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Report No: ICR00004734

IMPLEMENTATION COMPLETION AND RESULTS REPORT

TF0A3117

ON A

SMALL GRANT

IN THE AMOUNT OF US\$3.0 MILLION

TO THE

PEOPLE'S REPUBLIC OF BANGLADESH

FOR

OBA SANITATION MICROFINANCE PROGRAM (P157958)

February 24, 2019

Water Global Practice  
South Asia Region

## CURRENCY EQUIVALENTS

Exchange Rate Effective February 8, 2017  
BDT 79.5 = US\$1 (At appraisal)

Exchange rate effective at June 30, 2018  
BDT 83.7 = US\$1 (At completion)

FISCAL YEAR  
July 1 - June 30

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## ABBREVIATIONS AND ACRONYMS

ASA	Association for Social Advancement	LE	Local Sanitation Entrepreneur
BFID	Bank and Financial Institutions Division, Ministry of Finance	LGED	Local Government Engineering Department
BDT	Bangladeshi Taka	M	“Moderate” risk rating
BRAC	Bangladesh Rural Advancement Committee	M&E	Monitoring and Evaluation
BURO	Basic Unit for Resources and Opportunities Bank	MDGs	Millennium Development Goals
CAS	Country Assistance Strategy	MFI	Microfinance Institution
CPF	Country Partnership Framework	NGO	Non-Governmental Organization
CBN	Cost of Basic Needs	OBA	Output-Based Aid
DPHE	Department of Public Health and Engineering	ODF	Open Defecation Free
ERD	Economic Relations Division, Ministry of Finance	PDO	Project Development Objective
ERR	Economic Rate of Return	PKSF	Palli Karma-Sahayak Foundation
ESI	Economics of Sanitation Initiative (World Bank)	PO	Partner Organization
ESMF	Environmental and Social Management Framework	PPI	Poverty Probability Index
FIRR	Financial Internal Rate of Return	PPP	Purchasing Power Parity
FM	Financial Management	SDGs	Sustainable Development Goals
GDP	Gross Domestic Product	SDL	Sanitation Development Loan
GoB	Government of Bangladesh	SECVPDF	Small Ethnic Communities and Vulnerable Peoples Development Framework
GPOBA	Global Partnership on Output-Based Aid	STEP	Systematic Tracking of Exchanges in Procurement
GRS	Grievance Redress Service	TA	Technical Assistance
GWSP	Global Water Security and Sanitation Partnership	UESD	Utilization of Essential Services Delivery Survey
HIES	Household Income and Expenditure Survey	WASH	Water, Sanitation, and Hygiene
IRR	Internal Rate of Return	WB	World Bank
ISR	Implementation Status and Results Report	WHO	World Health Organization
IVA	Independent Verification Agent		
IVC	Independent Verification Consultancy		
L	“Low” risk rating		

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DATA SHEET

BASIC INFORMATION

Product Information

Project ID P157958	Project Name OBA SANITATION MICROFINANCE PROGRAM
Country Bangladesh	Financing Instrument Investment Project Financing
Original EA Category Partial Assessment (B)	Revised EA Category Partial Assessment (B)

Organizations

Borrower Economic Relations Division - Ministry of Finance	Implementing Agency Palli Karma-Sahayak Foundation (PKSF)
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Project Development Objective (PDO)

Original PDO

The project development objective (PDO) is to increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh through commercial sanitation loans.

FINANCING

	Original Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$)
<b>Donor Financing</b>			
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Project Cost</b>	<b>25,000,000</b>	<b>25,000,000</b>	<b>25,072,625</b>



**KEY DATES**

Approval	Effectiveness	Original Closing	Actual Closing
30-Jun-2016	23-Feb-2017	30-Jun-2018	30-Sep-2018

**RESTRUCTURING AND/OR ADDITIONAL FINANCING**

Date(s)	Amount Disbursed (US\$M)	Key Revisions
26-Jun-2018	2.12	Change in Loan Closing Date(s)

**KEY RATINGS**

Outcome	Bank Performance	M&E Quality
Satisfactory	Satisfactory	Substantial

**RATINGS OF PROJECT PERFORMANCE IN ISRs**

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	06-Sep-2017	Moderately Satisfactory	Moderately Satisfactory	0.05
02	29-Mar-2018	Moderately Satisfactory	Moderately Satisfactory	0.89
03	04-Oct-2018	Satisfactory	Satisfactory	2.34

**ADM STAFF**

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**The World Bank**

OBA SANITATION MICROFINANCE PROGRAM (P157958)

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## I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

### A. CONTEXT AT APPRAISAL

#### Context

1. Over the past decade, Bangladesh has progressed economically, with gross domestic product growth rates of over 6 percent (6.51 percent in 2015), raising per capita GDP to US\$1,314.<sup>1</sup> At the same time, poverty continues to affect large parts of the population with just over 12.9 percent of Bangladesh's total population of 161.9 million (2015) categorized as extremely poor.<sup>2</sup> The rural population comprises 66.5 percent of the total country population, although with over 1,000 people per square kilometer, Bangladesh has one of the highest population densities in the world.
2. With the Government of Bangladesh driving its National Sanitation Campaign from 2003-2015, Bangladesh has made significant progress in reducing open defecation, from 34 percent in 1990 to just one percent of the national population in 2015<sup>3</sup>. Despite these achievements, much remains to be done if Bangladesh is to achieve universal access to safely managed sanitation services by 2030, in accordance with the Sustainable Development Goals (SDGs). Bangladesh's access to a basic sanitation service<sup>4</sup> in 2015 was 61 percent and is growing at only 1.1 percent annually.
3. Diarrheal prevalence among children under five years has fallen in the last 20 years, however Bangladesh was still one of 15 countries with the most deaths due to diarrhea or pneumonia in the world in 2013 (UNICEF 2014) with six percent of under-five child deaths attributed to diarrhea. As per the Utilization of Essential Services Delivery Survey (UESD), 38.7 percent of children under five years of age are stunted (short for their age), and 35 percent are underweight (low weight for age). The prevalence of chronic undernutrition in Bangladesh is unacceptably high in the context of the significant improvements in other human development indicators.
4. While local government institutions and particularly the union parishads played a key role in facilitating the social movement to eradicate open defecation, the key role in capacity provision was undertaken by NGOs while the provision of sanitation materials was undertaken by the informal private sector. This resulted in the almost universal extension of low cost and low quality sanitation facilities with 90 percent of rural households using their own funds to build latrines and 95 percent of rural households accessing latrine materials from local markets.<sup>5</sup> The almost universal access to some form of latrine is set against a massive challenge where 68 percent of the rural population (i.e. 72 million people or 18 million households) don't have access to a safely managed sanitation service.

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<sup>1</sup> Bangladesh Bureau of Statistics.

<sup>2</sup> Poverty headcount ratio (percent) updated in HIES, 2010 (BBS) using the cost of basic needs (CBN) methodology.

<sup>3</sup> Progress on Sanitation and Drinking Water – 2015 Update and MDG Assessment. UNICEF and WHO 2015

<sup>4</sup> Improved sanitation facilities are those designed to hygienically separate excreta from human contact. The SDG 6.2 target is the universal access to a safely managed sanitation service defined as the use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site. A basic sanitation service is defined as the use of improved facilities which are not shared with other households. A limited service is defined as the use of improved facilities shared between two or more households. An unimproved service refers to the use of pit latrines without a slab or platform, hanging latrines or bucket latrines. No service refers to open defecation or the disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste.

<sup>5</sup> WSP (June 2011) Long-Term Sustainability of Improved Sanitation in Rural Bangladesh. The World Bank.





5. Bangladesh also has a large, effective network of micro-finance institutions (MFIs) that provide livelihood and social sector financing across the country. These institutions are well established and have made significant contributions to Bangladesh’s development, particularly in rural communities. The largest MFIs include Grameen Bank, Bangladesh Rural Advancement Committee (BRAC) and the Association for Social Advancement (ASA), a self-sufficient NGO and second largest MFI in the world. Palli Karma-Sahayak Foundation (PKSF) is a government-owned wholesale public finance institution that supports small- to medium-scale MFIs and NGOs with capital and capacity development (as most of the local NGOs also have credit wings to provide loans to predominately rural borrowers).

6. With open defecation nearly completely eradicated in the country, the Government is seeking to assist rural households to move up the sanitation ladder to safely managed sanitation services. While the community-led total sanitation approach pioneered in Bangladesh (and adapted all over the world) has proven extremely successful in eradicating open defecation, community led approaches have not been so successful in assisting households to move up the sanitation ladder.

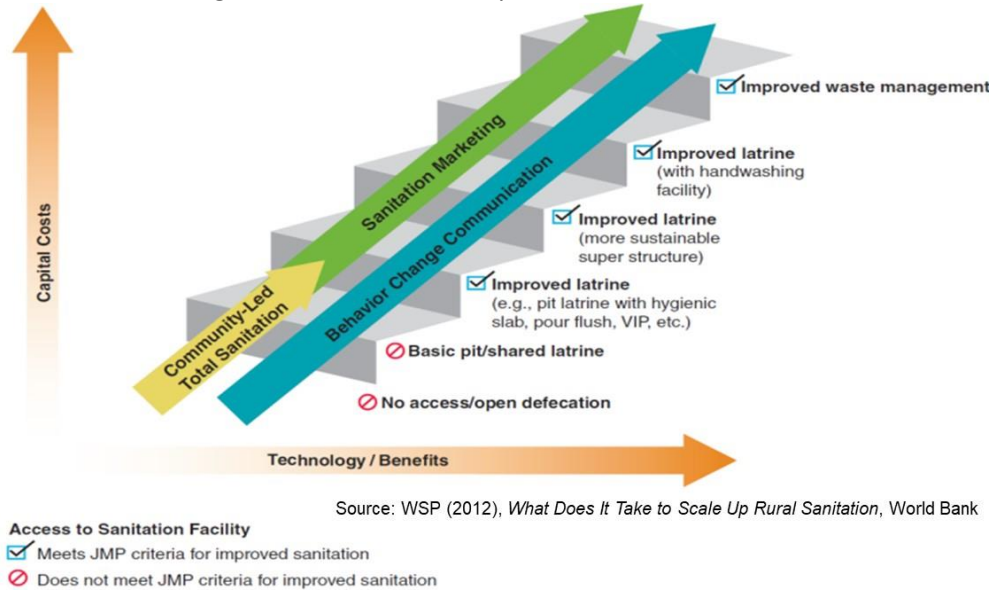


Figure 1: Approaches to enable households to move up the sanitation ladder<sup>6</sup>

7. In recognition of the comparative advantage of sanitation marketing in facilitating households’ movement up the sanitation ladder, the World Bank initiated a technical assistance (TA P131981) over the period from 2010-2015 to pilot sanitation marketing approaches in Bangladesh. This World Bank executed TA piloted shifts in technology and local entrepreneur behavior necessary to break the low quality of service nexus constraining sanitation markets in rural Bangladesh. Through this TA, the World Bank engaged with ASA (one of the premier MFIs in Bangladesh) to develop a financial product enabling low-income rural households to access credit to finance the purchase of improved sanitation facilities. The extension of business loans to local entrepreneurs trained in the production and installation of

<sup>6</sup> Perez, Eduardo; Cardosi, Jason; Coombes, Yolande; Devine, Jacqueline; Grossman, Amy; Kullmann, Craig; Kumar, C. Ajith; Mukherjee, Nilanjana; Prakash, Manu; Robiarto, Amin; Setiwan, Deviariandy; Singh, Upneet; Wartono, Djoko. 2012. What Does It Take to Scale Up Rural Sanitation? Water and sanitation program; working paper. World Bank, Washington DC, <https://openknowledge.worldbank.org/handle/10986/17334>



improved sanitation facilities were also piloted under this initiative.

8. Building on the work of the pilot program, the World Bank executed technical assistance (TA) program '*Scaling-up MFI lending for improved rural sanitation in Bangladesh (P156017)*' was initiated towards the end of FY16. This TA was comprised of four components: (i) skill development of entrepreneurs, including training in the production of multiple types of toilets; (ii) social marketing to influence behavior change; (iii) promotion of multiple hygienic latrine models; and (iv) access to consumer loans to purchase latrines and entrepreneur loans for business development.

9. While access to MFI loans can increase the affordability of hygienic latrines, World Bank research on household sanitation suggests that well-targeted subsidies can provide a critical safety net for the poor. This research indicates that these subsidies are most effective when made available after demand creation and if released on an output basis<sup>7</sup>. The Global Partnership on Output-Based Aid (GPOBA) therefore proposed the initiation of a US\$3 million grant to be targeted as an output-based aid (OBA) subsidy to poor households<sup>8</sup>.

10. Output based aid (OBA) is a form of results-based financing in which subsidies are paid to service providers based on verification of pre-agreed project targets defined during project design, thereby offering a strong incentive for the delivery of results. By channeling the OBA grant financing through PKSF (the government owned wholesale micro-finance institution) and blending this with micro-finance loans, the project sought to leverage an additional US\$22 million of capital from MFIs for improved household sanitation. The OBA subsidy was designed to leverage microfinance to improve the affordability of latrines and independent verification to ensure the quality of latrines as a means of assisting households to move up the sanitation ladder to achieve the sanitation SDG.

### **Theory of Change (Results Chain)**

11. The objective of the project was to increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh through commercial sanitation loans to redress the market failure associated with the unacceptably low quality of sanitation services associated with the high demand for cheap sanitation facilities. The project sought to strengthen the demand side through the provision of credit and awareness to rural households to demand hygienic latrines. The aforementioned Bank-executed TA (P156017) sought to strengthen the supply side through the provision of credit and training to local sanitation entrepreneurs.

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<sup>7</sup> Financing Household On-Site Sanitation for the Poor. WSP 2011.

<sup>8</sup>GPOBA is a multi-donor trust fund administered by the World Bank. Funds for this project were provided by the Australian Department of Foreign Affairs and Trade (DFAT).



### Bangladesh OBA Sanitation Microfinance Project Theory of Change

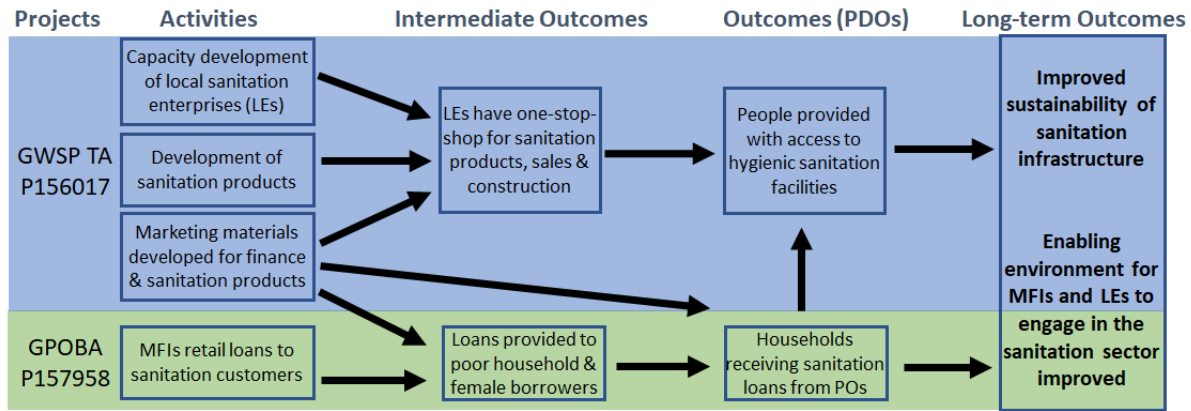


Figure 2: Schematic Overview of the OBA Sanitation Microfinance Project Results Chain

12. Responsibility for the implementation including compliance & reporting to the World Bank is with PKSf. PKSf signed implementation agreements with the 21 partner organizations (POs) to make available credit for the provision of sanitation development loans to households in 237 Upazilas (sub-districts) under 42 districts. The OBA subsidy of 10 - 12.5 percent of the total value of the loan was disbursed to the household through PKSf which was interpreted for households as an interest free loan to be paid off within a year in weekly installments. The POs which obtained capital financing from PKSf received a 10 percent OBA subsidy and POs which invested their own capital (i.e. ASA) received a 12.5 percent OBA subsidy. Household borrowers were required to choose from a range of standard design 'set price' latrines installed by trained local sanitation entrepreneurs. A 6-10 percent sample of the quality of household sanitation services certified by an Independent Verification Agent formed the basis for the release of the OBA subsidy by the World Bank to PKSf and from PKSf to the retail MFIs.

13. The Bank-executed TA (P156017) supported sanitation market development from June 2016 - May 2018 building capacity for the supply of improved sanitation services. This included the training of MFIs and Local Entrepreneurs in the supply of 'turn-key' sanitation services. It also included the capacity building of MFIs and Local Entrepreneurs in the creation of household demand 'at the doorstep' for improved sanitation services. Through this TA, assessments of the baseline sanitation status of households and evaluations of the commercial performance of Local Entrepreneurs were also undertaken

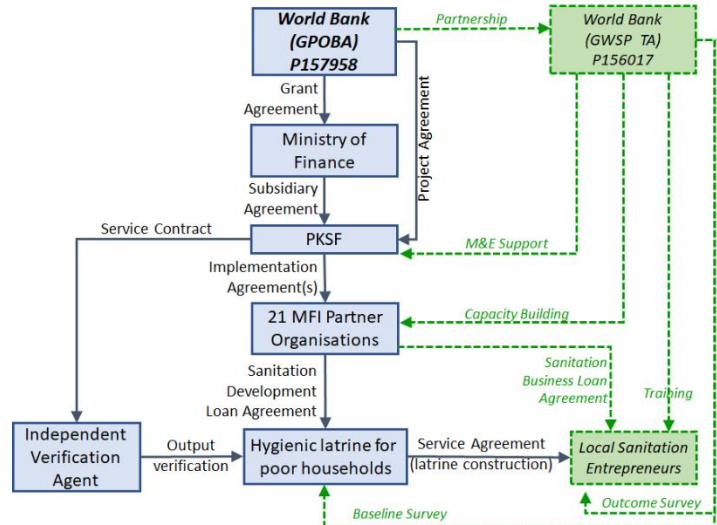


Figure 3: Program Implementation Arrangements

#### Project Development Objective (PDO)

14. The project development objective (PDO) was to increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh through commercial sanitation loans.



**Key Expected Outcomes and Outcome Indicators**

15. The project targeted the construction of hygienic latrines for 170,000 poor households in rural Bangladesh, benefitting 850,000 individuals. Based on the existing customer base of these POs, approximately 90 percent of borrowers were expected to be women.

16. Progress of the project was to be monitored via the following outcome indicators:

- Households receiving sanitation loans from POs under the project (number)
- People provided with access to hygienic sanitation facilities under the project (number)

17. The project approach was to support MFIs to extend sanitation loans to poor rural households to engage pre-qualified local sanitation entrepreneurs to install hygienic latrines. This sought to leverage change through the adoption of the following roles by four main actors:

- *Wholesale MFI*: to develop the sanitation loan financial product, make available wholesale credit to local partner MFIs and verify compliance with the OBA latrine quality standards, loan disbursement and the collection of repayments.
- *Retail MFIs*: to extend sanitation development loans to households, facilitate the process of social marketing, disburse the loans, collect the repayment installments, link the customers to entrepreneurs and ensure the quality of construction.
- *Local Entrepreneurs*: to manufacture, deliver and install a quality 'turn-key' latrine facility at the doorstep for their clients. As the main provider of sanitation services, LEs play a key role in creating the market for quality sanitation goods and services that comply with environmental safeguards.
- *Credit Group Members*: to access low interest finance from MFIs to engage trained LEs to install OBA certified quality latrine products.

**Project Components**

18. The original components of the project are as follows:

Component	Estimated cost at appraisal	Actual cost	Description
<b>Component 1:</b> OBA subsidies to increase access to household sanitation.	US\$2.4 million	US\$2.31 million	The component will finance subsidies to improve access to on-site sanitation for a total of approximately 170,000 low-income households, benefitting 850,000 people in rural areas. The one-off OBA subsidy will be available for low-cost technologies ranging from US\$45 - 128, which will reduce the total purchase price for households unable to pay the entire amount up front. The OBA subsidy will range from 10 - 12.5 percent of the total value of loan, to be disbursed upon independent verification outputs.
<b>Component 2:</b> Implementation support & independent	US\$0.60 million	US\$0.57 million	This component will finance operational and implementation related costs, including project management, subproject monitoring and supervision, administering the OBA subsidy to the



verification agent (IVA).			POs, hiring designated Environmental, Social, and Financial Management Specialists, and for hiring the IVA.
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## II. OUTCOME

### A. RELEVANCE OF PDO

19. The PDO ‘to increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh through commercial sanitation loans’ remained highly relevant to Bangladesh's development priorities throughout the duration of the project. The project's objectives of improving the quality of sanitation services is consistent with national policies and strategies and the long-term vision of the 7th Five Year Plan (2016-2020) of inclusive growth and the eradication of poverty.

20. The project’s focus on engaging with the private sector to leverage financial, technical and human resources to address sanitary containment challenges of rural Bangladesh demonstrates a willingness of the project to engage with approaches at the frontiers of sector thinking. The sanitary quality of service standards provided by the private sector and verified through the independent verification service are designed to enable compliance with the rigorous safely managed sanitation service standards targeted by the sanitation Sustainable Development Goal (SDG) target 6.2.

21. The PDO remains strongly aligned with the World Bank Group’s Country Partnership Framework (CPF) 2016-2020 (Report No. 103723-BD) for Bangladesh. Safely managed sanitation contributes to Focus Area 2 (Social Inclusion) in addressing challenges related to quality improvements in health particularly given the strong association with nutritional outcomes. Shifting World Bank resources from the direct financing of public service delivery to the leveraging of private sector finance to improve public service outcomes contributes to Focus Area 1 (Growth and Competitiveness) where private sector engagement supports job creation and the mobilization of private capital fosters economic growth.

22. *The alignment of the PDO with the CPF, the Government of Bangladesh’s Sixth Five Year Plan and the sanitation SDG 6.2 indicates that the relevance of the PDO is rated as ‘high’.*

### B. ACHIEVEMENT OF PDO (EFFICACY)

23. The project surpassed the target for the number of households receiving sanitation loans. The shortfall in the number of people reached is simply a function of the household size being slightly less than that estimated in the project development objective target.

PDO Level Result Indicators	Targets	Results
Number of Households receiving sanitation loans from POs under the project	170,000	170,679
People provided with access to hygienic sanitation facilities under the project	850,000	776,590

24. Data submitted by participating POs was used to identify the number of households receiving sanitation loans under the project. PO progress reports indicate that a total of 170,679 households received sanitation loans over the project period. Initially the progress was slow because the project areas were affected by floods and heavy rainfall, requiring 90 percent of the sanitation loan target to be achieved within the remaining 9-month period from October 2017 - June 2018.

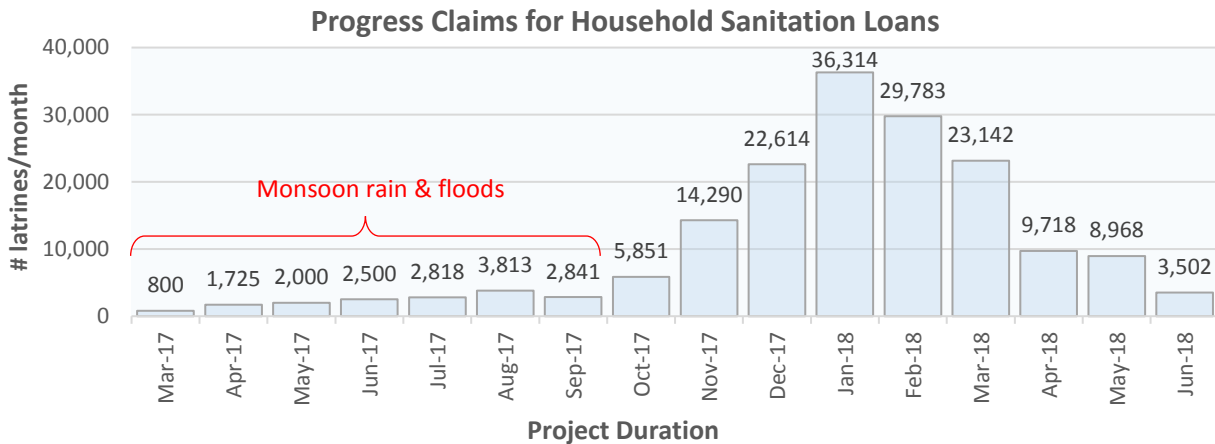


Figure 4: OBA household sanitation loan progress

25. The target number of 850,000 people provided with access to hygienic sanitation facilities under the project was calculated based on an assumption of an average household size of 5 persons. The baseline survey in the project areas found an average household size of 4.55 people per household. For the total of 170,679 households receiving loans under this project, this gives an estimated 776,590 people that were provided with access to hygienic sanitation facilities.

26. The project surpassed the intermediate result targets - on the number of latrines constructed, the number of poor households, the loans provided to female borrowers and household satisfaction.

Intermediate Result Indicators	Targets	Results
Number of hygienic latrines constructed in rural areas under the project	170,000	170,679
Number of households receiving sanitation loans which are identified as poor	80%	89%
Loans provided to female borrowers	90%	96%
Households satisfied with latrine installation process and functionality	90%	99.99%

27. In most cases, the disbursement of the loan to households by the PO was initiated after the latrine had been constructed, concurrent with the payment to the local entrepreneur by the household and prior to the release of the OBA subsidy by PKSF. This means that the data on the disbursement of the loan to the household occurred after the construction of the latrine. This is one reason why the number of latrines constructed is the same as the number of loans issued. Another reason is that the release of the OBA subsidy by PKSF to the POs was contingent on the 8-point verification of the quality of the process and the construction of latrines based on a sample of 6 percent – 10 percent of the latrines installed.





28. The PKSf partner MFIs (excluding ASA) classify their credit group members into three groups: Buniad (ultra-poor), Jagoron (poor), and Agrasor (non-poor). Analysis of the database of 70,623 households who took out sanitation loans from these 20 partner MFIs indicates that 89 percent of those who took out sanitation development loans were at least poor, of which 13 percent were classified as ultra-poor. Only 11 percent of those accessing interest free sanitation development loans were not considered to be poor.

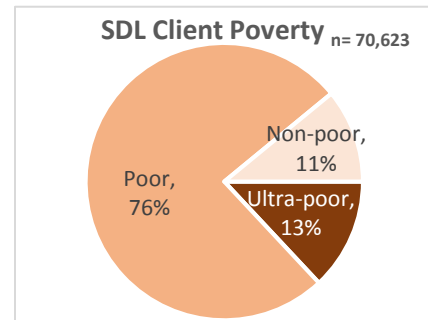


Figure 5: Poverty of SDL Credit Group Members (excluding ASA)

29. The international poverty line was revised in 2015 by the World Bank to \$1.90/day at 2011 PPP dollars (equivalent to \$1.25/day at 2005 PPP). In 2017, the World Bank also introduced lower middle-income (set at \$3.20/day) and upper middle-income (set at \$5.50 /day) International Poverty Lines. This means that while the \$1.25/day at 2005 PPP dollars defines the extreme poverty line for Bangladesh, the poverty line for a lower middle income like Bangladesh will be roughly equal to \$2.11 at 2005 PPP.

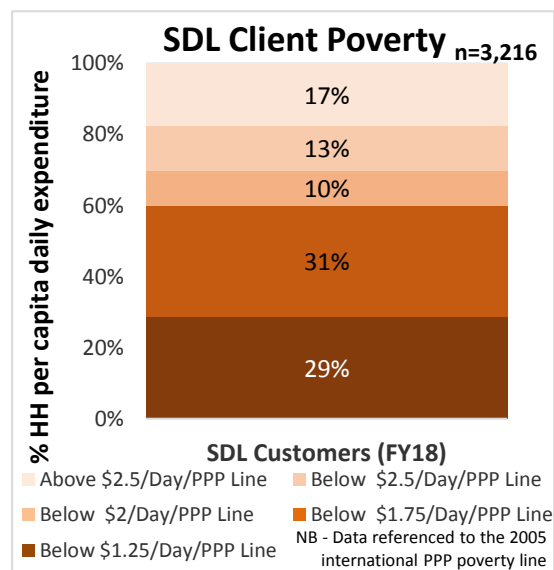


Figure 6: Poverty Analysis of Sanitation Development Loan (SDL) Customers

30. The IVA undertook Poverty Probability Index (PPI®) scoring of the validated households calibrated against 2005 PPP dollars. As the poverty line for a lower-middle income country at 2005 PPP is approximately \$2.11 per day, the number of SDL customers that are classified as poor according to the PPI for Bangladesh will be somewhere between 83 percent (i.e. less than \$2.50 per day) and 70 percent (i.e. less than \$2.00 per day).

31. The PPI also established that 29 percent of the customers taking out sanitation development loans under the project were extreme poor (i.e. living on less than \$1.25/day). According to national poverty data for Bangladesh, an estimated 39 percent of the population of Bangladesh were living on less than \$1.25 per day. While extreme poverty rates have continued to decline in Bangladesh since 2010, we would expect the percentage of extremely poor customers taking out sanitation development loans to be lower than the national average because reaching the extreme poor are generally not the most effectively reached through micro-credit programs.





32. The analysis of the relative wealth of households who took out sanitation development loans from the IVA data gives an indication of the effectiveness of individual MFIs in reaching the poor. Unfortunately, the data set is not big enough to give a sufficient level of confidence in ranking the MFIs performance in reaching the poor. However, the sample for ASA is large enough to indicate that the poverty status of ASA clients is consistent with that of the other MFIs. This is significant because the self-assessed poverty ranking of clients undertaken by the other 20 MFIs was not undertaken by ASA.

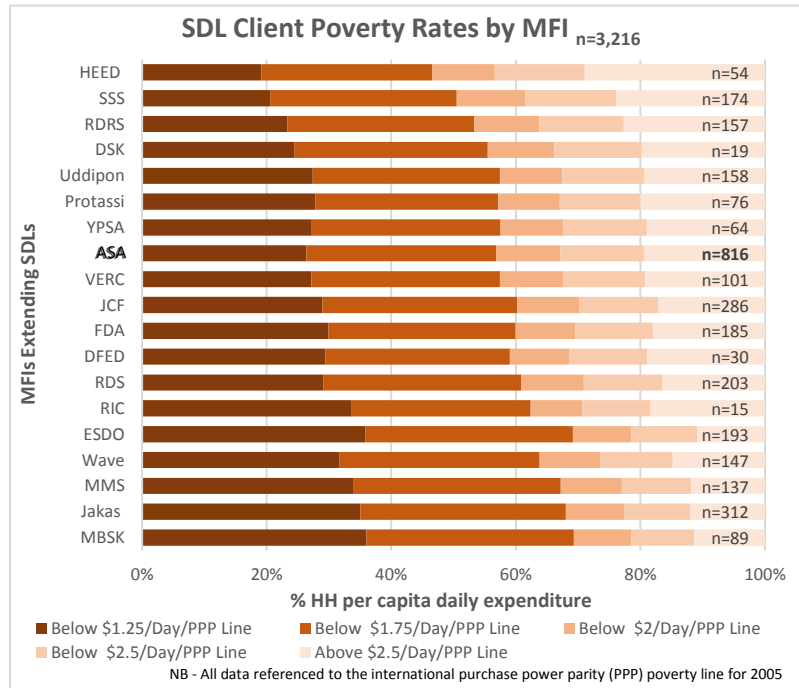


Figure 7: PO Poverty Analysis of SDL Customers

33. Although women account for 89 percent of MFI clients nationally<sup>9</sup>, females constituted 96 percent of the sanitation development loan customers under the project. There was only a marginal difference in the average loan size of males (BDT 10,091) and females (BDT 9,845) and the uptake of sanitation loans by male (6 percent) and female (5.4 percent) credit group members. Although male borrowers had a marginally higher repayment rates (46 percent) than female borrowers (41 percent) this data is not particularly meaningful until the end of the loan period (e.g. it could indicate that men took out their loans earlier than women and are therefore further into their loan repayments). The lower incidence of overdue repayments on loans for females (6 percent) as compared to males (6.8 percent) is significant.

34. Household satisfaction with the latrine installation process and functionality was recorded against a 4-point ranking system through the IVA verification process. Only 0.01 percent of the customers of sanitation development loans visited by the IVA were unsatisfied with the installation process or functionality of their latrines. The cause for their dissatisfaction in both cases was the lack of any provision for water storage and the arrangements for the supply of water to latrines.

35. The project also surpassed other estimated performance targets captured in text such as the independent verification of latrines and the private capital leveraged by the project.

Other Target Indicators	Targets	Results
Number of Latrines verified by the Independent Verification Consultants (IVC)	6-10%	8.6%
Financial capital leveraged for quality sanitation investments by the project	\$22 m	\$22.2 m

<sup>9</sup> World Bank, "Linking Up and Reaching Out in Bangladesh: Information and Communications Technology for Microfinance"



36. Independent verification agents (IVA) were engaged to undertake a 4-point verification of the process and a 4-point verification of the quality of latrines, with the release of the OBA subsidy by PKSF to the POs being contingent on the clearance by the IVA. Over the duration of the project, the IVA undertook a total of 14,612 visits to households with latrines constructed under the project (i.e. verified 8.6 percent of latrines constructed under the project). Although 56 latrines (or 0.4 percent of those visited) failed to achieve the 80 percent score from the IVA necessary for the release of the full OBA subsidy, these failures had been corrected prior to the quality verification in the next IVA annual quarter visits.

37. A significant goal of the project was the leveraging of commercial capital to finance improved sanitation facilities. The final evaluation of the program has calculated that the US\$3.0 million grant invested by GPOBA has leveraged an additional US\$22.2 million of capital investment from ASA, PKSF and the 20 retail POs. Additional capital investments by clients were necessary in 39 percent of cases to finance the latrine cost increases not covered by the loans.

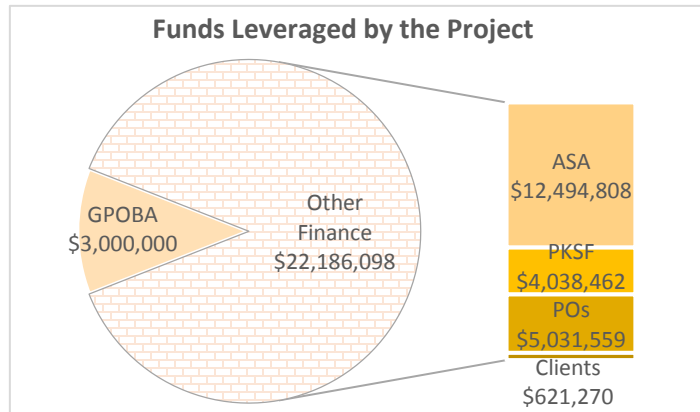


Figure 8: Sanitation Program Financial Leverage

38. *The Achievement of PDO (efficacy) is rated as 'substantial' due to the surpassing of most of the significant targets within the extremely short project implementation period. However, there was a shortfall in the number of people reached due to the household size being slightly less than that estimated in the project development objective target.*

### C. EFFICIENCY

39. According to the World Bank Economics of Sanitation Initiative (ESI) for Bangladesh, inadequate sanitation caused Bangladesh economic losses equivalent to 6.3 percent of the country's GDP in 2007. This equated to an economic loss in 2007 due to poor sanitation of BDT 295.5 billion per year, or US\$4.22 billion per year or US\$30 per capita per year. The economic costs of inadequate sanitation in Bangladesh were the greatest on health (84.3 percent), followed by welfare and access time (10.8 percent) and water (4.9 percent). The losses resulting from premature mortality accounting for three quarters of all economic impacts with diarrhea being the most detrimental of the health factors<sup>10</sup>.

40. The consequences of the constant exposure to unsanitary environmental conditions has also been shown to contribute to the incidence of chronic undernutrition in children (i.e. the failure to achieve normal height-for-age standards which is also known as stunting) which affects the physical and intellectual development of children and consequently the future economic development of a nation. The consequences of the chronic exposure of children to a poor sanitary environment, on the incidence of chronic undernutrition, on the economic potential of the workforce is much more difficult to quantify and was not included in the ESI for Bangladesh.

### Economic Analysis

<sup>10</sup> Barkat, Abdul. Economic Impacts of Inadequate Sanitation in Bangladesh. World Bank, 2012.



41. The estimated economic internal rate of return (EIRR) prior to undertaking the project was estimated to be 40 percent using cost-benefit analysis and ESI data. The intervention cost was BDT 11,350 per latrine which included the subsidy, the independent verification agent and the household contribution. The operation and maintenance costs were BDT 500 taka per annum applied over a latrine lifespan of 10 years at an annual rate of inflation of 6 percent. The 2007 ESI costs and estimations were adjusted to 2016 figures based on the consumer price index and the economic benefits of reduced health costs and income lost due to death or disease and reduced water pollution costs due to improved sanitation facilities. The monetary value of time savings from improved sanitation was excluded from the ESI analysis as most households already had some form of sanitation. As the ESI represents the upper bound of the potential welfare gains, the benefits were adjusted downwards in 2016 BDT to account for recent gains in access to sanitation. The economic benefit of the project was therefore estimated at BDT 925 per year (94.5 percent health & 5.5 percent water) which is a quarter of the total potential economic gains from sanitation and hygiene interventions in Bangladesh cited by the ESI.

42. The actual economic internal rate of return (EIRR) was updated at the completion of the project to be 35 percent using actual costs. The intervention cost was revised upwards slightly to include the average 3 percent contribution by households above the fixed price of the latrine necessary to cover the increased costs borne by the local entrepreneurs (i.e. transport in remote areas) in over one third of the cases. The number of beneficiaries was revised downwards slightly from 5 persons per household to reflect the baseline figure for the project area of 4.55 persons per household. The timeline for the intervention was revised down from 3 years to 2 years and the actual number of latrines constructed in FY17 and FY18 updated from the progress charts.

### Financial Analysis

43. The projected financial internal rate of return (FIRR) of 2 percent was only marginally positive, even with the World Bank grant funding. While this is lower than other projects extending income-generating loans, the considerable public health benefits were well-aligned with PKSF's social mission. The major projected costs of the project to PKSF were the cost of the capital for the wholesale loans provided by PKSF to POs estimated at 0.5 percent of the loans (US\$109,000), the costs of the staff estimated at 1.3 percent of the loan (or US\$283,000) and the costs of contracting and supervising the IVA (estimated at US\$210,000). The financial benefits of the project were from Component 2 of the World Bank grant offsetting the costs of the IVA and staff time.

44. The projected marginally positive FIRR turned out to be negative at the completion of the project, due to reasonable increases in the costs of the implementation of the project. The outsourced costs incurred by PKSF in the implementation of the IVA were US\$259,412 representing a 23.5 percent increase in costs over the original estimate of US\$283,000. The direct staff costs were almost exactly as per the original estimate of \$282,880 (based on a PKSF legacy of 1.3 percent of the loan) but adding reasonable management overhead costs for the project increased total staff costs to US\$343,718 (i.e. 22 percent over the original estimate).

45. Although the economic internal rate of return (EIRR) is strongly positive it is less than anticipated at appraisal. The financial rate of return (FIRR) is negative and with administrative efficiency hampered by some delays in the initiation of the project *the efficiency of this project has been rated as 'substantial'*.



#### D. JUSTIFICATION OF OVERALL OUTCOME RATING

46. *The overall outcome of the project has been rated as ‘satisfactory’ as there were only minor shortcomings in the efficacy, efficiency, or relevance of the project.*

- Relevance: Redressing the market failure associated with the high demand for low-cost and low-quality latrines responds to the Government, World Bank and SDG imperatives to move households up the sanitation ladder to access a safely managed sanitation service.
- Efficacy: Surpassing of the targets of loans extended and independently verified sanitary latrines constructed within an extremely short project duration of just 16 months.
- Efficiency: Very attractive economic rates of return on investments in the sanitation sub-sector by leveraging of private capital to finance verified quality latrines. In addition, the cost of community mobilization for improved sanitation facilities significantly reduced as this was undertaken by MFI branch staff as part of their normal role.

#### E. OTHER OUTCOMES AND IMPACTS

##### Gender

47. By working with the majority female members of the credit groups established by MFIs and by training LEs to deliver a verified quality ‘turn-key’ sanitation service to doorstep, *women became the key interlocutor in sanitation decision making within the household.* Making product catalogues with key functionality, serviceability and pricing criteria available also lifted the decision making from the price of individual sanitation components to the quality of the sanitation service delivered. This enabled features such as the privacy (due to a robust superstructure), or security (due to a lockable door), or convenience (proximate to living areas within the house) to influence decision making.

48. Prior to the introduction of this project, latrine components were available on the shop floor from small-scale cement businesses (i.e. cement slabs, rings & poles) and hardware shops (i.e. PVC pipes, pee traps and ceramic commodes, wood & corrugated iron). Households were responsible for the transportation of materials and the construction of latrines. The purchasing of latrine materials, transportation, design and construction *almost exclusively being undertaken by male household members.* The major determinant of the selection of materials and the design of the latrine being the price of the sanitation components rather than the effectiveness of the sanitation service.

##### Public Service Financing

49. This project also pioneered a shift in the market behavior of MFIs in relation to the extension of loans to households to gain access to independently verified improved public services. Combining the extension of modest ‘non-productive’ sanitation loans to households with larger ‘productive’ sanitation loans to entrepreneurs, enabled MFIs to extend loans for fixed assets (that can’t be recovered in the event of a default on the loan) without significantly increasing their market costs or risks. This has also enabled MFIs to cover the social mobilization costs associated with the necessary change in behavior of households to invest in more hygienic sanitary facilities.

50. Prior to this program, non-productive loans were less than 5 percent of the total loans by MFIs in Bangladesh<sup>11</sup>. With the introduction of the sanitation development loans, 9 percent of the total number of micro-credit group members targeted that did not have an improved latrine ended up taking out a

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<sup>11</sup> Bangladesh Microfinance Statistics (2016-17) as quoted in the OBA Sanitation Microfinance Program Evaluation Report



sanitation development loan (6 percent for ASA and 30 percent for the other 20 MFIs). The introduction of the non-productive interest free sanitation loans led to a 13 percent increase in the number of new borrowers amongst all MFIs (9 percent increase for ASA and 18 percent increase for the other 20 MFIs).

### III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

#### A. KEY FACTORS DURING PREPARATION

51. *Soundness of background preparation:* The project's design was built on the lessons learned from a World Bank executed sanitation marketing technical assistance pilot project (TA P131981) implemented over the period from 2010-2015. This technical assistance pilot project supported the establishment of the major latrine model designs, identified the importance of providing a 'turn-key' latrine services 'at the doorstep' of households and piloted the viability of working with MFIs to extend 'non-productive' loans for improved sanitation facilities. This previous technical assistance pilot project also trialed different models that proved not to be successful such as the installation of latrines by local entrepreneurs on hire purchase (i.e. with repayments to the entrepreneurs rather than the MFIs) and the sale of a prefabricated improved latrine superstructure (i.e. to be assembled by households themselves).

52. *Priority objectives motivating ambitious targets:* The high relevance of the PDO with Bangladesh's development priorities as well as with the World Bank Country Partnership Framework (CPF) enabled the objectives for this project to be well-focused to address sector challenges. The high priority accorded to the objectives provided the motivation necessary to pursue the ambitious targets within the very short time frame. The high priority also provided the motivation to make the completely new service delivery model for the delivery of improved sanitation services successful.

53. *Innovative combination of financing instruments:* The innovative blending of OBA grant financing with commercial lending through PKSf enabled the project to leverage a significant level of commercial financing from POs to improve public sector outcomes in the sanitation sector. This included the leverage of private finance to improve the affordability of improved latrine facilities through the extension of 'non-productive loans' for sanitation facilities. This also included the deployment of OBA verification mechanisms for quality assurance and OBA finance for softening loans to increase demand from the non-poor.

54. *Readiness for implementation:* Despite this being a novel design of a project for the sanitation sector, the World Bank has worked with PKSf previously on wholesale lending to retail MFIs for the extension of 'productive loans' and PKSf has previous experience in the extension of 'non-productive loans'. Though the independent verification of the quality of construction required under the OBA modality was new to the MFI sector, PKSf has proven in the past to have a robust monitoring and evaluation systems. As a result, PKSf were largely well prepared to meet the requirements for the implementation of the project. In addition, the prior initiation of the World Bank executed technical assistance (TA P156017) enabled the materials for the training of local entrepreneurs and the retail MFIs to be prepared in advance of the commencement of the project.

#### B. KEY FACTORS DURING IMPLEMENTATION

55. *PKSF Wholesale Capacity:* The previous experience of the PKSf Board and senior management in the oversight and PKSf panel leaders and dealing officials in the managing of World Bank operations



were key factors in the effectiveness of the project. The routine monitoring and supervision, the regular field visits and contact of PKSf staff with retail MFIs were key factors identifying and addressing implementation challenges. With the very short time frame available for the implementation of the project, the ability of PKSf to re-allocate wholesale financing amongst the 20 retail MFIs was a key factor in reaching the project targets. This enabled PKSf to reduce the funding allocation and targets to those retail MFIs that were underperforming and redistribute the funds and targets to the better performing retail MFIs. This capacity was particularly important given the delays experienced during the initial 6 months of the project due to heavy monsoon rains and flooding.

56. *MFI Retail Capacity:* While the OBA modality and the extension of non-productive loans to households for improved sanitation facilities was novel for the retail MFIs, most of the retail MFIs engaged under the project had previous experience in the sanitation sector. This meant that the willingness and ability of the MFIs to engage in the sanitation sector was high. This meant that the training provided to the MFIs on the implementation modalities, sanitation quality of service standards and the application of the sanitation environmental and social safeguards was effective in ensuring the quality construction of sanitation facilities with very few non-compliant latrines.

57. *TA Capacity:* The World Bank executed technical assistance supported the standardization of the latrine models to be financed and built under the program, the development of training modules on sanitation technology options for MFI staff and local entrepreneurs, the generation of promotional materials for the latrine options and improved hygiene behavior. This World Bank executed technical assistance capacity enabled the development of technology and training capacity to run in parallel with the development of the financing and management modalities by PKSf.

## IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

### A. QUALITY OF MONITORING AND EVALUATION (M&E)

#### **M&E Design**

58. The project followed a well-structured theory of change to leverage market finance to address the unacceptably low quality and cost of sanitation facilities by strengthening both the 'demand for' and the 'supply of' higher quality and cost sanitation options to move the sector up the sanitation ladder. The project M&E design therefore required the tracking of both the project finance and commercial finance leveraged, the number of loans and the number of latrines constructed, the demographics of the clients (i.e. gender and poverty), the quality compliance of latrines and the consumer satisfaction levels. In addition to the normal project reporting systems, the project design required the engagement of an independent verification agency (IVA) to validate the major quality of compliance requirements (i.e. latrine standards, poverty levels, customer satisfaction). In addition, the project design incorporated the World Bank technical assistance to undertake the baseline survey, an assessment of local entrepreneurs and an evaluation of project effectiveness.

#### **M&E Implementation**

59. The project M&E system collating the implementation data on the physical and financial progress of the project from retail MFIs to the wholesale MFI was extremely effective. This followed a well-established reporting pattern of collating retail information from retail MFIs developed by PKSf for





other World Bank projects. There are however some minor shortfalls such as not changing the targets of the people reached to reflect the actual household size or more systematically managing the data generated by the IVA.

60. The independent verification agency (IVA) role was performed by independent verification consultants (IVC) engaged by PKSF. Though their procurement was slightly delayed this did not present a major challenge because the construction of latrines was initially very slow due to the waterlogging of the soil that occurred during an exceptionally wet season. The independent verification consultants exceeded the minimum percentage of latrines required to be verified and submitted summary reports that improved in quality over the course of the project.

61. The extensive baseline data set generated through the World Bank technical assistance was significant in also identifying the major factors undermining the hygienic status of latrines in the project areas. This contributed to the technical design requirements for the latrine models under the project and the verification check-list for the IVA. The World Bank executed surveys of the local entrepreneurs trained and extended business loans through the project added considerably to the body of knowledge on business viability. The end of project evaluation supported by the World Bank technical assistance also quantified the financial leverage and poverty targeting by the project.

#### **M&E Utilization**

62. The effective utilization of the project M&E on physical and financial progress enabled PKSF to reduce the funding envelope and targets to underperforming retail MFIs and increase the funding envelope and targets to the better performing retail MFIs. The independent verification consultants generated an extensive data set that was necessary to ensure the quality standards, the satisfaction level & poverty targets established by the project were achieved. The information generated from the World Bank executed surveys of local entrepreneurs was incorporated into the training modules for the local entrepreneurs and retail MFI staff. The financial leverage and poverty data from the end of project evaluation were significant in the justification of a scaled-up successor project with World Bank loan financing rather than grant financing.

#### ***Justification of Overall Rating of Quality of M&E***

63. *The strong design, implementation and utilization of the M&E framework justifies an overall rating of M&E as 'substantial'. This rating is given due to the minor shortcoming of not changing the target number of beneficiaries during the project restructuring to reflect the actual household size of 4.55 persons.*

## **B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE**

### **Environmental & Social Safeguards**

64. *Environmental:* While the latrines are of good quality and meet hygienic standards, they did not always comply with standards on the minimum distance from the drinking water sources. PKSF were therefore required to prepare a compliance assessment report to generate lessons learned on environment and social safeguards. This review found that although only 40 percent of latrines were located more than 10 metres away from the drinking water source, however

- Vertically, the bottom of the pits was located above the water table (i.e. shallow pits were dug in high water table areas to keep the bottom of the pit at least 1 metre above the water table).



- Horizontally, the perimeter of the pits was buttressed with fine silty soil that slows the rate of transfer of moisture and increases the reduction of pathogens.

65. *Social:* The project made efforts to include marginalized groups (i.e. tribal peoples) as beneficiaries. Grievance Redress Committees (GRCs) were set up with all 21 POs at district or upazila level, with members drawn from a cross-section of stakeholders including local communities, beneficiaries and where relevant representatives of ethnic minorities. The environmental and social management framework (ESMF) details the use of the consumer satisfaction survey deployed by the IVA which received a 99.99 percent satisfaction rate from surveyed clients. Under the Small Ethnic Communities and Vulnerable Peoples Development Framework (SECVPDF) the project engaged 6 POs to target ethnic communities in five districts (Chattagram, Dinajpur, Joypurhat, Moulvibazar, and Thakurgaon) of the Chittagong Hill Tracts. This included the specific engagement with ethnic communities on the design of the standard latrine packages proposed under the project. A total of 459 customers were identified as being from ethnic groups with loans totaling BDT 4.59 million.

#### **Fiduciary**

66. *Procurement:* Procurement methods only applied to the goods and services procured under Component 2 (i.e. implementation support and independent verification). All goods and services under this component were procured in accordance with Bank guidelines and following the Systematic Tracking of Exchanges in Procurement (STEP).

67. *Financial Management:* PKSF consistently applied appropriate controls on the financial operations of the project by hiring the staff required for fiduciary functions and observing the Financial Management procedure detailed in their Operational Guidelines. PKSF has their own accounting system which is adequate to capture the project financial information electronically and facilitate the production of reliable financial reports. Annual audits of the project accounts were undertaken in addition to the requirement for an audit by a reputable private firm at the completion of the project.

### **C. BANK PERFORMANCE**

#### **Quality at Entry**

68. The World Bank teams ensured that the PDO aligned with relevant GOB's and World Bank strategies. In addition, lessons and capacities from the previous World Bank executed technical assistance pilot project were incorporated into the design of the project. While the private sector partnership modalities conceptualized in the project were innovative for the sanitation sector, it did build on previous World Bank experience and partners in the wholesaling of micro-finance services.

69. The initiation of the World Bank executed technical assistance (TA P156017) prior to the approval of the project enabled the World Bank to deploy additional resources to the design of the project. This included support for conducting the baseline assessment and analysis of the baseline data in the retail MFI project areas. It also included the development of training modules for local entrepreneurs and retail MFI staff on the promotion and installation of the technology options developed under the previous World Bank executed technical assistance (TA P131981). This also included the making available of technical resources in the sanitation sector for PKSF whose expertise was almost exclusively in the micro-finance sector.





### Quality of Supervision

70. The World Bank team provided regular and effective advice to counterparts within the PMU to support implementation of the project. Supervision missions by the World Bank team after five and 10 months of the project were timely in assisting the project to achieve its objectives as well as generate the data necessary to prove that the objectives had been achieved. The WBG Environmental and Social Safeguard team, supported three trainings for key project personnel (i.e. PKSF project staff & IVCs; retail MFI managers, credit coordinators, panel leaders and dealing officers) on the environment and social safeguards provisions of the project.

71. The World Bank executed technical assistance was an essential part of project implementation bringing to bear technical expertise on sanitation and the delivery of capacity to local entrepreneurs to market and supply improved latrine models. The World Bank executed technical assistance comprised of four distinct and interdependent components: 1) Development and promotion of sanitary designs /delivery mechanisms; 2) Skills development of entrepreneurs; 3) Behavior change through social marketing of hygienic latrines; and 4) Increase affordability through the introduction of financial products. Assessments of the market development by local entrepreneurs under the World Bank executed technical assistance was instrumental in refining the technical advice and improving the quality of the training provided to local entrepreneurs.

### **Justification of Overall Rating of Bank Performance**

72. *Based on the quality of World Bank performance at entry and at supervision, the overall rating of World Bank performance is 'satisfactory'.*

### D. RISK TO DEVELOPMENT OUTCOME

73. The latrines installed and the commercial finance leveraged through this small GPOBA grant to subsidize the interest rate on loans and finance the independent verification processes is highly likely to be sustained.

- The improved quality of the latrines, the verified compliance with hygienic latrine standards and the safety of emptying of the twin offset pits indicates that this sanitation intervention will contribute to improved health outcomes.
- Though it is still too early to tell how many of the loans will be fully repaid, however, only 0.83 percent of the total of 170,679 customers had an overdue repayment on their loan (as of June 2018). This is better than the national recovery rate of loans of 95-98 percent.

74. The GPOBA recipient executed funding through PKSF to retail MFIs enabled the extension of loans to households for improved sanitation at 0 percent interest. This reduced the average repayment by households for sanitation loans from BDT 220 per week to BDT 200 per week. The access to interest free loans through the project enabled a rapid expansion in access to improved sanitation facilities with loans released for more than 150,000 latrines (i.e. 90 percent of the project target) which were installed within just 8 months of the project period. However, the sharp reduction in the number of retail loans for sanitation extended by MFIs since the program targets were met (in the absence of any wholesale financing of sanitation loans in FY19) raises serious questions about the sustainability of the level of the subsidy.

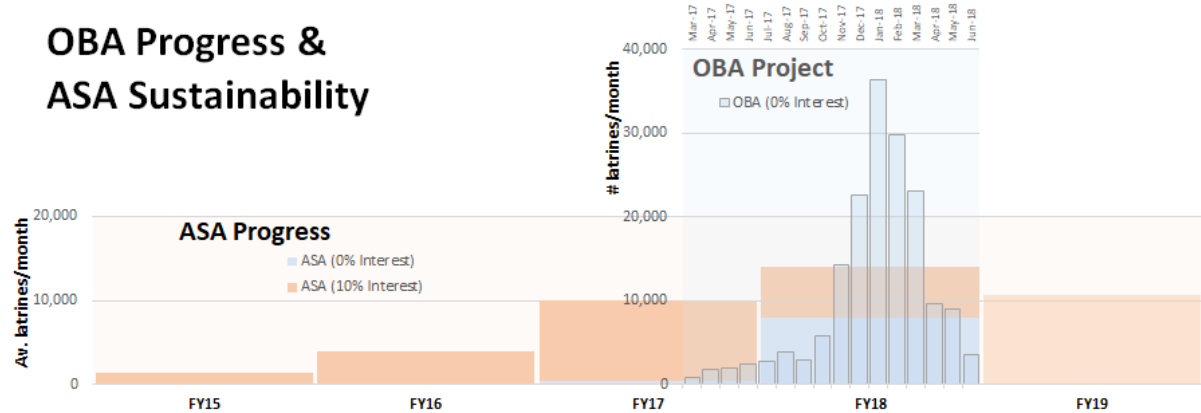


Figure 9: Sanitation loan progress by ASA at an interest rate of 10 percent and the project at an interest rate of 0 percent

75. While the zero percent interest rate on sanitation loans appears to have triggered the market to foster a sharp increase in demand for sanitation loans, this level of subsidy may not be sustainable. For example, the work of the precursor World Bank executed sanitation marketing technical assistance pilot project (TA P131981) led ASA to introduce a reduced interest rate for non-productive sanitation loans of 10 percent (against productive business loans of 12.5 percent) in FY15. By FY16, the extension of ASA sanitation loans had grown to approximately 4,000 latrines per month across all its branches. With the inclusion of approximately one third of the ASA branches within the GPOBA project, the demand for sanitation loans increased to 10,000 loans per month in FY17 and 14,000 loans per month in FY18 (with more than half at 0 percent interest through the project). While the demand for sanitation loans amongst the other twenty retail MFIs has fallen to practically zero since the closure of the project, ASA have allocated US\$18 million of their own capital to extend 128,250 sanitation loans at 10 percent interest (at an average of 10,700 loans per month) in FY19.

76. Surveys of local entrepreneurs have shown significant demand and willingness of households to pay for the latrine models designed and developed under this project even without access to credit or at least access to credit at market rates. This suggests that the project has successfully moved the quality and price point for latrine facilities in rural areas up the sanitation ladder. The scale of this GPOBA funded project has probably not yet been enough to leverage a move up the sanitation ladder in non-project upazilas. In some cases, the limited availability of water for handwashing, for flushing and for anal cleansing presents a risk to the sustained hygienic management of sanitary latrines.

77. Since completion of this project, PKSf has developed a sanitation development loan (SDL) policy to extend hygienic sanitation to any of its retail MFI partner organizations. PKSf has also allocated capital finance to support retail MFIs in five sub-districts to reach 100 percent sanitation coverage in their project areas through a Programme supporting the SDG target 6 of ensuring safely managed water and sanitation for all.

## V. LESSONS AND RECOMMENDATIONS

78. **Carefully designed public funding can leverage significant commercial resources to improve sanitation outcomes.** The effective blending of concessional and commercial finance through this project represents both a significant innovation in the sector and an enormous opportunity for the



future. In line with the objectives and approach of the World Bank's Maximizing Finance for Development (MFD) agenda, the project proved that carefully designed catalytic funding can leverage a significant amount of external resources for the sanitation sector. With the Sustainable Development Goals requiring new ways of doing business to meet the challenging targets set, the combining of output-based approaches with new models to leverage commercial finance offers the sanitation sector a new and now tested model to tackle these challenges.

**79. Greater engagement of women and local entrepreneurs at the doorstep has led to investments in higher quality latrine facilities.** This project has successfully placed women as the primary interlocuter on sanitation decision making by working through the predominantly female micro-credit groups and by changing local entrepreneur behavior to provide a 'turn-key' sanitation service 'at the doorstep' of the household. This lifted the dialogue from the delivery of the sanitary components of a latrine (negotiated by men in the market) to the delivery of a sanitation service (negotiated by women prior to payment at the completion of installation). This has been effective in addressing the market failure of the unacceptably low quality and price point for sanitation facilities by encouraging and enabling households to move up the sanitation ladder through investments in higher quality (and higher priced) latrine facilities.

**80. A combination of sanitation loans for households and small businesses created incentives for MFIs to bear the costs of hygiene behavior change.** This project also pioneered a shift in the market behavior of MFIs in the extension of 'non-productive' loans to households to improve their own access to independently verified public services. Combining the extension of modest 'non-productive' sanitation loans to households with larger 'productive' sanitation loans to entrepreneurs, enabled MFIs to extend loans for fixed assets (that can't be recovered in the event of a default on the loan) without significantly increasing their market costs or risks. In expanding this customer base, MFI branch officers have been engaged in the previously costly exercise of creating demand for improved sanitary latrines and engaging in hygiene behavior change.

**81. The inclusion of piped water services could be a valuable addition to future sanitation and hygiene marketing projects.** Under this project, technical and financial assistance was extended to households to install an improved offset pit latrine with a sealed floor, modern superstructure with the facility for water storage (to enable flushing and anal cleansing). Financial and technical assistance for piped water plumbing to the latrine was beyond the scope of the program however the baseline data revealed that water proximate to latrines was a major determinant of the hygienic status of the latrine. The carting of water to the latrines being also a potentially significant additional burden on women. Increasing the sanitation development loans to include the piping of water for flushing, anal cleansing and hand washing to latrine facilities could be a valuable addition to future projects.

**82. Sustainability is improved when MFIs already have their own sanitation policy and capital for sanitation loans.** The sustainability of the sanitation development loans is much higher for MFIs such as ASA which have their own sanitation loan policy and their own allocation of capital (with targets) for the extension of sanitation loans. It is recommended that any future projects with PKSF should establish an eligibility criterion for retail MFIs that they must have a sanitation policy and some of their own capital allocated to sanitation loans before being considered for future projects. The balance between the sustainability and the speed of the extension of the loans could potentially be balanced by increasing



the duration of successor projects and reducing the interest rate subsidy on non-productive loans for sanitation.

83. ***Reducing the subsidy on non-productive sanitation loans to households plus the extension of productive loans to local sanitation entrepreneurs could increase viability and sustainability.*** Together, the recipient and World Bank executed project components have leveraged a rapid and significant shift in the market behavior of sanitation clients and providers within the project area. However, while the use of the OBA funds for the verification of the quality of latrines extended by MFIs appears to have been essential, the interest free loan appears to have been less essential. While some interest rate subsidy seems to empower women to advocate for sanitation loans within their household, the amount of the subsidy seems to be less important. Reducing the subsidy on the non-productive sanitation loans to households and increasing the extension of productive loans to local sanitation entrepreneurs will potentially increase viability and sustainability by leveraging the entrepreneurs to undertake a greater role in demand creation.

84. ***Reaching the ultra-poor will require additional instruments better suited to their needs and capacities.*** While microfinance has been effective in improving access to finance for the poor, microfinance has not been so effective in reaching the ultra-poor that are not part of local credit groups. Similarly, while OBA has proven to be effective in orienting institutions to meet quality of output targets at scale, OBA has not been so effective in the segmentation of the market to tailor services to reach the ultra-poor. In order to reach the ultra-poor with verified high-quality offset latrines, it will be necessary to explore the potential combination with other instruments that are better tailored to reach the ultra-poor (i.e. social safety net programs and local government subsidies for the ultra-poor).



ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: Increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
People provided with access to improved sanitation services	Number	0.00 30-Jun-2016	850000.00 30-Jun-2018	850000.00 30-Sep-2018	776590.00 30-Jun-2018
People provided with access to "improved sanitation facilities" - rural	Number	0.00 30-Jun-2016	850000.00 30-Jun-2018	850000.00 30-Sep-2018	776590.00 30-Jun-2018

Comments (achievements against targets): Note: This is a corporate indicator used to measure access to quality sanitation. The latrines constructed under the project are improved, while also fulfilling more advanced hygienic requirements, thus the term hygienic is used in the PDO. The project target number of 850,000 people provided with access to hygienic sanitation facilities under the project was calculated based on an assumption of an average household size of 5 persons. The baseline survey in the project areas found an average household size of 4.55 people per household. For the total of 170,679 households receiving loans under this project, this gives an estimated 776,590 people that were provided with access to hygienic sanitation facilities. As a results, 91% of the target was achieved.

Objective/Outcome: Support the provision of commercial sanitation loans for hygienic sanitation



Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Households receiving sanitation loans from partner MFIs under the project	Number	0.00	170000.00	170000.00	170679.00
		30-Jun-2016	30-Jun-2018	30-Sep-2018	30-Jun-2018

**Comments (achievements against targets):** 100.4% of the target was achieved. As of June 2018, approximately US\$22 million of sanitation loans were disbursed among 170,679 households through microfinance lending under the project to construct improved/ hygienic latrines. A significant feature of this project was the ability of the World Bank and GPOBA’s funds to leverage additional commercial finance to support the project objectives.

## A.2 Intermediate Results Indicators

**Component:** Component 1: OBA subsidies to increase access to household sanitation. This component financed subsidies to improve access to on-site sanitation for a total of approx. 170,000 low-income households

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Improved latrines constructed under the project	Number	0.00	170000.00	170000.00	170679.00
		30-Jun-2016	30-Jun-2018	30-Sep-2018	30-Jun-2018

**Comments (achievements against targets):** 170,679 improved/hygienic latrines were constructed under the project (100.4% of the target), all fulfilling the pre-established criteria of improved/hygienic latrines. The IVA verified 8.6% of the latrines constructed under the project. Only 0.4% of the latrines initially failed to achieve the full qualification criteria necessary to release the OBA subsidy; however, these failures had been corrected prior to the quality verification in the next IVA annual quarter visits.



Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Households receiving sanitation loans under the project which are identified as poor	Number	0.00	136000.00	136000.00	151904.00
		30-Jun-2016	30-Jun-2018	30-Sep-2018	30-Jun-2018

**Comments (achievements against targets):** 112% of the target was achieved. Based on Poverty Probability Index (PPI®) scoring undertaken by the IVA, 89% of customers who took out sanitation development loans were identified as poor, with 29% identified as extreme poor (i.e. living on less than \$1.25/day).

**Unlinked Indicators**

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Loans provided to female borrowers	Percentage	0.00	90.00	90.00	96.00
		30-Jun-2016	30-Jun-2018	30-Sep-2018	30-Jun-2018

**Comments (achievements against targets):** 96% of sanitation development loan customers under the project were female, exceeding the target by 6 percentage points. There was a marginal difference in the average loan size of males (BDT 10,091) and females (BDT 9,845) and the uptake of sanitation loans by male (6%) and female (5.4%) credit group members. Although male borrowers had marginally higher repayment rates (46%) than female borrowers (41%), this data is not particularly meaningful until the end of the loan period. There has been a lower incidence of overdue repayments on loans for female borrowers (6%) as compared to males (6.8%).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
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Households satisfied with latrine installation process and functionality	Percentage	0.00 30-Jun-2016	90.00 30-Jun-2018	90.00 30-Sep-2018	99.99 30-Sep-2018
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**Comments (achievements against targets):** Household satisfaction with the latrine installation process and functionality was recorded against a 4-point ranking system through the independent verification (IVA) process by consultants. Only 0.01% of the customers of sanitation development loans visited by the IVA were unsatisfied with the installation process or functionality of their latrines, exceeding the target by 9.99 percentage points. The cause for their dissatisfaction in both cases was the lack of the provisions for water storage and sufficient arrangements for the supply of water to their latrines.





**B. ORGANIZATION OF THE ASSESSMENT OF THE PDO**

**PDO:** Increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh through commercial sanitation loans

<b>Objective/Outcome 1</b> Increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh	
Outcome Indicators	1. Number of people provided with access to improved sanitation services - rural
Intermediate Results Indicators	2. Number of improved latrines constructed under the project 3. Number of households receiving sanitation loans under the project which are identified as poor 4. Percent of households satisfied with latrine process and functionality
<i>Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)</i>	1. <i>776,590 people living in rural areas provided with access to hygienic/improved sanitation facilities under the project</i> 2. <i>170,679 hygienic/improved latrines constructed under the project</i> 3. <i>151,904 households receiving sanitation loans under the project identified as poor</i> 4. <i>99.99% household satisfaction rate</i>
<b>Objective/Outcome 2</b> Support the provision of commercial sanitation loans for hygienic sanitation	
Outcome Indicators	1. Number of households receiving sanitation loans from partner MFIs under the project
Intermediate Results Indicators	2. Percentage of loans provided to female borrowers
<i>Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)</i>	1. <i>170,679 households received sanitation loans from partner MFIs under the project</i> 2. <i>96% of sanitation loan customers were female</i>



**ANNEX 2. PROJECT COST BY COMPONENT**

Components	Amount at Approval (US\$M)	Actual at Project Closing (US\$M)	Percentage of Approval (US\$M)
<b>Component 2:</b> Implementation support for PKSF and independent verification agent (IVA).	0.60	0.57	95%
<b>Component 1:</b> OBA subsidies to increase access to household sanitation.	2.40	2.31	96%
<b>Client Contribution</b>			
• Palli Karma-Sahayak Foundation			
• Association for Social Advancement	22.00	22.19	101%
• Partner Organizations			
• Households			
<b>Total</b>	<b>25.00</b>	<b>25.07</b>	<b>100%</b>



ANNEX 3. RECIPIENT, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS



পঞ্জী কর্ম-সহায়ক ফাউন্ডেশন (পিকেএসএফ)

[www.pksf-bd.org](http://www.pksf-bd.org)

Memo No: 53.23.0000.000.012.02.19

Date: 20 February 2019

To  
Ms. Rokeya Ahmed  
Water and Sanitation Specialist  
The World Bank, Dhaka.

Subject: Comments on ICR Report of 'OBA Sanitation Microfinance Program' Project.

Dear Ms. Ahmed,

Thank you for sharing the Implementation Complementation and Result (ICR) Report of 'OBA Sanitation Microfinance Program' Project. We find the Report very compelling. However, we have some observations and comments, as stated below, on certain parts of the ICR.

**A. Observations and comments**

1. In Page 2 of the ICR, the donor contribution has been stated to be US\$ 2,635,248 but the actual amount is US\$ 2,886,527. The same way, the borrowers' contribution was mentioned as to be US\$ 22,186,098 but the correct figure is US\$ 23,621,649.
2. The ICR says 11 percent of those accessing interest-free sanitation development loans were not poor. The reality is that these people once were poor but with various support from PKSF, they managed to improve their financial condition and now have either graduated or are on the track of graduation. **So, this 11 percent of the members can be considered as poor member.**
3. A key factor that affected implementation and outcome (page 16. iii, main head), in sub head 53, was mentioned to be 'clever combination of financing instruments'. In the project's context, the word 'clever', which has negative connotations, should rather be replaced by 'innovative'.



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4. Another key factor during implementation (page16, B main head), in the sub head 55, has been described as 'MFI wholesale capacity'. This term should be replaced with 'PKSF wholesale capacity'.

**B. Recommendations for incorporation in ICR**

1. The provisions for water storage and sufficient arrangements for water supply to the latrines were a main cause of dissatisfaction among clients (p-12). To address this issue, we recommend that permanent water supply facilities be introduced if there comes a scope to run a new sanitation project in future. Also, new toilet designs should have an option for running or piped water supply.

2. A key factor during implementation was described as the role of 'MFI retail capacity and TA capacity'. It is strongly recommended that roles of the PKSF Board, senior management, panel leaders and Dealing Officials i.e. their involvement, regular monitoring and supervision, field visits, contact over phone etc be duly recognized as key factors. Also, the role of the PMU should be described separately.

3. After completion of this project, PKSF has taken an initiative to spread the hygienic sanitation program through SDL all over the country via its Partner Organizations. In this connection, PKSF has formulated SDL policy.

4. To meet the SDG Goal-6 (Clean water and sanitation for all), PKSF has started a pilot project in five sub-districts of Bangladesh with a view to ensuring 100 percent sanitation coverage in those areas.

We firmly believe that the observations, comments and recommendations stated above will only enrich the ICR.

Best regards,

Md. Abdul Matin  
General Manager (program)

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