

## Project Completion Report Validation

### Participatory Small Scale Water Resources Sector Project People's Republic of Bangladesh

Date of validation by IOE: October 2019

#### I. Basic project data

			Approval (US\$ m)		Actual (US\$ m)	
Region	Asia and the Pacific	Total project costs	119.8			
Country	Bangladesh	IFAD-1 loan and percentage of total	22.0	18.4%	18.56	-
Loan number	ADB (L-2542-BAN(SF) IFAD-1 (8248-BAN) IFAD-2 (8250-BAN)	IFAD-2 loan and percentage of total	10.0	8.3%	8.65	-
Type of project (subsector)	Water resources	IFAD TOTAL loan and percentage of total	32.0	26.7%	27.21	-
Financing type	Loan					
Lending terms <sup>1</sup>	Highly concessional	Borrower	29.1	24.3%	-	-
Date of approval	ADB: 04 Sept 2009 IFAD-1: 15 Sept 2009 IFAD-2: 12 April 2009	Cofinancier 1 (ADB)	55.0	45.9%	45.63	-
Date of loan signature	18 Oct 2010	Beneficiaries	3.7	3.1%	-	-
Date of effectiveness	ADB: 12 Nov 2009 IFAD-1: 06 Nov 2009 IFAD-2: 18 Oct 2010	Other sources	-	-	-	-
Loan amendments	18 Oct 2010 <sup>1</sup>					
Loan closure extensions	Once <sup>2</sup>					
Country programme managers	Omer Zafar Nigel Brett; Thomas Rath; Hubert Boirard (current)	Number of beneficiaries	350,000 direct HH (1.8 million individuals)			
Regional director(s)	Nigel Brett (current) Hoonae Kim Thomas Elhaut	Project completion date	January 2017		June 2018	
Project completion report reviewer	Elsbeth Asbeek Brusse	Loan closing date	30 June 2017		31 Dec 2018	
Project completion report quality control panel	Hansdeep Khaira	Mid-term review			07 June 2014	
		IFAD loan disbursement at project completion ( )			IFAD-1: 91.6% IFAD-2: 92.2%	
		Date of the project completion report			October 2018	

\*) special loans on highly concessional terms, free of interest but bearing a service charge of three fourths of one per cent (0.75%) per annum and having a maturity period of 40 years, including a grace period of 10 years

<sup>1</sup> An additional IFAD loan of US\$ 10.0 million (Loan 8250-BD) was approved by IFAD on 18 October 2010.

<sup>2</sup> The loan closing date was set for 30 June 2017. Considering the progress and other issues both the Asian Development Bank (ADB) and IFAD agreed to extend the closing of Loan by 31 December 2018.

Source: Project Completion Report 2018<sup>1</sup>, Presidents report, 2010<sup>2</sup>, Outline of Proposed Project, 2007.

## II. Project outline

### Introduction

1. The design of the Participatory Small-scale Water Resources Sector Project (PSSWRSP) was the outcome of lessons learned from previous projects funded by the Asian Development Bank (ADB), the Dutch and the International Fund for Agriculture Development (IFAD) in Small Scale Water Resources Development Projects. This first project took place from 1996 to 2002 and has developed into 280 subprojects in the western 37 districts of Bangladesh (SSW-1). The Second Small Scale Water Resources Development (SSW-2) Project took place from 2002 to 2010 and developed into 300 subprojects in 61 of the 64 districts of Bangladesh.
2. PSSWRSP was implemented in 56 of the country's 64 districts (excluding the districts in the Chittagong Hill Tract), with the financial assistance of ADB, IFAD, and the Government of Bangladesh. The Government of Bangladesh was the borrower, and the executing agency of the project was the Local Government Engineering Department (LGED) of the Local Government Division under the Ministry of Local Government, Rural Development and Cooperatives.
3. **Project area.** PSSWRSP was implemented in 56 of the country's 64 districts (excluding Chittagong Hill Tract districts).
4. **Project goal, objectives and components.** The overall goal of PSSWRSP was to support the government's poverty reduction efforts by increasing sustainable agriculture and fishery production.
5. The project had the objective to achieve small-scale water resources (SSWR) management systems within the project area, by financing subproject investments in the small-scale water resources sector, including subprojects for flood management, drainage improvement, water conservation, and command area development including surface water irrigation. The Project supported the development of inclusive water management cooperative associations (WMCAs) that include landowners, land operators, women, fishers, and other vulnerable groups. The project was in line with the National Strategy for Accelerated Poverty Reduction II of the Government of Bangladesh, which identifies water resources development and management as a critical sector for pro-poor economic growth and food security through agricultural development.
6. The Project activities were grouped into three components:  
**Component 1: Institutional Strengthening:** This component focused on further capacity building of government agencies at all levels to support SSWR development and to fully internalize the subproject development process within Integrated Water Resources Management Unit (IWRMU) of LGED. The project provided training for institutional strengthening within various organizations involved in the small-scale water resources sector, and enhanced the long-term capabilities of the institutional stakeholders, particularly IWRMU and the Department of Cooperatives (DoC), to carry out small-scale water resources development according to the national water plan. The institutional strengthening component covered three areas: (i) Capacity Enhancement of Local Government Engineering Department, (ii) Institutional Strengthening of Department of Cooperatives, and (iii) Improved Performance Monitoring.  
**Component 2: Participatory Subproject Development:** This component refined the critical aspects of the participatory subproject development utilizing a selection process, appraisal, and design, involving area stakeholders throughout its implementation. Subprojects were selected based on the same criteria as in SSW-1 and SSW-2. WMCAs were established and provided with substantial institutional support before, during, and following construction completion. With the support of locally based community assistants (one male and one female per subproject), WMCAs were mobilized for involvement in the design and planning, as well as in

overseeing the construction process. After the subprojects were handed-over to them, they have taken full responsibilities for operation and maintenance (O&M). To maximize benefits of improved water management, beneficiaries were supported with agricultural and fisheries training. The training program was designed in response to well-defined needs and provided in accordance with priorities based on the urgency of those needs. This component covered the following areas: (i) water resources oriented support programs; (ii) O&M, capacity building of water management cooperative associations; and (iii) participation of women in subproject development.

**Component 3: Small Scale Water Resource Infrastructure and Project Implementation Support**

This component included: (i) construction, rehabilitation, development and/or improvement of 270 small-scale water resources subprojects, including flood management, drainage improvement, water conservation and command area development; and (ii) improvements of 150 better performing subprojects financed under SSW-1 and SSW-2.

7. **Target group.** The core target group for the project was composed of small and marginal farmers, classified in Bangladesh as households owning between 0.5 and 1 hectare of land. A secondary target group for this project comprised of functionally landless households, who would benefit from agricultural wage labour opportunities and from non-farm employment generated by broad-based agricultural growth. Studies conducted during the design phase showed that 90 per cent of households that would benefit from the schemes to be developed, belonged to these two categories. The target group was in line with the Bangladesh Country Strategic Opportunities Paper (COSOP) and the IFAD Policy on Targeting.
8. The main targeting instrument was represented by the selection of subprojects to be developed under the project. One of the eligibility criteria to be met was that at least 40 per cent of the subproject benefit area must accrue to the functionally landless, marginal or small farmer households.
9. **Financing**

Table 1  
Project costs in million USD

Source	Total revised allocation	Contract award	% of contract award	Disbursement	% of disbursement
ADB (2542)	51.133	48.915	95.662	45.629	89.24
IFAD-1 (8248)	20.271	19.913	98.236	18.558	91.55
IFAD-2 (8250)	9.386	9.343	99.533	8.650	92.16
<b>Total</b>	<b>80.791</b>	<b>78.171</b>	<b>96.758</b>	<b>72.838</b>	<b>90.16</b>

Source: PCR, p.21.

10. **Changes and developments during implementation.** The project was designed for implementation over an eight-year period including one-year joint O&M support. The original closing date was 31 December 2017, with a revised completion scheduled for June 2018. The first revision of the Development Project Pro-forma (DPP) was approved by the Ministry of Local Government Rural Development & Cooperatives for implementation within the period from January 2010 to June 2018. The administrative order in this respect was issued on 6 June 2017. The second revision of the DPP was approved by the Ministry of Planning covering the period from January 2010 to December 2018.
11. The implementation of the targeted 270 new and 150 performance enhancement subprojects could not be completed as scheduled, due to reasons such as delays in completing feasibility studies and design studies by contracted local firms, political

unrest throughout the country during 2013 and 2014, restricting the movement of people and materials, early rainfall limiting construction season, and slow reimbursements affecting fund flows.

12. **Intervention logic.** The project developed sustainable stakeholder-driven, small-scale water resource management systems with special attention to the poorer section of the population by: (i) fine-tuning the means of beneficiary participation in the selection, design, implementation, and O&M of small scale water resource management development systems; (ii) rehabilitating and constructing small-scale water resource management infrastructure with appropriate agricultural extension, fisheries extension, and aquaculture development; (iii) developing effective management of environmental and social impacts of subprojects, including on those engaged in practicing floodplain capture fisheries; (iv) developing institutional strengthening and capacity building of relevant government and stakeholder organizations to ensure adequate support for small scale water resources development at all levels; and (v) developing community-based crop processing / storage centers.
13. **Delivery of outputs.** Output delivery per project component can be found in Annex III, as well as in the PCR, Appendix 1.

### III. Review of findings

#### A. Core criteria

##### Relevance

14. **Policy Relevance.** The project objective and scope were aligned with IFAD's previous and current COSOP for Bangladesh (2006-2011, 2012-2018). In particular, the project funded pro-poor infrastructure development, with much of the construction work being carried out by Labour Contracting Societies (LCSs). It was also fully in line with the emphasis in the IFAD Strategic Framework 2007-2010 on sustainable management of natural resources. In addition, it focused on governance of natural resources and ensured participation of the poor in governance through representation in water management associations.
15. The project supported several key elements of the Government's Poverty Reduction Strategy Paper (PRSP) of October 2005. The PRSP describes the country's macroeconomic, structural, and social policies in support of growth and poverty reduction. The policy triangle on which this road map broadly rests is constituted of pro-poor economic growth, human development and governance. In addition, the PRSP notes that accelerating agricultural and rural growth is central to the reduction of poverty, and places priority on accelerated rural growth and the development of agricultural and non-farm economic activities.
16. The project supported the National Strategy for Accelerated Poverty Reduction of the Government of Bangladesh, which identifies the water resources development and management as a critical sector for pro-poor economic growth and food security through agricultural development.
17. **Relevance to national needs.** Since 90 per cent of the country's poor people live in rural areas, agriculture and rural development are critical elements of the government's poverty reduction strategy. Key constraints for rural poverty reduction include: (i) lack of physical infrastructure; (ii) lack of support services including extension, marketing, and financial services; (iii) lack of high-quality agricultural inputs; (iv) suboptimal utilization of water resources; and (v) lack of access to basic social services. Water is the foundation for many rural livelihood activities of the rural poor, and effective water resource management is fundamental to addressing pervasive rural poverty problems while promoting economic growth in Bangladesh.

18. To meet this need for effective water management, the project improved the development of the water resources sector through participatory rehabilitation and management of small-scale (less than 1,000 ha) water resources infrastructure. Additionally, the project assisted stakeholders to form water management associations and to upgrade physical facilities including: (i) flood management; (ii) drainage improvement; (iii) water conservation; and (iv) command area development. These improvements in the water resource infrastructure assisted in: (i) improvement of income opportunities for food crop production; (ii) development of culture fisheries in areas protected by embankments; (iii) ensured access by the poor to public water bodies; and (iv) encouragement of nonagricultural activities by the poor with forward linkages, hereby taking important steps in catering to national needs.
19. **Relevance of design.** PSSWRSP's design was based on the structure of SSW-1 and SSW-2. In order to improve the design of the current project, several improvements were implemented based on the lessons learned from SSW-2. For example, to improve project oversight, a project steering committee was formed consisting of representatives of all ministries and agencies concerned. A more participatory approach was used that foresaw local governments, LGED district offices, and community assistants recruited locally to be involved in assisting the formation of WMCAs. Also, an implementation agreement had to be signed in a public forum after the formation of WMCAs and prior to initiating construction, hereby ensuring that all parties were ready for construction activities to be undertaken. Based on these improvements for the current project, the design is considered valid and appropriate.
20. **Institutional framework.** The project design specified the involvement of a large number of government agencies that would provide support to WMCAs.<sup>1</sup> To coordinate the support of these agencies, the design foresaw LGED entering into agreements with each through signing a Memorandum of Understanding. Although the number of cooperating government agencies may suggest increased complexity in operation, the cooperation between LGED and the Department of Agricultural Extension (DAE), the Department of Fisheries (DoF), DoC, the Rural Development Academy (RDA), the Bangladesh Academy for Rural Development (BARD), the Bangladesh Fisheries Research Institute (BFRI) was found, in general, satisfactory.
21. The project was designed as a participatory project. The early stages of the project had involved beneficiaries actively, including in Participatory Rural Appraisal (PRA), design, establishment of WMCAs as well as in construction supervision committees. Each subproject's planning phase started with conducting a PRA, in which beneficiaries' views were generally sought and reflected in the project's activities planning, and most were actively involved in the WMCA activities.
22. On the basis of recommendations of several missions, the Project Management Office (PMO) had increasingly given beneficiary participation in O&M more focused and effective attention. Beneficiaries contributed to the degree envisaged in the design.
23. **Targeting.** The project targeted different categories of economically poor in rural communities. The core target group for the project was composed of small and marginal farmers, classified in Bangladesh as households owning between 0.5 and 1 hectare of land. A secondary target group for the project comprised of functionally landless households who would benefit from agricultural wage labour opportunities and from non-farm employment generated by broad-based agricultural growth. The main targeting instrument was represented by the

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<sup>1</sup> These agencies were the Department of Agriculture Extension (DAE) (Ministry of Agriculture), Department of Fisheries (DoF) (Ministry of Livestock and Fisheries), the DoC (Ministry of Local Government Rural Development and Cooperatives), the Department of Environment (Ministry of Environment, Forest & Climate change), Bangladesh Academy for Rural Development (BARD), Rural Development Academy (RDA), and Bangladesh Fisheries Research Institutes (BFRI).

selection of subprojects to be developed under the project. These selection criteria were the same as for SSW-1 and SSW-2. One of the criteria that had to be met, was that at least 40 per cent of the subproject benefit area had to be owned by the functionally landless, marginal or small farmer households.

24. **Project adjustments.** The number of subprojects that were included in the first DPP under the project was 240 new and 160 enhancement subprojects. The Project Administration Manual of March 2011 indicated the construction and maintenance of up to 270 new SSW subprojects and performance enhancement of up to 150 subprojects, of which the project could ultimately implement 265 new subprojects and 147 performance enhancement subprojects.
25. A reallocation of loan was approved on 07 December 2016. For all three loans (ADB, IFAD-1 and IFAD-2) the increased category was 'civil work' and decreased categories were 'training & capacity development' and 'benefit monitoring and evaluation'. The PCR does not indicate if these changes in loan allocation are due to a need for more staff or over-budgeting for 'training & capacity development' and 'benefit monitoring and evaluation.'
26. The project was designed for implementation over an eight-year period including one-year joint O&M support, with a revised completion scheduled for June 2018.<sup>2</sup> The revision of the completion date was vital to retain the relevance of the project, because without this extension the objectives would not have been met.
27. In sum, the project objectives were in line with key IFAD and government objectives for promoting sustainable agriculture development as well as the needs of the rural poor, the project design was appropriate to meet the intervention's objectives, the cooperation between various government agencies was found, in general, satisfactory, and necessary adjustments in loan allocation and completion date were implemented in order to meet the objectives, the PCRV rates relevance as **satisfactory (5)**, the same as rated by the Programme Management Department (PMD).

### **Effectiveness**

28. The project objectives and achievements, as reported in the Design Monitoring Framework in the PCR, are described in the following section per project component.
29. **Outcome of component 1 (Institutional strengthening).** The first component had the objective to enhance institutional capacity and capability of government agencies at all levels that support SSWR development. Indicators to meet this objective were the creation of budgeted posts at 10 LGED regional offices (four within one year of loan effectiveness, four within three years of loan effectiveness, and two within five years of loan effectiveness), an annual Effect Monitoring and Evaluation (EME) completed as scheduled with data to be disaggregated by gender and socioeconomic category, 420 WMCAs regularly provided with institutional and technical support, and gender training of IWRMU staff.
30. All of the 10 LGED regional offices were created as per target. Three annual EME reports were written. The first in 2014-15, the second one in 2016, and the third one in 2017-18. All data were disaggregated by gender and socioeconomic category. In addition, 412 WMCAs were provided with institutional and technical support and all the IWRMU staff were given training on gender.
31. **Outcome of component 2 (Participatory subproject development).** The second component had the objective of refinement of the subproject development process for sustainable WMCAs that are performing well. Indicators to meet this

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<sup>2</sup> The first revision of the DPP was approved by the Ministry of Local Government Rural Development & Cooperatives for implementation within the period from January 2010 to June 2018. The second revision of the DPP was approved by the Ministry of Planning covering the period from January 2010 to December 2018.

objectives were registration of all WMCAs, with at least 30 per cent women membership in management committees, auditing of 270 new and 150 existing WMCAs, approval of 270 requests for funding new SSWR systems and 150 requests for performance enhancement of existing SSWR systems, a WMCA maintenance fund sufficient for annual maintenance activities, and timely maintenance and O&M fund replenished periodically.

32. Of the 270 WMCAs, 165 were registered, with 33 per cent women membership in managing committees. Also, 265 out of 270 new, and 147 out of 150 existing subprojects were audited respectively, and funding requests for these new and existing subprojects was approved. Lastly, the WMCA maintenance fund was found sufficient for annual maintenance activities and the maintenance and O&M fund was replenished periodically.
33. **Outcome of component 3 (Small-scale water resources infrastructure).** The third component had the objective to construct and maintain small-scale water resources subprojects. Indicators to meet these objectives were the completion of 270 new SSWR subprojects and performance enhanced of 150 existing subprojects, and a total area of 231,000 ha covered by 420 subprojects. At the end of the project, 265 new (against a target of 270) and 147 performance enhancement subprojects (against a target of 150) were completed and an area of 220,000 ha was covered by 412 subprojects.
34. **Changes in overall context that affected project results.** Of the five new subprojects that were not finished, four were structurally completed subprojects, but damaged due to flood and excessive rainfall. These subprojects need rehabilitation and restoration of damaged components. The fifth subproject was rescinded by the executive engineer for non-performance of contractual obligations by the contractor.
35. The implementation of five of the new subprojects, and three of the performance enhancement subprojects could not be completed as scheduled due to both management and contextual reasons. Contextual reasons for the need for an extension of the project, that were mentioned in the PCR, are the political unrest throughout the country during 2013 and 2014, that restricted the movement of men and materials, and early rainfall that limited construction season.
36. **Factors in design and implementation that affected project results.** The main reason for the delays in loan utilization was the delayed preparation of the feasibility studies and design studies prepared by local consulting firms. These planning and design activities were on the critical path, and delays in their production affected the overall achievements.
37. The planning and design activities were also delayed, because of a one-year delay in recruiting local consulting firms and, once recruited, their performance (production rate) was much slower than anticipated. Initially eight consulting firms were contracted and later on four additional local consulting firms had to be contracted to help improve the situation. In spite of the efforts, the progress was not improved. At that critical point seven junior hydraulic structure design engineers were recruited in two phases, firstly four and thereafter three. With the recruitment of these design engineers, the progress has improved substantially, and all feasibility and design studies were completed by December 2016. Another reason for the delay in loan utilization, was the delay by LGED executive engineers in submitting their reimbursement applications. The backlog was a constraint in achieving projected reimbursement targets and, as a result, fund flow was reduced.
38. A ranking of the quality of the WMCAs and its assessment of O&M performance based on selected indicators illustrates that of the 265 WMCAs that were established, 200 are functioning properly. From the remaining 65 WMCAs, 55 are

not functioning satisfactorily, and 10 are poor in their functionality. Formation of poor-quality WMCAs was often the result of the subproject development cycle having been short-circuited to achieve physical and disbursement targets. This reflects shortcomings in project administration and management at various levels; the subproject development process considers that 12-18 months, with active and capable support, is required for the beneficiaries to establish themselves as a viable institution. Later, this time frame was reduced to two-four months to advance subproject implementation in several cases. In addition, in a number of subprojects, there were delays between the completion of feasibility and the fielding of community assistants and facilitators. During this delay, there was little or no progress towards institutional establishment.

39. PRAs were made mandatory in the project design. Ten Non-Governmental Organizations (NGOs)/Firms out of 23 short listed ones were contracted by PMO to carry out these activities. Unfortunately, the NGOs and local firms often engaged insufficiently experienced professionals for the assignment, resulting in low quality of planning and design studies, requiring a considerable number of revisions and delaying delivery of quality reports. The scheduling of subprojects for PRA was not always properly coordinated with the scheduling for feasibility studies, resulting in subproject preparation delays. The PRA team members were not paid adequately by the contracted NGOs/Firms and payments were not made in time. Thus, team members lost interest in the job, were frustrated and deserted the team to explore better opportunities elsewhere.
40. In sum, even though the objectives of Component 1 were met, and the objectives of Component 2 and 3 were partially met, planning and design activities were delayed due to a one-year delay in recruiting local consulting firms and, once recruited, their performance was suboptimal. Delayed preparation of feasibility studies and design studies, as well as delays in submitting reimbursement applications by LGED executive engineers, caused delays in loan utilization. The backlog was a constraint in achieving projected reimbursement targets and a reduced fund flow. Additionally, almost a quarter of the established WMCAs were considered poor-quality, reflecting shortcomings in project administration and management at various levels. Thus, the PCRV rates effectiveness as **moderately satisfactory (4)**, one rating lower than PMD's rating.

### Efficiency

41. The project was **approved** in September 2009 and IFAD's first loan became **effective** in November 2009 i.e. after 2 months. The second loan was approved in April 2010 and became effective in October 2010 i.e. after five months. Both these periods were lower than the Asian and the Pacific Region average of 5.7 months and of Bangladesh's average of 7 months.<sup>3</sup>
42. The overall **loan disbursement** (ADB and IFAD loans) stood at some 90 per cent. government's contribution in the form of LGED staff salaries (IWRM and staff seconded to the project), VAT and taxes was fully realized. The beneficiary contribution of US\$3.7million was in the form of the operations and management funds that the water management cooperative associations were able to mobilize.

Source	Total Revised Allocation	Contract Award	% of CA	Disbursement	% of Disbursement
ADB Loan No. 2542	51.133	48.915	95.662	45.629	89.24%
Loan No. 8248 (786-IFAD)	20.271	19.913	98.236	18.558	91.55%
Loan No. 8250 (808-IFAD)	9.386	9.343	99.533	8.650	92.16%
<b>Total</b>	<b>80.791</b>	<b>78.171</b>	<b>96.758</b>	<b>72.838</b>	<b>90.16%</b>

<sup>3</sup> IFAD Oracle Business Intelligence (accessed in August 2019).

43. There was appreciation of dollar value against SDR and the ADB and IFAD loan amount fell to about \$80 million against originally planned \$87 million. On the other hand, the exchange rate of dollar against the Bangladesh Taka (BDT) at approval stage was BDT 69.12 to \$1 but during implementation, it increased to 83.00 to \$1. This helped the project compensate for the appreciation of the dollar value against the SDR.
44. The original outreach number of direct beneficiaries was 350,000 households but the project reached 280,000 at completion. However, since this there was a decrease in the loan amount caused by the change in the dollar to SDR rate, the **cost per beneficiary** did not change noticeable; it was US\$ 249 at design and US\$ 260 at completion.
45. The feasibility studies prepared for SSW-2 subprojects showed a relatively high Economic Internal Rate of Return (EIRR), with flood management subprojects having an average EIRR of 38 per cent, drainage improvement 53 per cent, water conservation 34 per cent and command area development 27 per cent. The economic rate of return for the PSSWRSP subprojects was expected to range from 26 per cent to 28 per cent, and for the overall project 29 per cent was expected. The financial rate of return for the project was indicated at 28 per cent, according to the President's Report (2010). Unfortunately, the actual EIRR is not reported in the PCR.
46. Based on the above considerations, the PCRV rates efficiency as **satisfactory (5)**, *the same as PMD*.

### **Rural poverty impact**

47. The PCR does not mention the methodology employed to measure impact, which is a serious lacuna. The PCRV managed to obtain the baseline and end line studies in order to ascertain the validity of the results mentioned in the PCR. The impact study measured the results with the help of treatment and control groups ('with/without' analysis) both at the baseline and at the end line ('before/after' analysis). The sampling methodology was sound; household units were selected randomly from both these groups, although, geographic sampling was purposive. The PCRV concludes that the results can be considered as valid.
48. **Household income and assets.** Out of 265 subprojects, 155 have set up microcredit programs and distributed BDT 244.50 million to 16,336 borrowers (male 59.57 per cent, female 40.43 per cent). The average size of each loan is about BDT 14,966. Most beneficiaries of loans were able to invest these funds profitably in agriculture, livestock, fisheries or off-farm enterprises. As such, the credit scheme had an important impact on poverty alleviation. In some cases, wage-employment through earthwork done under LCS enabled the poorest to eventually become WMCA members as it enabled them to buy a share. Landless WMCA members could, in due course, with income generated through the credit scheme, either lease or buy land (supervision report, 2018).
49. An indirect benefit of the project was that average land prices in the subproject area increased. For instance, in Ulushi, Tarash in Sirajganj the price of one bigha of land has gone up from 50,000 Bangladesh Taka (BDT) in 2012 to 500,000 BDT, and in Dhanigram-Sundarban the price for 1 bigha of land has gone up from BDT 20,000 in the year 2000 to BDT 1,000,000 currently (supervision report, 2018).
50. The project enhanced rural incomes by developing community based water management associations and community managed small-scale infrastructure. This approach has proved effective in the drive to increase agricultural production and reduce rural poverty. The water bodies developed under the project are very important resources for the WMCAs to engage genuine fishers and interested women members in aquaculture activities to enhance their income and livelihood.

51. **Food security and agricultural productivity.** The project achieved a substantial increase in agricultural productivity and production in the project target area. The PCR reports on data collected from 205 subprojects to assess agricultural production for three complete crop seasons. The estimated pre-project total crop production was 896,427.90 metric tons with 611,571.60 metric tons (68.22 per cent) accounted for from the cereal crop. The post-project estimated total crop production for the three seasons was 1,260,525.80 metric tons. Cereal production was 837,573.10 metric tons (66.45 per cent) and non-cereals crops were 422,952.70 metric tons.
52. There were yield increase for cereal and non-cereal crops in all three seasons. The highest sub-project average yield increase was for non-cereal crops in the Rabi season; 0.93 t/ha from a pre-project base level of 6.32 t/ha. The cropping intensity in the 205 completed subprojects increased by 37.80 per cent (from 175.30 per cent pre-project to 213.10 per cent post-project). Similarly incremental crop production is 45.70 per cent (from 4372.80 Metric Ton pre-project to 6148.90 Metric Ton post-project).
53. Incremental fisheries production was estimated both at flood plain and permanent water bodies at 1,609 Metric Ton with an increase of 1,337 Metric Ton from culture fisheries and also an increase of 272 Metric Ton from flood plain fisheries.
54. **Human, social capital and empowerment.** The project was designed to provide extensive training for mobilizing beneficiaries to participate in subproject selection, planning, implementation, and O&M.
55. The project conducted training in 81 course events against 10 modules to strengthen the delivery of services and increase the functioning of project components. In conducting such a huge program, the project has spent about BDT 523.25 million on about 483,699 person-days of training that was directed to various stakeholders including LGED and LGED managed staff (24,208 person-days); project beneficiaries (248,777 person-days); and partner agencies (1,680 person-days). The pre and post training evaluations found mostly favorable responses in participant's capacity improvement.
56. The project also supports the role of women in SSWR development by: (i) training women in income-generating activities, including fish culture and improved agricultural practices; (ii) priority employment of destitute women in labor contracting societies for subproject earthworks; (iii) social mobilization of women stakeholders so they are fully included in subproject development process; and (iv) provision of demand-driven microcredit.
57. **Institutions and policies.** The overall objective of Component 1 of the project was to strengthen government agencies at all levels to support SSWR development and to fully internalize the subproject development process within IWRMU of LGED. The institutional strengthening encompasses both the organizational set-up of the organizations involved and the capacity building of those organizations by means of training.
58. The project strengthened LGED, IWRMU, and DoC through training in: (i) project orientation and management; (ii) planning, design and construction methods; (iii) WMCA establishment and management; (iv) improved O&M; (v) environmental management; and (vi) gender awareness. The training program enhanced the long-term capabilities of the institutional stakeholders, particularly IWRMU and DoC, to carry out small-scale water resources development according to the national water plan. It also enhanced the performance of the concerned agencies in implementing the water resources development activities of the project.
59. WMCAs have been formed in 265 subprojects and these are legal bodies, registered under the cooperative law. The activities such as annual general meetings,

elections, capital formation, micro-credit programs carried out by WMCAs provided a good measure for the empowerment at the community level.

60. In sum, the credit scheme had an important impact on poverty alleviation, including both the poorest and landless. The project enhanced rural incomes by developing community based water management associations and community managed small-scale infrastructure, and achieved a substantial increase in agricultural productivity and fisheries production in the project area. Extensive training was provided to strengthen LGED, IWRMU, and DoC, enhancing the long-term capabilities of the institutional stakeholders. WMCAs have been formed in 265 subprojects and have been registered under the cooperative law. An indirect benefit of the project was that average land prices in the subproject area increased. Thus, the PCRV rates the impact on rural poverty as **satisfactory (5)**, *the same as PMD*.

### **Sustainability of benefits**

61. The project was established to develop sustainable stakeholder driven small-scale water resources management systems with special attention to the poorer section of the population. According to the supervision report (2018), the project successfully influenced the policy or institutional framework through the production or utilization of evidence in policy processes and/or the increased policy capacity of governments to design and/or implement policies, but the sustainability of these changes and activities is not yet proven.
62. The logical framework shows the following longer-term goals five years after completion of the project (2022): (1) Sustained increase in agricultural and fisheries production; and (2) Supportive institutional framework capable of carrying out its defined roles in the small-scale water resources sector.
63. Although the available project documents do not mention an exit strategy, an exit strategy supported by most project stakeholders is being developed, in which institutional arrangements, legal aspects, ownership and post-project funding are covered, according to the PCR. The PCR also mentions that further work is needed to ensure sustainability, especially regarding O&M funding. The WMCA maintenance fund was found sufficient for annual maintenance activities. However, it should be noted that an exit strategy should be developed during the design stage of the project, and not at the time of project completion.
64. For the O&M upfront contribution in fixed deposits, with the interest that these deposits will generate, the stability and sustainability of this funding source is highly dependent on the quality of the performance-based guideline that PMO is developing, as well as on the quality of DoC in utilizing this guideline when auditing WMCAs. The O&M crop-share method is proportional, indicating that when more land is cultivated, more is paid into the O&M fund. The sustainability of this funding source depends on the ability to establish the actual size of cropped land and to prevent the downgrading of reported land size to lower the amount of collected paddy and consequently the amount of money added to the O&M fund. The sustainability of the maintenance budget managed by IWRM unit at LGED depends on the responsibility of the WMCAs to perform routine maintenance on subprojects. If they rely on government support after four-five years, the amount of funding needed to perform the necessary maintenance works after this period of time, will not be sufficient.
65. In conclusion, the project was designed and implemented to attain sustainable results. Strong emphasis was placed on the O&M of each subproject, with beneficiary contributions being essential. By setting up community-based associations to self-manage the subprojects, ensuring a high-quality participatory process and providing a strong training program – including training on legal issues – to WMCA members and management committees. Therefore, the sustainability of the project seems secured although the quality of the available

O&M funding sources are vital for the continuation of sustainable benefits. Thus, PCRV rates the sustainability of benefits as **satisfactory (5)**, the same as PMD.

## **B. Other performance criteria**

### **Innovation**

66. Innovation is not mentioned in the PCR, but according to the President's Report (2010), the project aimed to be innovative in two ways. Firstly, it was designed to introduce enhanced accountability of water infrastructure providers to WMCAs, through implementation of subproject agreements. Hereby the WMCAs became less dependent on government assistance and more self-sufficient.
67. Secondly, the project was designed to reorient LGED and beneficiaries from a short-term perspective, focused mainly on the design and construction of infrastructure, towards a longer-term view, that also considered the sustainability of the water management systems put in place. This is the third in a series of projects focusing on small-scale water resource development. The approach could be considered as innovative in the previous two phases, given the context at that time. Within the present project, the project, though useful and effective, can not be presented as an innovation any longer.
68. The PCRV concludes that the approaches were not quite innovative when IFAD's definition of innovation is strictly adhered to, although some element of sustainability was introduced. This criterion is given a rating of **unsatisfactory (3)**, one lower than PMD.

### **Scaling up**

69. Scaling up in IFAD terminology implies using non-IFAD resources to scale up successful IFAD interventions and results. Although there is no information about the potential scaling up in the PCR, according to the supervision report (2018) LGED has already taken up the PSSWRSP approach as its policy towards water management development and both the government and the Japan International Cooperation Agency are now scaling up the approach. Therefore, there is evidence that the government and another international organization are scaling up the current approach.
70. The PCRV rates this component as **satisfactory (5)**, the same as PMD.

### **Gender equality and women empowerment**

71. As per ADB, the project was classified as gender equity theme category and had a Gender Action Plan (GAP), which aimed at supporting the project to ensure women's active participation in every process of planning, implementation, supervision and O&M of the sub-projects. The gender and development activities were implemented as per GAP and the progress of gender aspects was reported on a quarterly basis with challenges regarding the implementation of the project.
72. The project delivered on the objectives of its gender strategy by reaching out to a large number and a cross-section of women, and improving their skills. The GAP progress report up to March 2018 states that a total of 97,073 women (37 per cent of total trainees) had been trained by this project on various aspects, through 5,179 courses. In addition, 770 courses on gender specific training were conducted for 22,971 people (female participation was 69 per cent). These gender specific training activities were held since inception and were attended by both male and female members of WMCA, Union Parishads, officers from partner agencies (DWA, DoC, DAE), LGED officials, project staff, PRA and FSDD teams.
73. A total of 26 successful and self-reliant women, members of WMCA of various districts, received award on the occasion of International Women's Day, 8th March. The 2018 mission appreciated the positive changes in women's livelihoods i.e. increased involvement in fish culture in personal ponds, and earning more cash from homestead gardening, poultry and livestock rearing, LCS works, land

ownership, land leasing capacity, increased agricultural production and wage earning opportunities in the agricultural lands where cropping intensity increased. Women were vocal and confident to share their experiences after involvement with the project.

74. According to the supervision report (2018), various gender training recipients disseminated their knowledge and inspired other women and men in their neighborhood. In addition, the project expanded women's access to and control over fundamental assets – notably micro-credit, land and knowledge. The project strengthened women's decision-making role in WMCA affairs and representation in its management and sub-committees. The project ensured gender-equitable participation through applying targets in terms of the proportion of women participants to be reached under different project activities.
75. The project generated about USD 3,2 million in wage-employment for 15,050 women through earthwork (LCS), with field data indicating equal pay for men and women. Women participation is 33 per cent in LCS and 37 per cent in WMCAs, which is slightly higher than the targets set at design.
76. Of the total number of members in the 265 WMCAs, 37.12 per cent were women. The target was a minimum of 33 per cent, but membership among women increased gradually. A minimum of 30 members (15 male and 15 female) of each WMCA received gender awareness training from the project.
77. In sum, gender and development activities were implemented as per GAP and the project delivered on the objectives of its gender strategy. Positive changes in women's livelihoods were observed and data indicated equal pay for men and women. Of the WMCA members, 37.12 per cent were female, against a target of 33 per cent. Thus, the gender focus of the project is rated by the PCRV as **satisfactory (5)**, one above PMD's rating.

#### **Environment and natural resources management**

78. According to the PCR, efforts were made to shed some light on the impacts of subproject interventions on various project pertinent environmental issues. As part of the environmental impact assessment process, the impacts were broadly classified as physical, biological and social, and then each of these broad categories further divided into different aspects. However, the specific potential impacts that were identified are not included in the PCR.
79. According to the supervision report after the 2018 mission, there was moderate improvement in the environment or the natural resource base in the project target area. The pressure on the natural resource base was slightly reduced and there were some changes in current harmful agricultural practices. High-standard environmental norms were followed for most project activities and there was no negative impact on the environment reported.
80. The 2018 mission also noted that a total of 2,016 trainees attended the three environment training programs (environmental monitoring, water quality testing, and environmental awareness) as of March 2018, and completion of initial environmental examinations. While environmental monitoring by the PMO on a regular interval was highly appreciated, the mission was concerned about non-compliances to construction period health and safety issues by the contractors. The mission strongly recommended that budget for implementation of Environmental Management Plans (EMP) were included in the Bill of Quantities and that all contractors follow the EMP and good construction practices during the subproject implementation.
81. According to the PCR, the implementation of EMP in subproject works took effect as per recommendation and contract specification, with few exceptions. Although the contractors are found to address the environmental safeguard issues/facilities and providing better working conditions, these could still be improved further, and

accordingly the contractors were advised to achieve improvement at the maximum possible extent.

82. In sum, the pressure on the natural resource base was slightly reduced in 2018 and changes in current harmful agricultural practices were observed. However, environmental safeguard issues/facilities and working conditions should have been improved more after implementation of EMP. Thus, the PCRV rates this component as ***moderately satisfactory (4)***, the same as PMD.

### **Adaptation to climate change**

83. The PCR does not report on the Project's adaptation to climate change. According to the supervision report (2018), climate change adaptation measures were not specifically included in the design nor planned for at the start of the project. Though not included in the design, the project activities by their nature supported the beneficiaries in reducing their vulnerability to climate shocks and created more resilience to both droughts and floods. For instance, some WMCAs were able to use their water management structures during unexpected floods to save their crops.
84. The small-scale water resources interventions aimed to reduce the vulnerability of households, agro-ecosystems and natural systems to great fluctuations in water availability, including droughts and floods. As such, these interventions also reduced current and expected impacts of climate change, by maintaining or increasing climate resilience, through increased ability to adapt to, or to absorb, climate change stresses. Most subprojects had both drainage and water control structures enabling the WMCA to control water flows. However, there was no explicit basis of supporting climate change resilience.
85. In sum, climate change adaptation measures were not included in the project design, but the project interventions reduced current and expected impacts of climate change by maintaining or increasing climate resilience. Thus, the PCRV rates this component as ***moderately satisfactory (4)***, the same as PMD.

### **C. Overall Project achievement**

86. The project managed, despite the impediments it faced during the initial years, to reach good results. The number of beneficiaries met the target figure, the project activities were overall effective, and a good level of impact was reached. The project activities have positively responded to the needs of the target groups. In addition, the project has been gender-sensitive and over-delivered in terms of agricultural and fishery revenue. Trainings and other capacity building sessions took place as planned and contributed to the sustainability of the project activities. While recognising the success of the project, the PCRV considers that the PSSWRSP could have had more impact and enhanced sustainability prospects by focussing on a narrower set of activities. Also, enhancing the focus on environmentally responsible outcomes and adaptation to climate change, as this is a main priority in the current COSOP, could benefit small-scale water resources interventions in the future.
87. The overall achievements of the PSSWRSP are rated ***satisfactory (5)***, the same as PMD.

### **D. Performance of partners**

88. **IFAD.** IFAD's performance is not covered in the PCR. IFAD has participated in the planning process of PSSWRSP through participating in ADB missions for Project Preparation Technical Assistance (PPTA) inception, the interim report, and loan fact-finding. During these missions, IFAD consultants provided advice to the PPTA on a number of issues. These issues were of relevance to the design of the project and covered a number of areas such as: (a) a study to evaluate the microfinance activities of WMCA and recommendations for a future microfinance strategy; (b) recommendations for a targeting strategy to select those subprojects with

maximum benefits for landless, marginal and small farmers; (c) recommendations for the management and monitoring of LCS; (d) terms of reference for a study of water management in the Chittagong Hill Tracts; (e) review of proposals for a Women's Action Plan and for additional poverty-focused activities; and (f) suggestions for project M&E. Lessons from IFAD projects were shared with PPTA and mentioned in the design document (IFAD Supplementary Design Document for QA).

89. IFAD did not have an active role in the implementation of the project. However, for every mission (design or supervision), an IFAD consultant was part of the team to ensure that specific IFAD requirements were met to the extent possible. These consultants were also responsible for reporting back to the IFAD country program manager/country program officer in addition to contributing to the Aid-Memoire. IFAD also approved an additional loan of USD 10.0 million (Loan 8250-BD) on 18 October 2010.
90. IFAD contributed during the design and preparation process through a number of activities, and ensured that specific IFAD requirements were met during the implementation phase of the project, the performance of IFAD is rated as **satisfactory (4)**, the same as PMD.
91. **Government.** The lead project agency was the LGED of the Ministry of Local Government, Rural Development and Cooperatives. The responsibility for project implementation was assumed by LGED. The IWRMU within LGED was responsible for monitoring and evaluation support for small-scale water resources subprojects, as well as for overall development, operation and maintenance. A project management office was established within IWRMU to manage and coordinate project activities. A project steering committee was formed and consisted of representatives of all ministries and agencies concerned. Local governments, LGED district offices, and community assistants recruited locally were involved in assisting the formation of WMCAs.
92. A PMO was established in LGED to manage the project with subproject implementation delegated to district LGED offices. PMO was responsible for contracting consultancy firms/NGOs, which unfortunately caused delays in delivering quality reports. More scrutiny should have been introduced into the process of recruitment and management of the consultancy firms/NGOs.
93. The project entered into a Memorandum of Understanding with a number of technical line government agencies, and the project strongly benefited from the collaboration and work of all the specialized agencies. Key service providers were DoC, DAE and DoF. Other project partners included the Bangladesh Water Development Board, the Department of Environment, RDA, BARD, the National Institute of Local Government, the Water Resources Planning Organization, the Ministry of Land, the Department of Women's Affairs, the BFRI and the Bangladesh University of Engineering and Technology. A good attempt was made in enhancing coordination and synergies with other organizations and/or initiatives during project implementation, especially with relevant officers of DoC, DAE and DoF.
94. In view of this, the performance of the government is rated **satisfactory (5)**, the same as PMD.

#### **IV. Assessment of PCR quality**

##### **Scope**

95. According to the PCR, the PCR has been prepared in accordance with the recommendations of the ADB Guidelines for PCRs and does not follow the PCR Guidelines from IFAD. The report comprises of eight sections, namely introduction, project description, project implementation, project outputs, project effects,

lessons learned, activities of PSSWRS project by photographs, and success stories of PSSRWSP.

96. Although there is some overlap with IFAD's PCR requirements, several essential issues were not covered as expected. Information about the internal rate of return, which is an expected and important component of a PCR, was not included. Total costs of the project, including the disbursement of government and beneficiary funds, were not presented, nor the actual costs per project component or the total number of beneficiaries. This made it impossible to evaluate the efficiency of the project according to the IFAD PCR Guidelines.
97. Separate evaluation components that needed to be rated for the PCR, are not rated in the PCR, making a comparison of the PCR and PCR ratings impossible. The Design Monitoring Framework as presented in Appendix III is missing parts that are present in other project documents, such as in the President's Report (2010) and the supervision report (2018). Sustainability, innovation and scaling up, environment and natural resources management, adaptation to climate change, and IFAD's performance were either not covered in the PCR, or hardly touched upon.
98. The PCR scope is rated ***moderately unsatisfactory (3)***.

### **Quality**

99. Relevant documents were reviewed, but the PCR is not always based on robust data. There is no mention of meetings with LGED, beneficiaries, or partner representatives, nor of visited project activities. Data that are presented are based on other reports. It is unclear what activities are conducted for the PCR, apart from document review. No description, even succinct, is provided of the methodology used to measure impact. As a result, the PCR had to expend time and effort to obtain the baseline and end line impact studies.
100. The content of the PCR is highly repetitive, with a lot of the same information in different chapters of the report. The number of subheadings makes the report unclear and in several cases, the subheading is not indicative of the content of the paragraph. The report is incoherently structured, lacking substantial analysis, and could have improved quality by proofreading.
101. The PCR quality is rated ***moderately unsatisfactory (3)***.

### **Lessons**

102. The lessons learned chapter is a repetition of the project outcomes, making a large part of this chapter redundant. In several cases, the lessons learned are not detailed enough (i.e. "The process has worked well. It has been suggested to continue the process unchanged"), or not providing any new information (i.e. "Lessons learned from the experience of microcredit are: a. A total of 155 WMCAs, accumulated required capital base, acquired necessary management capability, such as group formation, holding regular weekly meetings, employed staff and collected savings and credit installment from loaners/borrowers on regular basis are operating micro credit program"). On the other hand, however, for several components the lessons learned are very detailed and well formulated, pertinent and useful for future project design.
103. The lessons learned in the PCR are rated as ***moderately satisfactory (4)***.

### **Candour**

104. The PCR makes an attempt to balance positive achievements as well as shortcomings of the project and presents stronger and weaker aspects of the implementation. However, the weaker ones could have been given more attention in the PCR.
105. The candour of the PCR is rated as ***moderately satisfactory (4)***.

## **V. Lessons learned**

106. A reasonable proportion of the WMCAs were functioning effectively but several were facing difficulties such as improper construction of infrastructure, inactive leadership, conflict between the general members and the management committee, conflict between the chairperson and the secretary, conflict related to labor contracting societies, and land problems. In future investments of this type, the foregoing would indicate that improved construction practices, a stronger focus on assisting with fund management, and more systematic support to establishing effective leadership would go a considerable way to developing effective WMCAs.
107. The contracting of the local consulting firms was delayed by about nine months under a process of indefinite delivery contract arrangement and once recruited, their performance in preparing feasibility study reports and designs studies was much slower than anticipated. In the future, more scrutiny needs to be introduced into the process of recruitment and managing the firms contracted to undertake the planning and design studies and mechanisms should be put in place to address concerns such as: (i) a strong commercial interest of the consulting firms; (ii) slow progress due to the investment of limited resources by contracted firms; (iii) relatively poor quality of work which requires extensive inputs by project staff to ensure quality; and (iv) no penalty for late submission of reports.
108. A capacity building plan has been an essential element of PSSWRSP. The large number of training types and events, with a range of agencies and organizations, successfully met the challenges with smooth delivery of training. An effective training monitoring and evaluation system is necessary to track training and its follow-up effects. Capacity building plans developed by the project should include a monitoring and assessment process and an evaluation by trainees.
109. An implementation agreement should be signed in a public forum to indicate that all preconditions for the subproject implementation have been met and to confirm the intention of the beneficiaries and the government, prior to the commencement of construction. In many cases, it was found that pressure to sign these agreements was driven by the wish to commence construction in order to meet targets. The concept of signing an implementation agreement prior to initiating construction serves an important role by ensuring that all parties are ready for construction activities to be undertaken. Adequate institutional monitoring is necessary to ensure that implementation agreements are in place as a part of 12 pre-conditions before the procurement for construction starts, as well as to ensure that the conditions specified in the implementation agreement are fulfilled by all parties.

## Definition and rating of the evaluation criteria used by IOE

Criteria	Definition *	Mandatory	To be rated
<b>Rural poverty impact</b>	Impact is defined as the changes that have occurred or are expected to occur in the lives of the rural poor (whether positive or negative, direct or indirect, intended or unintended) as a result of development interventions.	X	Yes
	<i>Four impact domains</i>		
	<ul style="list-style-type: none"> <li>Household income and net assets: Household income provides a means of assessing the flow of economic benefits accruing to an individual or group, whereas assets relate to a stock of accumulated items of economic value. The analysis must include an assessment of trends in equality over time.</li> </ul>		No
	<ul style="list-style-type: none"> <li>Human and social capital and empowerment: Human and social capital and empowerment include an assessment of the changes that have occurred in the empowerment of individuals, the quality of grass-roots organizations and institutions, the poor's individual and collective capacity, and in particular, the extent to which specific groups such as youth are included or excluded from the development process.</li> </ul>		No
	<ul style="list-style-type: none"> <li>Food security and agricultural productivity: Changes in food security relate to availability, stability, affordability and access to food and stability of access, whereas changes in agricultural productivity are measured in terms of yields; nutrition relates to the nutritional value of food and child malnutrition.</li> </ul>		No
	<ul style="list-style-type: none"> <li>Institutions and policies: The criterion relating to institutions and policies is designed to assess changes in the quality and performance of institutions, policies and the regulatory framework that influence the lives of the poor.</li> </ul>		No
<b>Project performance</b>	Project performance is an average of the ratings for relevance, effectiveness, efficiency and sustainability of benefits.	X	Yes
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, institutional priorities and partner and donor policies. It also entails an assessment of project design and coherence in achieving its objectives. An assessment should also be made of whether objectives and design address inequality, for example, by assessing the relevance of targeting strategies adopted.	X	Yes
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.	X	Yes
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted into results.	X	Yes
Sustainability of benefits	The likely continuation of net benefits from a development intervention beyond the phase of external funding support. It also includes an assessment of the likelihood that actual and anticipated results will be resilient to risks beyond the project's life.	X	Yes
<b>Other performance criteria</b>			
Gender equality and women's empowerment	The extent to which IFAD interventions have contributed to better gender equality and women's empowerment, for example, in terms of women's access to and ownership of assets, resources and services; participation in decision making; work load balance and impact on women's incomes, nutrition and livelihoods.	X	Yes
Innovation	The extent to which IFAD development interventions have introduced innovative approaches to rural poverty reduction.	X	Yes
Scaling up	The extent to which IFAD development interventions have been (or are likely to be) scaled up by government authorities, donor organizations, the private sector and others agencies.	X	Yes
Environment and natural resources management	The extent to which IFAD development interventions contribute to resilient livelihoods and ecosystems. The focus is on the use and management of the natural environment, including natural resources defined as raw materials used for socio-economic and cultural purposes, and ecosystems and biodiversity - with the goods and services they provide.	X	Yes
Adaptation to climate change	The contribution of the project to reducing the negative impacts of climate change through dedicated adaptation or risk reduction measures.	X	Yes

<i>Criteria</i>	<i>Definition</i> *	<i>Mandatory</i>	<i>To be rated</i>
<b>Overall project achievement</b>	This provides an overarching assessment of the intervention, drawing upon the analysis and ratings for rural poverty impact, relevance, effectiveness, efficiency, sustainability of benefits, gender equality and women's empowerment, innovation, scaling up, as well as environment and natural resources management, and adaptation to climate change.	X	Yes
<b>Performance of partners</b>			
• IFAD	This criterion assesses the contribution of partners to project design, execution, monitoring and reporting, supervision and implementation support, and evaluation. The performance of each partner will be assessed on an individual basis with a view to the partner's expected role and responsibility in the project life cycle.	X	Yes
• Government		X	Yes

\* These definitions build on the Organisation for Economic Co-operation and Development/Development Assistance Committee (OECD/DAC) Glossary of Key Terms in Evaluation and Results-Based Management; the Methodological Framework for Project Evaluation agreed with the Evaluation Committee in September 2003; the first edition of the Evaluation Manual discussed with the Evaluation Committee in December 2008; and further discussions with the Evaluation Committee in November 2010 on IOE's evaluation criteria and key questions.

## Rating comparison<sup>a</sup>

<i>Criteria</i>	<i>Programme Management Department (PMD) rating</i>	<i>IOE Project Completion Report Validation (PCRVR) rating</i>	<i>Net rating disconnect (PCRVR-PMD)</i>
<b>Rural poverty impact</b>	5	5	0
<b>Project performance</b>			
Relevance	5	5	0
Effectiveness	5	4	-1
Efficiency	5	5	0
Sustainability of benefits	5	5	0
<b>Project performance<sup>b</sup></b>	<b>5</b>	<b>4.75</b>	
<b>Other performance criteria</b>			
Gender equality and women's empowerment	4	5	1
Innovation	4	3	-1
Scaling up	5	5	0
Environment and natural resources management	4	4	0
Adaptation to climate change	4	4	0
<b>Overall project achievement<sup>c</sup></b>	<b>5</b>	<b>5</b>	<b>0</b>

<b>Performance of partners<sup>d</sup></b>			
IFAD	4	4	0
Government	5	5	0
<b>Average net disconnect</b>			<b>-0.08 (-1/12)</b>

<sup>a</sup> Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.p. = not provided; n.a. = not applicable.

<sup>b</sup> Arithmetic average of ratings for relevance, effectiveness, efficiency and sustainability of benefits.

<sup>c</sup> This is not an average of ratings of individual evaluation criteria but an overarching assessment of the project, drawing upon the rating for relevance, effectiveness, efficiency, sustainability of benefits, rural poverty impact, gender, innovation, scaling up, environment and natural resources management, and adaptation to climate change.

<sup>d</sup> The rating for partners' performance is not a component of the overall project achievement rating.

### Ratings of the project completion report quality

	<i>PMD rating</i>	<i>IOE PCRVR rating</i>	<i>Net disconnect</i>
Candour	-	4	-
Lessons	-	4	-
Quality (methods, data, participatory process)	-	3	-
Scope	-	3	-
Overall rating of the project completion report		3	

Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.p. = not provided; n.a. = not applicable.

## Design Monitoring Framework (DMF)

Design Summary	Performance Targets/Indicators	Achievement	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b> Enhanced productivity and sustainability of agriculture in subproject areas</p>	<p>5 years after project completion (2022):</p> <p>Agriculture productivity within public flood management and irrigation schemes will have increased to Tk.80,000 per hectare (ha)</p> <p>Irrigated winter paddy (<i>boro</i>) yields will be 6.0 tons (t)/ha</p>	<p><b>Impact</b> Impact will be assessed through Benefit Monitoring and Evaluation (BME) after 5 years of project completion (2023).</p>	<p>Data provided by Bangladesh Bureau of Statistics</p> <p>National poverty level data</p> <p>ADB and development partners' reports</p> <p>External independent performance evaluation</p>	<p><b>Assumptions</b> Macroeconomic and political stability</p> <p>The Government continues to support agricultural extension activities</p> <p>The Government continues to support sector policies for water resources management</p> <p>Sustained support by Government for strategic pillars of NSAPR II</p> <p><b>Risks</b> Natural disasters</p> <p>Increased input prices for the fertilizer, pesticides, etc.</p>
<p><b>Outcome</b> Sustainable small-scale water resources management system in subproject areas</p>	<p>At the end of the Project (2017):</p> <p>Increased cereal production at subproject sites from 609000 t in 2009 to 806000 t and non-cereal production from 309000 t in 2009 to 452,000 t</p> <p>420 WMCAs (with at least one-third female membership) demonstrate their ability to plan, implement, and operate and maintain small-scale water resources management systems</p>	<p><b>Outcome</b></p> <p>Increased cereal production achieved at subproject sites from 609000 t in 2009 to 1055619 t against targeted 806,000 t and non-cereal production from 309000 t in 2009 to 511221 t against targeted 452000 t.</p> <p>About 37%female members are involved in all mentioned activities.</p>	<p>Data provided by Bangladesh Bureau of Statistics</p> <p>Ministry of Finance, Bangladesh</p> <p>Economic Review</p> <p>LGED MIS database</p> <p>Data held by registrar, DOC on audited, reelected, and trained WMCAs</p>	<p><b>Assumptions</b> Participatory small-scale water resources development is investment priority for the Government</p> <p>WMCAs prioritize small-scale water resources management</p> <p>Line departments include WMCAs in their annual and seasonal work plans</p> <p><b>Risks</b> LGED does not meet time-bound actions for institutional strengthening of IWRMU</p> <p>WMCAs do not undertake routine and periodic maintenance</p>

Design Summary	Performance Targets/Indicators	Achievement	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p><b>Outputs</b> 1: Institutional Strengthening</p> <p>Enhanced institutional capacity and capability of government agencies at all levels that support SSWR development</p>	<p>Budgeted posts created at 10 LGED regional offices: 4 within 1 year of loan effectiveness, 4 within 3 years of loan effectiveness, and 2 within 5 years of loan effectiveness</p> <p>Annual EME completed as scheduled with data to be disaggregated by gender and socioeconomic category</p> <p>420 WMCAs regularly provided with institutional and technical support</p> <p>Gender training of IWRMU staff</p>	<p><b>Outputs</b></p> <p>All of the 10 LGED regional offices are created as per target.</p> <p>3 Annual EME reports were conducted, the first in 2014-15 covering 12 SPs; the second one in 2016 covering 109 SPs and the 3<sup>rd</sup> one in 2017-18 covering 205 SPs respectively. All data were disaggregated by gender and socioeconomic category</p> <p>Revised 412 WMCAs were provided with institutional &amp; technical support.</p> <p>All the IWRMU staffs were given training on gender.</p>	<p>MOLGRD &amp; Cooperatives for creation and filling of revenue posts</p> <p>LGED organization chart</p> <p>LGED EME reports</p> <p>LGED MIS database</p> <p>DOC data</p> <p>LGED MIS database</p> <p>DAE annual work plan</p> <p>DOF annual work plan</p>	<p><b>Assumptions</b></p> <p>The Government continues to commit to institutional strengthening actions</p> <p>New budgeted posts are maintained</p> <p>Skilled and trained staff members are retained in their respective functions</p>
<p><b>Output 2:</b> Participatory Subproject Development</p> <p>Refinement of subproject development process for sustainable WMCA that are performing well</p>	<p>All WMCAs registered, with at least 30% women membership in management committees</p> <p>270 new and 150 existing WMCAs are audited</p> <p>270 requests for funding new SSWR systems and 150 requests for performance enhancement of existing SSWR</p>	<p><b>Output 2:</b></p> <p>265 out of 270 WMCAs were registered with 33% women membership in managing committees</p> <p>265 out of 270 new and 147 out of 150 existing SPs were audited respectively.</p> <p>Revised 265 new &amp; 147 enhancement SPs were approved.</p>	<p>DOC (gender-disaggregated) data for registered WMCA and re-elected management committee</p> <p>Union Parishad data on registered societies</p> <p>LGED MIS database</p> <p>LGED data on approved subprojects</p> <p>LGED <i>upazila</i> office</p> <p>DAE block level data</p> <p>LGED MIS database</p> <p>LGED data on utilization of</p>	<p><b>Assumptions</b></p> <p>Commitment from WMCAs to fully participate in O &amp; M and take responsibility for it.</p> <p><b>Risks</b></p> <p>Weak WMCA leadership</p> <p>WMCA fails to prioritize collection of maintenance funds and resorts to LGED emergency funding</p>

Design Summary	Performance Targets/Indicators	Achievement	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>systems approved</p> <p>WMCA maintenance fund sufficient for annual maintenance activities</p> <p>Timely maintenance and O&amp;M fund replenished periodically</p>	<p>WMCA maintenance fund was found sufficient for annual maintenance activities.</p> <p>Maintenance and O&amp;M fund is replenished periodically</p>	<p>emergency fund</p> <p>WMCA records and accounts</p>	
<p><b>Output 3:</b> Small-Scale Water Resources Infrastructure</p> <p>Construction and maintenance of small-scale water resources subprojects</p>	<p>270 new SSWR subprojects completed and performance enhanced at 150 existing subprojects</p> <p>A total of command area of 231,000 ha covered by subprojects</p>	<p><b>Output 3:</b> Revised 265 new and 147 performance enhancement SPs were completed in all respect.</p> <p>A revised command area of 220000 ha covered by revised 412 subprojects.</p>		<p><b>Risks</b> Labor contracting societies operate as subcontractors and do not directly benefit target group</p> <p>There is insufficient rural labor willing to undertake earthworks</p>

## Abbreviations and Acronyms

ADB	Asian Development Bank
BARD	Bangladesh Academy for Rural Development
BDT	Bangladesh Taka
BFRI	Bangladesh Fisheries Research Institute
COSOP	Country Strategic Opportunities Paper
DAE	Department of Agricultural Extension
DoC	Department of Cooperatives
DoF	Department of Fisheries
DPP	Development Project Pro-forma
EIRR	Economic Internal Rate of Return
EMP	Environmental Management Plan
GAP	Gender Action Plan
IFAD	International Fund for Agriculture Development
IWRMU	Integrated Water Resources Management Unit
LCS	Labour Contracting Society
LGED	Local Government Engineering Department
NGO	Non-Governmental Organization
O&M	Operation & Maintenance
PCR	Project Completion Report
PCR/V	Project Completion Report Validation
PMD	Programme Management Department
PMO	Project Management Office
PPTA	Project Preparation Technical Assistance
PRA	Participatory Rural Appraisal
PRSP	Poverty Reduction Strategy Paper
PSSWRSP	Participatory Small-Scale Water Resources Sector Project
RDA	Rural Development Academy
WMCA	Water management co-operative associations
SSW-1 and SSW-2	Small-scale water resource project 1 and 2
SSWR	Small-Scale Water Resource

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