB shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to LDDDB.	Section 2.01 (b)	Partly complied with The LDDDB was not free to operate independently due to undue involvement by the government in its affairs.
LDDDB shall make available, promptly as needed, the funds, facilities, services, equipment, land and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project.	Section 2.02	Complied with
In the carrying out of the Project, LDDDB shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB.	Section 2.03 (a)	Not applicable No consultants or contractors were appointed by the LDDDB for the project.
Except as ADB may otherwise agree, all goods and services to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 and Schedule 5 to the Loan Agreement. ADB may refuse to finance a contract where goods or services have not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	Section 2.03 (b)	Not complied with Vehicles were procured without following the NCB procedure required under the Schedule 4 of the loan agreement.
LDDDB shall carry out the Project in accordance with plans, specifications, work schedules and construction methods acceptable to ADB. LDDDB shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.	Section 2.04	Not applicable The project involved no construction work.
LDDDB shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance Of Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.	Section 2.05 (a)	Complied with
Without limiting the generality of the foregoing, LDDDB undertakes to insure, or cause to be insured, the goods to be imported for the Project and to be financed out of the proceeds of the Loan against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such goods.	Section 2.05 (b)	Not applicable Nothing was imported under the project by LDDDB.

Covenant	Reference in Project Agreement	Status of Compliance
LDDB shall maintain, or cause to be maintained, records and accounts adequate to identify the goods and services and other items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.	Section 2.06	Complied with
ADB and LDDB shall cooperate fully to ensure that the purposes of the Loan will be accomplished.	Section 2.07 (a)	Complied with
LDDB shall promptly inform ADB of any condition which interferes with; or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement, or the accomplishment of the purposes of the Loan.	Section 2.07 (b)	<p>Not complied with</p> <p>After implementation of the 18th constitutional amendment in 2011, the Ministry of Livestock and Dairy Development (the parent ministry of the LDDB) was abolished and the government decided to close down the LDDB. When the LDDB board of directors tried to conduct a meeting in 2011 but the government prevented the meeting by requiring the SECP to instruct the board in writing that it was not to be held.</p> <p>ADB was not informed of this until fielding of the PCR mission.</p>
ADB and LDDB shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, LDDB and the Loan.	Section 2.07 (c)	Complied with
LDDB shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the goods and services and other items of expenditure financed out of such proceeds; (iii) the Project; (iv) the administration, operations and financial condition of LDDB; and (v) any other matters relating to the purposes of the Loan.	Section 2.08 (a)	Not complied with
Without limiting the generality of the foregoing, LDDB shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following quarter.	Section 2.08 (b)	Not complied with
Promptly after physical completion of the Project, but in any event not later than three (3) months thereafter or such later date as ADB may agree for this purpose, LDDB shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial	Section 2.08 (c)	Not complied with

Covenant	Reference in Project Agreement	Status of Compliance
operation of the Project, including its cost, the performance by LDDB of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.		
LDDB shall (i) maintain separate accounts for the Project and for its overall operations; (ii) have such accounts and related financial statements (balance sheet, statement of income and expenses, and related statements) audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; and (iii) furnish to ADB, promptly after their preparation but in any event not later than 6 months after the close of the fiscal year to which they relate, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of the Loan Agreement as well as on the use of the procedures for imprest account/statement of expenditures), all in the English language. LDDB shall furnish to ADB such further information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.	Section 2.09 (a)	Partly complied with Audited financial statements were not submitted to ADB regularly.
LDDB shall enable ADB, upon ADB's request, to discuss LDDB's financial statements and its financial affairs from time to time with the auditors, appointed by LDDB pursuant to Section 2.09(a) here above, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of LDDB unless LDDB shall otherwise agree.	Section 2.09 (b)	Not complied with The LDDB did not submit its audited financial statements to ADB for review or discussion.
LDDB shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the Loan, all other plants, sites, works, properties and equipment of the LDDB and any relevant records and documents.	Section 2.10	Complied with
LDDB shall, promptly as required, take all action within its powers to maintain its corporate existence, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its business.	Section 2.11 (a)	Partly complied with The LDDB was not independent enough and mostly worked under government directives, which defeated the very purpose of its establishment as an independent corporate body.
LDDB shall at all times conduct its business in accordance with sound administrative, financial, environmental and livestock management practices, and under the supervision of competent and experienced management and personnel.	Section 2.11 (b)	Partly complied with Since 2009, the LDDB has had no full-time CEO. A federal secretary who is a government nominee on LDDB's board has exercised the powers of CEO.
LDDB shall at all times operate and maintain its plants, equipment and other property, and from time to time,	Section 2.11 (c)	Complied with

Covenant	Reference in Project Agreement	Status of Compliance
promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound administrative, financial, engineering, environmental, governance and maintenance and operational practices.		
Except as ADB may otherwise agree, LDDDB shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.	Section 2.12	Complied with
Except as ADB may otherwise agree, LDDDB shall apply the proceeds of the Loan to the financing expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all goods and services financed out of such proceeds are exclusively in the carrying out of the Project.	Section 2.13	Complied with
LDDDB shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of its Charter and shall afford ADB an adequate opportunity to comment on such proposal prior to taking any action thereon.	Section 2.14	Not complied with The government never provided ADB any notice or indication of its decision to close down the LDDDB.

ADB = Asian Development Bank, CEO = chief executive officer, LDDDB = Livestock and Dairy Development Board, SECP = Securities and Exchange Commission of Pakistan
Source: ADB project completion review mission estimates.

**COMPLIANCE WITH PROJECT COVENANTS
PAKISTAN HORTICULTURE DEVELOPMENT AND EXPORT COMPANY**

Covenant	Reference in Project Agreement	Status of Compliance
PHDEC shall carry out the Project with due diligence and efficiency, and in conformity with sound administrative, financial, engineering, environmental and horticultural practices.	Section 2.01 (a)	Partly complied with PHDEC is not operating as a fully independent corporate body and its affairs are predominantly influenced by the government. Moreover, no audits have been conducted on PHDEC for since FY2009.
In the carrying out of the Project and operation of the Project facilities, PHDEC shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to PHDEC.	Section 2.01 (b)	Partly complied with PHDEC failed to comply with many of its obligations under the LA and PA, particularly on submission of quarterly progress reports, project completion report, and audited financial statements.
PHDEC shall make available, promptly as needed, the funds, facilities, services, equipment, land and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project.	Section 2.02	Complied with
In the carrying out of the Project, PHDEC shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB.	Section 2.03 (a)	Compliance not assessed due to PHDEC lack of cooperation with the ADB PCR mission. PHDEC management refused to provide relevant records to ADB during the PCR mission.
Except as ADB may otherwise agree, all Goods, Works and consulting services to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where Goods, Works or consulting services have not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	Section 2.03 (b)	Compliance not assessed due to PHDEC refusal to cooperate with the ADB PCR mission. PHDEC management did not provide relevant records to ADB during the PCR mission.
PHDEC shall carry out the Project in accordance with plans, specifications, work schedules and construction methods acceptable to ADB. PHDEC shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.	Section 2.04	Not applicable The project did not involve any civil works.
PHDEC shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such	Section 2.05 (a)	Complied with

Covenant	Reference in Project Agreement	Status of Compliance
risks and in such amounts as shall be consistent with sound practice.		
Without limiting the generality of the foregoing, PHDEC undertakes to insure, or cause to be insured, the Goods to be imported for the Project and to be financed out of the proceeds of the Loan against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.	Section 2.05 (b)	Not applicable Nothing was imported under the Project.
PHDEC shall maintain, or cause to be maintained, records and accounts adequate to identify the Goods, Works and consulting services and other items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.	Section 2.06	Compliance not assessed due to PHDEC refusal to cooperate with the ADB PCR mission. PHDEC management did not provide relevant records to ADB during the PCR mission.
ADB and PHDEC shall cooperate fully to ensure that the purposes of the Loan will be accomplished.	Section 2.07 (a)	Compliance not assessed due to PHDEC refusal to cooperate with the ADB PCR mission. PHDEC management did not provide relevant records to ADB during the PCR mission.
PHDEC shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement, or the accomplishment of the purposes of the Loan.	Section 2.07 (b)	Not complied with The affairs of PHDEC were controlled predominantly by the government, which affected the implementation of the project component for which PHDEC was responsible. However, ADB was not informed of any such interference or obstacles during the project execution.
ADB and PHDEC shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, PHDEC and the Loan.	Section 2.07 (c)	Partly complied with PHDEC management did not cooperate with or provide relevant records to the ADB PCR mission.
PHDEC shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the Goods, Works and consulting services and other items of expenditure financed out of such proceeds; (iii) the Project; (iv) the administration, operations and financial condition of PHDEC; and (v) any other matters relating to the purposes of the Loan.	Section 2.08 (a)	Partly complied with PHDEC management did not cooperate with or provide relevant records to ADB during the PCR Mission.

Covenant	Reference in Project Agreement	Status of Compliance
Without limiting the generality of the foregoing, PHDEC shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request and shall indicate, among other things, progress made and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following quarter.	Section 2.08 (b)	Not complied with PHDEC did not submit quarterly progress reports to ADB.
Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, PHDEC shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by PHDEC of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.	Section 2.08 (c)	Not complied with PHDEC did not submit a project completion report and the PHDEC management avoided meeting the ADB PCR mission.
PHDEC shall (i) maintain separate accounts for the Project and for its overall operations; (ii) have such accounts and related financial statements (balance sheet, statement of income and expenses, and related statements) audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; and (iii) furnish to ADB, promptly after their preparation but in any event not later than 6 months after the close of the fiscal year to which they relate, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of the Loan Agreement as well as on the use of the procedures for imprest account/statement of expenditures), all in the English language. PHDEC shall furnish to ADO such further information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.	Section 2.09 (a)	Partly complied with The required audited financial accounts were not submitted to ADB.
PHDEC shall enable ADB, upon ADB's request, to discuss PHDEC's financial statements and its financial affairs from time to time with the auditors, appointed by PHDEC pursuant to Section 2.09(a) here above, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADO, provided that any such discussion shall be conducted only in the presence of an authorized officer of PHDEC unless PHDEC shall otherwise agree.	Section 2.09 (b)	Not complied with Audited accounts were not submitted to ADB.
PHDEC shall enable ADB's representatives to inspect the Project, the Goods and Works financed out of the proceeds of the Loan and any relevant records and documents.	Section 2.10	Partly complied with PHDEC management did not cooperate with the ADB PCR mission or facilitate inspection of project records or project-financed goods.

Covenant	Reference in Project Agreement	Status of Compliance
PHDEC shall, promptly as required, take all action within its powers to maintain its corporate existence, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its business.	Section 2.11 (a)	Not complied with PHDEC is predominantly controlled by the government and, effectively, is not an independent, corporate body.
PHDEC shall at all times conduct its business in accordance with sound administrative, financial, environmental and horticultural practices, and under the supervision of competent and experienced management and personnel.	Section 2.11 (b)	Partly complied with PHDEC is predominantly controlled by the government and, effectively, is not an independent, corporate body.
PHDEC shall at all times operate and maintain its plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound administrative, financial, engineering, environmental, horticultural, and maintenance and operational practices.	Section 2.11 (c)	Compliance not assessed due to PHDEC lack of cooperation with the ADB PCR mission. PHDEC management did not provide relevant records to ADB during the PCR mission.
Except as ADB may otherwise agree, PHDEC shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.	Section 2.12	Compliance not assessed due to PHDEC lack of cooperation with the ADB PCR mission. PHDEC management did not provide relevant records to ADB during the PCR mission.
Except as ADB may otherwise agree, PHDEC shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all Goods, Works and consulting services financed out of such proceeds are used exclusively in the carrying out of the Project.	Section 2.13	Compliance not assessed due to PHDEC lack of cooperation with the ADB PCR mission. PHDEC management did not provide relevant records to ADB during the PCR mission.
PHDEC shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of its Charter and shall afford ADB an adequate opportunity to comment on such proposal prior to taking any action thereon.	Section 2.14	Compliance not assessed due to PHDEC lack of cooperation with the ADB PCR mission. PHDEC management did not provide relevant records to ADB during the PCR mission.

ADB = Asian Development Bank, PHDEC = Pakistan Horticulture Development and Export Company.

Source: ADB project completion review mission estimates.

CONSULTANCY INPUTS (person-months)

Item	At Appraisal		At Completion	
	International	National	International	National
A. Agribusiness Support Fund Promotion				
Agribusiness support fund promotion	1.00		0.00	
Agribusiness support fund promotion		3.00		0.00
Subtotal (A)	1.00	3.00	0.00	0.00
B. Agribusiness Finance Awareness Building and Monitoring				
Agribusiness finance awareness building	3.00		3.03	
Agribusiness finance capacity building	168.00		0.00	
Agribusiness finance performance monitoring	3.00		0.00	
Subtotal (B)	174.00		3.03	
C. Agribusiness Capacity Building				
Institutional restructuring and coordination	12.00		8.98	
Institutional Development Study (provinces and special areas)		4.00		7.17
Institutional quality standards (DALPMAG export certification)	3.00		2.00	
Seed and fruit nursery certification and standards	5.00		4.49	
Agribusiness training curriculum development	3.00		3.00	
Agribusiness training curriculum development		9.00		11.26
Training, coordination, and dissemination (DALPMAG)		36.00		9.03
Floriculture training	6.00		3.03	
Agribusiness policy	6.00		6.85	
Horticulture policy		14.00		18.44
Regulatory framework and international standards compliance	3.00		4.00	
Subtotal (C)	38.00	63.00	32.35	45.90
D. Project Management and Studies				
Project management support	2.00		1.00	
Monitoring and evaluation		15.00		11.31
ASF audit		5.00		1.14
Environmental monitoring and evaluation studies		16.00		0.00
Competitive and comparative advantage study		4.00		0.00
Livestock and dairy study		10.00		10.00
Subtotal (D)	2.00	50.00	1.00	22.45
E. Unallocated				
Unallocated	6.00		3.06	
Unallocated		12.00		34.17
Subtotal (E)	6.00	12.00	3.06	34.17
Total	221.00	128.00	39.44	102.52^a

ASF = Agribusiness Support Fund, intl = international, DALPMAG = Department of Livestock Product Marketing and Grading.

^a The ADB loan review mission of August 2009 reported that national consultant inputs to that date totaled 110.22 person-months. However, per data provided by PMU at the loan closing, the national consultants' input accounts for a total of 102.52 person-months.

Source: Asian Development Bank project completion review mission.

PROJECT ECONOMIC AND FINANCIAL REEVALUATION

A. Introduction

1. The Asian Development Bank approved the Agribusiness Development Project to support the contribution of agribusiness to economic growth and employment generation in Pakistan. The project sought to address market failures to facilitate private sector-led agribusiness development. This was to be achieved by extending financial and technical capacity building support to entrepreneurs, service providers, financial institutions, and farmers. Policy and regulatory frameworks were to be improved.

B. Economic Reevaluation

1. Methodology and Assumptions

2. A wide range of demand-driven interventions were to be identified during implementation. This meant that the likely mix of the scale and types of participating enterprise could not be determined at appraisal. A full economic analysis of the project was accordingly considered to be impractical and was not attempted.

3. Both time and data constraints meant that it was impossible for a full economic reevaluation to be carried out for the PCR. A partial analysis was accordingly made using the limited information that was available about one farm production enterprise supported by the Agribusiness Support Fund (ASF), tunnel house production of vegetables. This enterprise has been used as the model representing all the widely diverse range of activities supported by the Project, both on and off-farm. In addition, process efficiency was considered in determining the overall economic efficiency of the Project.

4. For the reevaluation, a gross margin (exclusive of initial investment costs financed by the Project) has been estimated for a single enterprise. The aggregate value of incremental output has then been estimated by assuming all 1,949 households who participated in ASF-supported farm production activities adopted this enterprise. This aggregate has then been compared with adjusted Project investment costs and an EIRR estimated. All output from the enterprises is assumed to be incremental, as production is mainly out-of-season using resources that were previously under-utilized.

5. All costs and benefits are expressed in constant 2011 rupees (PRs) in the domestic price numeraire. A Shadow Exchange Rate Factor of 1.14 has been used to convert border prices of traded goods to the domestic price level.¹ Investment costs of tradable goods have been adjusted to constant 2011 values using the Manufactures Unit Value published by the World Bank in its Commodity Price Projections series and non-tradable costs by the General Consumer Price Index published by the Pakistan Federal Bureau of Statistics. Table A10.1 shows the indices used.² A shadow wage rate factor of 0.80 has been used to adjust farm family and unskilled hired labor costs to economic values, reflecting the situation of less than full employment in most of the Project areas. The salary costs of incremental Project and ASF staff, have, however, been included in the analysis at their full value. Duties and taxes have been removed and financial charges excluded from investment costs. A zero residual value has been assumed for Project equipment, vehicles and buildings. A 17-year Project life, which covers two

¹ Based on a standard conversion factor of 0.88 as estimated by Shakheel Ahmad: Farm Forestry Project – Economic Analysis of Selected Nurseries. Islamabad. June 2004.

² All tables for the economic reevaluation are found at the end of this appendix.

12-year production cycles, has been assumed. Table A10.2 shows the investment cost in economic prices.

2. Investment Costs

6. Project investments were made in a wide range of activities including legislative reform, trade facilitation, horticultural, agricultural and animal production, administrative reform and project management. In order to allocate investment costs more specifically to the horticultural production activities included in the analysis, total economic investment costs have been adjusted as follows (i) Agribusiness Support Services – 65% of cost included in the analysis, (ii) Agribusiness Capacity Building – 60% of cost included in the analysis, and (iii) Project Management Support - 65% of cost included in the analysis. The adjusted economic investment cost (Table A10.2) included in the analysis is \$17.55 m (\$27.13 million unadjusted).

3. Economic Gross Margins and Prices

7. The gross margin for tunnel house production (Table A10.3) was estimated from field data, largely drawn from the reports of participating NGOs. Local financial prices have been taken as border price equivalents, with the unskilled labor content adjusted by the shadow wage rate factor.

4. Economic Internal Rate of Return

8. Under the above assumptions, the economic internal rate of return (EIRR) is estimated at 4% (Tables A10.4 and A10.5), compared with an assumed economic opportunity cost of capital of 12%. The estimated return is very sensitive to changes in investment costs – an increase of 10% would result in the EIRR falling to 2%, while a fall in investment costs of 10% would result in the EIRR rising to 6%. For the share of investment costs assumed in the base case analysis, the economic gross margin would need to rise by about 23% for the EIRR to reach 12%.

C. Financial Reevaluation

9. Financial justification for the project was based on an analysis of the profitability of investing in a number of agro-enterprises that represented the types of enterprise that were likely to participate in the project. The following types of enterprises were analyzed:

- (i) fruit tree nursery production
- (ii) livestock fattening
- (iii) milk collection and chilling center
- (iv) cool chain distribution for cut flowers
- (v) date processing
- (vi) mango-packing
- (vii) cold storage
- (viii) vegetable seed production and marketing
- (ix) kinnow packing

10. The analysis showed that financial internal rates of return exceeded the assumed financial opportunity cost of capital of 12% for all enterprises, although vegetable seed production and kinnow packing were very marginal.

11. The project completion review was unable to reevaluate using these models because the original models were unavailable and undertaking the detailed fieldwork that would have been required to prepare new estimates during the mission was not practical. Instead, data from ASF that were based in part on completion reports of participating nongovernment organizations have been used to provide indicative examples of the financial return to beneficiaries at the farm level.

1. Agha Khan Rural Support Program, Gilgit

12. ASF grants provided support to farmers through the Agha Khan Rural Support Program for product quality improvement. In the case of apricot drying, the replacement of open air drying with drying in a plastic tunnel resulted in a marked improvement in quality and growers reported a price premium of up to 150% over apricots dried using traditional techniques.

13. Other grants provided support for construction of plastic sheet tunnel houses for out-of-season vegetable production and for capacity building for local institutions that were providing packing, grading, and marketing services to fruit and vegetable producers. Initial indications are that net margins to individual farmers have improved as a result of these activities.

14. Grants were used to support the formation of farmer groups. Members have reported that acting as a group has enabled them to reduce input, transport, and marketing costs and thus increase their margins. It has also provided them with a platform for sharing information about production techniques.

2. Sarhad Rural Support Program

15. ASF grants supported the formation of 340 farmer groups in Khyber Pakhtunkhwa Province. Subsequent operational grants were made to these groups to support the provision of services for activities such as vegetable production, vegetable pickling, fruit juice production, and cheese making. One group producing off-season vegetables in Mansehra District reported that individual incomes of group members using traditional techniques were previously PRs4,000–PRs5,000 per month but after adopting tunnel systems had risen to about PRs12,000 per month for a 3–4 month production season. There was also a significant employment effect, with each member hiring 3 or 4 laborers from the area at PRs250 per day.

16. Assuming a 3-month production season, an investment cost (net of ASF grant) of PRs300,000, a plastic cover replacement cost of PRs150,000 every second year, and a project life of 6 years (with no residual value), the margins after the tunnel system's adoption represent a financial rate of return to grower capital of over 60%.³

17. The ASF grant program also produced important social benefits. The Sarhad Rural Support Program reported that an all-female group in Peshawar District initiated a cheese making and marketing business after receiving business development and marketing training under a grant and invested PRs40,000 of their own capital. The women are currently supplying cheese to local sweet shops and bakeries and are developing a degree of financial independence.

³ The galvanized hoops would, in fact, have a very long life even if in some other use.

3. Examples of Actual or Potential Financial Benefits of Other Agribusiness Support Fund Initiatives

18. The ASF funding of the protection of dates during the monsoon season is an example of the ASF's grant activities. The harvesting season for dates in Pakistan runs from the end of July and until mid-September. Monsoon rain during this period can cause crop losses of up to 80% and post-harvest handling and storage of the remaining crop can also be adversely affected. In 2010, project grants were provided to growers on a cost-sharing basis to test the use of bags to protect the crop during the harvest period. Results so far have been encouraging and should prove to be financially attractive. Covered crops not only survived heavy rain but the quality and taste improved when compared with uncovered bunches. Incremental revenue resulted from reduced losses, increased bunch weight, and better color and taste. Overall, marketable yields increased by up to 35% over those of the pre-grant period.

19. The ASF successfully supported the training of more than 100 enterprises and individuals in the requirements for product certification for export, particularly in Global Good Agricultural Practices (GlobalGAP) and Hazard Analysis Critical Point Control. Grants were used to help with the cost of visits to Pakistan by specialists who provided training in certification procedures to local processors, producers, and consultants. This training has increased the ability of growers, processors, and exporters to respond to the increasingly stringent sanitary and phytosanitary and food quality standards in export markets. In addition, several private sector consultants are now certified to provide GlobalGAP and other certification services for agribusinesses and producers. The program has facilitated the application of GlobalGAP good agricultural practices covering about 580 hectares of mango orchards and processing firms that handle over 7,750 tons of mango products annually. Producers reported that they have been able to realize significantly higher farm gate prices after becoming certified. A further practical outcome of the program was the lifting of a ban by the Russian Federation on imports of citrus products from certified enterprises in Pakistan.

20. An ASF grant supported a trial shipment of fresh mangoes by sea to Europe in controlled atmosphere containers. Fruit shipped in these containers had a shelf life at least 20 days longer than that of fruit shipped in conventional chilled containers and the shipping costs were considerably lower than those by air. Although further trials are required, it is expected that this will become a more financially viable and sustainable means of shipping for the bulk of the mango export crop than airfreight.

D. Recommended Follow-Up Actions for Further Benefits

21. The following follow-up actions are recommended:

- (i) The newly established Ministry of Food Security and Research should ensure that the product quality standards revised during the project are published on a website and that institutional arrangements are put in place to ensure that they remain current. This would benefit exporters, domestic producers and domestic consumers by reducing the transaction costs of acquiring information about quality requirements, especially where there are implications for international trade and food safety. Payment could be required for some information, which would to some extent offset government recurrent budget costs.
- (ii) Over the next 1–2 years, the ASF should conduct case studies of firms in the non-farm part of the value chain to assess the financial value of the types of interventions financed under the project. The ASF provided matching grants

under the project to allow the companies to acquire services to help establish new agribusinesses or to upgrade existing businesses. The installation of mango packing lines and the construction of screen houses were among the activities supported. A full financial evaluation of a selection of these enterprises, taking into account all investment costs and the market outlook, would allow a more comprehensive assessment to be made of the benefits of a services grant program than is currently available. It would also provide a clearer picture of the financing required to cover the non-grant component of services and the associated equipment and working capital. This information is essential for planning purposes.

- (iii) Revised financial arrangements are required for FSCRD to ensure that laboratories financed under the project can remain operational. This could involve either an increase in regular budget provision and/or charging for services. Development of partnerships with private sector seed and planning material suppliers should remain a priority in efforts to ensure a sound financial basis for FSCRD operations. Under the current plant propagation structure, FSCRD plays an important role in ensuring that plant material remains true to type and disease free. FSCRD activities have the potential to deliver large benefits to producers and the national economy and all avenues for funding need to be considered.
- (iv) LDDDB and PHDEC urgently needed to prepare and implement sustainability plans. Requiring these companies to acquire funding from sources other than the government and donors would be a true test of their worth and would force them to adopt a much more private sector oriented approach to their activities and management. The strategic analysis that would be needed to develop a sustainability plan would help in this respect and would also define a corporate structure, especially in regards to the degree of independence from the government that will be necessary to ensure that the companies become sustainable.

Table A10.1: Exchange Rates and Multipliers

	Unit	2006	2007	2008	2009	2010	2011
Average annual exchange rate for \$1.00	PRs	61.03	69.40	76.61	80.32	85.28	85.61
Exchange rate ratio: 2011 to current year		1.40	1.23	1.12	1.07	1.00	1.00
Consumer price index (2000/01=100)		131.60	141.90	158.90	191.70	214.40	235.80
Domestic inflation Jul-Jun:1996=1995/96	%	7.87	7.83	11.98	20.64	11.84	9.98
Domestic inflation: estimated calendar year basis	%	7.85	9.90	16.31	16.24	10.91	9.75
Local inflation factors: 1996=1.00, end-year		1.78	1.96	2.28	2.65	2.94	3.22
Local inflation factors: 1996=1.00, mid-year		1.71	1.87	2.12	2.46	2.79	3.08
Inflation multipliers; constant 2011, mid-year		1.79	1.65	1.15	1.25	1.10	1.10
Manufactures unit value (MUV) index	%	1.20	4.70	6.4	-5.60	2.50	4.90
MUV factors; 1996=100, end-year		0.97	1.03	1.10	1.04	1.06	1.12
MUV factors; 1996=1.00, mid-year		0.98	1.01	1.07	1.07	1.05	1.09
MUV multipliers, constant 2011, mid-year		1.11	1.08	1.02	1.02	1.04	1.00

MUV= manufactures unit value, PRs=Pakistan rupees

Note: Exchange rate is average for year.

Source: Asian Development Bank for exchange rates, Pakistan Federal Bureau of Statistics for inflation rates, and World Bank for MUV.

Table A10.2: Project Economic Investment Costs, Constant 2011
(\$ million)

(A) All Costs Included							
Item	2006	2007	2008	2009	2010	2011	Total
A Agribusiness Support Services	1.96	0.36	3.13	3.86	2.66	3.01	14.97
B Agribusiness Finance Development							
C Agribusiness Capacity Building	0.59	0.52	0.42	0.03	0.01	0.10	1.67
D Agribusiness Policy Formulation							
E Project Management Support	2.04	3.00	2.23	2.04	0.58	0.59	10.48
Total Project Economic	4.59	3.88	5.79	5.93	3.24	3.71	27.13

(B) Costs Adjusted for Economic Evaluation							
Item	2006	2007	2008	2009	2010	2011	Total
A Agribusiness Support Services (65%)	1.27	0.23	2.04	2.51	1.73	1.96	9.73
B Agribusiness Finance Development							
C Agribusiness Capacity Building (60%)	0.36	0.31	0.25	0.02	0.00	0.06	1.00
D Agribusiness Policy Formulation							
E Project Management Support (65%)	1.33	1.95	1.45	1.33	0.38	0.38	6.81
Total Project Economic	2.96	2.49	3.74	3.85	2.11	2.40	17.55

Source: Base financial costs from Asian Development Bank financial management system. Tradable/non-tradable ratios from Asian Development Bank financial management system with project completion review adjustments. Multipliers are from Table A10.1. Cost adjustment factors from project completion review estimates.

Table A10.3: Financial Analysis of Tunnel House Enterprise (Incremental Returns)

		Year of Enterprise											
	Unit	1	2	3	4	5	6	7	8	9	10	11	12
Enterprise Net Income													
Members	No.	10											
Monthly incremental margin	PRs '000'	6											
No. months	mnth	3											
Annual net increment	PRs '000'	180	180	180	180	180	180	180	180	180	180	180	180
Investment Cost													
Tunnel house and fittings	PRs '000'	300						300					
Maintenance	PRs '000'		150		150		150		150		150		150
Total investment	PRs '000'	300	150		150		150	300	150		150		150
Cash Flow	PRs '000'	(120)	30	180	30	180	30	(120)	30	180	30	180	30
FIRR		64%											

FIRR = financial internal rate of return, mnth = month, No.=number, PRs=Pakistan rupees

Source: NGO reports to Agribusiness Support Fund, PCR Mission estimates.

Table A10.4: Economic Flow - Tunnel House Enterprise^{1/}
(\$)

Year of Enterprise	Incremental gross margin	Incremental investment	Less grant financing	Net group investment	Enterprise Economic Flow
1	2,102	3,504	3,504	0	2,102
2	2,102	1,752		1,752	350
3	2,102	0		0	2,102
4	2,102	1,752		1,752	350
5	2,102	0		0	2,102
6	2,102	1,752		1,752	350
7	2,102	3,504		3,504	(1,402)
8	2,102	1,752		1,752	350
9	2,102	0		0	2,102
10	2,102	1,752		1,752	350
11	2,102	0		0	2,102
12	2,102	1,752		1,752	350

^{1/}Gross margin and investment cost from Table A10.3 converted at an exchange rate of \$1=PRs85.62.

Source: Grant financing data from Agribusiness Support Fund reports.

Table A10.5: Project Economic Analysis

		Year of Project																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Enterprise economic flow	\$	2,102	350	2,102	350	2,102	350	-1402	350	2,102	350	2,102	350					
Enterprise numbers (1949)	starts	20	50	495	389	400	595											
Project enterprise flow (\$m)	Yr 1	0.04	0.01	0.04	0.01	0.04	0.01	-0.03	0.01	0.04	0.01	0.04	0.01					
	Yr 2		0.11	0.02	0.11	0.02	0.11	0.02	-0.07	0.02	0.11	0.02	0.11	0.02				
	Yr 3			1.04	0.17	1.04	0.17	1.04	0.17	-0.69	0.17	1.04	0.17	1.04	0.17			
	Yr 4				0.82	0.14	0.82	0.14	0.82	0.14	-0.55	0.14	0.82	0.14	0.82	0.14		
						0.84	0.14	0.84	0.14	0.84	0.14	-0.56	0.14	0.84	0.14	0.84	0.14	0.00
							1.25	0.21	1.25	0.21	1.25	0.21	-0.83	0.21	1.25	0.21	1.25	0.21
Total Enterprise flow	\$m	0.04	0.11	1.10	1.10	2.08	2.49	2.22	2.32	0.55	1.13	0.88	0.41	2.2	2.38	1.19	1.39	0.21
Project costs	\$m	2.96	2.49	3.74	3.85	2.11	2.40											
Net project economic flow	\$m	-2.91	-2.38	-2.64	-2.75	-0.03	0.09	2.22	2.32	0.55	1.13	0.88	0.41	2.24	2.38	1.19	1.39	0.21
Economic Internal Rate of Return		4%																

Source: Tables A10.2, and A10.4. Agribusiness Support Fund reports with PCR adjustments to reflect calendar years.