FOR OFFICIAL USE ONLY

Report No: PP1715

PROJECT PAPER

ON A

PROPOSED GLOBAL PARTNERSHIP ON OUTPUT-BASED AID GRANT

IN THE AMOUNT OF (US\$ 3.0 MILLION)

TO THE

GOVERNMENT OF BANGALDESH

FOR THE

OBA SANITATION MICROFINANCE PROGRAM

November 2, 2016

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

(Exchange Rate Effective February 8, 2016) Currency Unit = Bangladeshi Taka (BDT) BDT 78 = USD 1

ABBREVIATIONS AND ACRONYMS

		LE	Local Sanitation Entrepreneur
BFID	Bank and Financial Institutions	LGED	Local Government Engineering
	Division, Ministry of Finance		Department
BDT	Bangladeshi Taka	M	"Moderate" risk rating
BRAC	Bangladesh Rural Advancement	MDGs	Millennium Development Goals
DUDO	Committee		
BURO	Basic Unit for Resources and	MFI	Microfinance Institution
CAS	Opportunities	NGO	Non Covernmental Organization
CAS	Country Assistance Strategy	OBA	Non-Governmental Organization
CCCP	Community Climate Change Project	UDA	Output-Based Aid
CBN	Cost of Basic Needs	ODF	Open Defecation Free
DPHE	Department of Public Health and	PDO	Project Development Objective
DITIL	Engineering	TDO	r toject Development objective
ERD	Economic Relations Division,	PKSF	Palli Karma-Sahayak Foundation
2102	Ministry of Finance		
ERR	Economic Rate of Return	PO	Partner Organization
ESMF	Environmental and Social	RERED	Rural Electrification and Renewable
	Management Framework		Energy Development program
FM	Financial Management	SDGs	Sustainable Development Goals
GDP	Gross Domestic Product	SECVPDF	Small Ethnic Communities and
			Vulnerable People's Development
			Framework
GoB	Government of Bangladesh	SHS	Solar Home System
GPOBA	Global Partnership on Output-	SORT	Systematic Operations Risk-rating Tool
	Based Aid		
GRS	Grievance Redress Service	TA	Technical Assistance
HIES	Household Income and	USD	United States Dollar
	Expenditure Survey		
IDCOL	Infrastructure Development	WASA	Water Supply and Sewerage Authorities
	Company Limited		
IP	Indigenous Person	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	WSP	Water and Sanitation Program
L	"Low" risk rating		

Regional Vice President:	Annette Dixon
Country Director:	Qimiao Fan
Global Practice Senior Director:	Guang Zhe Chen
Practice Manager:	Meike van Ginneken
Task Team Leader:	Rokeya Ahmed

BANGLADESH OBA Sanitation Microfinance Program

TABLE OF CONTENTS

Data	Sheet	6
I.	STRATEGIC CONTEXT	9
	A. Country Context	9
	B. Sectoral and Institutional Context	9
	C. Higher Level Objectives to which the Project Contributes	
II.	PROJECT DEVELOPMENT OBJECTIVES	12
	A. PDO	12
	Project Beneficiaries	12
	PDO Level Results Indicators	13
III.	PROJECT DESCRIPTION	13
	A. Project Components	13
	B. Project Cost and Financing	15
	C. Lessons Learned and Reflected in the Project Design	17
IV.	IMPLEMENTATION	17
IV.	IMPLEMENTATION A. Institutional and Implementation Arrangements	
IV.		17
IV.	A. Institutional and Implementation Arrangements	
IV.	A. Institutional and Implementation ArrangementsB. Results Monitoring and Evaluation	
IV.	A. Institutional and Implementation ArrangementsB. Results Monitoring and EvaluationC. Project Reporting	
IV. V.	 A. Institutional and Implementation Arrangements B. Results Monitoring and Evaluation C. Project Reporting D. Sustainability 	
	 A. Institutional and Implementation Arrangements B. Results Monitoring and Evaluation C. Project Reporting D. Sustainability E. Scale-up and replication potential 	
V.	 A. Institutional and Implementation Arrangements B. Results Monitoring and Evaluation C. Project Reporting D. Sustainability E. Scale-up and replication potential KEY RISKS AND MITIGATION MEASURES 	
V.	 A. Institutional and Implementation Arrangements B. Results Monitoring and Evaluation C. Project Reporting D. Sustainability E. Scale-up and replication potential KEY RISKS AND MITIGATION MEASURES APPRAISAL SUMMARY	
V.	 A. Institutional and Implementation Arrangements	
V.	 A. Institutional and Implementation Arrangements B. Results Monitoring and Evaluation C. Project Reporting D. Sustainability E. Scale-up and replication potential KEY RISKS AND MITIGATION MEASURES APPRAISAL SUMMARY A. Economic and Financial Analysis B. Financial Management 	

F. World Bank Grievance Redress	
Annex 1: Results Framework and Monitoring	32
Annex 2: Economic and Financial Analysis	34
Annex 3: Procurement	
Annex 4: Financial Management	41
Annex 5: PKSF Partner Organizations and Working Areas	44

DATA SHEET

Bangladesh

OBA Sanitation Microfinance Program

Small RETF Grant Project Paper

South Asia 0000008069

			В	asic	Inform	mation			
Date: Novembe	r 2, 2016			Secto	ors: Sanita	ation			
Country Directo	or: Qimiao Fan			Then	nes: Rural	l development			
Practice Manag Practice Senior van Ginneken/ J (Acting)	Director: Meike			EA C	Category: 1	В			
Project ID: P15	7958								
Instrument: Invo Financing	estment Project								
Team Leader(s) Ahmed	: Rokeya								
				•					
Recipient: Gove	ernment of Bangl	adesh - E	conomics Relations Div	ision					
Executing Agen	ncy: Palli Karma-	Sahayak H	Foundation (PKSF)						
Contact: Md.	Fazlul Kader		·		T PKS	Fitle: Deputy Man SF	aging Director	,	
Telephone No	o.: 880-2-912624	40			E	Email: pksf@pksf	-bd.org		
Project Impleme	entation Period:	Start Date:	November 30, 2016				End Date	: June 30, 2018	
Expected Effect	tiveness Date:	Novemb	er 30, 2016						
Expected Closin	ng Date:	June 30,	2018 (end disbursement	: Octob	er 31, 20	18)			
			Project	Fina	ncing	Data(US\$N	()		
Total Project Co	ost : 25.0		-		Tot	al Financing : 25	0		
Financing Gap	:								
Financing S	ource								Amount(US\$M)
_	hip on Output-Ba	ased Aid							3.0
Borrower	1 1								22.0
Expected Di	isbursements	in US	D Million)						
Fiscal Year	2017	2018	2019						
Annual	0.8	1.6	0.6						

Cumu	lative	0.8	2.4	3.0					
Project Development Objective(s)									
The p	The project development objective is to increase access to hygienic sanitation facilities for low-income households in rural areas of Bangladesh through commercial sanitation loans.								
Com	ponen	ts							
	ponent							Cos	t (USD Millions)
-	-		unitation loans						2.4
Imple	mentatic	on support ar	nd Independent V	erification Agent					0.6
					Comp	liance			
Polic	:y				-				
Does t	the proje	ect depart fro	om the CPS/CPF i	n content or in othe	r significant res	pects?		Yes []	No [X]
Does t	the proje	ct require a	ny exceptions from	n Bank policies?				Yes []	No [X]
Have	these be	en approved	by Bank manage	ment?				Yes []	No []
Is app	roval for	any policy	exception sought	from the Board?				Yes []	No []
Does t	the proje	ect meet the	Regional criteria	for readiness for im	plementation?			Yes [X]	No []
Safe	guard	Policies 7	Friggered by	the Project				Yes	No
Enviro	onmenta	l Assessmen	t OP/BP 4.01					Х	
Natura	al Habita	ats OP/BP 4.	.04						X
Forest	s OP/BF	9 4.36							X
Pest N	/lanagen	nent OP 4.09)						X
Physic	cal Cultu	ral Resourc	es OP/BP 4.11						X
Indige	enous Pe	oples OP/BI	P 4.10					Х	
Involu	intary R	esettlement	OP/BP 4.12						X
Safety	of Dam	s OP/BP 4.3	37						X
Projec	ets on Int	ernational V	Vaters OP/BP 7.5	0					X
Projec	ets in Dis	sputed Areas	s OP/BP 7.60						Х
Lega	al Cove	enants							
Name	e				Due Date]	Recurrent	Frequency
1	Subsidi	ary Grant A	Agreement			Effectiveness		N/A	
2. 1	Project	Operations	Manual			Effectiveness	1	N/A	
Desci	Description of Covenant								
	 The Subsidiary Grant Agreement must be executed on behalf of the Recipient and PKSF as a condition for effectiveness, required within 90 days after the date of the Grant Agreement. 								
	2. The Project Operations Manual, acceptable to the Bank, must be developed and adopted by PKSF as a condition for effectiveness, required within 90 days after the date of the Grant Agreement.								
	Team Composition								
Bank	Staff								
Name	e			Title		Specialization		Unit	UPI

Bangladesh		Multiple loc	ations (rural)			
	First Administrative Division	Location		Planned	Actual	Comments
Locations						
Non Bank Staff	I		1		1	I
Satish Kumar Shivakumar	Finance Offic	er	Finance		WFALN	
Jorge Luis Alva-Luperdi	Senior Couns	el	Legal		LEGES	
Sabah Moyeen	Senior Social Specialist	Development	Social safeguards		GSU06	
Iqbal Ahmed	Environmenta	al Specialist	Environmental safeguards		GEN06	
Rajesh K. Advani	Senior Infrast Specialist	ructure	Infrastructure development		GSUOA	
Jonathan Kano Ikeda	Water & Sani Specialist	itation	Financial manageme	Financial management		
Joel Evan Kolker	Lead Water a Specialist	nd Sanitation	Private sector develo	opment	GWASP	
Jessica Anne Lopez	Operations O	fficer	OBA project develop	pment	GSUOA	
Mohammad Reaz Uddin Chov	wdhury Financial Mar Specialist	nagement	Financial Management		GGO24	
Ishtiak Siddique	Senior Procur Specialist	rement	Procurement	Procurement		
Rokeya Ahmed	Water and Sa Specialist (TT		Water and sanitation		GWASS	

I. STRATEGIC CONTEXT

A. Country 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\$ 1,314.¹ At the same time, poverty continues to affect large parts of the population. Just over 12.9 percent of Bangladesh's total population of 161.9 million (2015) is categorized as extremely poor.² 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.

B. Sectoral and Institutional Context

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 2015³. Despite these achievements, much remains to be done if Bangladesh is to achieve universal improved⁴ sanitation coverage by 2030, in accordance with the Sustainable Development Goals (SDGs). Bangladesh's current rate of improved sanitation is 61 percent, growing at only 1.1 percent annually. To achieve the SDGs, Bangladesh will need to provide almost 50 million rural people with access to improved sanitation, and ensure services are extended to Bangladesh's rural poor.

3. Diarrheal prevalence among children under five years has fallen in last 20 years; however, six percent of under-five child deaths in Bangladesh are still due to diarrhea. Furthermore, Bangladesh was one of 15 countries with the most deaths due to diarrhea or pneumonia in the world in 2013 (UNICEF 2014). According to 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). As per the classification of the World Health Organization (WHO), there is "very high prevalence" of underweight in Bangladesh, a rate that is higher than most of Sub-Saharan Africa⁵

4. The Ministry of Local Government, Rural Development and Cooperatives, leads the sector. It delegates its functional responsibility to several other agencies including: (i) the

¹ Bangladesh Bureau of Statistics.

² Based on the Household Income and Expenditure Survey, 2010 (Bangladesh Bureau of Statistics - BBS). Poverty headcount ratio (percent) updated in HIES, 2010. Poverty lines in Bangladesh are calculated using the cost of basic needs (CBN) methodology..

³ Progress on Sanitation and Drinking Water – 2015 Update and MDG Assessment. UNICEF and World Health Organization 2015

⁴ Improved sanitation physically separates feces from the environment, although it does not necessarily block the transmission of pathogens. Hygienic sanitation facilities physically separate feces from the environment, and also block the transmission of pathogens. Unimproved sanitation, in contrast, is characterized by low-quality, basic infrastructure which does not separate feces from the environment

⁵ Water, Sanitation, Hygiene, and Nutrition in Bangladesh; A World Bank Study, 2015

Department of Public Health and Engineering (DPHE); (ii) the Local Government Engineering Department (LGED); (iii) the Water Supply and Sewerage Authorities (WASA) in metropolitan centers; and (iv) local authorities - *Pourashavas* in urban areas and the *Union Parishad*⁶ in rural Bangladesh. Although these government institutions strongly support efforts to improve the quality of sanitation services in rural areas, resource and capacity constraints limit the feasibility of large-scale government intervention.

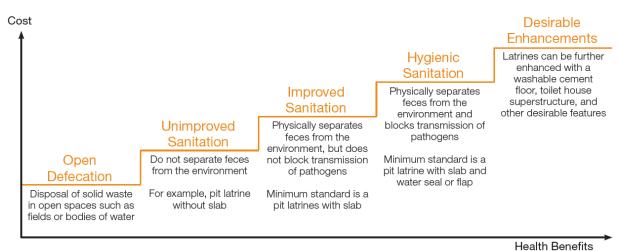
5. The government has a host of development partners constantly promoting the need for improved sanitation, including many international and local non-government organizations (NGOs) that work with government and foreign donors in efforts to increase access to safe drinking water and improved sanitation. Most donor programs work only through these NGOs, who act as the principal program implementation agencies for many development projects in the country. The large-scale international NGOs in this sector include WaterAid, Plan International, Dutch WASH Alliance, Max Foundation, Concern Universal, and Practical Action.

6. Bangladesh also has a large, effective network of micro-finance institutions (MFIs) that provide both livelihood and social sector financing across the entire 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), Basic Unit for Resources and Opportunities (BURO) Bank, and Association for Social Advancement (ASA), a self-sufficient NGO and second largest MFI in the world. Most local NGOs also have credit wings to provide loans to predominately rural borrowers. Palli Karma-Sahayak Foundation (PKSF) is the government-backed wholesale public finance institution that supports small- to medium-scale MFIs/NGOs, also known as Partner Organizations (POs) with capital and capacity development. Many MFIs tend to offer loans for water and sanitation facilities under the auspices of their other loan products, such as housing loans and disaster loans.

7. Until recently, Grameen Bank was the only MFI that offered a specific water/sanitation loan product for basic toilet construction. The aim of this loan product was to support rural areas to reach "open defecation free" (ODF) status. As the country made substantial progress towards this target, the objective of Grameen Bank was completed, and the product discontinued in 2012. With open defecation nearly eradicated in the country, the Government has taken a strategy to transition rural households to hygienic quality sanitation, moving them up the sanitation ladder, as depicted in Figure 1. Hygienic latrines are considered the next generation of toilets, fully confining waste from both the user and the surrounding environment.

⁶ Union Parishad is the oldest and lowest tier of local government representing 10 to 15 villages with around 5000 households. Nine wards (1-2 villages compose a ward) form a Union. Each union is composed of 13 elected representatives including a chair, 9 members (1 from each ward), and 3 women elected members to reserved seats based on 1 female representative for every 3 wards. Water and sanitation task forces exist in each Union Parishad. They are responsible for operation and maintenance of water and sanitation services.

Figure 1. The Sanitation Ladder



Source: WHO/UNICEF Joint Monitoring Programme for Water and

8. Many households in rural Bangladesh do not have sufficient cash on hand to upgrade sanitation systems, but can afford the cost if they are able to spread the cost over time. To help address this, the World Bank piloted a small project on sustainable sanitation services in 2009, in collaboration with MFIs and local level sanitation entrepreneurs. Working with MFIs, the World Bank supported the development of specialized loan products for low-income rural households to finance the purchase of hygienic sanitation systems, in addition to extending business loans to small construction firms. The World Bank also trained the entrepreneurs on hygienic latrine construction. As a result, at the end of 2014, a household sanitation loan product was introduced in a number of districts, which links the borrower to local entrepreneurs trained in installing hygienic latrines.

9. Building on the work of the pilot program, which closed in 2015, the World Bank has recently begun implementation of a follow-on Bank-executed technical assistance (TA) program, Scaling-up MFI lending for improved rural sanitation in Bangladesh (P501617). The new TA includes 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.

10. While access to MFI loans increases affordability of the hygienic latrines, subsidies can provide further incentive to poor households where affordability is still an issue. World Bank research on household on-site sanitation $(2011)^7$ suggests well-targeted subsidies can provide a critical safety net for the poor. Furthermore, the most effective subsidies are provided after demand creation, and on an output basis. The World Bank is proposing to provide a US\$ 3 million grant⁸ to PKSF, targeted to poor households and paid as an output-based aid (OBA)

⁷ Financing Household On-Site Sanitation for the Poor. WSP 2011.

⁸Funds are provided through GPOBA by the Australian Department of Foreign Affairs and Trade (DFAT). The Trust Fund will close June 30, 2018, with an end disbursement date of October 31, 2018.

subsidy. The grant will leverage approximately US\$ 22 million in household loan finance from participating POs, for a total project cost of US\$ 25 million. The OBA subsidy is designed to improve affordability of hygienic latrine installation at the household level and scale up the adoption of sanitation microfinance in Bangladesh as a tool for achieving the SDGs.

C. Higher Level Objectives to which the Project Contributes

11. The Bangladesh Country Partnership Framework (CPF, 2016-2020) emphasizes the importance of improved access to quality maternal and infant health service (Objective 2.2) of the citizens of Bangladesh by expanding access to water and sanitation services. The proposed project supports the intentions of the CPF to assist the Government of Bangladesh (GoB) in scaling up improved sanitation services to the rural poor. More specifically, the program complements the intentions of the current Bangladesh CPF to continue efforts to promote greater private sector participation in rural sanitation, including through technical assistance to microfinance institutions for sanitation loans to rural households and local entrepreneurs.

12. The project will use OBA, an innovative results-based financing instrument, as an approach to ensure results, incentivize and strengthen accountability of service providers, and target the poor. By extending access to basic services to poor, hard-to-reach, and other previously excluded households, OBA is well-aligned with the World Bank twin goals of eliminating extreme poverty and boosting shared prosperity. The project is also aligned with GPOBA's objectives of testing OBA in new sectors, innovation, and mainstreaming the OBA approach within country operations. This will only be GPOBA's third project in on-site sanitation⁹, and the first involving a blended finance approach combining commercial financing (through MFIs) and output-based subsidies to reach poor households. This approach has been used successfully in the renewable energy sector in Bangladesh, as a country with a vibrant MFI sector, with lessons from both the pilot and scale-up projects aiding in the design of this sanitation microfinance initiative.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

13. 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.

Project Beneficiaries

14. Hygienic latrines will be constructed 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 are expected to be women¹⁰.

⁹ On-site sanitation GPOBA projects have been piloted in Senegal (closed 2011) and Sri Lanka (on-going).

¹⁰ 91 percent of PKSF current borrowers are female

PDO Level Results Indicators

- 15. PDO level results indicators include the following:
 - (a) Households receiving sanitation loans from POs under the project (number);
 - (b) People provided with access to hygienic sanitation facilities under the project (number).

III. PROJECT DESCRIPTION

16. The project will support local POs to provide sanitation loans to poor households through a nation-wide program in rural Bangladesh. Pre-qualified local construction firms will construct the hygienic latrines and/or upgrade existing latrines to meet hygienic standards, such that waste will be fully confined and not come into contact with the environment or user. Hygienic latrines are designed also to block the transmission of pathogens. Most rural households currently have access to basic/improved latrines, characterized by direct pit latrines, constructed using 3-5 rings for pit lining, and a concrete slab with a plastic pan to channel the waste to the pit (most of them without a water seal). These latrines are often poorly constructed, quickly falling into disrepair, both increasing the risk of environmental pollution and exposing the contents of the pit to the user. Participating construction firms will be identified through a competitive process.

A. Project Components

- 17. The components of the project are as follows:
 - (a) Component 1 (US\$ 2.4 million): OBA subsidies to increase access to household sanitation. 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 (US\$ 600,000): Implementation support and independent verification agent (IVA). This component will finance operational and implementation related costs, including project management, subproject monitoring and supervision, administering the OBA subsidy to the POs, hiring designated Environmental, Social, and Financial Management Specialists, and for hiring the IVA.

Outputs

- 18. Project outputs include:
 - (a) Sanitation loans to 170,000 households
 - (b) Hygienic latrines constructed for 170,000 households, benefitting 850,000 individuals

Targeting

19. The program will target credit group members of the 21 POs. Further targeting will be achieved through self-selection, as the OBA subsidy will only be offered for low-cost latrine technologies, which meet hygienic sanitation standards. The latrines offered by the construction firms range between US\$ 45 and 220, while the OBA subsidy will only be offered for latrines costing between US\$ 45 and 128, as these lower-cost options are more likely to be purchased by poor households. World Bank research (2011) shows that subsidies that are targeted to the poor through community-based or self-selection methods may be more effective in reaching the poor than other means-tested systems, which can be costly and generate perverse incentives.¹¹

20. While 80 percent of customers are expected to be existing customers of the POs, existing membership is not a requirement. Non-members will also be targeted for the program, and able to receive sanitation loans without additional requirements. PKSF POs will identify clusters of poor consumers in rural areas, interested in accessing sanitation loans. The organizations will work in partnership to determine target districts, so as to avoid any overlap. In line with the existing customer base of these POs, approximately 90 percent of borrowers are expected to be women.

Gender

21. Gender plays an important role in terms of hygienic environments. Women are typically responsible for maintaining the home and the surrounding environment, childcare, and the overall wellbeing of the family, as well as securing the financing from POs. As most (around 90 percent) of household loan recipients of participating POs are female, latrine design takes into account female preferences and gender-related issues which may impact access, such as adequate space inside the toilet for menstrual hygiene. Considering the convenience and security of female users, all toilets will have a proper superstructure with lockable doors. Where possible, households will be motivated to construct toilets adjacent to their houses / bedrooms, rather than the legacy of 'out house' latrine construction.

Innovation

22. The project supports a social and commercial marketing approach to stimulate supply and demand for hygienic sanitation facilities by poor consumers using a combination of marketing, behavior change, and subsidies. By supporting trained construction firms and

¹¹ Financing Household On-Site Sanitation for the Poor. WSP 2011.

providing financing, these households will be able to access higher-quality options at more affordable prices.

23. The project will provide an opportunity to deepen learning on how financing for latrines can be designed to best influence uptake, also testing the use of OBA to incentivize MFIs to lend to the poorest households. By working with prominent Bangladeshi MFIs/POs, the grant will also provide a demonstration effect on sanitation lending for other MFIs, both in Bangladesh and globally.

B. Project Cost and Financing

24. The total cost of the project is estimated at US\$ 25 million. The World Bank contribution to the project is US\$ 3 million, and will leverage approximately US\$ 22 million in household loan finance provided by PKSF and POs. The unit cost, proposed subsidy and user contribution per latrine technology option are presented in Table 1.

25. While all technology options available under the project are high-quality and hygienic, the variations in price by model (Aram, Aram Plus, Bilash) are based primarily on improvements to the facility's super-structure.

Latrine technology	Aram	Aram Plus	Bilash
Unit cost	\$45	\$90	\$128
Total cost with interest/ project management	\$50 - \$51	\$99 - \$101	\$141 - \$144
fees (10% - 12.5%)			
OBA grant (10 – 12.5%)	\$5 - \$6	\$9 - \$11	\$13 - \$16
User contribution	\$45	\$90	\$128
Total est. installations		170,000	
Total OBA subsidy grant		\$1,600,000	
Total est. user contribution (financed		\$13,000,000	
through PO loans)			
Total investment (including \$600,000 for		\$25,000,000	
Component 2)			

Table 1. Unit cost, subsidy level, and household contribution

26. The number of each type of facility is subject to market demand; hence, the total number of installations is based on conservative estimates made by the implementing agencies. The assumption is that most households will demand Bilash model latrines, based on experience from the World Bank pilot.

Pre-financing

27. Financing will come from PKSF and POs using their own funds. In most cases, PKSF will provide wholesale loan financing to the POs, who will in turn finance the household sanitation loans.

Unit cost per subsidy

28. The OBA subsidy will be 10 - 12.5 percent of the total value of the loan disbursed to the household, with funds channeled through PKSF. For loans managed by those POs which receive capital financing from PKSF, a 10 percent subsidy will be disbursed. For a PO which invests its own capital, the OBA subsidy will be slightly higher at 12.5 percent. Eligible loans will have a minimum size of 3,500 BDT (US\$ 45) and a maximum size of 10,000 BDT (US\$ 128); therefore, the unit cost of the subsidy will range between US\$ 5 - 16. Households will be responsible for repayment of the total amount of the loan to the lending PO, less the OBA subsidized amount, as specified in Table 1.

Affordability

29. Based on the 2010 Household Income and Expenditure Survey (HIES), the average rural household has total yearly expenditures of roughly US\$ 1,450. Of this, 66 percent is spent on food and housing, leaving approximately US\$ 493 available for other annual expenditures. Many of these households have the ability (and often willingness) to pay for the hygienic sanitation options developed through the World Bank pilot program, which range in cost from US\$ 45 to 220. However, like households in many developing countries, households in Bangladesh are often cash-constrained and cannot easily pay cash for a purchase of that size. The weekly repayment on a sanitation loan of US\$ 2.08 is much more manageable for all but the very poorest households.

30. The OBA subsidy effectively reduces the weekly repayment for targeted households addressing the gap between the cash price and financed price of the latrine, allowing households to more easily spread the cost of the purchase over time. As is stands, the participating POs have an average repayment ratio of approximately 99 percent. Each of the POs have individual policies regarding late payment and default, which are clearly communicated to potential borrowers up front (it is expected that around 80 percent of project beneficiaries will be existing borrowers of these POs). Most require borrowers to contribute a fixed amount to a savings account that can be tapped in case of emergency, as well as a program for deferments in the case of hardship.

31. After project close, it is anticipated that economies of scale will further reduce prices for the latrine models, making them more readily financeable without subsidy. Additionally, if successful, there is the potential for further follow-on subsidy work (through IDA or other donors) to further scale subsidies for sanitation microfinance.

Subsidy payment schedule and disbursement

32. OBA subsidies under Component 1 will be disbursed 100 percent after verification of quality hygienic latrine installation for poor households. Verification, performed by a qualified IVA identified by PKSF, will take place on a quarterly basis, through a sample of installed latrines during the given quarter. Only technically sound and satisfactorily installed hygienic latrines will qualify for the OBA subsidy, as documented through an output verification report undertaken by the IVA, reviewed and approved by PKSF and the World Bank.

C. Lessons Learned and Reflected in the Project Design

33. The World Bank pilot on sustainable sanitation services (2009 - 2015), introduced the concept of sanitation marketing to rural Bangladesh communities. The program was designed to assist consumers in improving their sanitation status from low quality latrines to better quality, user friendly, hygienic latrines, along with other healthy practices. Through their pilot program, the World Bank found that while access to MFI loans increases affordability of the hygienic latrines, subsidies can provide further incentive to poor households where affordability is still an issue. Many of the lessons from this pilot will be used and enhanced in the World Bank's new Programmatic TA, complementing the OBA project. Key areas supported by the program include: (a) development of new and improved toilet technologies; (b) capacity development of small-scale sanitation entrepreneurs to produce multiple hygienic latrine options, achieve quality standards, and carry out village-level marketing; (c) engagement of local government and community leaders for project advocacy; and (d) access to affordable MFI loans by sanitation entrepreneurs.

34. The project also builds on the success of a GPOBA-funded project for solar home systems (SHS) in rural Bangladesh, a component of the World Bank Rural Electrification and Renewable Energy Development (RERED) program. The Bangladesh SHS experience has successfully demonstrated that commercial lending to rural households, met with capital buydown grants, can help bridge the affordability gap. The role of the project implementing agency, the Infrastructure Development Company Limited (IDCOL), in setting technical standards and enforcing those standards through inspection and monitoring has been critical to the project's success. Other success factors include the sense of consumer ownership, resulting in proper use and care of the systems, and risk-sharing between IDCOL and the POs. The structure of the OBA Sanitation Microfinance Program was modeled after the RERED program, with these useful lessons learned incorporated in the project design.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

35. The project will be implemented by PKSF (as a non-ADP project), the Government of Bangladesh's wholesale microfinance institution. PKSF will be responsible for compliance with the terms of the Grant Agreement, and for reporting to the World Bank. PKSF will sign implementation agreements with 21 POs for providing household sanitation loans to the targeted beneficiaries. The POs are mostly NGO's with microfinance and water and sanitation sector experience—criteria for PO consideration are detailed in Table 2.

36. Financing for household loans will come from PKSF and POs, using their own funds. Household borrowers will choose from a selection of trained and qualified construction firms (local entrepreneurs) to contract for construction of hygienic latrines. In accordance with the loan agreement, households are required to choose from the selection of World Bank-designed and verified hygienic toilets for installation. The latrines offered under the program have set pricing, as detailed in the unit cost per subsidy section of this document; however, households will have the option of purchasing various upgrades (non-subsidized), as desired, including low-cost handwashing devices¹².

37. Upon completion of works, an IVA will verify that the works have been completed to the required standard and that consumers have access to the hygienic sanitation facilities. This will be done through a sampling of households serviced on a quarterly basis. On the basis of this verification, the 10 - 12.5 percent OBA subsidy will be released by the World Bank to PKSF. PKSF will disburse the subsidy to the POs as a portion of their loans to the households, according to the number of loans extended and qualified latrines constructed by each.

38. Households will pay off the loan in weekly installments, over a period of 55 weeks. Interest on these loans is a fixed rate of 12.5 percent—this is calculated as a flat rate based on the market MFI rate of 20-25 percent declining balance, for ease of payment and collection by consumers and field staff. Repayment will begin two weeks from the date the household receives the loan. The amount of OBA subsidy is equivalent to the interest for a 55 week loan, as that is the extent of subsidy deemed necessary by the implementing POs to incentivize poor households to finance a hygienic latrine; however, the grant is designed as an OBA one-off capital subsidy, as it is paid upon verification that the outputs have been achieved and in accordance with OBA principles.

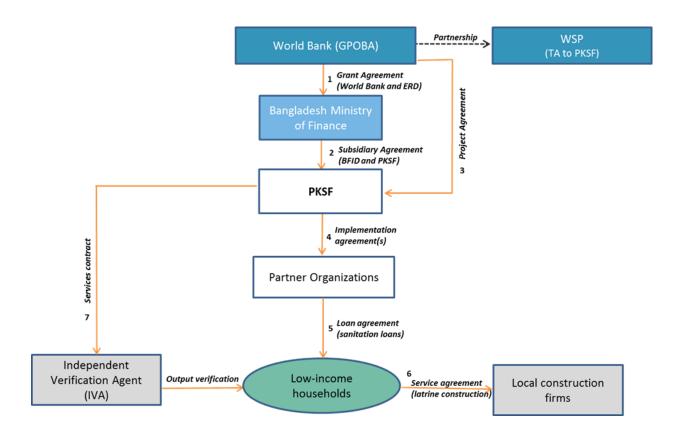
39. The amount repayable by the households will be equal to the total amount of the loan, net of OBA subsidy. In this way, performance risk is not taken on by the household, but rather the POs in the case that latrines are not constructed according to the required standard. However, due to a number of measures to ensure quality latrine installation, including training and capacity building of construction firms, the use of only specific, verified technologies, the involvement of technical and environmental specialists, and a two-year warranty offered by the construction firms, this risk is very low. Should a household which takes out an eligible loan choose not to construct a hygienic latrine from the selection of World Bank-designed technologies, and installed by a qualified construction firm, this household will not be eligible for the OBA subsidy.

40. The OBA project will be coordinated closely with the World Bank TA activity, Scaling-up MFI lending for improved rural sanitation in Bangladesh. This activity will support the demand creation and market promotion, including handwashing promotion and behavior change activities, provide follow up support to trained entrepreneurs to ensure quality of construction, involve community leaders and local government, and support POs to reach the poorest households. By raising awareness of the need to shift from unimproved to hygienic sanitation facilities, local government agencies and NGOs will help build demand for the loan products offered by PKSF partners, which will subsequently support a scale-up of the approaches tested.

41. The diagrams below show the contractual and funds flow arrangements under the project.

 $^{^{12}}$ Latrine prices may vary 5 – 10 percent for more remote POs, due to higher transportation and other costs. For variations in price greater than 5 percent, the World Bank is required to verify and approve.

Figure 2. Contractual arrangements



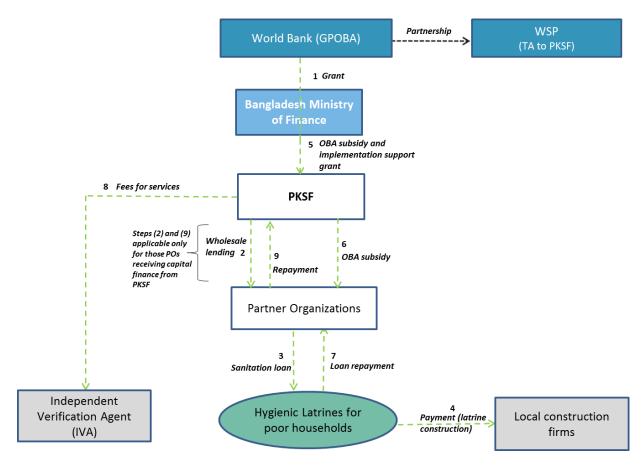
42. *Contractual arrangements* under the project:

1) The World Bank signs a grant agreement with the Bangladesh Ministry of Finance,

Economic Relations Division (ERD);

- 2) The Bangladesh Ministry of Finance, Bank and Financial Institutions Division (BFID), signs a subsidiary grant agreement with PKSF;
- 3) The World Bank signs a Project Agreement with PKSF for implementation of the project (the project will be implemented as a non-ADP project);
- 4) PKSF signs separate project implementation agreements with 21 POs (PKSF is responsible for channeling OBA subsidy funding to POs);
- 5) POs enter micro-loan arrangements with low-income households;
- 6) Households and construction firms enter service agreements for latrine construction;
- 7) PKSF and IVA (identified by PKSF with non-objection from the World Bank) sign a services contract for verification of latrine construction and quality;
- 8) PKSF will open a separate designated account (DA) in the form of convertible Taka special account (CONTASA) in a commercial Bank acceptable to the World Bank.

Figure 3. Funds flow



43. *Funds flow* under the project:

- 1) World Bank grant provided to PKSF, based on subsidiary agreement between the Government of Bangladesh (BFID) and PKSF;
- 2) PKSF provides wholesale financing to POs for sanitation loans (excluding any PO which may use its own funds);
- 3) POs provide sanitation loan to household (up to US\$ 128);
- 4) Household uses loan to pay trained and pre-certified local construction firm for hygienic latrine construction;
- 5) Subsidy payment disbursed to PKSF upon independent verification of latrine construction and quality (10 12.5 percent);
- 6) PKSF disburses subsidy to POs, according the number of sanitation loans provided and qualified latrines installed;
- 7) Household loan repayment to PO over 55 weeks (repayment begins two weeks from date household receives loan);
- 8) PKSF provides payments to IVA based on report submission;
- 9) Loan repayment from POs to PKSF (excluding any PO which may use its own funds).

44. A project management unit will be formed with representatives from PKSF and its POs, along with recruited project staff as presented in the following diagram. The responsibilities of the PMU will be loan disbursement to the PKSF POs, supervision and monitoring.

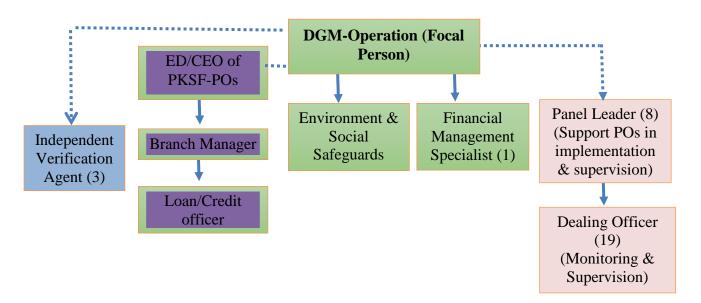


Figure 4. Project Management Unit of PKSF

- 45. The Focal Person of the PMU will play a key role in this project as follows:
 - (a) Liaison with World Bank, BFID, and ERD
 - (b) Preparation of board memos
 - (c) Coordination with PKSF partner POs
 - (d) Overall team management
- 46. Table 2 below describes project partner details, including roles and responsibilities.

Table 2. Project implementation partners

Partner	Description/Roles and Responsibilities
ERD	ERD is a division of the Bangladesh Ministry of Finance, which mobilizes external resources for socio-economic development of the country. ERD will sign the Grant Agreement with the World Bank.
BFID	BFID is a division of the Bangladesh Ministry of Finance, and is responsible for overall progress review as per modus operando. BFID will sign a subsidiary agreement with PKSF to implement the project and receive subsidy funding from the World Bank directly.

PKSF (Implementing Agency)	PKSF was established by the GoB in 1990 as a 'not-for-profit' company, to provide wholesale funding to various organizations for microcredit programs focusing on poor borrowers. PKSF will be responsible for overall implementation of the OBA Sanitation Microfinance Program. In this role, PKSF will: (i) offer wholesale financing to the POs; (ii) provide oversight to participating POs and construction firms, ensuring quality as well as compliance of all financial management, procurement, and safeguard obligations; (iii) recruit the IVA to monitor and verify household hygienic latrine construction; (iv) request (to the World Bank) subsidy payouts; (v) administer OBA subsidy funds; and (vi) prepare progress reports on the implementation of the project.
Partner Organizations	POs, mostly NGO's with experience in microfinance, will be responsible for providing sanitation loans to targeted households, supported by wholesale finance from PKSF, and collecting the repayment installments. PKSF has identified 21 top-performing POs to participate in the OBA program, with consideration for the following criteria: geographical coverage, overall performance in microfinance program operations (including rating score), experience in implementing WASH projects funded by other donors, performance in managing and implementing other projects financed by PKSF, and social commitment. A complete list of selected PO's is included in Annex 5.
Local Construction Firms	 Local construction firms—local entrepreneurs trained in installing hygienic latrines, will be responsible for project works. In addition, the construction firms are responsible for driving latrine sales, with the support of the POs, by engaging directly with the customers. There are around 10,000 small-scale sanitation entrepreneurs in Bangladesh. Entrepreneurs catering to this market are typically too small to be recognized by the formal sector to be eligible for loans from commercial banks. The World Bank pilot program helped develop the capacity of approximately 2,100 of these entrepreneurs to produce multiple hygienic latrine options, achieve standards to insure quality and sustainability, access loan finance, and carry out marketing at the village level. Ultimately, quality improvements and cost savings are introduced by the entrepreneurs. Only qualified firms will be selected to take part in the OBA program. The selection criteria (which has been published) include the following: At least 3 years business experience on sanitation Sanitation business as the main livelihood Owns or rents a business center with signboard and license Committed to providing quality sanitation service in the project area
Households	• Masons and newly established businesses not applicable Households will apply on a demand basis for eligible sanitation loans from the participating POs. Households will then be responsible for contracting a construction firm (for hygienic latrine installation. In accordance with the loan agreement, households are required to choose from the selection of World Bank- designed and verified hygienic toilets for installation. Households will be responsible for loan repayment to the POs in weekly installments, over a period of 55 weeks, as stipulated in their loan agreements.
World Bank (technical	The World Bank will provide advisory support and capacity building for staff of the participating POs of PKSF, training for construction firms and community

assistance)	group leaders, as well as market promotion and demand creation through a hired	l
	firm.	

B. Results Monitoring and Evaluation

47. PKSF will monitor overall project implementation against the performance indicators listed in the 'PDO Level Results Indicators' section. PKSF will use a third-party verification agent that will verify a sample of installed latrines on a quarterly basis, ensuring a randomized process covering different geographic locations. The World Bank has allocated funding from the total grant amount to PKSF for covering the costs of the IVA. The IVA is responsible for providing reports of actual loans provided and latrines installed, to PKSF. Please refer to Annex 1 for a complete list of indicators to be monitored by the IVA. These indicators should be disaggregated by PO and Upazila (district sub-unit), or other relevant political division. Data and statistics on project outputs and outcomes will be gathered, analyzed, and included in the quarterly progress reports to be submitted by PKSF to the World Bank. These efforts on monitoring progress towards the achievement of the PDO will be complemented by Implementation Status and Results Reports (ISRs).

C. Project Reporting

48. A series of reports from PKSF and the IVA will allow for the specific monitoring and evaluation of the implementation of the project and achievement of its objectives.

- (a) PKSF will submit semi-annual performance reports to the World Bank in accordance with the reporting requirements set out in the Operations Manual (to be developed as a condition for effectiveness).
- (b) A Completion Report not later than six months after the closing date of the Grant Agreement.
- (c) The local consultants under Component 2 will submit updates in accordance with the reporting requirements set out in the Environment and Social Management Framework (ESMF) and Small Ethnic Communities and Vulnerable Peoples Development Framework (SECVPDF).
- (d) Additional financial management, fund flows and reporting agreements, if needed, will be included in the Operations Manual and Grant Agreement.

D. Sustainability

49. The project is entirely demand-driven, such that households which choose to participate make the choice to secure a sanitation loan from a participating PO to be repaid through monthly installments over more than one year, elect a qualified local firm to undertake construction, and select their preferred hygienic latrine model. This level of household ownership increases the likelihood of sustained use of the latrines. An evaluation of the World Bank pilot program found that 95 percent of households in intervention areas claimed sustained use of the latrine by all household members.

50. The project takes into account fecal sludge management, as well as the risks to flood prone areas. Effective waste management is critical in helping households move up the sanitation ladder. The project supports the construction of offset pit latrines, further encouraging households to install dual pit latrines. The offset pit latrine is easy to clean, and the option of dual pits allows households to use a second chamber when the first one becomes full. The organic matter in the first chamber will have time to decompose and settle at the bottom of the chamber, and it can later be removed through desludging However, construction two pits is more costly, so to overcome the cost barrier, a flexible connection with a single offset pit has been introduced. After the first pit is filled, a new pit can be constructed and the connection pipe transferred to the new pit. This allows the investment to be deferred to a later stage. Each pit is designed to last about five to seven years. For flood prone areas, the project promotes an elevated platform and pit, specifically encouraging the construction of an attached toilet at the same height as the living room. Figure 5 provides a depiction of the offset latrine design.

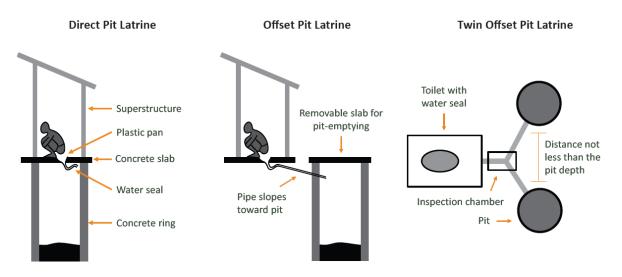


Figure 5. Hygienic Latrine Design

51. Technical sustainability is further achieved through technical assistance to the construction firms involved in the project. These firms are bound by operating guidelines, and will be held accountable by a designated technical consultant and environmental engineer under the OBA project. Construction firms are strongly encouraged to offer a two-year warranty for all customers, guaranteeing the functionality of the hygienic latrines.

52. Financial sustainability is ensured by transferring financing risk to the PO's, which are making household loans of US\$ 22 million for the installation of quality hygienic latrines to be repaid by the households over 55 weeks. The POs have an average repayment ratio of approximately 99 percent. Due diligence on behalf of PKSF and the POs, including careful selection criteria of local construction firms and continuous training and capacity building, mitigates the risk of household non-payment or poor quality latrine installation.

E. Scale-up and replication potential

53. The proposed OBA grant offers significant potential for further scaling up in Bangladesh, as well as a model for further replication elsewhere. Emerging World Bank research from Indonesia indicates that the adoption of improved sanitation in rural areas may follow an "S-curve" pattern, where the rate of uptake is fairly slow, with a small core of early adopters initially acquiring improved sanitation. As others observe the early adopters, they begin to upgrade their latrines as well, and the rate of growth increases substantially until nearly everyone has upgraded.

54. By building a core of nearly 200,000 early adopters, the OBA grant has the potential to provide an initial stimulus to the market for rural sanitation, triggering a substantial increase in access. In total, the PKSF POs participating in the OBA project have over 14 million clients nationwide. In addition to the 170,000 latrines to be directly subsidized through the grant, these POs have the scope to offer this product to millions of existing and potential clients. Further demand for sanitation lending could be subsidized through additional donor resources, such as IDA grants or bilateral donors, which could leverage the existing implementation systems developed for the OBA grant (although donor discussions have not yet begun). The initial results could also encourage additional MFIs to offer a sanitation lending product.

V. KEY RISKS AND MITIGATION MEASURES

55. The Table below provides indicative levels for the risk categories identified in the WBG SORT risk tool. The overall risk of the project is assessed to be moderate. While the political and macroeconomic environment presents some challenges, including foreign exchange risk, the proven design of the project, buy-in from stakeholders and institutional capacity of the implementing agency should keep risk at a manageable level. The pilot work supported by the World Bank over the last several years has successfully demonstrated the market demand for improved sanitation, and the willingness and ability of households to purchase it when appropriate financing options are available.

Risk	Rating	Comments
Risk 1. Political and governance	M	The project's geographic focus outside of Dhaka is both a positive and a negative. While it will be somewhat insulated from any political tension, working in rural areas brings other challenges and governance issues. PKSF has strong capacity and governance, and is a well-respected government agency with previous experience working with the World Bank. There is an additional risk that further support for MFI implementers will reduce the incentives for the government
		to engage more directly in the provision of sanitation services. However, the government is still being engaged as an active partner in this work, particularly in the provision of public goods such as behavior change.
2. Macroeconomic	М	There is some exposure to foreign exchange risk – in the less likely

Table 3. Project Risks

		case, the BDT strengthens against the dollar, reducing the number of potential beneficiaries. Conversely, if the BDT weakens, imported goods would become relatively more expensive. Although the majority of the components of the latrine model being subsidized are manufactured locally, large exchange rate shifts could have some
		impact the overall cost. Inflation risk is a greater concern. While the POs are lending at fixed interest rates, the short tenors minimize exposure to this risk. Additionally, the POs have a low cost of capital, providing a substantial cushion against inflation risk. Of greater concern, if labor or inputs become relatively more expensive, the overall cost of the latrine models could increase, requiring a corresponding increase in the amount subsidized, reducing the total number of beneficiaries. However, sensitivity analysis indicates that inflation is not a main risk factor for the expected economic rate of return.
3. Sector strategies and policies	L	Based on the previous pilot work conducted by the World Bank, there is strong buy-in for the proposed approach from within the sector. Previous political interference in the microfinance sector is not anticipated to impact the POs participating in the OBA project.
4. Technical design of project	L	The World Bank has successfully executed pilot work over the last several years, demonstrating market demand for improved sanitation and the willingness and ability of households to purchase it when appropriate financing options exist; therefore, the demand risk is considered low. Participating POs have assessed internal capacity for loan provision over the life of the OBA project, and loan targets have been set accordingly. All construction firms undertaking the works are participants of the World Bank TA program, considered qualified by a set of standard criteria, with extensive training and capacity building support. While there is some theoretical risk that subsidies could negatively impact the market, the potential for providing an initial stimulus to reach scale and the strong public goods element of sanitation access justify the subsidy.
5. Institutional capacity for implementation and sustainability	М	While PKSF has strong capacity to implement, and has worked with the World Bank previously, the POs will need initial capacity development from PKSF and the World Bank in order to launch the sanitation loan product. As PKSF and POs will pre-finance the project using their own funds, this poses some pre-financing risk. However, this risk is assumed to be low due to the financial strength of these selected POs, which have an average repayment ratio of approximately 99 percent.
6. Fiduciary	М	A financial management and procurement assessment of the implementing agency, PKSF, have rated the risk as moderate. The high number of small transactions creates some level of fiduciary risk; however, the implementing agency is among the world's most respected MFIs, and the output-based aid structure, as well as the leveraging of the MFI's own capital creates incentives for strong fiduciary management.
7. Environment and social	М	The project is expected to have positive social outcomes, due to the health and social benefits of providing hygienic sanitation to poor households. The project will likely be extended to geographic locations where indigenous peoples live, and therefore, the project

		triggers OP 4.10 for IPs and a Small Ethnic Communities and Vulnerable Peoples Development Framework (SECVPDF) has been developed. Beneficiaries are allowed to opt into the program, and the small footprint of the latrine models being promoted will not require resettlement. There is slight risk of negative environmental impact, due to high groundwater tables in Bangladesh and the potential risk of contamination by poorly-constructed soaking pits. This risk is particularly high in flood prone areas (approximately 10% of all planned installations). The project mitigates this risk through the transition to hygienic latrines, which are designed to fully confine waste from both the user and surrounding environment. Additional mitigation measures and guidelines for latrine construction have been put in place, including through sand barriers, designed according to factors such as soil condition, ground water level, and distance from drinking water sources, as well as measures to ensure latrines are constructed an appropriate distance from water supply mains. Once the latrines are full in 5-6 years, there is a risk that desludging is not carried out hygienically, potentially resulting in environmental contamination. Fecal sludge management is strengthened through offset latrines with a flexible connection, which are easy to clean and have the option of a dual pit, which allows households to use a second
8. Stakeholders	L	chamber when the first one becomes full. The proposed concept has high levels of support from key stakeholders, including government agencies, the financial sector,
9. Other	L	beneficiaries and NGOs. Due to specific structure of this project, there is the potential risk of the subsidy impacting loan portfolio quality for PKSF POs, with the potential for accessing subsidies creating incentives to lend to marginal borrowers who then default. While technically possible, this is a low risk, given the existing strong portfolio quality and long history of prudent loan analysis.
Overall	М	While the political and macroeconomic environment presents some challenges, the proven design of the project, buy-in from stakeholders and institutional capacity of the implementing agency should keep risk at a manageable level.

M = *Moderate*; *L*=*Low*

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

56. Poor sanitation has health, educational, and social costs. These costs include time spent in accessing facilities, higher disease burden, and time and money spent on accessing medical care. Children that live in communities with high rates of open defecation on average are shorter than children who live in communities with better sanitation. This stunting impacts cognitive development and earning potential later in life. Lack of access to household sanitation also disproportionately effects women, who risk assault while seeking a place to defecate. At present, 47 million rural people in Bangladesh lack access to improved sanitation. By helping 170,000 rural households in Bangladesh gain access to hygienic sanitation, which safely confines potentially dangerous pathogens within the pit, the grant will contribute to improved health outcomes and, ultimately, lower levels of poverty.

57. The economic internal rate of return (EIRR) of the project is estimated at 40 percent, including the broader cost savings attributable to improved sanitation. Per capita economic benefits for the project are estimated using existing data from the World Bank's Water and Sanitation Program Economics of Sanitation Initiative,¹³ which uses a standardized methodology to quantify the monetary and non-monetary impacts of inadequate sanitation. The benefits assumed under this analysis include the direct cost savings due to reduced health costs, as well as income that would have otherwise been lost due to death or disease, and waterrelated costs avoided as a result of a reduction in water pollution due to quality sanitation facilities. Since the per capita benefits in the Economics of Sanitation Initiative represent an upper bound of the potential welfare gains, the benefits (expressed in 2016 Taka) were adjusted downwards by 75 percent in order to account for existing levels of access to sanitation. The per capita economic benefit is estimated at 925 Taka per year. Costs include the direct project costs for the subsidy and IVA, household contribution, and an annual figure of 500 Taka for operations and maintenance, based on local estimates. The model assumes the total useable lifespan of a latrine constructed under the project is 10 years, and a rate of inflation of 6 percent per year, in line with current trends.

58. A sensitivity analysis was conducted to test the economic viability of the project given variations of three inputs: unit cost, inflation, and latrine lifespan. The sensitivity analysis finds that the EIRR is robust for variations in unit costs, inflation and latrine lifespan.

Variable	EIRR
Unit Cost +/- 20%	34% - 48%
Inflation 0% - 12%	32% - 48%
Latrine lifespan 6-10 years	37-40%

Table 4. Sensitivity Analysis

59. The project, from the perspective of the project implementing agency, PKSF, is estimated to have a financial internal rate of return (FIRR) of 2 percent. While this is potentially lower than other projects focusing on income generating loans, the proposed project is well-aligned with PKSF's social mission and learning objectives, and provides significant social impact. Intervention costs include the cost of capital for wholesale loans provided by PKSF to POs, the cost of hiring and supervising an IVA, as well as the estimated staff costs for originating and servicing the loans to the POs. The financial benefits for PKSF are predominately through component 2 of the proposed grant, which offsets the cost of the IVA and staff time, as well as fees for originating and servicing the PO loans.

¹³ Barkat, Abdul. Economic Impacts of Inadequate Sanitation in Bangladesh. WSP, 2012.

B. Financial Management

60. Financial management capacity assessment was carried out to evaluate the overall financial management capacity prevailing in the country and within the implementing agency, PKSF. The overall financial management risk is assessed to be "moderate". This rating takes into account that the previous World Bank funded project managed by PKSF was satisfactorily run in all material aspects of financial management, though there is room for improvement in the case of internal audit and the financial reporting of partner NGOs. Currently, there is one project funded by the Bank being implemented by PKSF, the Community Climate Change Project (CCCP).

61. It was noted during the assessment that there is a requirement for consultants in PKSF in order to assist the POs on day to day financial management of the project. PKSF is audited by a private professional accounting firm each year to meet the statutory reporting criteria. An accounting system assessment shows that PKSF has their own accounting system, which is adequate to meet its accounting and reporting requirements.

62. PKSF, having long experience in managing projects supported by the Bank and other development partners, has developed efficient FM and internal control systems. PKSF has an established finance division headed by a Deputy Managing Director for Finance and Administration. In order to monitor the activities of its partner organizations, it also has in place an internal audit cell headed by a General Manager who directly reports to the Managing Director of the organization. The project will be audited by a reputable private audit once at the end of the project life.

C. Procurement

63. As the implementing agency of the OBA project, PKSF will be responsible for monitoring the procurement activities under the project and ensuring compliance with the terms of the Grant Agreement. Procurement methods for this project will apply only to the goods and services to be procured under Component 2. The OBA subsidies under Component 1 are going towards latrines constructed by sanitation entrepreneurs, and will not involve procurement.

64. A procurement capacity assessment of PKSF has been carried out to evaluate the capability of the implementing agency and of the adequacy of systems in place to administer Bank-financed procurement, and to assess the risks that may negatively affect ability of the agency to carry out the procurement process. PKSF has extensive experience in executing Bank-funded projects and conducting procurements following the Bank's Procurement Guidelines.

65. PKSF has been implementing the CCCP since 2012, without any significant procurement problems or systemic deficiencies, with the exception of minor delays in completing procurement activities; it has adequate in-house expertise to deal with procurement. However, to safeguard Bank funds, a critical review of procurement has been done; the project is rated "moderate risk" from a procurement operations and contract management viewpoint. A number of risk mitigation measures would be put in place to minimize the risk. For example,

identify procurement focal point in the implementing agencies; continuous fiduciary training to improve procurement and contract management knowledge of the relevant stakeholders; use of electronic procurement planning and management system (STEP-Systematic Tracking of Exchanges in Procurement); and ensure adequate procurement staff at the PMU.

D. Environment and Social Safeguards

66. The OBA Sanitation Microfinance Program has been assessed as environmental assessment category B, as the project's potential adverse environmental impacts on human population or environmentally important areas are site-specific; few if any of them are irreversible; and in most cases, mitigation measures can be designed more readily than for Category A projects. The project is expected to have a positive environmental impact by ensuring the safe disposal of human waste (sanitation). The primary risk with on-site sanitation is the pollution of drinking, surface, or groundwater as a result of poorly built toilets or improper fecal sludge management. This project is designed to mitigate this risk, by transitioning households from basic/improved latrines, which run the risk of environmental pollution, to hygienic latrines, which are structurally sound and fully confine waste from both the user and the surrounding environment. The project supports only small-scale infrastructure, which will improve the sanitation environment and can be implemented without any major technical complexity.

67. Additional mitigation measures and guidelines for latrine construction have been put in place to further mitigate the risk of environmental pollution, including through sand barriers, designed according to factors such as soil condition, ground water level, and distance from drinking water sources, as well as measures to ensure latrines are constructed an appropriate distance from water supply mains. Fecal sludge management is strengthened through offset latrines with a flexible connection, which are easy to clean and have the option of adding a second pit at any point, which allows households to use a second chamber when the first one becomes full.

68. The project is expected to also have positive social outcomes, due to the health and social benefits of providing hygienic sanitation to poor households, including fewer incidences of diarrheal and other WASH related diseases. Latrine facilities also take into account female preferences, such as lockable doors and adequate space for menstrual hygiene. The project areas will likely include geographic locations where indigenous peoples (IP) live, also referred to as small ethnic communities and vulnerable peoples, and therefore, the project triggers OP 4.10 for IPs. However, availing the facilities/services/products is purely on a voluntary basis for all paying customers (including IPs). As all beneficiaries will be involved in the selection of construction firms and sanitation products to be installed, IPs have the opportunity to select firms and products according to their preferences. No negative impacts are anticipated towards IPs; rather, activities under the project will ensure statutory rights and privileges of IPs, and that their customs and norms are not hampered or disturbed, rather complied with.

69. The project will not allow any land acquisition. In addition, it restricts the use of any type of public land. Land, whether made available via direct purchase, or leasing will be screened to ensure that no physical or economic displacement of communities/persons will take place. Private lands, which are disputed or have encroachments on them (informal settlers,

non-titled entities) will not be used for the project. The project will not allow any type of involuntary resettlement or adverse impacts to IPs. Therefore, OP 4.12 has not been triggered for the project.

70. An Environment and Social Management Framework (ESMF) and separate Small Ethnic Communities and Vulnerable Peoples Development Framework (SECVPDF) have been disclosed on June 27, 2016. In accordance with the ESMF, a basic screening, undertaken by an Environmental Specialist hired by PKSF, will be done to ensure all sanitation products and methods for installation are in compliance with World Bank environmental safeguards policies, and latrines are constructed in accordance with the mitigation measures identified in this ESMF. The Specialist will be responsible for predicting and/or identifying any potential adverse environmental impacts arising from project activities, and for developing measures as needed to mitigate/eliminate/offset/reduce impacts to acceptable levels.

71. The SECVPDF is designed to ensure that the ethnic minorities in the project areas benefit equally (both in terms of needs and quality) from its various interventions. Specific action plans – to be called the Small Ethnic Communities and Vulnerable Peoples Development Plan (SECVPDP) – will be prepared for each district/region, as relevant to the project's overall objectives and presence of ethnic minority communities in the particular district/region during implementation.

E. Citizen Engagement

72. Project beneficiaries will have the opportunity to provide feedback on the program through the IVA, which will visit a sample of households which have participated in the program on a quarterly basis. The IVA will offer households a simple survey, with questions pertaining to the ease of the process, the quality and functionality of the latrine, the installation process, and general satisfaction with the project, providing also the opportunity to discuss any issues, challenges, or suggestions for further improvement. A specific indicator is included within the Results Framework of the project addressing household satisfaction, which will be assessed on a 5-point scale, from "very unsatisfied" to "very satisfied" with the project.

F. World Bank Grievance Redress

73. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org

							ework and Mo	0		
Project Development Objective	(PDC)): Increase a	ccess to h				on Microfinan ow-income hou		eas of Bangladesh	through commercial sanitation loans.
PDO Level Results	Core	Unit of	Base		ative Targe (Fiscal yea		Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc.)
Indicators*	C	Measure	-line	YR 1 (2017)	YR 2 (2018)	YR 3 (2019)				
Indicator One: Households receiving sanitation loans from POs under the project		Number	0	30,000	110,000	170,000	Quarterly	PKSF	PKSF	Data from participating POs will be used to identify the number of households receiving qualified sanitation loans under the project
Indicator Two: People provided with access to hygienic sanitation facilities under the project	x	Number	0	150,000	550,000	850,000	Quarterly	IVA	PKSF	IVA will verify the number of households, assuming 5 people per latrine-purchasing household, which have been provided with access to a hygienic latrine as result of the project
					INT	ERMEDIA	TE RESULTS	5		
Intermediate Result (Componen	nt On	e): Subsidies	for house	ehold sanit	ation loans					
Intermediate Result indicator One: Hygienic latrines constructed in rural areas under the project	x	Number	0	30,000	110,000	170,000	Quarterly	IVA	PKSF	IVA will verify the number of hygienic latrines constructed in rural areas under the project
Intermediate Result indicator Two: Households receiving sanitation loans under the project which are identified as poor		Number	0	24,000	88,000	136,000	Quarterly	IVA	PKSF	Bangladesh Progress out of Poverty Index will be used to estimate respondents' poverty level, given to households as a questionnaire by the IVA. Poverty lines in Bangladesh are calculated using the cost of basic needs (CBN) methodology
Intermediate Result indicator Three: Loans provided to female borrowers		Percentage	0	90	90	90	Quarterly	Socio- demographic information from borrowers	PKSF	PO socio-demographic information from borrowers will be used to identify the number of loans provided to female borrowers
Intermediate Result indicator Four: Households satisfied with latrine		Percentage	0	90	90	90	Quarterly	IVA	PKSF	Household satisfaction with latrine installation and functionality will be based on a 5-point scale (very

installation process and					unsatisfied to very satisfied), and given
functionality					to households as a survey by the IVA

Annex 2: Economic and Financial Analysis BANGLADESH: OBA Sanitation Microfinance Program

Introduction

1. Poor sanitation has health, educational, and social costs. These costs include time spent in accessing facilities, higher disease burden, and time and money spent on accessing medical care. Children that live in communities with high rates of open defecation on average are shorter than children who live in communities with better sanitation. This stunting impacts cognitive development and earning potential later in life. Lack of access to household sanitation also disproportionately effects women, who risk assault while seeking a place to defecate. Furthermore, poor rural sanitation has significant economic costs as well. Countries are estimated to lose up to seven percent of GDP annually due to the poor sanitation. At present, 47 million rural people in Bangladesh lack access to improved sanitation. By helping 170,000 rural households in Bangladesh gain access to hygienic sanitation, which safely confines potentially dangerous pathogens within the pit, the OBA grant will contribute to improved health outcomes and, ultimately, lower levels of poverty.

Economic Analysis

2. The main objective of the economic analysis is to substantiate the economic attractiveness of the OBA Sanitation Microfinance Program by translating direct and indirect benefits into quantifiable outcomes. A cost-benefit methodology is used to estimate the economic internal rate of return (EIRR). The project is estimated to have an EIRR of 40 percent.

3. Intervention costs include the direct project costs for the subsidy and independent verification agent, as well as the household contribution, financed by participating microfinance institutions (totaling approximately 11,350 Taka per latrine). In addition, an annual figure of 500 Taka for operations and maintenance was included, based on local estimates. The model assumes that the total useable lifespan of a latrine constructed under the project is 10 years, and also assumes a rate of inflation of 6 percent per year, in line with current trends.

4. The benefits from the interventions are estimated using existing data from the World Bank Water and Sanitation Program (WSP) Economics of Sanitation Initiative.¹⁴ This study uses a standardized methodology to quantify the monetary and non-monetary impacts of inadequate sanitation. The analysis of this project confines quantified benefits to the direct cost savings due to reduced health costs and income that would have otherwise been lost due to death or disease, and water-related costs avoided as a result of a reduction in water pollution due to quality sanitation facilities. The WSP study also incorporates estimates on the monetary value of time savings from improved sanitation to calculate total economic benefits; however, this analysis excludes this benefit, as most households targeted under the project have access to some form of household sanitation, and therefore will likely not experience time savings as a result of project interventions. While the WSP study derives costs and estimations from 2007, this analysis adjusted figures to 2016 Taka (based on the consumer price index).

¹⁴ Barkat, Abdul. Economic Impacts of Inadequate Sanitation in Bangladesh. WSP, 2012.

5. **Health impacts.** Poor sanitation directly contributes to diseases such as diarrhea, schistosomiasis, trachoma, and typhoid. Diarrhea often leads to malnutrition, which increases exposure to other diseases such as acute lower respiratory infection (ALRI) and malaria. Poor sanitation accounts for 88 percent of diarrheal deaths, and 100 percent of deaths from helminthes (parasitic worms) (Barkat 2012). The WSP study considers costs and/or losses avoided due to premature mortality, productivity loss, and health care expenses, as a result of access to improved household sanitation facilities. Preventable diseases considered include diarrhea, ALRI, malaria, and helminthes infection. The value of a worker's full working day is estimated using the unemployment-adjusted labor share of GDP per worker, reduced by 70 percent. Time for children under 15 is valued at 50 percent of the adult rate.

6. **Water impacts.** Poor sanitation can lead to water pollution, which causes not only disease, but also other issues such as foul odor and oxygen depletion. Households exposed to polluted water have to either treat it, or seek alternative water sources, both of which have financial and nonmonetary costs; for example, if untreated water is boiled, the cost of fuel should be taken into account. For households which have to fetch safe drinking water some distance away, time loss must be captured.

7. Since the per capita benefits in the Economics of Sanitation Initiative represent an upper bound of the potential welfare gains, the benefits (expressed in 2016 Taka) were adjusted downwards in order to account for existing levels of access to sanitation. The team has estimated that, as a result of the project intervention, the expected per capita economic benefit will be about 925 Taka per year. This is equivalent to 25 percent of the total estimated economic gains that can be achieved through sanitation and hygiene interventions in Bangladesh, according to the WSP study.

	Annual Amount (per
Expected Benefits	capita)
Households receiving access to hygienic sanitation	170,000
Health impacts	875 Tk.
Water impacts	50 Tk.
Total annual benefits from OBA project	925 Tk.

		***	a • •	D • (T
Table 1: Annual	Health and	Water	Savings for	r Proiect	Beneficiaries
					Denenation

8. Aside from these direct and indirect preventable economic losses, there are many other potential benefits that are not factored into this cost-benefit analysis, such as the impact of improved sanitation on other sectors. Moreover, it should be recognized that real economic benefits accruing from the targeted low-income populations may not be financial or economic in nature. For instance, improved sanitation provides comfort and dignity. Therefore, the estimated benefits of the project described in this analysis can be considered conservative.

Sensitivity Analysis

9. A sensitivity analysis was conducted to test the economic viability of the project given variations of three inputs: unit cost, inflation, and latrine lifespan. The sensitivity analysis finds that the returns observed are generally robust, suggesting normal variations in these variables will not adversely affect the economic viability of the project.

Variable	EIRR
Unit Cost +/- 20%	34% - 48%
Inflation 0% - 12%	32% - 48%
Latrine lifespan 6-10 years	37-40%

Table 2: Sensitivity Analysis

Financial Analysis

10. The financial analysis focuses on a cost-benefit analysis to verify the financial attractiveness of the OBA Sanitation Microfinance Program for the participating microfinance institutions. The project is estimated to have a financial internal rate of return (FIRR) of 2 percent, based on a calculation of intervention costs (cost of capital for loans to POs, IVA, staff time, loan administration) and financial benefits for PKSF (World Bank funding for the IVA and staff time, fees for loans to POs) as detailed in the paragraphs below. While this is potentially lower than other projects focusing on income-generating loans, the proposed project is well-aligned with PKSF's social mission, and provides significant social impact. PKSF also views the pilot as a learning experience, opening up a new area for investment, which could potentially be scaled-up and expanded to both water and sanitation sectors. This could also potentially attract further donor support to PKSF. Furthermore, this project will help build the capacity of PKSF's partner organizations for future opportunities.

11. Intervention costs include the cost of capital for wholesale loans provided by PKSF to POs in order to on-lend to household borrowers. Based on estimates from the 2015 annual report, the cost of capital is approximately 0.5 percent. In addition to this cost, PKSF will also incur the cost of hiring and supervising an IVA, as well as the estimated staff costs for originating and servicing the loans to the POs. Based on estimates from the 2015 PKSF annual report, staff costs represent about 1.3 percent of the value of the loan.

12. The financial benefits for PKSF are predominately through component 2 of the proposed grant, which offsets the cost of the IVA and staff time, as well as fees for originating and servicing the PO loans.

Figure 1: Economic and Financial Analysis, Assumptions¹⁵

Benefits		
	Source	
Economic Benefit Per Capita, 2007 Taka	1849 Barkat, Abdul. Economic Impacts of Inadequate Sanitation in Bangladesh. WSP, 2012.	
Consumer Price Index (CPI) 2007	110 Bangladesh Bureau of Statistics	
CPI 2016	220 Bangladesh Bureau of Statistics	
Economic Benefit Per Capita, 2016 Taka	3698	
Adjustment Factor - Economic Benefit	75% Estimate, based on quality of existing sanitation access	
Adjusted Economic Benefit	925	
Adjusted Economic Benefit	525	
Costs		
(2016 Bangladeshi Taka)		
	Source	
GPOBA Subsidy Per Unit	1,092 PAD (Bilash)	
Household Contribution Per Unit	9,984 PAD (Bilash)	
Annual Operations and Maintence	500 Estimate, based on current costs	
Component 2 Costs	46,800,000 PAD	
Other Inputs		
	Source	
Lifespan of Latrine, Years	10	
Inflation	6% Estimate, based on current trends	
Number of Members per Household	5 Bangladesh Demographic and Health Survey 2011	
Number of Latrines constructed, Year 1	30,000 PAD targets	
Number of Latrines constructed, Year 2	80,000 PAD targets	
Number of Latrines constructed, Year 3	60,000 PAD targets	
Financial Analysis		_
	Source	
Fees for loans to POs	5% PAD	
Cost of capital	0.5% Estimate, based on PKSF 2015 annual report	
IVA	16,380,000 PAD	
Direct staff costs (% of loan value)	1.3% Estimate, based on PKSF 2015 annual report	
	Liste Estimate, based on risi 2019 dimutriport	

Figure 2: Economic Analysis

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Costs: Component 2	(15,600,000)	(15,600,000)	(15,600,000)									
Costs: Household Contribution, Year 1 Tranche	(299,520,000)											
Costs: GPOBA Subsidy, Year 1 Tranche	(32,760,000)											
Costs: Operations and Maintenance, Year 1 Tranche	(15,000,000)	(15,900,000)	(16,854,000)	(17,865,240)	(18,937,154)	(20,073,384)	(21,277,787)	(22,554,454)	(23,907,721)	(25,342,184)		
Costs: Household Contribution, Year 2 Tranche		(846,643,200)										
Costs: GPOBA Subsidy, Year 2 Tranche		(92,601,600)										
Costs: Operations and Maintenance, Year 2 Tranche		(42,400,000)	(44,944,000)	(47,640,640)	(50,499,078)	(53,529,023)	(56,740,764)	(60,145,210)	(63,753,923)	(67,579,158)	(71,633,908)	
Costs: Household Contribution, Year 3 Tranche			(673,081,344)									
Costs: GPOBA Subsidy, Year 3 Tranche			(73,618,272)									
Costs: Operations and Maintenance, Year 3 Tranche			(33,708,000)	(35,730,480)	(37,874,309)	(40,146,767)	(42,555,573)	(45,108,908)	(47,815,442)	(50,684,369)	(53,725,431)	(56,948,957)
Benefits: Total Economic Benefit, Year 1 Tranche		146,995,500	155,815,230	165,164,144	175,073,992	185,578,432	196,713,138	208,515,926	221,026,882	234,288,495		
Benefits: Total Economic Benefit, Year 2 Tranche			415,507,280	440,437,717	466,863,980	494,875,819	524,568,368	556,042,470	589,405,018	624,769,319	662,255,478	
Benefits: Total Economic Benefit, Year 3 Tranche				330,328,288	350,147,985	371,156,864	393,426,276	417,031,852	442,053,763	468,576,989	496,691,609	526,493,105
	(362,880,000)	(866,149,300)	(286,483,106)	834,693,788	884,775,415	937,861,940	994,133,657	1,053,781,676	1,117,008,577	1,184,029,091	1,033,587,748	469,544,148

Economic Internal Rate of Return (EIRR) 40%

Figure 3: Financial Analysis

	2016	2017	2018
Revenues: Funding for IVA, operating costs, fees for loans to POs	15,600,000	15,600,000	15,600,000
Costs: Cost of Capital, loans to POs	(1,497,600)	(3,993,600)	(2,995,200)
Costs: IVA	(5,460,000)	(5,460,000)	(5,460,000)
Costs: Staff time, loan administration	(3,893,760)	(10,383,360)	(7,787,520)
	4,748,640	(4,236,960)	(642,720)
Financial Internal Rate of Return (FIRR) 2%			

¹⁵ All monetary values expressed in Bangladeshi Taka

Annex 3: Procurement

BANGLADESH: OBA Sanitation Microfinance Program

1. **Procurement Guidelines.** Procurement under this Project will involve goods, consulting services and non-consulting services under the Component 2 of the project. The OBA subsidies under Component 1 are going towards latrines constructed by sanitation entrepreneurs, and will not involve procurement. Procurement financed under the Program shall be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-consulting services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published in January 2011 (revised July 2014), in the case of goods, works, and non-consulting services; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published in January 2011 (revised July 2014), in the case of goods, works, and non-consulting services; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published in January 2011 (revised July 2014), in the case of goods, works, and non-consulting Services and Grants by World Bank Borrowers" published in January 2011 (revised July 2014) in the case of consultants' services, and the provisions stipulated in the Financing Agreement.

2. **Procurement Arrangement.** PKSF is the implementing agency for this Project, and will be responsible for ensuring compliance with the project's procurement rules to be stipulated in the Grant Agreement.

3. Procurement Capacity and Risk Assessment. A procurement capacity assessment of PKSF has been carried out to evaluate the capability of the implementing agency and of the adequacy of systems in place to administer Bank-financed procurement, and to assess the risks that may negatively affect ability of the agency to carry out the procurement process. PKSF has extensive experience in executing Bank-funded projects and conducting procurements following the Bank's Procurement Guidelines. PKSF has been implementing the Community Climate Change Project (CCCP) since 2012, without any significant procurement problems or systemic deficiencies, with the exception of minor delays in completing procurement activities; it has adequate in-house expertise to deal with procurement. However, to safeguard Bank funds, a critical review of procurement has been done; the project is rated "moderate risk" from a procurement operations and contract management viewpoint. A number of risk mitigation measures would be put in place to minimize the risk. For example, identify procurement focal point in the implementing agencies; continuous fiduciary training to improve procurement and contract management knowledge of the relevant stakeholders; use of electronic procurement planning and management system (STEP-Systematic Tracking of Exchanges in Procurement); and ensure adequate procurement staff at the PMU.

4. **Managing Procurement Risks.** In order to minimize the procurement associated risks, the following measures have been agreed upon with the implementing agency.

- (i) *Procurement Focal Point:* PKSF will assign a procurement focal person for the project with adequate understanding of Bank funded procurements. The focal person will receive national three weeks procurement training organized by the Central Procurement Technical Unit (CPTU) before starting any procurement activity.
- (ii) *Bid/Proposal Evaluation Committee*: Implementing agency shall ensure that the bid/proposal evaluation committees are formed following the provision of the Public

Procurement Rules 2008. Formation of such committee shall be subject to Bank's acceptance.

- (iii)*Introducing STEP system:* Systematic Tracking of Procurement Exchanges System (STEP) will be introduced to prepare and manage procurement plan and procurement transactions under the Project. It will be also used to regular updating and getting no objection of the procurement plans and prior review procurement documents of this Project.
- (iv)Due-diligence Measures: The following steps will be followed as part of procurement and implementation arrangements: (a) all bid evaluation reports will cover verification of recommended bidders' post-qualification information [for goods and works]; (b) all contract negotiations will be preceded by additional due diligence by PMU on verification of recommended consultants' experience and curriculum vitae of key staffs [for consultancy services]; (c) make bidders generally aware about fraud and corruption issues; (d) award of contracts within the initial bid validity period, and closely monitor the timing; (e) preserve records and all documents regarding procurement (including correspondences with the potential bidders as well as complaints/clarification requests etc.), in accordance with the Public Procurement Rules 2008 and Bank's Procurement Guidelines, to facilitate smooth procurement audit or post-review; (f) publish contract award information on Central Procurement Technical Unit (CPTU) and the respective agencies' website within two weeks of contract award, and in United Nations Development Business (UNDB online) for International Competitive Biddings (ICB) or international consultancies.); and (g) ensure timely payments to the suppliers/ contractors/consultants.

5. **Particular Methods of Procurement of Goods, Works and Non-consultancy services.** Except as otherwise agreed in the procurement plan, works and goods may be procured on the basis of International Competitive Bidding. Procurement of goods and works having estimated value less than the ceiling stipulated in the Procurement Plan may follow National Competitive Bidding (NCB), Framework Agreement, and Shopping (Request for Quotations) methods, and Community Participation Procedures, which have been found acceptable to the Association. Direct Contracting may be allowed under special circumstances with prior approval of the Bank. NCB would be carried out under Bank Procurement Guidelines following procedures for Open Tendering Method (OTM) of the People's Republic of Bangladesh (Public Procurement Act 2006 - PPA, 1st amendment to PPA (2009) and the Public Procurement Rules 2008, as amended in August 2009) using standard/model bidding documents satisfactory to the Bank. Shopping will be carried out based on a model document satisfactory to The Bank. For the purpose of NCB the following shall apply:

- Post bidding negotiations shall not be allowed with the lowest evaluated or any other bidder;
- Bids should be submitted and opened in public in one location immediately after the deadline for submission;
- Lottery in award of contracts shall not be allowed;
- Bidders' qualification/experience requirement shall be mandatory;

- Bids shall not be invited on the basis of percentage above or below the estimated cost and contract award shall be based on the lowest evaluated bid price of compliant bid from eligible and qualified bidder; and
- Single-stage two-envelope procurement system shall not be allowed.

6. **Methods of Procurement of Consultants' Services.** Selection of Consultants will follow the Bank's Consultant Guidelines and standard documents in all types of selection processes. The following methods will apply for selection of consultants: Quality and Cost based Selection (QCBS), Quality-based selection (QBS), Fixed Budget Selection (FBS), Consultants' Qualification (CQ), Least Cost Selection (LCS), and Single Source Selection (SSS). Single Source Selection may be allowed under special circumstances with prior approval of the Bank. Shortlist of consultants for services estimated to cost less than US\$500,000 equivalent per contract may be composed entirely of national consultants. The Procurement Plan will specify the circumstances and threshold under which specific methods will be applicable, along with the Bank's review and implementation support requirements.

7. Use of Standard Procurement Documents. For procurement through International Competitive Bidding and for selection of consultants, the Bank's Standard Bidding Documents (SBDs) and Standard Request for Proposals (SRFPs) will be used, including the form of contract attached with SBDs and SRFPs. For all NCB, Shopping packages, Framework Agreements and partnership agreements, the implementing agencies will use model documents agreed with the Bank.

8. **Prior review Thresholds.** The Procurement Plan shall set forth those contracts which shall be subject to the Bank's prior review. All other contracts shall be subject to Post Review by the Bank.

9. **Post Review.** For compliance with the Bank's procurement procedures, the Bank will carry out sample ex-post review of contracts that are below the prior review threshold.

10. **18-months' Procurement Plan.** For each contract to be financed by the Project, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan of the project will be prepared in agreement with the Bank. It will also be available in the Program's website, and in Bank's external website for this Program. Besides, all expected major procurements will be announced in the General Procurement Notice, published in the Bank external website and United Nations Development Business. The procurement plan will be updated semi-annually or as required and will be the basis of Bank's procurement supervision plan. The Bank's electronic procurement planning and monitoring system (STEP) will be used to prepare and regular updating and getting no objection of the procurement plans of this Project. Respective PMU staff will receive training on STEP prior to appraisal mission of the Project, and continuous training will be provided during its use in the Project.

Annex 4: Financial Management

BANGLADESH: OBA Sanitation Microfinance Program

Fiduciary Capacity

1. Financial management capacity assessment was carried out to evaluate the overall financial management capacity prevailing in the country and within the implementing agency, PKSF. The overall financial management risk is assessed to be "moderate," mainly because the previous Bank funded project managed by PKSF was satisfactorily run in all material aspects of financial management, though there is room for improvement in case of internal audit and the financial reporting of partner NGOs. Currently, there is one project funded by the Bank being implemented by PKSF, the Community Climate Change Project (CCCP).

2. It was noted during the assessment that there is a requirement for consultants in PKSF in order to assist the POs on day to day financial management of the project. PKSF is audited by a private professional accounting firm each year to meet the statutory reporting criteria. An accounting system assessment shows that PKSF has their own accounting system, which is adequate to meet its accounting and reporting requirements.

3. PKSF, having long experience in managing projects supported by the Bank and other development partners, has developed efficient FM and internal control systems. PKSF has an established finance division headed by a Deputy Managing Director for Finance and Administration. In order to monitor the activities of its partner organizations, it also has in place an internal audit cell headed by a General Manager who directly reports to the Managing Director of the organization.

Planning and Budgeting

4. *Budgeting*: A budgetary management and monitoring system exists within PKSF. For the project under consideration, a budget will be maintained for the entire term of the Project, and detailed budgets for each fiscal year will also be produced to provide a framework for financial management purposes. The annual budget will be prepared on the basis of the procurement plan and any other relevant annual work plans. These budgets will be monitored periodically to ensure actual expenditures are in line with the budgets, and to provide input for necessary revisions.

Internal Control

5. *Filing and Record-Keeping*: The PMU will preserve all procurement records and financial records/documents in accordance with the provisions of the PPA 2006. These records must be made readily available on request for audit/investigation/review by the Government and the Bank. All project-related documents must be filed separately to facilitate internal and external audits, as well as reviews by the Bank.

6. *Financial Management Manual*: PKSF has an Accounting Manual which has been consistently followed for preparation of software-based final accounts. The financial statement of PKSF is prepared in accordance with International Accounting Standard (IAS) as adopted by the Institute of Chartered Accountants of Bangladesh (ICAB).

7. *Financial Management System:* PKSF has their own accounting system. Accounts are maintained on an accrual basis under historical cost convention. The accounting manual has been consistently followed for preparation of software-based final accounts.

Internal Audit: The purpose of the internal audit is to ascertain the effectiveness of 8. expenditure, ensure adherence to the Government/Implementing agency rules and regulations in the payment process, and management of assets and funds of the project. In order to facilitate the periodic review by experts, a professional accounting/auditing firm will be hired to conduct internal audit of the project at least twice in the life time of the project. Going beyond the financial aspects, the internal audit would also look into the effectiveness and efficient use of project resources, and conduct an independent appraisal of the workings of the PMUs and other partners in the implementing arrangements. The key internal audit function will be: (a) ascertaining whether the system of internal checks and controls for preventing errors, fraud and corruption within the organization, is effective in its design as well as operation; (b) ensuring reliability of accounts and other records, as well as ensuring that accounting methods provide the necessary information for the preparation of correct financial statements; (c) determining the extent to which the project entity's assets are safeguarded from any unauthorized uses or losses; (d) undertaking physical verification of assets/goods and (e) establishing whether administrative and financial regulations of the Government and instructions issued by the Treasury as well as donors' legal requirements are complied with.

9. In order to monitor the activities of its POs, PKSF has in place an internal audit cell headed by a general manager, who is supported by three mid-level and nine junior-level officers. PKSF will, in consultation with the World Bank, prepare an annual audit plan to carry out annual internal audit on the project/sub-project activities and expenditures incurred by PKSF itself and the NGOs to review the compliance, accountability and transparency of the expenditures and the process, and assess the relevance of the expenditures incurred for the purpose intended. The half yearly internal audit report on the project, comprising observations and recommendations, will be furnished to the Bank not later than June 30 and December 31 of each year until the completion of the project.

10. *Assets and Payments:* All project payments will be made using the banking system (except for small petty cash expenses). The project will maintain assets tracking system for ensuring annual physical verification and reporting on assets procured under the project.

Governance and Oversight Arrangements

11. *External Audit*: The project will be audited by a reputable private audit once at the end of the project life. The audit report will be submitted to the Bank within six months from the end of the financial year of the closure of the project, and this will be monitored in the Bank system (PRIMA). The audited financial statements will be made available for public disclosure. If there are any audit objections, it will be the responsibility of PKSF to follow up and take remedial actions, with the assistance from the Financial Management Specialist and the program implementing sections relevant to the audit objections. There are no outstanding audit reports from any of these agencies as of the current date.

Financial Management Considerations in the Fiduciary Assessment

12. *Staffing:* PKSF will be responsible for the overall financial management of the project and will also provide overall guidance/directions on a day to day basis to the Financial Management Consultant to be recruited under the project. PKSF will hire the FM Consultant/Specialist within two months from the date of signature of the financing agreement. The terms of reference of this Financial Management Specialist will need to be shared with the Bank for its review and concurrence. The contract will be "Prior Review" for this services.

13. *Basis of disbursements:* Component 1 of the project will be disbursed on an output-basis through reimbursements to PKSF. Output-based subsidies will only be eligible for payment based on an output verification report undertaken by the IVA, reviewed and approved by PKSF and the World Bank. Component 2 of the project will be disbursed as an advance, for the purposes noted in the Project Paper.

14. Flow of Funds from Designated Account (DA): Funds will be disbursed through a Designated Account (DA) to be established in a branch of a commercial bank acceptable to the Bank and the DA will be managed and maintained by PKSF. The Commercial bank should have adequate experience, manpower, network and authority to process transactions on a fast track basis. The approved government procedures governing the establishments of DA shall be followed in all respects and the PMU will be responsible for the DA. According to the agreement to be signed between PKSF and POs for the project implementation, funds will be transferred from PKSF to POs on the fund requirement basis.

15. Accounting and Reporting: The implementing agency will require to maintain a satisfactory financial management system, including keeping all the mandatory books of accounts, preparing semi-annual and yearly financial statements. Semi-annual IUFRs will be submitted to the Bank by the project within 45 days from the end of each calendar semester. IUFRs will need to be prepared from the financial information directly produced by the accounting software.

Annex 5: PKSF Partner Organizations and Working Areas BANGLADESH: OBA Sanitation Microfinance Program

SI. No.	Name of partner MFI of PKSF	Division	District	Upazilla
1	DAM Foundation For Economic Development (DFED) Dhaka	Khulna	Satkhira	Satkhira Sadar & Devata
2	Dushtha Shasthya Kendra (DSK), Dhaka	Dhaka	Gazipur	Sreepur
3	Eco-Social Development Organization (ESDO) Thakurgaon	Rangpur	Thakurgao n	Rani Sankaul & Horipur
4	Heed Bangladesh Dhaka	Sylhet	Moulvibaz ar	Kamalganj & Rajnagar
5	Jagorani Chakra Foundation (JCF) Jessore	Khulna	Kushtia	Kushtia Sadar
6	Jakas Foundation Jaipurhat	Rajshahi	Jaipurhat	Jaipurhat Sadar
7	Manab Mukti Shangstha (MMS) Serajganj	Rajshahi	Sirajganj	Shahjadpur
8	Mohila Bohumukhi Shikkha Kendra (MBSK) Dinajpur	Rangpur	Dinajpur	Dinajpur Sadar
9	Palli Bikash Kendra (PBK) Dhaka	Dhaka	Narsingdi	Narsingdi Sadar
10	Prottyashi Chittagong	Chittagong	Cox'bazar	Chandanaish upazila
11	Poribar Unnayon Songstha, Bhola	Barishal	Bhola	Charfashion
12	RDRS Bangladesh Dhaka	Rangpur	Lalmonirh at	Lalmonirhat Sadar
13	Resource Integration Centre (RIC), Dhaka	Dhaka	Gazipur	Kaliganj
14	Rural Development Sangstha (RDS), Sherpur	Mymensingh	Sherpur	Sherpur Sadar
15	Society for Development Initiatives (SDI), Dhaka	Dhaka	Dhaka	Dhamrai
16	Society for Social Service (SSS), Tangail	Dhaka	Tangail	Tangail Sadar
17	UDDIPAN, Dhaka	Chittagong	Chandpur	Matlab (north & south)
18	Village Education Resource Centre (VERC),Savar	Chittagong	Comilla	Laksam
19	Wave Foundation, Chuadanga	Khulna	Jhenaidah	Jhenaidah Sadar
20	Young Power in Social Action (YPSA), Chittagong	Chittagong	Chittagong	Sitakunda
21	Association for Social Advancement	PKSF will finalize areas during implementation	10 districts	