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December 11, 2015

Closing Date: Friday, January 8, 2016 at 6 p.m.

FROM: The Corporate Secretary

Indonesia Third Water Supply and Sanitation for Low Income Communities/Community Based Water Supply Project

Project Paper

Attached is the Project Paper regarding a proposed additional second loan and restructuring to Indonesia for the Third Water Supply and Sanitation for Low Income Communities/Community Based Water Supply Project (R2015-0245), which is being processed on an absence-of-objection basis.

Distribution: Executive Directors and Alternates President Bank Group Senior Management Vice Presidents, Bank, IFC and MIGA Directors and Department Heads, Bank, IFC and MIGA

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Report No: PAD1532

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT PAPER

ON A

PROPOSED ADDITIONAL LOAN

IN THE AMOUNT OF US\$ 300 MILLION

TO THE

REPUBLIC OF INDONESIA

AND RESTRUCTURING

FOR A

SECOND ADDITIONAL FINANCING FOR THE THIRD WATER SUPPLY AND SANITATION FOR LOW INCOME COMMUNITIES/COMMUNITY BASED WATER SUPPLY PROJECT (PAMSIMAS III)

DECEMBER 7, 2015

WATER GLOBAL PRACTICE INDONESIA COUNTRY MANAGEMENT UNIT EAST ASIA AND PACIFIC REGION

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CURRENCY EQUIVALENTS

(Exchange Rate Effective September 9, 2015)

Currency Unit = IDR 14,280 = US\$1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

BAPPENAS	Badan Perencanaan Pembangunan Nasional (National Planning Board)
BPSPAMS	Badan Pengelola Sistem Pelayanan Air Minum dan Sanitasi (village water- boards)
CAPs	Community Action Plans
CDD	Community Driven Development
CLTS	Community-Led Total Sanitation
CMAC	Central Management Advisory Consultants
CPMU	Central Project Management Unit
CPS	Country Partnership Strategy
DFAT	Department of Foreign Affairs and Trade
DIPA	Integrated Budget (Recurrent and Investment)
DMAC	District Management Advisory Consultants
DPMU	District Project Management Unit
EIRR	Economic internal rate of return
GoI	Government of Indonesia
ICR	Implementation Completion and Results Report
EIA	Environmental Impact Assessment
FMR	Financial Monitoring Report
ODF	Open-Defecation Free
O&M	Operation and Maintenance
MIS	Management information system
MoHA	Ministry of Home Affairs
MoPWH	Ministry of Public Works and Housing
MoVDT	Ministry of Village, Disadvantage Areas and Transmigration
PAMSIMAS	Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat (Community- Based Water Supply and Sanitation)
PPMU	Provincial Project Management Unit
ROMS	Regional Oversight Management Services
RPJMN	Rencana Pembangunan Jangka Menengah-Nasional (National Medium
	Term Development Plan)
STBM	Sanitasi Total Berbasis Masyarakat
TA	Technical Assistance
WSLIC-2	(Second) Water and Sanitation for Low Income Communities Project
WSP	Water and Sanitation Program
WSS	Water Supply and Sanitation

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INDONESIA SECOND ADDITIONAL FINANCING FOR THE THIRD WATER SUPPLY AND SANITATION FOR LOW INCOME COMMUNITIES/COMMUNITY BASED WATER SUPPLY PROJECT (PAMSIMAS III) (P154780)

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Indonesia

Indonesia: Second Additional Financing for the Third Water Supply and Sanitation for Low Income Communities/Community Based Water Supply Project (PAMSIMAS III) (P154780)

EAST ASIA AND PACIFIC

GWADR

			Ba	sic Info	orma	ation – Pa	arent					
Parent Pro	oject ID:	P08537	P085375			Original EA Category:			В	B - Partial Assessment		ssment
Current Closing Date: 31-Dec-2016												
		Ba	sic Inform	ation -	- Ad	ditional I	Financing ((AF)				
Project ID):	P15478	80			Additiona (from AU	al Financing JS):	g Typ	^e s	cale Up		
Regional	Vice President	Axel va	an Trotsenb	urg		Proposed	EA Catego	ory:	В	ł		
Country D	Director:	Rodrig	o A. Chave	s		Expected	Effectiven	ess D	ate: F	ebruary 29	9, 20	16
Senior Glo Director:	obal Practice	Junaid	Kamal Ahr	nad		Expected	Closing D	ate:	D	ecember (31, 2	020
Practice M	Ianager:	Ousma	ne Dione			Report N	0:		Р	AD1532		
Team Lea	der(s):	George	Soraya									
		·]	Borr	ower			·			
Organizat	ion Name	Contact		Title			Telepho	ne	Email	il		
Ministry of Public Works and Housing Mr. Andreas Suhono		Director General of +62-21 Human Settlements 7279-6158			april1804@yahoo.com; cpmu_pamsimas@yahoo.co.id							
Project I	Financing Dat	a - Parent (and San US\$ Mil		Low	Incom	e Commu	unitio	es Project-
Project	Ln/Cr/TF	Status	Approval Date	L	Sign	ing Date	Effective Date	ness	Origin Closin	nal ng Date		vised sing Date
Project P085375	Ln/Cr/TF IBRD- 82590	Status Effective				ing Date un-2013			Closin		Clo	
	IBRD-		Date	2013	11-Ju		Date	2013	Closin 31-De	ng Date	Clo 31-1	sing Date
P085375	IBRD- 82590 IDA-42040	Effective	Date 02-May-2	2013	11-Ju	un-2013	Date 02-Aug-2	2013	Closin 31-De	ng Date	Clo 31-1	sing Date Dec-2017
P085375 P085375 Disbursen	IBRD- 82590 IDA-42040	Effective	Date 02-May-2	2013	11-Jı 27-D	un-2013 Dec-2007	Date 02-Aug-2	2013	Closin 31-De 30-Ju	ng Date	Clo 31-1 31-1	sing Date Dec-2017
P085375 P085375	IBRD- 82590 IDA-42040 nents	Effective Closed	Date 02-May-2 27-Jun-2	2013	11-Ju 27-D	un-2013 Dec-2007 Revised	Date 02-Aug-2 06-Jun-20	2013	Closin 31-De 30-Ju	ng Date ec-2016 n-2013	Clo 31-1 31-1	sing Date Dec-2017 Dec-2014 %

	g Estimated Disbursements	· · · · · · · · · · · · · · · · · · ·			
FY	16 17	18 19	20		21
Annual Cumulative		70 70 130 200	60 260		40 300
		al Financing for the Third Wat ater Supply Project (PAMSIM			
[X] Loan [] Grant []	IDA Grant			
[] Credit [] Guarantee []	Other			
Total Project Cost:	US\$ 1,069.44 mil	lion Total Bank Financin	g: U	S\$ 300.00 mil	lion
Financing Gap:					
Financing Source	e – Additional Financing ((AF)		Amount in	US\$ million
Borrower					489.86
International Bank for	or Reconstruction and Deve	elopment			300.00
Local Government a	nd Communities				279.58
Total					1069.44
			ł		
Policy Waivers					
Does the project dep	art from the CAS in conten	t or in other significant respects?	P No		
Explanation					
Does the project requ	uire any policy waiver(s)?		No		
Explanation			4		
		Team Composition			
Bank Staff					
Name	Role	Title	Specializa	tion	Unit
George Soraya	Team Leader (ADM Responsible)	Lead Municipal Engineer	Task Team	Leader	GSURR
Dea Widyastuty	Local Government, Project Monitoring and Supervision	Operations Analyst/CoTL	Operations Manageme		GSURR
Pratibha Mistry	Pratibha Mistry Quality Enhancement Senior Water and Sanitation Specialist/CoTL Water and Sanitation				
Budi Permana	Procurement Specialist	Procurement Specialist	Procureme	nt	GGODR
Christina I. Donna	Financial Management Specialist	Senior Financial Management Specialist	Financial N	Aanagement	GGODR
Indira Dharmapatni	Safeguards Specialist	Senior Operations Officer	Social Safe	eguards	GSURR
Krisnan Pitradjaja Isomartana	Environmental Specialist	Environmental Specialist	Environme Safeguards		GENDR
Puti Marzoeki	Health and Hygiene	Senior Health Specialist	Health and	Hygiene	GHNDR
Lina Damayanti	Capacity Building and Sanitation	Capacity Building Specialist	Capacity B Sanitation	building and	GWADR
	Water and Sanitation	Water and Sanitation	Infrastructu		

Djono			Specialist			
Deviariandy Setiawan		Sanitation	Community Development Specialist	Sanitation		GWASE
Doly Pranoto		MIS	MIS Specialist	MIS		GWADR
Gisella Elvir Lokopessy		Program Assistant	Program Assistant	Program A	Assistant	EACIF
Locations						
Country	First A	Administrative Division	Location	Planned	Actual	Comments
Indonesia	North	Sumatra	Sumatera Utara	X	Х	
Indonesia	Aceh		Nanggroe Aceh Darussalam	X	Х	
Indonesia	Daerah	ı Istimewa Yogyakarta	Daerah Istimewa Yogyakarta	X	Х	
Indonesia	South	Sumatra	Sumatera Selatan	X	Х	
Indonesia	West S	umatra	Sumatera Barat	X	Х	
Indonesia	North	Sulawesi	Sulawesi Utara	X	Х	
Indonesia	Sulawe	esi Tenggara	Sulawesi Tenggara	X	Х	
Indonesia	Centra	l Sulawesi	Sulawesi Tengah	X	Х	
Indonesia	South Sulawesi		Sulawesi Selatan	X	Х	
Indonesia	Riau		Riau	X	Х	
Indonesia	East Nusa Tenggara		Nusa Tenggara Timur	X	Х	
Indonesia	Nusa Tenggara Barat		Nusa Tenggara Barat	X	Х	
Indonesia	Maluku		Maluku	X	Х	
Indonesia	Lampu	ng	Lampung	X	Х	
Indonesia	East K	alimantan	Kalimantan Timur	X	Х	
Indonesia	Kalima	antan Tengah	Kalimantan Tengah	X	Х	
Indonesia	South	Kalimantan	Kalimantan Selatan	X	Х	
Indonesia	West F	Kalimantan	Kalimantan Barat	X	Х	
Indonesia	East Ja	va	Jawa Timur	X	Х	
Indonesia	Centra	l Java	Jawa Tengah	X	Х	
Indonesia	West J	ava	Jawa Barat	X	Х	
Indonesia	Jambi		Jambi	X	Х	
Indonesia	Papua		Papua	X	Х	
Indonesia	Bengk	ulu	Bengkulu	X	Х	
Indonesia	Bali		Bali	X	Х	
Indonesia	Banten	l	Banten	X	Х	
Indonesia	Goron	alo	Gorontalo	X	X	
Indonesia	Bangk	a-Belitung	Kepulauan Bangka Belitung	X	Х	
Indonesia	-	u Utara	Maluku Utara	X	Х	
Indonesia	West F		Papua Barat	X	Х	

		Sulawesi Barat		Х	Х		
Indonesia	Riau Islands	Kepulauan Riau		X	Х		
		Institutional Data					
Parent (Thi	rd Water Supply and Sa	nitation for Low Income Com	munities Pro	ject-P0	85375)		
Practice Are	ea (Lead)						
Water							
Contributing	g Practice Areas						
Cross Cuttir	ng Topics						
[] Climate	Change						
[] Fragile,	Conflict & Violence						
[X] Gender							
[] Jobs							
[] Public P	rivate Partnership						
	mate Change						
Sector (Maxi	mum 5 and total % must e	equal 100)					
Major Sector		Sector	%		ptation Co- fits %	Mitigation Co-benefits %	
Water, sanita	tion and flood protection	Water supply	50				
Water, sanita	tion and flood protection	Sanitation	25				
Public Admiı Justice	nistration, Law, and	Sub-national government administration	10				
Public Admiı Justice	nistration, Law, and	Central government administration	15				
Total			100				
Themes							
Theme (Max	imum 5 and total % must	equal 100)					
Major theme		Theme			%		
Rural develog	pment	Rural services and infrastructur	e		3:	5	
Human devel	lopment	Other human development			2:	5	
Social dev/ge	ender/inclusion	Participation and civic engagement			20)	
Human devel	lopment	Other communicable diseases			10)	
Social dev/ge	ender/inclusion	Social Inclusion			10)	
Total					10	0	
TOTAL	a		0	9			
	Consultants (War Required? Yes	ill be disclosed in the Monthly	Operational	Summ	ary)		

I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an additional loan in the amount of US\$300 million to the Indonesia Third Water Supply and Sanitation for Low Income Communities Project (P085375) (IBRD LN 8259 and IDA Credit 4204-IND), and to restructure the current project to ensure consistency with the proposed additional loan. The proposed additional loan would help finance the costs associated with the scale up of PAMSIMAS to a further 15,000 villages, reaching an additional 8 million people with water supply and 7.7 million people with improved sanitation facilities. The proposed changes include: (i) additional financing of US\$300 million; (ii) revision of the project development objective and project results framework; (iii) extension of the original loan closing date by one year to December 31, 2017 and (iv) enhancements to the scope and activities of selected components.

2. **Partnership Arrangements.** The project is being co-financed by a series of Government of Australia's Department of Foreign Affairs and Trade (DFAT) grants totaling US\$ 90.4 million. The grants support water supply infrastructure in selected villages, sanitation interventions through the district-wide implementation of Community Based Total Sanitation, and community empowerment and local institutional development activities. The grant is scheduled to close on September 30, 2017 and will be extended to coincide with the closing date of the additional financing to June 30, 2021. The PDO of the grant will be revised to ensure consistency with the additional financing.

II. Background and Rationale for Additional Financing in the amount of U\$ 300 million.

3. **Alignment with GoI policy.** In the recent National Medium Term Development Plan (RPJMN) 2015-2019 GoI has committed to an ambitious target of achieving universal access to water supply and sanitation by 2019. Through the '100-0-100' program, the Government aims to achieve 100 percent access to safe water, zero slums, and 100 percent access to sanitation facilities. The Ministry of Public Works and Housing, which is the lead implementing agency for PAMSIMAS, has direct responsibility for the 100-0-100 program. Sector policy in Indonesia for achievement of universal access is driven by four key platforms of delivery: (i) the Urban Water and Sanitation Program, (ii) the Regional Water and Sanitation Program, (iii) the Platform for Areas of Water Scarcity, and (iv) the community-based rural water supply and sanitation (PAMSIMAS). PAMSIMAS is regarded as the most cost effective platform to scale-up to universal access in rural and peri-urban areas where water is available and the community driven development (CDD) approach is applicable. The Bank financing is designed as the supporting platform to enable infrastructure spending using the CDD approach, including capacity building, monitoring and sustainability interventions.

4. The project is rated Satisfactory for both implementation progress and achievement of the project development objective. Thus far it has reached about 8 million people with access to improved water services, and about 7.7 million people with access to improved sanitation in more than 10,000 villages. PAMSIMAS is the largest project that has been implemented in the sector with a broad geographic focus and scale, and a targeting mechanism that favors the poor. The project is designed at two levels, to extend new access, and to support performance improvements of existing systems. The scale up of PAMSIMAS will include both the extension of new access and the consolidation of the existing project through targeted sustainability interventions and capacity building at local government levels to ensure that institutional mechanisms are built to ensure post-project sustainability.

5. **Decentralization and Village Law.** Indonesia's transition to democracy in 1998 was followed by a policy of decentralization in 2001 when significant responsibilities were devolved to districts and municipalities. The empowerment of subnational governments over the past decade has made them increasingly critical for achieving Indonesia's service delivery goals. The introduction of the Village Law by the Indonesian House of Representatives in December 2013 was a significant change to the village governance structure by providing for greater accountability of the village government to villagers within

the context of broader changes to the regional autonomy and decentralization framework. PAMSIMAS will continue to build the capacity of sub-national governments for community driven rural water supply and sanitation in project areas, as described in **Annex 1**. Further efforts will be made to build the capacity of local governments to actively manage post-construction support in partnership with associations of BPSPAMS to ensure the institutionalization of ongoing sustainability interventions and enable village governments to direct a portion of the Village Fund to rural water supply and sanitation services. **Annex 1** provides the decentralization context for rural water supply and sanitation service delivery using the CDD approach.

Relationship to Country Partnership Framework. The Systematic Country Diagnosis, 6. completed in 2015, describes three key development pathways for reducing poverty and increasing shared prosperity in Indonesia. It recognizes that eradicating poverty and increasing shared prosperity in Indonesia depends, to a large extent, on closing the country's large infrastructure gap. In spite of substantially increased decentralized public funding for basic services and infrastructure, including water supply and sanitation, the quality of services remains low and unevenly distributed across regions. In response, the draft Country Partnership Framework FY16 – FY20 frames the Bank's support for rural water supply and sanitation around two key engagement areas that are supported by the project: Engagement Area 1: Delivery of National Infrastructure, and Engagement Area 4: Delivery of Local Infrastructure and Services. Under Engagement Area 1 the Bank has a coordinated response to support the ambitious target of eliminating slums and providing universal access to water and sanitation (100-0-100 target), including the end to open defecation, by 2019 at set out in the RPJMN. The Bank proposes to directly support several expanding and new national-level programs. In addition to PAMSIMAS, these include the National Slum Upgrading Program (NUSP) and the National Urban Water Supply Program (NUWSP). The Bank sees its role to help establish regional water supply systems which will increase water sources and production capacity, as well as encourage regional collaboration amongst local governments for a more effective and economically viable service delivery mechanisms. Under Engagement Area 4 the project directly supports the first pillar that aims to strengthen the decentralization framework to improve local service delivery.

Financing. The original PAMSIMAS IDA Credit (CR4204-ID/P085375) (PAMSIMAS I) for 7. US\$137.50 million was approved by the Bank on May 27, 2006 and became effective on June 6, 2008. The original project closing date was June 30, 2013. The project closing date was extended to December 31, 2014 through a Level 2 restructuring on November 27, 2012. Following Credit Effectiveness, a trust fund to support the project was approved through four separate Government of Australia Grants totaling US\$46.40 million equivalent. On April 08, 2013 an additional Government of Australia grant of US\$44 million (TF094792/P116236) was approved by the RVP. On May 02, 2013 the Board approved additional IBRD financing (LN 8259/P129486) for US\$ 99.9 million (PAMSIMAS II). This first additional financing scaled up water supply implementation to an additional 5,000 villages and extended sanitation interventions through district-wide implementation of Community Based Total Sanitation in about 218 districts. The DFAT grant supports (i) Component 1 through the provision of technical assistance to support programspecific training to community facilitators in the field and technical training expertise to support the training of trainers in Methodology Participatory of Assessment/Participatory Hygiene and Sanitation Transformation and Community Led Total Sanitation Program (CLTS); (ii) Component 2 through the provision of grants to Participating Villages; and (iii) Component 3 through the provision of technical assistance and capacity building for quality assurance¹.

8. **Project Development Objective**: The original project development objective was: *To increase the number of low-income rural and peri-urban populations accessing improved water and sanitation facilities and practicing improved hygiene behaviors as part of the Borrower's efforts to achieve WSS-MDGs,*

¹ This includes: (a) a PAMSIMAS implementation adviser; (b) a procurement and safeguards adviser; (c) a monitoring and evaluation baseline survey and impact evaluation consultant; (d) a community hygiene and sanitation behavior change specialist; (e) a management information ystems/knowledge management specialist; (f) a MPA/PHAST and sustainability expert; (g) community-led total sanitation program specialist; and (h) community facilitators.

through programmatic mainstreaming and scaling-up of a nationwide community-driven approach. The wording of the project development objective was changed slightly when the project was restructured on March 22, 2013 to better align with the Gol national program objectives and to reflect the increased emphasis on sustainability. The revised PDO was: To increase the number of under-served and low income rural and peri-urban populations accessing improved and sustained water and sanitation services and practicing improved hygiene behaviors as part of the Recipient's efforts to achieve WSS-MDG Targets, through programmatic mainstreaming and scaling-up of a nationwide community-driven approach.

9. **Overall scope and project components.** PAMSIMAS I and II currently covers 32 out of 34 provinces in Indonesia. By the end of 2016, the project will cover about 11,800 villages out of the total of 72,999 villages in the country, and targeted a total of 11.6 million people with improved water supply and more than 7.7 million people with improved sanitation facilities. The components remained unchanged during project implementation, but their scope was expanded, and costs and financing increased through additional financing. The project is comprised of the following components, and a detailed component description is provided in **Annex 2**.

Component	Description Summary
Component 1: Community Empowerment and Local Institutional Development	Supports facilitators, training and related activities at local community, district and provincial levels for planning and management of water supply and sanitation facilities and hygiene improvement programs using a community driven development approach, building stakeholder commitment and expanding the capacity of central, provincial and district government agencies.
Component 2: Improving Hygiene and Sanitation Behavior and Services	Supports households to access improved sanitation facilities of their choice, use improved water supply and sanitation infrastructure effectively, and progressively adopt key hygiene practices by implementing a phased program of Community-Led Total Sanitation, including school sanitation and hygiene improvement grants and training for provincial and district government units responsible for environmental health and hygiene.
Component 3: Water Supply and Public Sanitation Infrastructure	Finances block grants based on Community Action Plans (CAPs) developed using a community driven development approach in Component 1. Block grants are provided under the following windows: (i) water supply system for new villages; (ii) scaling up and expansion of existing village water supply systems (iii) optimization of existing underperforming village water supply systems.
Component 4: District and Village Grants	Provides incentive grants to participating districts and villages that have met or exceeded predetermined project performance criteria to support expansion and optimization of existing community water supply systems.
Component 5: Implementation Support and Project Management	Provides technical implementation support for the project, including project management services to the implementing agencies.

Table 1: PAMSIMAS Components

10. **Performance.** As of August 7, 2015, the Project provided about 8 million people with access to improved water facilities, and 7.7 million people with access to improved sanitation in 10,287 villages. More than 51% of target communities reached open defecation free (ODF) status, approximately 68% adopted hand washing programs, and approximately 85% of targeted schools improved their sanitation facilities and hygiene programs. 78% of targeted villages have efficiently managed and financed water

supply facilities². Progress towards achievement of the Project Development Objective and Implementation Progress have been consistently rated Moderately Satisfactory or Satisfactory for the past twelve months. Sub-ratings for Financial Management, Project Management, Counterpart Funding, Procurement and Monitoring and Evaluation have also been rated Satisfactory or Moderately Satisfactory. Since 2010 the project has disbursed on or ahead of schedule. There are no overdue audit and other financial management requirements. Further analysis of project performance is provided in the summary of the Implementation Completion and Results Report in **Annex 3**.

III. Proposed Changes

11. The project name was changed to 'Second Additional Financing for the Third Water Supply and Sanitation for Low Income Communities/Community Based Water Supply Project (PAMSIMAS III)' to maintain consistency in the reference to the project in GoI and World Bank documents.

12. **Change in focus.** The scale up will require strong project management capability and institutional capacity for implementation. Collaboration across Ministries, and through central, provincial, district and local government levels is important to align budget priorities and coordinate implementation. The additional financing will shift the focus of Bank financing towards further strengthening the institutional platform for collaboration developed under PAMSIMAS³. This will help facilitate service delivery by leveraging various funding sources and capacities towards the GoI's universal access targets. The bulk of the loan financing will be used for community block grants only in the first year in new participating districts to ensure that the quality and management of the grants is properly institutionalized and sustained by district governments and communities.

13. **Change in PDO.** The PDO will be changed to reflect the project's alignment with the GoI's new policy of universal access to water and sanitation as follows: *To increase the number of under-served rural and peri-urban populations accessing sustainable water supply and sanitation services.* Even though the PDO has been significantly simplified, intermediate outcomes for hygiene behavior change will continue to be tracked in the results framework. The project will continue to target low income communities by prioritizing districts on the basis of: high access gaps in water and sanitation, low and medium district fiscal capacity, and agreement to prepare five year investment plans for rural water supply and sanitation. In addition ongoing project implementation has shown that the lack of access is highly correlated with low incomes levels. **Annex 4** presents changes in PDO indicators and result framework.

14. **Changes by Component.** Lessons learned from the implementation of PAMSIMAS has guided the improved design of the proposed additional financing to support the scale-up as summarized in the Table below. The estimated project cost and financing associated with the components is presented in **Annex 5**.

² These villages have systems that are functioning at more than 80% as designed, have tariff levels are sufficient to cover operation and maintenance costs, and have established a BPSPAM by the decree of village head or other means, have an Annual Work Plan for water supply and sanitation services in place, and have a Partnership Plan in place setting out the multi-sector collaboration with other entities.

³ An important lesson from the ICR was that trust and partnership are essential to the successful implementation of a multi-sectoral CDD project. PAMSIMAS was developed, implemented and scaled-up in a truly collaborative spirit between the implementing agencies and the Bank. This helped the project to resolve unanticipated problems and make necessary changes to implementation arrangements more quickly and effectively than would have been possible under rule-driven working relationships.

Item	Current Project	Proposed change
Overall Project Scope	• 11,800 villages in 218 districts, with the provision of further geographic expansion across 32 provinces.	• Additional 15,000 new villages in up to 412 districts, with the provision of further geographic expansion to 33 provinces. The project will consolidate the achievement and systems built under original scope while it expands to the new villages.
Component 1: Community Empowerment, Local and Village Institutional Development	 A single Community Action Plan for target villages covering all activities funded under the block grant. Community facilitators engaged and trained 	 Component title revised to 'Community Empowerment, Local and Village Institutional Development' to reflect increased institutional development of village governments in support of the decentralization agenda under the Village Law. Addition of sub-component 1.4: Support to Village Governments, for provision of technical advisory services and training to village governments for maintaining and expanding water supply and sanitation services, and advocacy for budget allocations for post- construction activities to enhance sustainability. Community Action Plans for universal access to water supply and sanitation. Procurement of facilitator services on multi- year contracts.
Component 2: Improving Hygiene and Sanitation Behavior and Services	 Sanitation implementation undertaken on a district wide basis under the STBM program approach, but coordinated with Community Action Plan implementation in target villages. One Provincial Health Coordinator per province and one District Level STBM Facilitator per district recruited to provide implementation and capacity building support for District STBM implementation 	 Development of additional models to generate consumer demand for improved sanitation by improving the ability of local markets to respond to that demand. Mainstream the Behavior Change and Communication approach for promoting improved hygiene and sanitation behavior. Standardized training for sanitarian and relevant stakeholders through accredited training modules and e-learning modules. Endorse multi-sector linkages and collaborative work, for example to support the government priority for stunting prevention
Component 3: Water Supply and Public Sanitation Infrastructure	 Block grants are used to finance water supply infrastructure, sanitation infrastructure, expansion of existing village systems and optimization of existing underperforming systems on a cost-sharing basis: Central government 70% District government 10% Community 20% (4% cash, 16% in kind 	 About 4,000 villages will be financed by the loan. Counterpart funds will be used for financing the remaining villages. Village funds will contribute to block grant funding allocations as follows: Central government 60% District government 10% Village fund 10% Community 20% (4% cash, 16% in kind)

Table 2: Overall Scope and Project Components

Item	Current Project	Proposed change
Component 4: District and Village Incentives	 Incentives to participating districts and villages that have met or exceeded predetermined project performance criteria. Grants are used to support complementary activities of expansion and/or optimization of existing community water supply systems. 	 Additional performance grants to well performing district associations of BPSPAMS Support grants to underperforming villages Additional output based incentive grant to districts to extend 100% coverage
Component 5: Implementation Support and Project Management	 Regional Oversight Management Services (ROMS) contracts located in 7 regions to provided support and capacity building for PPMUs and DPMUs in their respective regions. Preparation of sector-wide program for water supply and sanitation 	 Additional ROMS as the geographical coverage is expanded Improved ICT enabled project monitoring, knowledge sharing and training content delivery to enable scale-up The PAMSIMAS approach was accepted as the preferred approach to rural water supply and sanitation

Table 3: Revised Outcome Indicators

Item	Original Targets	Achieved [2]	Revised Targets
Number of additional people with sustainable access to improved ⁴ water facilities	11.6 million	8 million	22.1 million [1]
Number of additional people with sustainable access to improved ⁵ sanitation facilities	7.4 million	7.7 million	14.9 million [3]

[1] Includes increase from 11,800 to about 27,000 target villages.

[2] As of August 7, 2015.

[3] Sanitation target is set lower than the target of water beneficiaries because the current project shows sanitation access tracking water supply access. Access to improved sanitation requires changes in hygiene behaviors and continuous usage of sanitation facilities. Last mile coverage under the additional financing will result in implementation with local governments that have lower capacity than the existing project and the sanitation access is expected to lag.

15. **Institutional Arrangements.** Institutional arrangements will remain the same: the central executing agency is the Ministry of Public Works and Housing (MPWH). Other central government implementing agencies are the Ministry of Health (MOH) and the Ministry of Home Affairs (MOHA). The Ministry of Village, Disadvantage Areas and Transmigration (MOVDAT) will be included in the institutional structure, as detailed in **Annex 6**. MOVDAT will facilitate the Village Fund contribution to the community action plans (CAP) and local institutional development activities. The current project utilizes seven Regional Oversight Management Services (ROMS) teams to support PPMUs and DPMUs for day-to-day project management, technical matters, implementation of community-driven processes, institutional capacity building, social inclusion and environmental safeguards, monitoring of implementation and sustainability of outcomes, and technical and financial reporting at the province, district and village level. To support the scale-up, 18 ROMS teams, will provide support to 33 provinces and 412 districts. At the national level, the project will maintain the Central Management and Advisory Services

⁴ Refer to original PAD: PAMSIMAS adopts the global definitions currently used for monitoring progress towards the MDG targets, i.e. those of the WHO-UNICEF Joint Monitoring Program. JMP definition of Access to safe drinking water is the percentage of the population using "improved" water supply services, which implies the availability of at least 20 liters per person per day from an "improved" source, within 1 Kilometer of the user's dwelling. "Improved" water sources are: Household connection/ Public standpipe/ Borehole/ Protected dug well/ Protected spring/ Rainwater collection.

⁵Refer to original PAD: JMP defines access to adequate sanitation as the percentage of the population using "improved" sanitation, when "improved sanitation" means: Connection to a public sewer, Connection to a septic system, Pour-flush latrine, Simple pit latrine, or Ventilated improved pit latrine. Excreta disposal systems are considered adequate if they are private, and separate human excreta from human beings

(CMAC)⁶ that is responsible for assisting CPMU to manage the program, and Training Development Services (TDS) to manage capacity building activities.

16. **Provision for delivery in remote and challenging areas.** It is estimated that approximately 5-10% of villages targeted will be in very difficult and remote areas. To address this, the implementation arrangements have been adjusted by increasing the number of facilitators from one team of two facilitators for four to six villages to one team of two facilitators for two villages. In addition, the cost estimate is adjusted based on a price index related to the remoteness of the location, for example the price index for Central Java is 0.78, Jakarta is 1, and Papua is 1.4, and additional allocations for transport costs are made. Implementation arrangements in remote areas will be subject to further refinement based on field experiences.

17. **Enhanced use of ICT.** The project will utilize appropriate ICT technologies to enhance implementation support, deliver training and other capacity building activities at the local level, facilitate knowledge sharing and enhance monitoring and oversight. Face-to-face delivery of content will be supplemented by cost effective ICT enabled learning support and feedback tools to provide on-demand ongoing capacity support. ICT will be used strategically to manage the risk of high scale up costs, and improve the efficiency, speed and accuracy of monitoring to facilitate implementation and oversight.

18. **Sustainability**. The additional financing will address long term system sustainability issues by (i) expanding access though the community driven development approach, which enhances sustainability by creating ownership for service delivery and cost recovery by communities through BPSPAMS supported by village governments; (ii) supporting long term operation and maintenance of water supply systems and permanent adoption of sanitation behaviors by strengthening the local governments to conduct ongoing monitoring and post-construction support to BPSPAMS. System sustainability will be strengthened through: (a) increased advocacy to increase or reallocate budgets of local governments for water supply and sanitation provision and for post-construction management; (b) improved monitoring of sustainability outcomes and improved access to results through adoption of the existing MIS into regular central and local government's systems; (c) providing targeted capacity building at village and district levels for operation and maintenance and post-construction support; and (d) mainstreaming incentives and increasing accountability for sustainable outcomes at the district level and (e) facilitation for development and strengthening of associations of BPSPAMS. Further details on sustainability definitions and measurement are provided in **Annex 7**.

19. **Development of associations of BPSPAMS.** The ongoing implementation of PAMSIMAS has demonstrated the natural tendency for strong BPSPAMS to form informal associations to further their service delivery objectives. The additional financing will support BPSPAMS to formalize into associations, and build the capacity of local governments to form partnerships for institutionalizing ongoing technical assistance and capacity building through formal Memoranda of Understanding (MoU). Under the additional financing about 400 associations of BPSPAMS will be strengthened and incentivized to provide: (i) technical assistance for preventive and corrective maintenance of water supply and sanitation systems operated by BPSPAMS; (ii) facilitation support for major technical maintenance; (iii) training to systems operators; (iv) promotion of health and hygiene education in the communities in cooperation with local health agencies; (v) improved management competencies in BPSPAMS, and (vi) establishment of partnerships with various stakeholders to facilitate service expansion of BPSPAMS. Performance criteria will be based on: (a) work program and performance, (b) geographical spread, (c) ability to facilitate issues to improve service performance, and (d) partnership with local government or other parties.

20. **Complementary technical assistance from the Water and Sanitation Program (WSP).** The Water and Sanitation Program (WSP) will leverage in-country and global experience to provide continuous support to the Government of Indonesia to build and strengthen institutions that support community-based management of rural water supply and sanitation. Technical assistance to support the project is designed

⁶ CMAC is a generic title for the central management and advisory services function. GoI may adopt an alternative title for this function.

around three pillars: a) development and implementation of a nation-wide rural water and sanitation capacity building framework to augment the number and improve the quality of decentralized human resources in support of the Government's 100-0-100 program; b) institutionalization of the local government role in rural water supply and sanitation service provision in accordance with the 2014 Village Law and Local Government Law, among others to strengthen their role on monitoring and evaluation; and c) development of sustainable financing options for community-based organizations to increase service access and ensure continuity of service delivery. These are detailed in **Annex 8**.

Summary of Proposed Changes	
Change in Implementing Agency	Yes [] No [X]
Change in Project's Development Objectives	Yes [X] No []
Change in Results Framework	Yes [X] No []
Change in Safeguard Policies Triggered	Yes [] No [X]
Change of EA category	Yes [] No [X]
Other Changes to Safeguards	Yes [] No [X]
Change in Legal Covenants	Yes [] No [X]
Change in Loan Closing Date(s)	Yes [X] No []
Cancellations Proposed	Yes [] No [X]
Change in Disbursement Arrangements	Yes [] No [X]
Reallocation between Disbursement Categories	Yes [] No [X]
Change in Disbursement Estimates	Yes [] No [X]
Change to Components and Cost	Yes [X] No []
Change in Institutional Arrangements	Yes [] No [X]
Change in Financial Management	Yes [] No [X]
Change in Procurement	Yes [] No [X]
Change in Implementation Schedule	Yes [] No [X]
Other Change(s)	Yes [] No [X]

Development Objective/Results

Project's Development Objectives

Original PDO

To increase the low-income rural and peri-urban populations accessing improved water and sanitation facilities and practicing improved hygiene behaviors, through programmatic mainstreaming and scaling-up of a nationwide community-driven approach to WSS-MDGs.

Current PDO

To increase the number of under-served and low income rural and peri-urban populations accessing improved and sustained water and sanitation services and practicing improved hygiene behaviors as part of the Borrower's efforts to achieve WSS-MDG Targets, through programmatic mainstreaming and scaling-up of a nationwide community-driven approach.

Proposed change to PDO

To increase the number of under-served rural and peri-urban populations accessing sustainable water supply and

sanitation servi	ices.								
			Compliance						
Covenants - Additional Financing (The National Rural Water Supply and Sanitation Project (PAMSIMAS III - P154780)									
Source of Funds	Finance Agreement Reference	Description of Covenants	of Date Due	Recurrent	Frequency	Action			
				X					
The loan agree			ncing reflects the largel	y the same co	ovenants as the pr	evious legal			
Conditions									
Source Of Fu	und	Name		Туре	<u>.</u>				
Source of Fe	unu			Турс					
Description of	of Condition								
The second add	ditional loan is	s subject only to the s	tandard conditions of	effectiveness					
		subject only to the s	Risk		HHHRISKS				
Risk Category	7				Rating (H, S,	M, L)			
. Political and					M				
2. Macroecono	mic		Μ						
3. Sector Strate	egies and Polic		L						
4. Technical D	esign of Proje	ct or Program			L				
5. Institutional	Capacity for 1	Implementation and S	Sustainability		S				
6. Fiduciary					М				
7. Environmen	t and Social				L				
8. Stakeholders	5				L				
9. Other					-				
OVERALL					Μ				
			Finance						
Loan Closing Project (PAM			he National Rural W	ater Supply	and Sanitation				
Source of Fun	ds		Proposed Additio	nal Financiı	ng Loan Closing	Date			
IBRD			December 31, 202	0					
	anitation for 1	Low Income Comm	Second Additional Fin unities/Community B						
Source of Fund	Currency	Category of Expenditure	Allocation		Disbursement %(Type Total)				
			Proposed (U\$ Mi	llion)	Proposed				

IBRD	USD		300	28%		
GOI & Community	USD		769.44	72%		
		Total:	1,069.44			
			Datasheet8259			
IV. Appraisal Summary						

Economic and Financial Analysis

Explanation:

The EIRR of the 77 fully functioning subprojects in the sample used for the economic analysis was estimated at 44.0 percent. The EIRR of the adjusted benefit and cost streams (also taking partly and non-functioning subprojects into consideration) was estimated at 36.1 percent, which is far higher than the Bank's minimum required rate of 12 percent, and comparable to EIRRs observed for piped water supply systems financed by other CDD programs in Indonesia.⁷ The economic benefits of additional value of incremental water were highest, accounting for 62 percent of the present value of the benefit streams, followed by benefits from non-incremental costs. Benefits from incremental tariff revenue were not significant. The large margin of economic benefits indicates that increased costs from implementation in remote areas will be economically viable. The detailed economic analysis is provided in **Annex 9**.

Technical Analysis

Explanation:

Based on the experiences in the ongoing PAMSIMAS project, typical investments under Component 3 are water reservoirs or tanks, intake structures, bore-wells, transmission and distribution pipes, and public hydrants and household connections. Grants under Component 4 are commonly used to expand existing systems or optimize underperforming water systems, and the types of investments are similar to Component 3. The village grant amount varies depending on the needs of the community, but averages US\$ 27,000 per system. As is the case in the ongoing PAMSIMAS project, the average investment size for subprojects is relatively small.

Social Analysis

Explanation:

The World Bank Indigenous Peoples OP/BP 4.10 safeguards policy was triggered. The Project remains Category B and no additional safeguard policies are triggered. The project will continue operate on the basis of the community driven development approach and is unlikely to lead to significant adverse social impacts.

The key social issue identified is the potential exclusion of vulnerable or disadvantaged people, such as women, the poorest, ethnic minorities and indigenous peoples (if they are present), either in the selection of the participating villages or in the community decision making process. The inclusion of vulnerable and disadvantaged people is assured by the use of the Methodology for Participatory Assessment as successfully implemented under WSLIC-2, PAMSIMAS, PAMSIMAS AF I. This is a comprehensive method for community social assessment that recognizes the importance of gender and poverty-sensitive approaches, and is integrated in project specific guidelines, training and monitoring. Initial screening showed the presence of indigenous peoples in 125 districts. Confirmation on the existence of indigenous

⁷ See for example, *Laporan Akhir Studi Skala Kecil Analisis Manfaat Ekonomi Proyek Infrastruktur PNPM Mandiri Perdesaan.* PNPM Support Facility. July 2012.

people communities will be carried out during the selection of participating villages during project implementation and potential impacts will be identified during the participatory community social mapping exercise.

The Safeguards Thematic Review conducted by the Indonesia Country Management Unit from 23 February to 9 March 2015 showed that the involvement of women in the project is growing, particularly in decision making roles in Community Boards of Trustees and BPSPAMS.

The project will continue the voluntary land donation process as successfully implemented in WSLIC-2, PAMSIMAS, PAMSIMAS AF I. Experiences to date have showed that subprojects require a relatively small amount of land, which is voluntarily contributed by landowners, with good consultation among community members. Voluntary land contribution has provided positive benefits to communities because facilities are located closer to the beneficiaries and the ready availability of land expedites construction of subprojects.

The updated Environmental and Social Safeguards Framework (ESSF) was disclosed on September 29, 2015 and includes an Indigenous Peoples Planning Framework (IPPF), the screening and identification of the presence of Indigenous Peoples communities, procedures and requirements for preparing the Social Assessment (SA) and Indigenous Peoples Plan (IPP).

Environmental Analysis

Explanation:

The World Bank Environmental Assessment OP/BP 4.01 safeguards policy was triggered. The Project remains Category B and no additional safeguard policies are triggered. The project will continue to operate with a community-based approach for the provision of water supply and sanitation services and is unlikely to lead to significant adverse environmental impacts. Potential site-specific environmental impacts in subprojects under the additional financing are expected to be similar to the experience in WSLIC-2, PAMSIMAS and PAMSIMAS AFI, for which an appropriate approach to safeguards management and adequate levels of mitigation were reported. Environmental impacts are likely to be associated primarily with the community water supply component (Component 3) and, to a lesser extent, the district and village development grants (Component 4). Both these components will provide grants for communities to plan, build and manage water supply systems based on a menu of possible technical options. The scale of most subprojects is expected to be small, and no major adverse environmental impacts are expected. In addition, the technical options will not include options that are known to lead to significant residual environmental impacts or place a substantial environmental management responsibility on local communities during the operational phase. Net environmental benefits are expected to accrue from the environmental sanitation improvements as a result of the project. The Environmental and Social Safeguards Framework (ESSF) has been reviewed and updated to incorporate recent regulatory changes in Indonesia's environmental assessment policy, and lessons learnt from the ongoing project. The Appraisal ISDS was disclosed on September 30, 2015.

Financial Management

Explanation:

Financial Management (FM) arrangements under the on-going project will continue to apply to the additional financing. The design of the additional financing will continue to provide substantial technical assistance support in these areas. The CPMU will ensure the DIPA availability to avoid delay in implementation. The CPMU will continue strengthening its oversight by enforcing the chain of monitoring and spot checks of FM performance from the provincial level down to district and Community Facilitators and ensure better quality of monitoring. The CPMU will further improve payment verification processes by implementing guidelines for the verification team, including random third party confirmation, and by improving accountability of the verification team through official appointment of

team members and ensuring that a verification report is produced for every consultant invoice. The existing project audit reports for FY 2014 have been submitted in a timely manner with unqualified (clean) opinions. The CPMU will follow up on outstanding audit findings audit and inform the Bank on the status. The project fund flows are detailed in **Annex 10**.

Disbursement Arrangements: The applicable disbursement method will be (1) Advance, (2) Direct payment, and (3) Reimbursement. A Designated (Special) Account (DA) denominated in US dollars will be opened by DG Treasury (MOF) in Bank Indonesia (the Central Bank). The DA will be solely used to finance eligible project expenditures. The ceiling of the advance to DA will be variable, and the advance will be made on the basis of the six month projected expenditures. The use of the DAs funds and expenditures would be reported in the quarterly IFRs (Interim Financial Reports), which should be submitted to the Bank not later than 45 days after the end of each quarter. Application for the advance to the DA shall be submitted together with the reporting on use of DA funds, which will consist of: (a) IFRs and list payments for contracts under the Bank's prior-review, (b) projected expenditures for six months, and (c) the DA reconciliation statement.

Allocation of the Loan Proceeds

In Indonesia, financing arrangements for Bank projects implemented by Central Government Agencies are governed by Integrated Budget, or DIPA. Source of financing for project activities, including financing percentage, are detailed in DIPA and strictly followed. For this additional financing, disbursement category setup and description and allocation are in the table below.

Category	Amount of the Loan Allocated (USD Million)	% of Expenditures to be Financed	
 Goods, consultants' services, non-consulting services, workshop and training under Parts A.1(a), A.2, A.3, A.4, B, C, D.4 and E of the Project as set out in the Legal Agreement 	125,030,000	80% of consultants' services, and non- consulting services; 100% of goods, workshops and training	
(2) Grants under Part C of the Project as set out in the Legal Agreement	62,970,000	100% of Grant amount disbursed	
(3) Consultants' services and non-consulting services under Part A(1)(b) of the Project	112,000,000	100%	
TOTAL	300,000,000		

Procurement

Explanation:

Procurement for this project is undertaken in accordance with the methods and procedures set out in: (i) the Loan Agreement and the agreed Procurement Plan; (ii) Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants, January 2011, revised in July 2014; and/or (iii) Guidelines: Selection and Employment of Consultants under IBRD Loans & IDA Credits & Grants by World Bank Borrowers, January 2011, revised in July 2014. Procurement under the National Competitive Bidding (NCB) method may be carried out following Gol's procurement regulations under Presidential Decree 54/2010 and its amendment subject to the improvements listed in the NCB-Annex to the Loan Agreement. With support from the Bank, the PMU will conduct an appraisal to prepare the Procurement Strategy for Development, which will include market analysis of the potential consultants, contractors and suppliers in the market, the potential procurement risks and planned

mitigation strategy This will be used to propose the most appropriate procurement arrangements suited for the Project. The Bank will also assist the CPMU in finalizing the Procurement Plan. Once the procurement plan is approved by the Bank, it should be uploaded and published in the MPWH's website as well as UNDB online. The Procurement Plan will be updated in agreement with the Bank at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity within the project.

Procurement of works and goods (materials) for small infrastructure will be carried out by the community and will follow Community Participation in procurement method, using forms and procedures as defined in the updated Project Operation Manual. Revisions and improvements to the POM may be needed based on the experience and lesson learned from the previous project for further enhancing competitiveness, transparency, and accountability of procurement at the community level.

Procurement for the additional financing will be generally under the same arrangements as the ongoing project and will include: (a) consulting services for the central management and advisory services (CMAC) and project benefit monitoring and evaluation (PBME) team, individual selection at provincial level for facilitator in the first year of implementation, and advisory consultants at national levels to assist PIUs in the project supervision and management, (b) non-consulting services for the regional oversight and management services of facilitators and consultants, including delivery of training at district and provincial levels and service provider for facilitator administration services at provincial level, and (c) small-value civil works such as small community water supply and sanitation infrastructure schemes expected to be procured through community participation procurement methods.

The current Procurement Committee/Pokja ULP under Directorate General of Human Settlement (DGHS) of the Ministry of Public Works and Housing will continue to be responsible for carrying out procurement under this project. The committee staff have experience with procurement under Bank-financed projects. The procurement of service provider for facilitator administration services will be carried out at provincial level. The Bank will provide procurement training in order to enhance the capacity and understanding of the CPMU and the procurement committee/Pojka ULP on Bank procedures and guidelines.

In addition to the Bank's prior review, it is recommended that at least one implementation support mission to visit the field be conducted each year during the project duration.

Risk

Overall risk rating is **Moderate**. The substantial risk identified for the scale up is for Institutional Capacity for Implementation and Sustainability, and for sufficient allocation of counterpart funds. Government commitment is strong and the government has committed the relevant Ministries to allocate sufficient funds for counterpart financing. Village Funds may not be available in the early years of implementation and the allocation may be sought from other sources of counterpart financing. The Ministry of Public Works has strong implementation capacity nationwide for PAMSIMAS and has demonstrated capacity for large scale delivery under the urban National Program for Community Empowerment (PNPM). The scale up of project activities in more challenging implementation contexts presents the risk of implementation delays due to project management deficiencies, start up delays, delayed mobilization of technical assistance resources, and inadequate local capacity in the new districts and villages. The project will continue to provide technical assistance to the CPMU, and PPMUs and DPMUs will supported through significantly expanded Regional Oversight Management Services. Community facilitation teams will be expanded for remote areas.

21. **Gender and Inclusion.** The project uses several approaches to give women in Indonesia a voice in WSS decision-making. Communities plan and implement WSS improvements of their choice. The project includes rules aimed at widening community participation in decisions, specifically targeting women for greater project success. The Gender Action plan, included in **Annex 11**, has been developed for the project that requires a minimum 30% representation of women in BPSPMAS. The project will also support mobile-based monitoring systems, gender sensitivity tools, and social audits to enhance accountability of service providers. The community level process makes poverty targeting and gender equity transparent and verifiable by all stakeholders. Selection of Facilitators plays a critical role in building awareness of gender equality within the community and in facilitating gender-sensitive processes. Facilitators play a role in encouraging women to participate in decision-making as the primary managers of household water. Basic gender training, followed up by on the job training and mentoring, has built the gender-sensitive facilitation skills of facilitators.

22. The Project Technical Guidelines define the methodology and approach to be applied throughout the Project cycle, from planning to operational and maintenance stage, which will assure the inclusion of vulnerable and disadvantaged people. The additional financing will continue to apply the Methodology for Participatory Assessment, which is a comprehensive method for community social assessment that recognizes the importance of gender and poverty-sensitive approaches. This approach supports the inclusion of women and poor, which is further supported by the project policy, available training opportunities and monitoring. Evidence shows that women's preferences are reflected in the design of community facilities, and that women gained greater voice in water management committees through increased access to training.

23. **Citizen Engagement.** At community level, citizen engagement is ensured through the use of the Methodology of Participatory Approach (MPA) throughout the project cycle. The MPA is a comprehensive method for community's social assessment, which also recognizes the importance of gender and poverty-sensitive approaches. The MPA is based on participatory inventories and analysis with focus groups, adequate representation of the various sections of the community is critical. The MPA uses a sequence of participatory activities. It allows opportunities to choose different tools for the same purpose or developing and using a variety of tools. The sequence itself is flexible and is adjusted to the convenience of the participating groups. The process allows for the expression and analysis of diversity by ensuring that a wide range of different actors are involved and their perspectives and realities are accurately represented. In all cases, women and men, better- and poor, local leaders, and user and non-user groups have participated. To ensure wide engagement of community, especially in the large communities with 1,000 households or more, the MPA process will be conducted from sub-village level (dusun), and the results discussed in plenary meeting at village level attended by representatives of various sections of the community.

24. At district level, citizen engagement is channeled through the partnership committee (PAKEM) that is responsible for village selection, evaluation of the community action plans (CAP), and monitoring of progress and results. PAKEM consist of government and non-government members, with the ratio of 4:5. The non-government members include a variety of stakeholders, such as civil society, academia, practitioners of WSS, etc. At the village selection process, citizens are engaged for ensuring that the process is transparent and accountable. The short-listed villages, which have been reviewed by PAKEM against eligible criteria and needs, are posted in public places including in sub-district and village levels for five days before the decision is made. Citizens can submit objections or complaints to PAKEM and District Government should they find that the process is not transparent and accountable. For long term sustainability the formation of the associations of BPSPAMS is supported in all the project districts. **Annex 12** presents project cycle at village and district levels.

V. World Bank Grievance Redress

25. 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 <u>http://www.worldbank.org/GRS</u>. For information on how to submit complaints to the World Bank Inspection Panel, please visit <u>www.inspectionpanel.org</u>.

ANNEX 1

DECENTRALIZATION OF SERVICE DELIVERY

1. Indonesia's transition to democracy in 1998 was followed by a policy of decentralization in 2001 when significant responsibilities were devolved to districts and municipalities. The empowerment of subnational governments over the past decade has made them increasingly critical in achieving Indonesia's service delivery goals. The assignment of new functions was accompanied by a reallocation of budgets, with subnational-governments now managing about half of total core public spending. PAMSIMAS was designed and launched in the post-decentralization era primarily as a capacity building initiative for scaling up water supply and sanitation services to meet MDG targets through local governments.

2. The introduction of the Village Law by the Indonesian House of Representatives in December 2013 was a significant change to the village governance structure by providing for greater accountability of the village government to villagers within the context of broader changes to the regional autonomy and decentralization framework. Under this law 72,999 villages in the country will receive a cash transfer equal to ten percent of the state budget earmarked for regional administration. Once the law is fully implemented villages will receive significantly increased financial transfers, varying from two to ten times current levels.

3. PAMSIMAS has made significant gains in empowering local communities to plan and manage their own water systems through the establishment of village BPSPAMS and has enhanced the role of subnational governments in planning, project management, and post-construction support. PAMSIMAS develops capacity at sub-national levels of government to exercise responsibility for rural water supply and sanitation services by aligning fiscal, financing, regulatory, and administrative responsibilities between local, district and provincial government levels, and building relationships of accountability between the responsible levels of government. Citizens are able to hold the government agencies responsible through the establishment of a complaints line. The additional financing will provide further support to subnational governments to coordinate and leverage their budgets and central government grants to support the achievement of universal access targets. In support of the further decentralization under the Village Law, PAMSIMAS will include additional activities to enable village governments to synchronize water and sanitation services in village development plans. Current sub-national government agency responsibilities under PAMSIMAS are presented as follows.

4. **Provincial level:** Each provincial government has a Provincial Water and Sanitation Working Group (Pokja AMPL), chaired by Bappeda and consisting of representatives from the provincial offices of Public Works, Health, and Community Empowerment Agency as well as provincial agencies responsible for community development and civil society, is responsible for coordination of the planning and implementation of the program. The Provincial Project Management Unit (PPMU) consists of members from the Department of Public Works-Settlements, BPMD, Public Health Service, and other relevant agencies, with the responsibility for financial planning and reporting, progress monitoring and evaluation, complaint handling, and management of consultants and facilitators. PPMU is assisted by the Provincial Project Implementation Unit (PPIU) to carry out the planning, implementation, monitoring, control and evaluation of the program

5. **District Level:** The District Government is in charge of the implementation of PAMSIMAS, assisted by the District Project Management Unit and District PIU. Each participating district government has established a District Water and Sanitation Working Group (District Pokja AMPL) chaired by the district Bappeda office and membership from the district offices Public Works, Health, District Water Utility Company and district agencies for community development and civil society. The role of District Pokja AMPL is to facilitate synchronization of district planning and implementation, establishing a list of target villages, monitoring and reporting, and complaints handling. The District Project Management Unit (DPMU) consists of the Department of Public Works, Public Health Service, BPMD and other relevant agencies. The main task of DPMU is to report on the progress and performance of the program, financial reporting, performance management of BPSPAMS, performance management of consultants and facilitators. PAMSIMAS builds the capacity of district governments to leverage funds from district budgets for maintaining and expanding the system.

6. **Village Government.** In the implementation of the program at the village level, the role of the village government is to facilitate the implementation of the program in the village, including socialization, facilitation, mediation and coordination responsibilities. The Village Head is tasked to facilitate socialization activities and village meetings, co-signs the Community Action Plan and facilitates the formation of the BPSPAMS. The village government is assisted by the Facilitators, tasked to help smooth the process of preparation and implementation of activities in follow up to village meetings. The Facilitator facilitates the development of Community Action Plans which sets out planning and implementation activities defined by the community, supports the capacity building of the BPSPAMS and facilitates the handover of the management of the systems to the BPSPAMS.

7. PAMSIMAS is therefore creating strong capacity for water supply and sanitation service delivery through a community driven development approach. This allows sub-national governments to extend coverage to non-project areas to meet universal access targets, and provide technical assistance and post construction support to support system sustainability. Strengthened sub-national governments are important drivers for further decentralization, as demonstrated in the international examples cited below.

Box 1: Experience in Decentralization of Service Delivery in Bangladesh and India

Decentralization in Bangladesh

Bangladesh has historically experienced a strong distrust of government decentralization initiatives, and is characterized by a highly centralized public sector, and centralized delivery mechanisms, resulting in extremely low levels of spending on local service delivery. The World Bank financed Local Governance Support Project assisted the government of Bangladesh to strengthen the lowest tier of local governments by providing unconditional block grants, delivered through a transparent and predictable transfer system, to deliver services that met community priorities. Increased resources and discretion were coupled with strong accountability systems that included community participation and oversight. Local governments become directly accountable to citizens for service delivery. Expanding the government of Bangladesh's block grant program was seen as an important and strategic opening to strengthen local governments in rural areas and to catalyze the emergence of an effective system of local governance. The acceptance of UPs as a legitimate tier of local government and the existence of Union Parishad block grants made this approach immediately feasible.

Report No: ICR00002017, Implementation Completion And Results Report (IDA-41930) on a Credit in the Amount of SDR 76.3. Million (US\$ 115.5million Equivalent) to the People's Republic of Bangladesh for a Local Governance Support Project March 30, 2012

Decentralization in the State of West Bengal, India

Democratic decentralization in West Bengal, India, was driven by a strong ruling party that mobilized constituencies that were traditionally excluded from national policymaking and led to a significant flow of untied funds at the discretion of local village councils for developmental purposes. The party's ideological commitment to the poor was crucial in creating the basis for successful decentralization, introducing and supporting an institutional structure for local self-governance and democracy, and leading to increased representation of the poor and marginalized.

Crook, R.C., and Sturla Sverrisson, A. 1999, 'To What Extent Can Decentralized Forms of Government Enhance the Development of Pro-Poor Policies and Improve Poverty-Alleviation Outcomes?', Institute of Development Studies

ANNEX 2

DETAILED DESCRIPTION OF PROJECT ACTIVITIES

1. **Project Development Objective** is *to increase the number of under-served rural and peri-urban populations accessing sustainable water supply and sanitation services.* The project will continue on the basis of the existing mechanisms and components to achieve the PDO. It will consolidate the achievements, systems and services developed under the original scope, as well as expand services to new villages. The project has five components:

Component 1: Community Empowerment, Local and Village Institutional Development US\$ 152.07 million (IBRD US\$ 140.07 million, GoI US\$ 12 million)

2. **Sub-component 1.1: Implementation of CDD processes at community level.** Provision of technical advisory services, recruitment of community facilitators and training for both governmental and non-governmental organizations, facilitators and participating communities to support the preparation and implementation of Community Action Plans (CAPs) for universal access, focusing on informed choice, design and costs of community and school water supply and peri-urban sanitation services, community and school hygiene behavior change activities, school sanitation facilities and post-construction management and sustainability. Provision through project financing of technical advisory services, facilitators and training for participating communities, baseline data collection and verification of outputs as qualification for the output based grant.

3. **Sub-component 1.2: Development of mechanisms and capacities of provincial, district and subdistrict institutions for quality program management.** Provision of technical advisory services and training to strengthen inter-agency cooperation at the Province and District-level and to develop the institutional capacity of the units, teams and related personnel involved in the implementation of the Project, including development and revision of guidelines and manuals, and training materials to ensure compliance with the relevant rules and procedures, and integration of critical operations for post-construction management into existing GoI functions.

4. Subcomponent 1.3: Development of mechanisms and capacities of provincial and district institutions for scaling up and mainstreaming community driven water supply and sanitation. Provision of training, through the recruitment of a Training and Development Service team at the national level to provide support to PPMUs and DPMUs, including strategic planning, preparation and quality assurance for training and capacity building activities. Implementation of a program of activities designed to support capacity building and advocacy activities for government and civil society to improve overall water and sanitation delivery, encourage reallocations in overall local government budgets in favor of community driven development for water supply and sanitation service delivery and promote post-construction innovations to enhance sustainability of services.

5. Subcomponent 1.4: Development of mechanisms and capacities of village government for maintaining and expanding water supply and sanitation services. Provides capacity building and advocacy activities for village governments to maintain and expand water and sanitation services, encourage allocation of village government budgets to promote post-construction activities to enhance sustainability of PAMSIMAS-supported water supply and sanitation services. The activities will include: integration of water and sanitation expenditure into the mid-term and annual development plans of village government, and facilitation to increase village government's expenditure to maintain and expand the existing water supply facilities.

Component 2: Improving Hygiene⁸ and Sanitation Behavior and Services US\$73.39 million (IBRD US\$ 29.48 million, GoI US\$ 43.96 million)

6. **Sub-component 2.1: Total Sanitation Program.** Provision of technical advisory services and training to support implementation of a phased program of community behavior change, consisting of the promotion of the community-led total sanitation (CLTS) approach to safe excreta management, hand-washing and other locally relevant environmental sanitation practices, including water storing and handling, food hygiene, solid waste and wastewater management and water quality surveillance. Enhancement of sanitation progress and ODF status monitoring, including the introduction of incentive mechanisms for sanitation data collection by field sanitation officials at sub-district level, improvement of monitoring of improved hygiene behaviors and increasing sanitation data use for program planning.

7. **Sub-component 2.2: Sanitation & Hygiene Marketing Program.** Provision of technical advisory services and training and carrying out of studies to support a sanitation and hygiene marketing program designed to generate consumer demand for improved sanitation, facilitate the ability of local markets to respond to this demand, and promote improved hygiene behavior.

8. **Sub-component 2.3: School Hygiene and Sanitation Program.** Provision of technical advisory services and training to support school-based hygiene promotion training and facilitation, and facilitate school-based hygiene promotion programs and health education programs.

9. **Sub-component 2.4: Strengthening Local Sanitation and Hygiene Units.** Provision of technical advisory services and training to strengthen the capacity of units responsible for environmental health and hygiene promotion in participating provinces and districts to monitor progress in meeting their water supply and sanitation targets, assess performance of their sanitation and hygiene programs and evaluate their impact on hygiene behavior.

Component 3: Water Supply and Public Sanitation Infrastructure US\$ 437.50 million (IBRD US\$ 62.97 million, GoI US\$ 182.04 million, Village, Local Government and Communities US\$ 192.49 million)

Provision of community block grants for participating communities with a menu of technical options 10. for rural water supply and public sanitation infrastructure. Block grants to support water supply infrastructure under community action plans include (i) water supply system for new villages; (ii) scaling up and expansion of existing village water supply systems (iii) optimization of existing underperforming village water supply systems. These are conducted through the design, construction and commissioning and operation of water supply infrastructure at the community level based on a menu technical options, including rapid technical assessments and community water supply and sanitation situation analysis to determine water demand and system options, informed water system technology choice, technical surveys and development of the detailed engineering designs, construction, supervision and quality control, and operations and maintenance training. The community will be fully responsible for operation and maintenance costs. In addition, each participating district government will agree to implement a sharing program, fully funded from the local government budget for a number of additional communities. The block grant per participating communities is constituted by funding contributions as follows: Central government 70%, Community 20% (4% cash, 16% in kind) and Village fund 10%, and for sharing program is District government 70%, Community 20% (4% cash, 16% in kind) and Village fund 10%. This component will finance the costs for implementation of the physical WSS facilities, school and community hygiene

⁸ Hygiene definition (refer to original PAD): "firstly elimination of open-defecation; secondly hand washing after defecation, handling infant feces and before touching food; thirdly other hygiene behaviors prioritized by target communities"

promotion, capacity building for community management, procurement of materials and equipment needed for construction, and development of a construction schedule and labor management plan (including identification of external skilled labor and civil works contractors, if required, to be contracted and supervised by the community). Technical assistance to determine water demand and system options, engineering design options, operational and maintenance training, and water source assessment will be financed under Component 1.1.

Component 4: District and Village Incentives US\$ 303.93 million (IBRD US\$ 6 million, GoI US\$ 210.84 million, Village, Local Government and Communities US\$ 87.09 million)

11. **Sub-component 4.1: Incentives Grant to Districts.** Provision of incentive grants through counterpart financing to participating districts that meet or exceed predetermined project performance criteria. Districts that have demonstrated good practice in their support of CDD WSS, have exceeded implementation targets, and management information system performance will be rewarded with incentive grants to further expand and sustain the program in their District.

12. **Sub-component 4.2: Incentives Grant to Villages.** Provision of incentive grants through counterpart financing to participating villages that meet or exceed predetermined project performance criteria, including achievement of component specific objectives of hygiene, community mobilization and contribution, and water supply and sanitation coverage to support complementary activities in view of scaling up and expansion of existing water supply and sanitation services. Provision of incentive grants through counterpart financing from the Rural Water Grant Program to villages on an output basis where community block grants are pre-financed by district governments.

13. **Sub-component 4.3 Support Grants for under-performing villages.** Provision of support grants through counterpart financing to participating villages that are yet to meet predetermined project performance criteria based on the participating village's achievement of component specific objectives of hygiene, community mobilization and contribution, and WSS coverage to support complementary activities for the purpose of supporting WSS system improvement and institutional performance.

14. **Sub-component 4.4 Grants to associations of BPSPAMS.** Provision of support to district associations of BPSPAMS to provide: (i) technical assistance for preventive and corrective maintenance of water supply and sanitation systems operated by BPSPAMS; (ii) facilitation support for major technical maintenance; (iii) training to systems operators; (iv) promotion of health and hygiene education in the communities in cooperation with local health agencies; (v) improved management competencies in BPSPAMS, and (vi) establishment of partnerships with various stakeholders to facilitate service expansion of BSPAMS. The grant amount will be based on: (a) work program and performance, (b) geographical spread, (c) ability to facilitate issues to improve service performance, and (d) partnership with local government or other parties.

Component 5: Implementation Support and Project Management US\$ 102.55 million (IBRD US\$ 61.53 million, GoI US\$ 41.02 million)

15. **Sub-component 5.1: Central Management Advisory Consultant to the Central Project Management Unit.** Provision of technical support, management, advisory services and training, through the recruitment of Central Management and Advisory Consultants (CMAC) and individual advisory consultants to provide support for the benefit of CPMU, in terms of overall project management, monitoring of implementation and outcomes, expansion of the national water supply and sanitation program, and technical and financial reporting, as well as in the fields of sustainable water supply and sanitation, hygiene promotion, capacity building, institutional strengthening, social and environmental safeguards and community empowerment, including improved project monitoring using the latest ICT technologies for (i)

data collection, data verification, and data use; (ii) enhanced grievance redressal mechanism to improve community feedback and response mechanisms. Provision of technical advisory services and training through a Training Development Services (TDS) team to deliver training for management and implementation of the project.

16. **Sub-component 5.2: Regional Management Advisory Consultants to the PPMUs and DPMUs.** Provision of technical advisory services and training , through the recruitment of Regional Oversight Management Services (ROMS) teams for the benefit of PPMUs and DPMUs, in terms of day-to-day project management, technical matters, implementation of community-driven processes, institutional capacity building social inclusion and environmental safeguards, monitoring of implementation and sustainability of outcomes through well-established MIS, and technical and financial reporting at the province, district and village level.

17. **Sub-component 5.3: Independent Project Evaluation.** Provision of advisory consultant team for planning and programming at the national level and a Project Benefit Monitoring and Evaluation Team to assist the CPMU for baseline and impact evaluation for the project.

ANNEX 3

SUMMARY OF IMPLEMENTATION COMPLETION AND RESULTS REPORT

Introduction

1. **ICR.** The current closing date of PAMSIMAS is December 31, 2016, and a supplemental ICR will be submitted to the Bank's Internal Evaluation Group within six months from closing. In July 10, 2015, the Bank completed the preparation of ICR to inform decision-makers about the status of the project as of 30 June, 2015, so as to make better informed decisions about a second round of Additional Financing of US\$300 million, which GoI requested from the Bank in the second half of 2014. The annex summarizes the findings of the ICR.

Key Factors Affecting Implementation and Outcomes

2. **Project preparation, design and quality at entry**. The design of PAMSIMAS was based on WSLIC-2, which was being implemented at the time of appraisal, but modified to reflect lessons learned from the implementation of its predecessor projects. The project development objectives were highly relevant and corresponded to the Government's own plans and priorities. The results framework is deemed adequate; it consisted of a relatively small number of well-defined and relevant performance indicators. However, the project design did not provide a definition of the term 'sustainable' so that it was not clear how the project would measure increases in sustainable access to water supply and sanitation facilities, and no provision was made for the assessment of health and other economic benefits. GoI's commitment to the project was strong and involved stakeholders at central as well as local level, including NGOs and community-based organizations. The overall project risk was rated Moderate. The risks assessment and mitigation measures were generally on target, and while some were more successfully mitigated than others, there were no unanticipated risks or missed opportunities for mitigation that seriously limited achievement of project outcomes.

3. **Implementation**. As of June 12, 2015, the project had provided grants for community-based water supply systems with a combined total of over 700,000 connections, about 15,000 public hydrants and over 35,000 public taps, benefitting about 7.9 million persons. The vast majority of these systems were effectively managed and financed, and functioned to the satisfaction of the majority of the targeted communities. The number of persons benefitting from improved sanitation facilities was about 7.6 million. From 2008 to mid-2015, PAMSIMAS delivered programs aimed at improving hygiene and sanitation behavior programs in over 10,200 villages, which helped increase the share of participating communities adopting proper hand-washing techniques from less than 20% in 2008 to 67% in May 2015. In the same period, the number of open-defecation free communities covered by the project increased from virtually zero to about 50%. The technical quality of construction was rated as good, while the cost of construction was significantly lower than connections built by municipal water utilities. The quality of facilitation was not always consistent but sufficient to meet minimum standards. The implementing agency worked diligently to meet challenging output targets and significant capacity was built at the community level. Monitoring and evaluation was largely based on a state-of-the-art management information system (MIS).

4. **Factors subject to the control of the government or the implementation agency**. The project was able to secure support at the highest levels of government, and participating district governments were willing to co-finance the project from their own resources. To date, the implementing agency has managed the project efficiently, implemented an effective anti-corruption strategy, and—in consultation with the Bank—has proven willing to adjust the project design in response to changing circumstances. On the negative side, there were avoidable delays in start-up, disbursement, consultant recruitment, the selection of districts eligible for incentive grants, and the provision of operational budgets for local health clinics.

Delays were also caused by organizational restructuring in the aftermath of presidential elections and the enactment of the Village Law.

5. **Effectiveness of risk mitigation**. Risk assessment and mitigation measures were generally well defined and effective. The key identified risks were: (i) complex institutional arrangements resulting from the multi-sectoral nature of the project, (ii) diversion of funds to uses other than intended, and (iii) inconsistent government policy on subsidy for household latrine construction, and these were well mitigated during implementation. However, risks related to delays in budget releases and procurement of consulting services were not mitigated as successfully as expected, though these shortcomings did not fundamentally undermine achievement of the project outcome.

6. **Monitoring and Evaluation (M&E) Design, Implementation and Utilization**. The project measured progress against key performance indicators using a management information system, augmented by a series of qualitative and quantitative surveys and the results of regular supervision missions. M&E was based on a results framework that consisted of a series of well-defined and realistic outcome and intermediate results indicators, with plausible time-bound targets for each indicator. In general, the monitoring of the project was well implemented through the MIS, spot-checking by consultants, and by a complaints handling system. The MIS gradually evolved into an integrated and user-friendly information system, and data collected by the MIS and other means helped the project to: (i) identify and remedy quality problems and incorporate better controls as the project progressed, (ii) fine-tune the targeting of resources to the areas with the greatest needs and to help achieve the greatest impacts, and (iii) ensure transparency and strengthen public confidence in the openness and fairness of the project. Significantly, the Bank and implementing agency agreed to only consider data entered into the MIS as relevant for monitoring and evaluation purposes.

7. Safeguard and fiduciary compliance. Although some project activities triggered safeguards related to environmental assessment (OD/BP 4.01) and indigenous peoples (OD/BP 4.10), none of these activities caused significant adverse impacts. However, the recording of potential social and environmental impacts was initially poor, especially with regards to voluntary land donations, but improved in later stages of project implementation. The project encountered problems with financial management throughout implementation, primarily because of delays in issuance of budget documents and problems with the introduction of a new public financial management system. On the positive side, the project received an unqualified opinion from an external auditor in all years from 2009 to 2014, and the project's financial management was generally acceptable throughout implementation. As to contracting, the project has generally complied with the World Bank's Guidelines. Also, community contracting worked well. Nonetheless, procurement remained moderately satisfactory throughout project implementation, mainly because of avoidable delays in the recruitment of consultants. This adversely affected the quality of project implementation, such as mobilization of consultants and facilitators, delayed salary payments, delayed distribution of socialization and training materials, and most importantly resulted in delays in the training of facilitators and consultants.

8. **Governance**. Individuals and independent organizations in beneficiary communities used channels of communication established by the project (such as the complaints handling unit or individual facilitators) to report incidences of suspected corruption. Follow-up actions, including local government coordination and withholding of funds distribution, proved effective in combating corruption. (As of June 11, 2015, CPMU had resolved 1,748 of 2,036 reported complaints, including 341 complaints about misuse of funds, and had recovered about US\$654,400 of misused funds totaling US\$763,600 equivalent; it expects to recover most of the remainder within six months of project closing.) The very low level of misuse of funds—equivalent to about 0.1% of the total project cost—was confirmed by external audits.

9. **Post-completion Operation/Next Phase**. For all PAMSIMAS-financed water supply systems, the project required the establishment of a management board (BP-SPAM) at the village level, which would collect tariffs to pay for O&M, replacements and overheads. For sanitation systems, similar arrangements were made through community groups. At the time of writing, the Government had expressed an interest in continuing PAMSIMAS on a nationwide basis, to help achieve two of its '100-0-100' objectives in rural and peri-urban areas by the end of 2019 (100% access to safe water, 0% slum areas and 100% access to improved sanitation).

Assessment of Outcomes

10. The PDO remained highly relevant throughout the implementation period. The relevance of the design was rated substantial, especially with regard to improving access to water and sanitation services. The project's efficacy was substantial as measured by its outcome indicators and intermediate results indicators linked to the achievement of the PDOs. The project exceeded most its targets set for these indicators except those related to the involvement of districts in the water supply and sanitation sector. As for the project's efficiency, the cost of water and sanitation infrastructure, which accounted for over 60% of the total project cost), was substantially lower than similar programs financed by government contractors, and the economic rate of return of the project's main output (community-based water supply systems) was estimated at 36.1%, far above the Bank's hurdle rate of 12%. It should be noted, however, that the above-mentioned cost savings are to some extent reduced by limited capabilities for O&M and heavy reliance on facilitators, which resulted in relatively high project implementation costs (with implementation support and project management accounting for over 20% of the total). Because of the high relevance of the project, the substantial efficacy of the outcome, and minor shortcomings to otherwise high efficiency, the overall outcome of the project was rated Satisfactory.

Assessment of Risk to Development Outcome

11. The Risk to Development Outcome is defined as the risk that the (expected) development outcomes of the project—at the time of this assessment—will not be maintained or realized. The most important constituent risks can be summarized as follows.

- *Technical risk.* These were rated Moderate, because the project's investments were concentrated in physical infrastructure that is relatively inexpensive to maintain and not technically complex. To mitigate the risk of inadequate O&M, the project required the establishment of dedicated management units for water supply systems (BP-SPAM) and community groups were mobilize for O&M of public sanitation facilities. In spite of these risk mitigation measures, 24% of PAMSIMAS-financed water supply systems were not fully functional in May 2015.
- *Financial risk.* BP-SPAM are expected to impose full cost-recovery tariffs, but the majority of BP-SPAMs appear to charge much lower tariffs, which are usually only sufficient to cover the cost of operations and routine maintenance. This implies that most systems are financially sustainable in the short and medium term, but may fail in the long term, as most BP-SPAMs are unable to collect tariffs that are sufficiently high to finance replacement investments. The financial risk was therefore rated Moderate.
- *Political risk.* This risk was rated Low given the fact that the central government and most local governments have shown a strong and long-term commitment to the financing of PAMSIMAS.

Assessment of Bank and Borrower Performance

A. Bank Performance

12. **Quality at entry**. The strengths of the original project design are: (i) strategic relevance, (ii) relevance to beneficiaries, (iii) robustness, and (iv) strategic use of information and communication technology (ICT). On the other hand, the original target of outcome indicator 'number of additional people

with sustainable access to improved sanitation facilities' was unrealistically high and needed to be revised downward. Also, the results framework did not clearly define the term 'sustainable' (which was needed to measure achievements of the two key indicators), and the design of the block grant for water supply and sanitation facilities did not allow for variation among regions or price increases arising from general price inflation. These shortcomings were deemed minor, however, and the Bank's performance in ensuring quality at entry was rated Satisfactory.

13. **Supervision**. The Bank mobilized a multi-disciplinary supervision team with expertise in project management, financial management, procurement, monitoring, and safeguards. Intensive supervision enabled the Bank to identify and proactively address key issues adversely affecting achievement of the PDOs in an early stage, notably problems with delays in budget execution and revision, consultant mobilization, compliance with safeguard policies, and timely dissemination of project manuals and socialization materials. However, the Bank was unable to prevent a delay of almost two years in the start of project implementation. Because this shortcoming was largely outside the control of the Bank, the quality of supervision was rated Satisfactory.

14. In light of the Satisfactory rating of the Bank's performance in ensuring quality at entry and the Satisfactory rating of the quality of supervision, the Bank's overall performance was rated Satisfactory.

B. Borrower Performance

15. **Government**. Throughout project implementation, the project enjoyed the strong support of the Government, which together with local governments and communities financed about 40% of the total project cost. GoI supported the Bank's efforts for continuous innovation of PAMSIMAS to improve the impact of the program on poor communities throughout Indonesia. It also maintained good relationships with other development partners involved in the project, made a timely request for the AF, and strongly supported the upscaling of the project into a national program. At the same time, it is felt that the Government could have been more pro-active in preventing delays in budget execution, and addressing delays caused by organizational restructuring and the enactment of the Village Law. These shortcomings were deemed minor, however, and GoI's performance was therefore rated Satisfactory.

16. **Implementing agency**. Throughout project implementation, Ministry of Public Works and Housing supported a bottom-up, community-driven approach to improving access to water supply and sanitation services. It strongly supported the continuous improvement of a comprehensive M&E system to maintain a high level of transparency of the outcomes of the project. It also took steps to modify implementation arrangements where needed and responded to complaints or suspicions about the misuse of funds with great vigor. There were, however, several challenges that stronger management may have been able to manage, such as delays in consultant recruitment, and the selection of districts eligible for incentive grants. These shortcomings were deemed minor and did not have a significant adverse impact on the progress of the project.

17. In light of the satisfactory ratings for the performance of both the Government and the implementing agency, the overall performance of the Borrower was rated Satisfactory.

Lessons Learned

18. The implementation of the PAMSIMAS confirmed the key lessons from WSLIC-2: CDD programs can deliver small-scale infrastructure at a lower cost and at a comparable quality than equivalent infrastructure constructed by local government contractors, provided that communities are adequately facilitated. In addition, several other lessons were learned, the most important of which can be summarized as follows:
- *Trust and partnership are essential to the successful implementation of a multi-sectoral CDD project.* PAMSIMAS was developed, implemented and scaled-up in a truly collaborative spirit, which helped the project to quickly and effectively resolve unanticipated problems and make necessary changes to implementation arrangements.
- The intensive use of ICT helps to maintain a high level of transparency in all aspects of the project cycle. The implementing agency instituted the policy to make all information about the project available on the project website, including payment advice from the State Treasury office, BP-SPAM performance records, and audit findings. This policy was effective in fostering public confidence in the project's openness and fairness.
- Active involvement from local governments in CDD programs increases the impact of such programs. The project demonstrated that financial incentives, coupled to intensive socialization and training of local government officials and their consultants, are an effective means to create a sustained interest of local governments in planning and co-financing small-scale infrastructure projects for and together with communities.
- The sustainability of water supply and sanitation facilities in rural areas is enhanced by selecting low-tech solutions. The project offered a menu of relatively simple (but environmentally sound) technical options. These options mostly met the needs of rural and peri-urban populations and resulted in affordable O&M cost-recovery tariffs, thereby ensuring the financial sustainability of the investments in the short and medium term. In most project locations it was not feasible to impose full-cost recovery tariffs, which cover both O&M and investment.
- Investments in hygiene and sanitation behavior programs need to be accompanied by investments in sanitation infrastructure. The project provided sanitation infrastructure in schools and public locations, so that project beneficiaries who were unable or unwilling to procure their own sanitary facilities, were unable to opt-out from the target to make all project locations open defecation free.
- One size does not fit all. Using a nation-wide standardized village targeting mechanism risks selecting villages without adequate demand. In addition, specialized implementation mechanisms are needed to provide additional support to different operating environments such as the eastern region and outer islands.
- *Central government support is essential to mitigate delays in project implementation.* The project was consistently delayed for reasons outside the control of the implementing agency, especially delays in budget approvals and reorganization of central government ministries. High-level intervention is needed to mitigate the impact of such delays.

All of the above lessons are applicable in developing countries with governance systems similar to Indonesia, with the possible exception of the last-mentioned lesson.

Item	Rating				
M&E Design, Implementation and Utilization	Substantial				
Relevance of Objective	High				
Relevance of Design	High				
Achievement of Project Development Objective (Efficacy)	Substantial				
Efficiency	High				
Assessment of Risk to Development Outcome	Moderate				
Bank Performance in Ensuring Quality at Entry	Satisfactory				
Bank's Quality of Supervision	Satisfactory				
Performance of the Government	Satisfactory				
Implementing Agency Performance	Satisfactory				

Table 1: Ratings in the PAMSIMAS ICR

RESULTS FRAMEWORK AND MONITORING INDICATORS

Revisions to the Resu	lts Framework	Comments/ Rationale for Change
PDO:		
Current (PAD)	Proposed	
To increase the number of under- served and low income rural and peri-urban populations accessing improved and sustained water and sanitation services and practicing improved hygiene behaviors as part of the Borrower's efforts to achieve WSS-MDG Targets, through programmatic mainstreaming and scaling-up of a nationwide community-driven approach	To increase the number of under-served rural and peri- urban populations accessing sustainable water supply and sanitation services	To reflect GoI's new policy of universal access for water and sanitation as specified in the National Mid-Term Development Plan (RPJMN 2016-2019). Even though the PDO has been significantly simplified, intermediate outcomes for hygiene behavior change will continue to be tracked in the results framework. The project will continue to target low income communities by prioritizing districts on the basis of: high access gaps in water and sanitation, low and medium district fiscal capacity, and agreement to prepare five year investment plans for rural water supply and sanitation. Ongoing project implementation has shown that the lack of access is highly correlated with low incomes levels
PDO indicators		
Current (PAD)	Proposed change	
Number of additional people with sustainable access to improved water facilities, differentiated by socioeconomic status	Number of additional people with sustainable access to improved water facilities ⁹	The indicator will not be differentiated by socio-economic status since the project will extend coverage to all rural communities. Socio-economic indicators will continue to be monitored in the MIS. The end of project target has been revised to 22.1 million beneficiaries (cumulative target).

⁹ Core sector indicator for water supply

Revisions to the Resu	Revisions to the Results Framework							
Number of additional people with sustainable access to improved sanitation facilities, differentiated by socioeconomic status.	Number of additional people with sustainable access to improved sanitation facilities ¹⁰	The indicator will not be differentiated by socio-economic status since the project will extend coverage to all rural communities. Socio-economic indicators will continue to be monitored in the MIS. The end of project target has been revised to 14.9 million direct beneficiaries in target villages (cumulative target). The current project shows sanitation access tracking water supply access. Access to improved sanitation requires changes in hygiene behaviors and continuous usage of sanitation facilities. Last mile coverage under the additional financing will result in implementation with local governments that have lower capacity than the existing project and the sanitation access is expected to lag.						

¹⁰ Core sector indicator for sanitation

Revisions to the Resu	lts Framework	Comments/ Rationale for Change		
Intermediate Results indicators				
Current (PAD)	Proposed change			
Number of villages developing community action plans	Change in target values.	Target has been revised to include additional 15,000 new villages.		
% of districts Capacity building plan to support the adoption and mainstreaming of the PAMSIMAS approach, and progress towards achieving its objectives	% of districts preparing capacity building plan to support the adoption and mainstreaming of the PAMSIMAS approach, and progress towards achieving its objectives Change in target values	The final target of 70% is based on the number of additional participating districts. The Capacity Building Plan is defined as the District Water and Sanitation Strategic and Investment Plan.		
Actual Project District WSS expenditure as a percentage of the budget needed to achieve MDG goals.	% of Districts that has an increased expenditure towards meeting the requirements to maintain existing WSS systems and achievement of Universal Access. Change in target values	Rewording of indicator to reflect universal access targets. Final target of 60% is based on the number of additional participating districts.		
% of village government incorporating community WSS plan to annual/mid-term village plan to support achievement of universal access	New indicator	Both indicators are included to reflect the contribution of village government in achieving universal access. This indicator monitors the new Sub-component 1.4. The final target of 80% is based on the number		
% of villages that has an increased budget to maintain and expanding existing WSS system to support implementation Community WSS Plan	New indicator	of additional participating districts.		
% of districts that are replicating the PAMSIMAS approach outside targeted communities	No change.			
% of villages with improved water supply systems that are effectively managed and financed	Moved to PDO level.	This indicator measures sustainability of access to water supply.		
% of villages with improved water supply systems that are functioning to the satisfaction of the majority of targeted community	Change in target values.	ICR recommended a lower target. 90% is considered too high and similar projects in Indonesia present satisfaction levels at 75- 80%.		
Number of villages exceeding project performance criteria and receiving supplementary grants	Change in target values.			

Revisions to the Resu	lts Framework	Comments/ Rationale for Change
Number of districts exceeding project performance criteria and receiving supplementary grants.	% of districts exceeding project performance criteria and receiving supplementary grants	Minor change in indicator to reflect new activities supported by the Project under Component 4. Presented as a % rather than absolute number. Target values have been revised to percentages.
		Include in the measurement of indicator is number of districts receiving supplementary grants for improving performance of BPSPAMS
% of target communities free of open defecation	Change in target values.	Target changed to 60% to reflect the improved ODF achievements of the existing project.
% of target communities adopting hand washing	Change in target values.	Number of end value is changed to 60%.
% of target schools that have improved water supply and sanitation facilities and hygiene programs	No change.	
% of districts that have project monitoring structure and tools provides regular information on project implementation quality	No change.	

Core Sector Indicators

The below core sector indicators have been recorded by the Project and will be continuously monitored through MIS.

Core Sector Indicator	Achievement as of August 2015	Remarks
Number of improved community water points constructed or rehabilitated under the project	50,047	Includes public taps and hydrants
Number of new piped household water connections that are resulting from the project intervention	714,206	
Number of piped household water connections that are benefiting from rehabilitation works undertaken under the project	5,548	PAMSIMAS provides window optimization to rehabilitate the non-functioning and functioning systems
Other water service providers the project is supporting ¹¹	10,287	Number of BPSPAMS established
Number of improved latrines constructed under the project		To be updated

¹¹ Other water service providers are defined as entities that provide water services to fewer than 10,000 people. Typically, these are community based organizations (including water committees), small scale providers and NGOs.

Core Sector Indicator	Achievement as of August 2015	Remarks
Number of people trained to improve hygiene behavior or sanitation practices under the project		To be updated
Number of female trained to improve hygiene behavior or sanitation practices under the project		To be updated

			Progress	Cum	ulative Ta	arget Val	ues (in mi	llion)		Data Source/	Responsibility	
PDO Level Results Indicators	Core	UOM	(August 7, 2015)	2016	2017	2018	2019	2020	Frequency	Methodology (*)	for Data Collection	Comments
PDO: To increase the number of under-served ¹² rural and peri-urban populations accessing sustainable water supply and sanitation services										ion services		
1. Number of additional people with sustainable access to improved water facilities		persons	7.98 million	10.3	12	16	19	22.1	Quarterly	Communities/ Primary collection	Facilitators and ROMS	All data is uploaded into MIS at district level. The data uploaded into MIS must be verified. Verification to data
2. Number of additional people with sustainable access to improved sanitation facilities		persons	7.7 million	8.2	9.1	11.1	13.6	14.9	Quarterly	Communities/ Primary collection	Sanitarian, District Health Agency and ROMS	completeness and validity is carried out at district level
3. % of villages with improved water supply systems that are effectively managed and financed		%	77%	90%	90%	90%	90%	90%	Quarterly	Village governments/ Primary collection	Facilitators/ ROMS	Indicator definition provided in Annex 7
Beneficiaries												
Project beneficiaries		Number	7.98	10.3	12	16	19	22.1	Quarterly	MIS data	CPMU	
Of which female (beneficiaries)		Number	4	5.2	6	8	9.5	11.5	Quarterly	MIS data	CPMU	

Project Results Framework

¹² Under-served refers to people who do not have access to at least 20 liters per person per day from an 'improved' source, within 1 Kilometer of the user's dwelling. 'Improved' water sources are: Household connection/ Public standpipe/ Borehole/ Protected dug well/ Protected spring/ Rainwater collection. Defined in the PAD as per the WHO-UNICEF Joint Monitoring Program definition for meeting MDG targets.

Intermediate Results a	Intermediate Results and Indicators [2]											
			Progress	Target Values							Responsibility	
Intermediate Results Indicators	Core	UOM	To Date (August 7, 2015)	2016	2017	2018	2019	2020	Frequency	Data Source/ Methodology	for Data Collection	Comments
Intermediate Result 1: sanitation, and hygiene							t instituti	onal arran	gements to	support the sca	aling up of impro	oved water use
1. Number of villages developing community action plans		Village	10,287	14,000	18,000	21,000	24,000	27,000	Annually	Communities/ Primary collection	Facilitators/ ROMS	
2. % of districts preparing capacity building plan to support the adoption and mainstreaming of the PAMSIMAS approach, and progress towards achieving its objectives		%	33%	35%	40%	50%	60%	70%	Annually	Local governments/ Secondary data	ROMS/CMAC	Measuring the target only against number of additional new districts
3. % of Districts that has an increased expenditure towards meeting the requirements to maintain existing WSS systems and achievement of Universal Access		%	61%	35% ¹³	30%	40%	50%	60%	Annually	Local governments/ Secondary collection	ROMS/CMAC	Measuring the target only against number of additional new districts
 % of districts that are replicating the PAMSIMAS approach outside target communities 		%	100%	90% ¹⁴	90%	90%	90%	90%	Annually	Local governments/ Secondary collection	ROMS/CMAC	

¹³ The denominator incorporates the additional number of participating districts (Increased from 219 in the existing project to about 412 districts in the additional financing)

¹⁴ Target is set at 90%, assuming that about 10% of potential participating districts with lower financial capacity (as the program's geographical coverage is expanded) will not able to fulfill the cost sharing program

			Progress	Target Values							Responsibility	
Intermediate Results Indicators	Core	UOM	To Date (August 7, 2015)	2016	2017	2018	2019	2020	Frequency	Data Source/ Methodology	for Data Collection	Comments
5. % of village government incorporating community WSS plan to annual/mid-term village plan to support achievement of universal access		%	0 (Baseline)	0	80%	80%	80%	80%	Annually	Village governments/ Primary collection	Facilitators/ ROMS	Measuring the target only against number of additional new villages
 % of villages that has an increased budget to maintain and expanding existing WSS system to support implementation Community WSS Plan 		%	0 (Baseline)	0	80%	80%	80%	80%	Annually	Village governments/ Primary collection	Facilitators/ ROMS	Measuring the target only against number of additional new villages
Intermediate Result 2: them effectively.	Targ	eted com	munities ga	in access	to improv	ved rural	water su	pply and c	communal sa	nitation servic	es, and use, man	age and sustai
7. % of villages with improved water supply systems that are effectively managed and financed		%	77%	90%	90%	90%	90%	90%	Quarterly	Village governments/ Primary collection	Facilitators/ ROMS	
 % of villages with improved water supply systems that are functioning to the satisfaction of the majority of targeted community 		%	87%	80%				80% ¹⁵	By Project Closing	Survey	CPMU	
 Number of villages exceeding project performance criteria and receiving supplementary grants 		Village	1,249	1,649	2,399	3,399	4,700	4,649	Annually	Communities/ Primary collection	Facilitators/ ROMS	

¹⁵ Based on global experience

Intermediate Results and Indicators [2]												
- · · · · · · ·			Progress	Target Values							Responsibility	
Intermediate Results Indicators	Core	UOM	To Date (August 7, 2015)	2016	2017	2018	2019	2020	Frequency	Data Source/ Methodology	for Data Collection	Comments
10. % of districts exceeding project performance criteria and receiving supplementary grants		District	36	68	20%	30%	40%	50%	Annually	Local governments/ Secondary collection	ROMS/CMAC	
11. % of target dusun free of open defecation		%	51%	60%	60%	60%	60%	60%	Quarterly	Communities/ Primary collection	Sanitarian, District Health Agency and ROMS	
12. % of target communities adopting hand-washing		%	68%	60%	60%	60%	60%	60%	Annually	Communities/ Primary collection	Sanitarian, District Health Agency and ROMS	
13. % of target schools that have improved water supply and sanitation facilities and hygiene programs		%	85%	95%	95%	95%	95%	95%	Annually	Schools/Prim ary collection	Facilitators/ ROMS	
Intermediate Result 3:	Proj	ect Mana	gement Un	its are abl	le to supp	ort the p	rogram					
14. % of districts that have project monitoring structure and tools provides regular information on project implementation quality		%	93%	90% ¹⁶	90%	90%	90%	90%	Quarterly	MIS data/ Secondary collection	ROMS/CMAC	

 Implementation quality
 Implementation quality

 Remarks: all the data is available through Management Information System (MIS) based on the data frequency

¹⁶ Target is set at 90% assuming that about 10% of potential participating districts will be remote and have insufficient internet connectivity. These districts will maintain manual records

REVISED ESTIMATE OF PROJECT COSTS

Estimated Cost by Component (US\$ Million)

COMPONENT	PAMSIMAS	PAMSIMAS Additional Financing I (PAMSIMAS II)	PAMSIMAS Additional Financing II (PAMSIMAS III)	TOTAL
Component 1: Community Empowerment, Local and Village Institutional Development	20.30	43.44	152.07	215.81
Component 2: Improving Hygiene and Sanitation Behavior and Services	25.20	15.14	73.39	113.89
Component 3: Water Supply and Public Sanitation Infrastructure	208.30	143.16	437.50	788.96
Component 4: District and Village Incentives (DVI)	7.50	21.05	303.93	332.48
Component 5: Implementation Support and Project Management	58.90	35.24	102.55	196.69
Unallocated	1.30			1.30
TOTAL	321.50	258.03	1,069.44	1,649.13

Project Financing (US\$ Million)

COMPONENT	APBN Murni	Loan	Village, Local Governments and Communities	Total
Component 1: Community Empowerment, Local and Village Institutional Development	12.00	140.07	-	152.07
Component 2: Improving Hygiene and Sanitation Behavior and Services	43.96	29.48	-	73.39
Component 3: Water Supply and Public Sanitation Infrastructure	182.04	62.97	192.49	437.50
Component 4: District and Village Incentives (DVI)	210.84	6.00	87.09	303.93
Component 5: Implementation Support and Project Management	41.02	61.53	-	102.55
TOTAL	489.86	300	279.58	1,069.44

INSTITUTIONAL ARRANGEMENTS

1. The project was designed to ensure collaboration and to provide maximum support to the delivery of services at the community level using the community driven development approach, with the coordination, control, management and monitoring of the project at progressively higher levels of government administration. The project management structure consists of four main levels of organization: (i) central; (ii) provincial; (iii) district; and (iv) village, as shown in the figure below.



UPDATED INSTITUTIONAL ARRANGEMENT

Legislative and Regulatory Framework

2. The legislative and regulatory framework of the Go1 has changed significantly with the enactment of the laws on decentralization and fiscal balance (UU32/2004, 33/2004). These laws mandate the responsibilities of each level of government. Enabling regulations expand on the provisions of the laws. The main legislative and regulatory instruments that will determine the budgeting, fund flow arrangements, and responsibilities for financial management are law 2/2005 on Public Finance, and government regulation 1/2005 expanding on the responsibilities for public finance management. Under the above decentralization legislation, provision of water supply and sanitation is a local government responsibility. The GoI adopted the concept of community driven development for the water supply and sanitation sector to ensure sustainability of initiatives and has formalized this in the regulation No. 7/2004.

3. In addition, a new Law of Village enacted village government will receive fund transfer from central government budget for ensuring financing of development priorities at village level, followed by a ministerial regulation No. 5/2014 which explicitly stating that water and sanitation is one of key priority programs to be financed through the village fund.. The mid-term development plan 2015-2019 set the target of 9.6 million households provided with house connection in rural areas. The Government issued a Presidential Regulation No. 185/2014 stipulated an acceleration of water and sanitation program. PAMSIMAS is used as a national platform for community-based rural water supply and sanitation service provision to support the achievement of the targets.

Project Coordination - Central Government/Provincial Government/District Government

4. There is no change to the project coordination overall structure and responsibilities, except a new ministry will join in the Central Coordination Team namely Ministry of Village, Disadvantage Areas and Transmigration. Roles and responsibilities of each ministries are updated based on recent changes in the central government organization structure and responsibilities.

Agency	Role
BAPPENAS	Overall Project Coordination
DG Human Settlements, MPWH	Executing agency and implementation of water supply and public infrastructure components
DG Disease Control and Environmental Health, MOH	Implementation of improving hygiene and sanitation behavior and services components, and support of the implementation of school health and hygiene promotion program
DG Regional Development, MOHA	Implementation of local government institutional development
DG Community Empowerment and Development, MOVDAT	Implementation of village social development and community management
DG Village Government, MOHA	Implementation of village institutional development
MOF	Support timely budget release, fund flows, disbursement of loan funds and counterpart budgets

Table [*]	1:	Role	of	each	Agency	in	PAMSIMAS
I abic .		TOIC	UI	cacin	rigency		

5. At the district and provincial levels, the technical coordination team is held by an inter-sector agencies team or the Water and Sanitation Working Group. At the district level, the team also responsible to select team for preparing the district strategic and investment plan for water supply and sanitation program (RAD AMPL).

Central Project Management Unit (CPMU), Provincial Project Management Unit (PPMU) and District Provincial Management Unit (DPMU)

6. CPMU will include MOVDAT in the structure. There is no change to the project management unit structure and responsibilities at provincial and district unit.

CAP Evaluation Team

7. The participating districts will establish a CAP Evaluation Team that reports to the District Coordination Team which has representatives from the three implementing agencies. If there is an existing group that can undertake this function, this could be included in their work. For transparency purposes, NGOs or civil society representatives should also be invited to participate or observe. THE CAP evaluation team is further known as "partnership committee" that consists of nine members with composition four local government officials representing all related sectors in water supply and sanitation, and five civil society (such as local NGOs, academician, village water-board management).

Community Facilitator Teams

8. An integral part of the project design at the village level is the provision of community facilitator teams (CFT) consisting of two people with technical and community development skills. The facilitators will be selected by the PPMU through a process of competitive recruitment based on selection criteria of qualifications, experience, and capability related to attitude and commitment to the tasks. Gender balance of the CF teams will be a requirement.

9. For hygiene and sanitation, the project uses the current health and sanitation government structure, which is the sub-district sanitarian. The sanitarian will take the role of hygiene and sanitation facilitators.

10. The facilitator team will cover approximately three to five villages per year and will wherever possible and practical, live in the project villages. The facilitators will be responsible for facilitating all aspects of the community process. This includes the situation analysis using MPAPHAST, formation of the VIT, CAP preparation, undertake coordination with sanitarian for CLTS and hygiene promotion activities. The overall aim of the community process is to develop and strengthen equitable community institutions to ensure sustainable improvements in water and sanitation facilities and related behaviors.

11. The project will provide additional facilitators to assist community and villages for post-construction period (or **sustainability** period). These facilitators will help the community to ensure operation, maintenance and expansion of the water system, and support development of the village plan to achieve 100% access in water and sanitation. Sanitarian, along with village midwife and BPSPAMS, will continue to monitor the open defecation free and hand-washing and continuous use of sanitation facilities by the community.

Technical Assistance Teams (CMAC and ROMS)

12. For overall management and implementation of the project, at the central level, CPMU will be assisted by CMC (Central Management Consultants) and Advisory Teams. At provincial and district levels, the project will be assisted by the Regional Oversight Management Services (ROMS). The teams will consists of various experts to cover areas, such as: community development and social safeguards, hygiene and sanitation, MIS, water supply infrastructures and environmental management, local government and institutional development, and financial management. The detailed description of structure and responsibilities of each consultants and services will be provided in the team's TOR and accountability

matrix. The consultant and services teams will also support the coordination team at each level. The Advisory teams will provide inputs for overall strategy and policy direction.

Association of BPSPAMS

13. The National Association of BPSPAMS was established by a Ministerial Decree of MPWH in 2012. In PAMSIMAS, there are about 110 district associations and about 4 provincial association. Number of district association will continue to grow as there is demand from BPSPAMS to form an association in several participating districts. Under the additional financing, the associations of BPSPAMS will be strengthened and incentivized to provide: (i) technical assistance for preventive and corrective maintenance of water supply and sanitation systems operated by BPSPAMS; (ii) facilitation support for major technical maintenance; (iii) training to systems operators; (iv) in cooperation with local health agencies, promotion of health and hygiene education in the communities; (v) improved management competencies in BPSPAMS, and (vi) establishment of partnerships with various stakeholders to facilitate service expansion of BSPAMS, such as village and local governments and private sectors.

SUSTAINABILITY

1. The project addresses the issue of sustainability in two dimensions. The first relates to the long-term operation and maintenance of the PAMSIMAS-financed water supply systems and to the permanence of the intended beneficiaries' behavior change. Ongoing project implementation has led to the development of design features to enhance sustained operations and maintenance by the beneficiary communities. The second is the sustained adoption and propagation of the PAMSIMAS approach among Indonesia's villages and across the country.

2. With regard to program expansion, PAMSIMAS is expected to be sustainable for the following reasons. First, PAMSIMAS is now regarded as the national platform of delivery for rural water supply and sanitation, with a clear government mandate to support the achievement of the Universal Access. In addition the associations of BPSPAMS have been officially recognized under the MPWH, allowing for continued support. Second, the Project has allocated adequate resources for advocacy, coalition formation, and capacity building activities to support PAMSIMAS expansion beyond its immediate target areas. This also covers strengthening of the associations of BPSPAMs and providing special facilitators for post construction support, under the coordination of local government and the Associations. Finally, the design of the Project has been structured to provide districts with greater ownership (e.g. responsibility for the staffing and non-salary operational cost of the DPMU) and the incentives to establish their own APBD-funded CDD water, sanitation and hygiene improvement programs, through replication programs. In addition the districts also will be to establish a partnership with the associations of BPSPAMS to maintain the MIS and other function established under the project, including hiring of the sustainability facilitators.

3. It is expected that by the end of the project, local government and the association will continue the support system to BPSPAMs, and central government will continue to provide financial incentives and technical standards to local governments to ensure the sustainability of the support system, through DAK (*specific allocation grant*) currently in place.

4. **Definition.** The project defines sustainability as the ability to maintain operations, services and benefits over time. Sustainable access refers to ensuring sustainable services, from both the service provider and the user perspective, around key technical, financial and institutional sustainability indicators. The project uses the following functional definitions of sustainability:

A water supply system is considered sustainable if:

- It is functioning at more than 80% as designed
- Tariff levels are sufficient to cover operation and maintenance costs
- The BPSPAM has been established by the decree of village head or other means, an Annual Work Plan for water supply and sanitation services is available, and a Partnership Plan setting out the multi-sector collaboration with other entities has been developed.

Sanitation interventions are considered sustainable if:

- ODF status is achieved and maintained
- Communities adopt hand-washing practices

5. **Indicators.** The following indicators in the results framework are used to monitor sustainability:

For water supply:

- Percentage of villages with improved water supply systems that are functioning to the satisfaction of the majority of targeted community. The service satisfaction covers continuity, affability and water quality and quantity(Survey)
- Percentage of villages with improved water supply systems that are effectively managed and financed. Under this indicator, tariff levels are disaggregated by: No water tariff, Tariff is not enough to cover O&M, Tariff covers O&M, and Tariff covers O&M and savings. Management rural water supply and communal sanitation services is evaluated by the establishment of an organization acknowledged by communities to manage the system, namely the BPSPAM. The system functionality is characterized as Fully (more than 80% functional), Partially (40% to 80% of the system is functional), or Nonfunctioning (Less than 40% of the system is functional). (MIS)

For sanitation:

- % of target villages free of open defecation. This indicator measures the number of communities that practice open defecation free (ODF—collected by MIS)
- % of target communities adopting hand-washing. This indicator measures the number of communities adopting hand-washing practices. Both ODF and hand-washing practice are monitored regularly by a sanitarian (sub-district health staff), and reported to district health agency through a text message. At district level, the report is uploaded into MIS

6. **Sustainability Monitoring.** Monitoring is carried out quarterly through the community level implementation processes to measure progress towards project outcomes. Sustainability measures are color categorized as red, orange and green, providing a clear indication of where further action is required by associations of BPSPAMS and local governments working in partnership. MIS data collection and independent verification is systematic and institutionalized in the project. User satisfaction is measured using household surveys. The first survey was completed in 2012, the second is taking place in 2015, the third is planned for early 2018, and the final planned for 2021.

Level	Institutional	Financial	Technical	Comments
BPSPAMS	Having adequate legal basis and consensus from community and village government to manage the system Having capacity to be accountable	Planning and collecting water tariff to ensure operation and maintenance of the system Mobilizing finance for rehabilitation, expansion and replacement	Having staff with adequate technical skill for operation and maintenance Having contacts or capacity to consult with district associations and local government for obtaining assistance for complicated system maintenance and rehabilitation	 Measured by the following indicators: % of villages with improved water supply systems that are effectively managed and financed Number of villages exceeding project performance criteria and receiving supplementary grants
District Association	Institution is functioning and acknowledged both by communities and local governments Supporting BPSPAMS to have better management	Having capacity to obtain financial support (or financial self-reliance) or having partnership with local governments and other parties Having financial accountability capacity	Supporting BPSPAMS for technical supports, including facilitating discussion with local governments and people with technical expertise	 Measured by the following indicators: % of villages with improved water supply systems that are effectively managed and financed Number of villages exceeding project performance criteria and receiving supplementary grants MPWH provided a Ministerial Decree of the National Association of BPSPAMS in Year 2012

Table 1: Responsibilities of Each Level Stakeholders to Assure Sustainability

Level	Institutional	Financial	Technical	Comments
Local Government	Providing institutional management support in the forms of training and coaching to ensure continuous management of the village water system and behavior change in hygiene and sanitation Continues implementing CDD- based WSS programs (including STBM), i.e: issue local regulation pertaining WSS Program Using and managing a management information system for informing decision-makers on CDD-based water supply and sanitation program	Providing budget or allocation for ensuring cost recovery program of the system, for specific technical option that is beyond community's capacity for replacement Providing budget allocation for technical supports implementing universal access, i.e: recruiting STBM facilitators	Providing technical backstops for repairing, especially for specific technical options such as pumps Establishing partnership with district associations Facilitating inter- sector supports for ensuring functioning of the system (i.e: with electrical company, water utility enterprise, etc)	 Measured by the following indicators: Issuance of a strategic and investment plan of water supply and sanitation program (or RAD AMPL) which consists five key programs as recommended by the project including community-based total sanitation (or STBM), community-based water supply provision, assistance for BPSPAMS and district associations. Increased annual expenditure in water supply and sanitation. Considered as an increased is 5% annual rate, as reported in the local government annual audited report. % of districts that are replicating the PAMSIMAS approach outside target communities % of districts that have project monitoring structure and tools provides regular information on project implementation quality Mainstreaming CDD-based water supply and sanitation is carried out by ensuring that the district include the CDD as one of the approach to be used for delivering block grants is available, local governments have experience to recruit facilitators for assisting communities, and have local partners such as district association to work with communities based on partnership agreement (MoU) District WSS Working Group (or Pokja AMPL), which is currently established in each districts will have responsibility for policy direction and monitoring

Level	Institutional	Financial	Technical	Comments
Provincial and Central Governments	Establishing WSS coordinating team (namely WSS Working Group) consists of inter- ministerial team to discuss policy and strategy of WSS sectors to achieve universal access	Providing financial options are available for delivering WSS services, both for local governments and community	Ensuring policy for local governments and district associations to have capacity to provide technical support to communities	 Measured by the following indicators: Number of additional people with sustainable access to improved water facilities Number of additional people with sustainable access to improved sanitation facilities Improved water supply and sanitation facilities follow MDGs definition as specified by WHO. The National Government has issue a Presidential Decree 185/2014 on accelerating the implementation of water supply and sanitation program The National Mid-Term Development Plan 2015-2019 set target of 9.6 million household connections for rural water supply MOHA has put CDD-based water supply and sanitation as key priority program in their annual ministerial regulation for guiding local government in preparing and implementing annual budget MOHA is drafting a local regulation concerning village water-board management Mainstreaming CDD-WSS through incentives program (for leveraging fund) becomes policy of central government and be measured in the following indicator: % of districts exceeding project performance criteria and receiving supplementary grants

Complementary Technical Assistance by the Water and Sanitation Program (WSP)

Supporting Indonesia in Achieving Sustainable Rural Water Supply and Sanitation Services for All (P157298)

1. Through the Water Global Practice's Water and Sanitation Program (WSP) the World Bank will provide continuous support to the Government of Indonesia to build and strengthen institutions that can backstop community-based management of rural water supply and sanitation based on in-country and global experience. Lessons from previous TA in Indonesia and from countries such as Sri Lanka, India, Vietnam and Colombia show that successful governments have set up an enabling environment that clearly defines the public sector role in terms of regulation of rural services and service providers; professionalizing community management; setting up local government-embedded capacity support for service providers; adequate financing structures to cover life-cycle costs beyond the original asset creation; and monitoring of service delivery and sustainability.

2. A key challenge for the Government's agenda and the Project will be the adequacy of decentralized human resources, both in quantity and quality, to support the implementation. For rural sanitation, under STBM WSP helped the government develop a national framework for capacity building which resulted in STBM training modules to be accredited and embedded with 28 provincial health schools in 27 provinces as part of the regular training program, along with a distance learning platform for rural sanitation practitioners outside the government system. Similarly, recent TA has demonstrated promising results with professionalizing Community Based Organizations (CBOs) via CBO associations and assisting the best-performing ones in accessing commercial finance for service expansion.

3. Based on global and country experience the Bank-executed complementary TA is thus designed around three pillars: a) development and implementation of a nation-wide rural water and sanitation capacity building framework to augment the number and improve the quality of decentralized human resources in support of the Government's 100-0-100 program; b) institutionalization of the local government role in rural water supply and sanitation service provision in accordance with the 2014 Village Law and Local Government Law, among others to strengthen their role on monitoring and evaluation; and c) development of sustainable financing options for community-based organizations to increase service access and ensure continuity of service delivery.

Pillar 1 – **Development and implementation of a nation-wide rural water and sanitation capacity building framework**

4. Building on recent experience with setting up the STBM capacity building framework for rural sanitation in provincial public health schools, the new capacity building framework to strengthen both PAMSIMAS and the overall Government program will improve the quality of existing structures, tools, and human resources. The TA will work with key units in the Ministry of Health, including Health Promotion and Human Resources Development Center, related key units in other ministries, and provincial and districts/cities training and development centers to contribute to implementation and support quality assurance and monitoring mechanisms. The TA will also improve the quality of the existing information and technology system to monitor nation-wide STBM implementation by adding more interactive fixtures and automatic alerts for STBM implementers, strengthened knowledge management, and continue supporting East Java as a learning laboratory to create innovative implementation of STBM. For rural water supply the TA will develop a corresponding capacity building framework for rural water supply the TA will develop a corresponding capacity building framework for rural water supply through a series of consultations with key stakeholders at national and sub-national levels to determine the best 'home'/anchor for delivery.

Pillar 2 – Institutionalization of the role of local governments in RWSS service delivery

5. Through the second pillar selected local governments will be assisted to implement the new Village Law and Local Government law by: (i) formalizing the cooperation between service providers/CBOs and village governments; (ii) facilitating the integration of rural water and sanitation services as part of the village government Minimum Service Delivery Standard and prioritize its implementation under village medium-term development plans; and (iii) strengthening local government's capacity to develop and implement a district-wide monitoring system. The TA will also strengthen the national and provincial government's role for knowledge activities in the rural water supply and sanitation program, through 'horizontal'/peer-to-peer learning among districts and provinces to strengthen capacity and create a competitive climate; establishment of, or attachment to, existing discussion forums as evidence-based learning and action-research venues; south-south learning exchange activities for rural water and support policies and/or regulations in other countries appropriate and potentially transferable to the conditions in Indonesia.

Pillar 3 – Development of sustainable financing options for access and continuity of service delivery

6. The project will continue the work undertaken in a previous TA to deepen partnerships between local governments and financial institutions, including local banks, to support CBOs and develop appropriate financing options and incentive schemes. The TA will support the creation of an enabling environment for cooperation between BPSPAMS and local financial institutions, through (i) disseminating BPSPAMS' market potential to related financial institutions; (ii) facilitating the issuance of regulations and incentive mechanisms that support active participation of financial institutions, in particular at district level; (iii) supporting the development of guidance for BPSPAMS to get financial access to improve and expand their services; and (iv) setting up collaboration contracts between interested BPSPAMS and other parties (such as the Association of the BPSPAMS) to ensure quality improvement and sustainability of the services.

7. **Collaboration.** The TA will seek to proactively collaborate with other sectors platforms – such as the National Community Empowerment Program (PNPM) – to ensure full alignment within the larger framework of local service delivery. While the focus of PAMSIMAS is on behavior change to eliminate open defecation practices and increase access to improved sanitation in rural areas, the TA will examine collaborations with other programs to address this issue. The findings from TA provided by WSP to the Directorate General of Human Settlements of the Ministry of Public Works on septage management in urban areas found that; despite considerable government investment in septage treatment facilities, septage management systems in Indonesia are unsatisfactory. Less than 10% of the 150 sludge treatment facilities constructed in the 1990s were still functional in 2009 and an estimate in 2011 suggested that less than 4% of Indonesia's septage is delivered to a treatment plant and is then treated.^[11] In addition, demand for pit and tank emptying services is low.

^[1] A Rapid Assessment of Septage Management In Asia, AECOM and SANDEC, 2010

Annex 9

ECONOMIC ANALYSIS

Introduction

1. In the first half of 2015, the Bank conducted a survey to assess the economic benefits of projectfinanced investments in community-based piped water supply systems. These investments account for over 80 percent of the total cost of Component 3 (which, in turn, account for over 60 percent of the total project cost) in the ongoing project. The survey covered 100 randomly selected subprojects in six provinces (West Sumatera, South Sumatera, East Nusa Tenggara, West Java, Central Java, and South Sulawesi), covering the three most common systems (gravity-fed, pumping from deep well, and intake from surface water). Data were collected from a total of 1,015 project beneficiaries using structured questionnaires.

Methodology

2. **Overview.** To assess the economic viability of PAMSIMAS-financed investments in piped water supply subprojects, an economic analysis was prepared for a representative sample of these subprojects based on *Guidelines for the Economic Analysis of Projects*, which were issued by the Asian Development Bank in 1997.¹⁷ The guidelines describe four basic steps to analyzing the economic viability of a subproject. These steps are:

- Identify economic costs and benefits,
- Quantify economic costs and benefits,
- Value economic costs and benefits, and
- Compare benefits and costs.

3. **Identification and quantification of economic costs and benefits.** The subproject's incremental economic costs and benefits were identified and, to the extent possible, quantified for a ten-year implementation period (the assumed useful life of a community-based piped water supply subproject). All costs and benefits were expressed in mid-2015 economic prices excluding transfer payments (such as taxes, duties and subsidies). The economic cost-benefit analysis was conducted at the domestic price level.

4. **Valuation of economic costs and benefits.** Economic costs were derived from financial costs using conversion factor of 0.70 for unskilled labor inputs, and 0.95 for other inputs (the same conversion factors that were used for the preparation of recent IFI-financed projects in Indonesia). The labor content of investment and O&M costs was estimated at 30 percent. Investment costs were taken from the MIS and increased by 36 percent to cover administrative overheads and facilitator costs. O&M costs were collected from the BP-SPAMs that managed the water supply systems in the sample. Economic benefits consisted of non-incremental costs saved, the additional value of incremental water (both estimated based on information provided by the 1,015 respondents to the survey), and incremental revenue from water tariffs (as recorded by BP-SPAMs).

5. **Comparison of economic benefits and costs.** Ninety-two of the 100 subprojects in the sample were classified as fully functioning, which is higher than the share of all water supply subprojects financed by PAMSIMAS. According to the MIS, by June 2015, 73 percent was fully functioning, 20 percent was functioning partly, and 7 percent did not function. The purpose of the economic analysis was to assess the net economic benefits of all water supply subprojects that have thus far been financed by the project, not

¹⁷ The Bank's *Investment Project Financing Economic Analysis Guidance Note* (2013) does not contain a detailed method for conducting an analysis, but refers several "representative sources that serve as useful background material to inform an economic analysis", including ADB's *Guidelines for the Economic Analysis of Projects*.

only the benefits of subprojects that are functioning well. For this reason, the economic benefits and costs were first estimated for the subprojects in the sample classified as fully functioning, and then adjusted to account for subprojects that are partly (or not at all) functioning. The procedure for estimating adjusted economic costs and benefits can be summarized as follows:

- *Estimate economic costs and benefits of fully functioning subprojects.* The economic costs and benefits of the fully-functioning subprojects in the sample were deemed representative for all fully functioning water supply subprojects financed by the project.
- Adjust economic benefits of partly and non-functioning subprojects. The average economic benefits of a partly functioning subproject were set at 50 percent of the benefits of the average economic benefits of a fully functioning subproject. For obvious reasons, the assumed economic benefits of a non-functioning subproject were zero.
- *Estimate weighted average economic costs and benefits.* To estimate economic costs and benefits for all PAMSIMAS-financed water supply projects, economic costs and benefits of fully, partly and non-functioning systems were weighted by their share in the total number of subprojects.¹⁸ In formula:
 - $EB_{ADJ} = EB_{FF} + EB_{PF} + EB_{NF}$
 - $EB_{PF} = 50\% (20/73) EB_{FF}$
 - $EC_{ADJ} = EC_{FF} + EC_{PF} + EC_{NF}$
 - $EC_{PF} = (20/73) EC_{FF}$
 - $EC_{NF} = (7/73) EC_{FF}$
 - Where
 - EB: economic benefits
 - EC: economic costs
 - ADJ: adjusted
 - FF: subscript denoting fully functioning piped water supply subprojects
 - PF: subscript denoting partly functioning piped water supply subprojects
 - NF: subscript denoting non-functioning piped water supply subprojects

6. The sum of PAMSIMAS-financed piped water supply subprojects was considered economically viable if the economic net present value of the adjusted discounted (net) benefit streams is at least zero, or if the economic internal rate of return (EIRR) of these benefit streams exceeds the economic opportunity cost of capital (EOCC) that was employed to finance the subprojects. For the purpose of assessing the economic viability of a subproject, the assumed EOCC was 12 percent.

Assessment of Economic Cost and Benefits

7. **Types of economic costs.** An assessment of the economic costs and benefits of a subproject should only consider costs and benefits that would not arise without that subproject. The quantifiable incremental economic costs of a water supply subproject consisted of:

- *Incremental economic investment cost.* This was the total cost of a subproject as recorded by the project's MIS. To this amount, a mark-up of 25 percent was applied to cover the costs of facilitation, training and project administration.
- Incremental economic cost of operations and maintenance (O&M). This was the annual O&M cost of a sub-project during its economic lifetime. This amount was estimated as the average annual expenditure of the BP-SPAM in 2013 and 2014.

8. **Types of economic benefits.** The quantifiable incremental economic benefits of a water supply subproject consisted of:

¹⁸ This implicitly assumes that the average cost of fully, partly and non-functioning subprojects are the same. This assumption was deemed realistic.

- *Incremental revenue from water tariffs.* The implementing agency requires villages that receive block grants for co-financing piped water supply systems to collect tariffs from beneficiaries. This amount was estimated as the average annual revenue of BP-SPAMs in 2013 and 2014.¹⁹
- *Non-incremental cost saved.* Persons to be served by the new system will have lower cost because project water is less costly than non-project water (this is because beneficiaries no longer need to purchase water from water vendors, or save time collecting water, or both).
- Additional value of incremental water. Persons to be served by the project will normally consume more water than before because project water is less expensive than non-project water; the economic benefit of the additional value as 50 percent of the cost difference between project and non-project water.²⁰

9. It is recognized that piped water supply systems may also generate substantial health benefits. However, it is methodologically difficult to disentangle the benefits generated by improved water supply systems from the benefits generated by improved public sanitation facilities and advocacy programs aimed at improving hygiene and sanitation behavior. In addition, there was a shortage of reliable time series on the incidence water-borne diseases at the village level. For these reason, health benefits of project-financed were not included as economic benefits water supply systems, but estimated separately as a benefit of the entire project (see **Box 1**).

Box 1: Indicative Estimate of Economic Benefits from Reduced Health Costs

In 2008, the Water and Sanitation Program managed by the World Bank published an authoritative study on the economic cost of poor sanitation in five Southeast Asian countries, including Indonesia.²¹ The study estimated the economic cost for Indonesia at US\$3.3 billion per year. The cost of water and sanitation-related diseases accounted for about 53 percent of the total; of these, diarrhea was by far the most important (with a share of approximately 40 percent of total health-related economic costs). Although the study focused on poor sanitation, the proposed subprojects would help mitigate the incidence of diarrhea and other waterborne diseases.

The economic benefits from reduced health costs are notoriously difficult to quantify. In 2012, the World Health Organization published a useful overview to value the economic benefits of improved health from a reduction in the incidence of diarrhea, the most costly water-borne disease in Indonesia.²² To value the welfare gained from avoiding lost working days, it is commonly assumed that a diarrhea episode will result in five lost working days. The World Bank estimates the opportunity cost of time at 30 percent of the monetary income using per capita GDP as a proxy for time value. In 2013, about 65 percent of the population of Indonesia was of working age, and the minimum wage in that year was about \$2,000 (or US\$500 per capita assuming an average household size of four). Assuming 250 working days per year, the economic cost of a single five-day diarrhea episode was estimated at (65 percent x 30 percent x 500 x 5/250 =) \$2.0 per capita per year. This amount increases to \$2.2 when welfare gains from reduced child illness and school absenteeism are added (estimated by the World Bank at 15 percent of monetary income each). Given that the economic cost of diarrhea accounted for 40 percent of the total economic cost of water-borne diseases in Indonesia, the average annual cost of a single episode of such a disease was estimated at (1/0.40 x 2.2=) \$5.6 per capita per year. This is equivalent to about IDR75,000 per beneficiary in mid-2015 prices. Note that this amount underestimates the true economic benefits from reduced health costs, because it ignores welfare gains from increased life expectancy and the value of avoided loss of life.

Source: World Bank, based on WSP (2008) and WHO (2012)

¹⁹ Some BP-SPAMs receive non-tariff revenue. This, however, is uncommon and in such cases the alternative sources of revenue do not account for a major share of incremental revenue.

²⁰ This is admittedly an imprecise method, but the survey did not allow for in-depth analysis of the shape of the demand curve.

²¹ Economic Impacts of Sanitation in Indonesia, Water and Sanitation Program. World Bank, 2008.

²² Global costs and Benefits of Drinking Water Supply and Sanitation Interventions to Reach the MDG Target and Universal Coverage. WHO, 2012.

Results

10. **Overview.** For 14 of the 92 subprojects classified as fully-functioning, no data were available on the number of house connections. Because the estimation of economic benefits requires this number, these subprojects were therefore excluded from the analysis. One subproject was completed in 2014; this project was also excluded because there was no information available on a full year of BP-SPAM revenue or expenditure. The analysis was therefore undertaken for 77 subprojects, and supported by data collected from 741 subproject beneficiaries.²³

11. **Economic costs.** The average economic investment cost of the subprojects in the sample was about IDR 362 million (including a 25 percent markup for project administration). Most subprojects provided piped water to 100 to 300 households. The average economic cost of operations and maintenance was about IDR 16 million per year, or 4 percent of the investment cost.

12. Economic benefits.

- *Incremental revenue from water tariffs.* In 2013 and 2014, the average tariff revenue generated by the 77 subprojects in the sample was about IDR 18 million. This amount was only slightly higher than the average O&M expenditure in the same period.
- *Non-incremental cost saved.* On average, households served by PAMSIMAS-financed water supply systems paid about IDR19,800 per month for water, which was almost double the monetary cost of water before these systems became operational (IDR10,800). It should be noted, however, that average consumption also almost doubled, so that average cost of water (expressed in IDR per cubic meter) was actually lower than in the 'without PAMSIMAS' scenario (the average cost dropped by almost 7 percent, from approximately IDR1,970/m³ to IDR 1,850/m³). Moreover, households saved substantial amounts of time collecting water; average collection time dropped from over 50 minutes per day to about 10 minutes per day. If the value of time is added to the monetary cost, the economic cost drops by more than 80 percent, from about IDR18,630/m³ to IDR 2,480/m³. The economic benefit on non-incremental cost saved was estimated by applying the total cost saving per cubic meter (monetary cost savings and time savings) to pre-PAMSIMAS consumption levels.
- Additional value of incremental water. Because project water is less expensive than non-project water, the vast majority of respondents increased their consumption significant (on average, by almost 100 percent). The economic benefit of the additional value of water was estimated by applying 50 percent of the cost difference between project and non-project water to the increase in consumption.

13. **Estimation of net economic benefits.** The EIRR of the 77 fully functioning subprojects in the sample was estimated at 44.0 percent. The EIRR of the adjusted benefit and cost streams (also taking partly and non-functioning subprojects into consideration) was estimated at 36.1 percent, which is far higher than the Bank's minimum required rate of 12 percent, and comparable to EIRRs observed for piped water supply systems financed by other CDD programs in Indonesia.²⁴ The economic benefits of additional value of incremental water were highest, accounting for 62 percent of the present value of the benefit streams, followed by benefits from non-incremental costs. Benefits from incremental tariff revenue were not significant, and at present tariff levels PAMSIMAS-financed water supply subprojects are not financially feasible.

²³ For each subproject, 10 persons were interviewed. The results of (770-741=) 29 interviews were not used, because these were outliers than would result in unrealistically high monetary savings.

²⁴ See for example, Laporan Akhir Studi Skala Kecil Analisis Manfaat Ekonomi Proyek Infrastruktur PNPM Mandiri Perdesaan. PNPM Support Facility. July 2012.

PAMSIMAS FLOW OF FUNDS

1. **Component 1: Community Empowerment, Local and Village Institutional Development.** This component would finance facilitators which are handled by the provincial *Satker*, following the standards set by the CPMU. At the beginning of each month, the provincial *Satker* calculates the salaries to be paid to each facilitator. Upon submission of facilitator reports, certified by project manager at city/district dinas office, verification officer in provincial *Satker* will issue payment orders (SPM) attaching a list of the payees for submission to the KPPN office. The Treasury Office checks the budget availability and issues the SP2D to the Treasury Office's operational bank which transfers the funds directly to facilitators' account and arrange for debiting the loan portion to the DA. This is the arrangement for the first year implementation. The following years the facilitator salaries will be included as part of the ROMS contracts under component 5. Project costs related to training for community facilitators, advocacy and socialization, and other trainings will be included as part of the ROMS or Training Development Services (TDS) contract, under component 5.

2. **Component 2: Improving Hygiene and Sanitation Behavior and Services.** The funding source for this component will be from GoI. This component would finance STBM implementation on district wide basis. Salaries of District Level STBM Facilitators to provide implementation (component 2 – financed by GoI) and capacity building support for District CBTS (STBM) implementation will be included as part of the ROMS or TDS contract under component 5.

3. **Component 3: Water Supply and Public Sanitation Infrastructure.** After LKM is established, it opens a bank account under the name of LKM with three members as authorized signatories. To be able to request the first tranche, they need to sign the block grant agreement with Operational PJOK at sub-district level. The request should be completed with CAPs and proposals and already verified by facilitators and certified by the consultant at district level.

4. The block grants comprise four sources of financing: (a) 60% from DIPA budget of central government made available from loan or from GOI own source (APBN); (b) 10% from district government budget (APBD); (c) 20% from community contribution; and (d) 10% from village funds (Dana Desa). Only one external funding source (APBN or APBD) will be used for any village grant. Grant funds are transferred to LKM's bank account.

5. The commitment officer at the district level assembles request from the various LKMs for which she/he is responsible. After review of documentation, she/he forwards it to verification officer. The payment officer then verifies and issues a payment order (SPM) to the Treasury Office (KPPN), attaching a list of LKM payee. This process is applicable to all funding options for village grant (new village, expansion, and optimization). The KPPN then issues remittance orders (SP2D) to the operational bank or Bank Indonesia branch office. The standard mechanism for releasing block grants from local government contribution is similar as above except the payment order (SPM) is issued to the local government finance department.

6. The release of funds to the LKM of the village is carried out in three tranches (40%, 40%, and 20%). The first payment is made upon signing of the block grant agreement, and the subsequent payments made based upon satisfactory progress reports that consist of financial and technical report as certified by the facilitator.

7. **Component 4: District and Village Incentives.** This component will finance block grant for BPSPAMS associations and additional district incentive grants. The source for additional district inventive

grants will be from GoI fund. Supports for BPSPAMS association will be financed by IBRD loan and included in the ROMS contract.

8. **Component 5: Implementation Support and Project Management.** This component would support the CPMU with hiring consultants or service providers (National Advisory Consultants, TDS, CMAC, and ROMS) etc. to assist in project implementation. These consultants submit an invoice to commitment officer in National *Satker*. Staffs in national *Satker* are assigned to conduct detail verification to the invoice. After the review, commitment officer issues payment request (SPP) to verification officer. After documents verification, the verification officer issues SPM (payment order) to relevant KPPN. The KPPN checks the budget availability and issue the SP2D to the KPPN's operational bank which transfers the funds directly to the consultant' account and arrange for debiting the loan portion to the DA.

The flow of funds and reporting mechanism (APBN) is shown diagrammatically below.



GENDER ACTION PLAN

	Activities	Measures	GAP Implementation in PAMSIMAS
1	Policy and guidelines	 Include a gender mainstreaming policy into Juknis covering measures identified below. Include operational guidelines for gender mainstreaming into Juklak and disseminate to all project management teams Develop a user friendly brochure and poster to explain gender policy and guidelines in simple terms and disseminate to all government stakeholders TORS for consultants state they must comply with the gender policy 	 Gender mainstreaming is stated as one of the project principles in the manuals. Operational guidelines and strategy for gender mainstreaming included in project technical guidelines, esp. safeguard, and community facilitator and consultant trainings. Communication materials (film, poster, etc) included the message of gender mainstreaming. TORs for consultants stated they are responsible to ensure gender mainstreaming in the program
2	Selection of consultants	 Requirement that contractors should actively seek women for positions and demonstrate their efforts to do so as part of their tender proposal. Require gender balance among provincial and district technical consultant teams (minimum 30% female or male) 	 Consultants and non-consultants services are encouraged to have gender balanced team composition. The composition of provincial and district consultant teams has reflected gender balance. Although it's challenging in difficult geographical areas.
3	Selection of community facilitators	 PPMU to include a statement in advertisements that women are actively encouraged to apply and make efforts to ensure applications from women At least one community facilitator per team must be a women or man 50% gender balance within sub-disciplines of community facililitators (i.e. technical, community development, health) is required 	 The composition of community facilitators has reflected gender balance. Although it's challenging in difficult geographical areas. Gender balanced for sub-disciplines is strongly encouraged. Although it's challenging for technical disciplines. Sanitarians (field health officer) who facilitated the sanitation and health component are mostly women (around 60%).
4	Orientations	• Provide orientation on the gender policy and guidelines to project implementing units, project coordination teams and consultants at all levels so they understand their responsibilities for gender mainstreaming	• Relevant project stakeholders - project management units at all level, project implementing units, consultants – were received training or orientation on project principles and approaches, including gender mainstreaming policy and strategy.
5	Capacity building for technical consultants and community facilitators	 Provide training for central, provincial and district consultants and community facilitators so they can adopt a gender mainstreaming approach within their areas and provide skills transfer to GoI staff and other personnel Identify local gender specialists (eg women's NGOs) who can assist with coaching facilitators and planning community participation strategies 	 Community facilitators and consultant received training which include gender mainstreaming policy and strategy. Community facilitators trained on methodology of participatory approach (MPA) that is applied throughout the project cycle at community level, which will assure the inclusion of gender balance decision making process.

	Activities	Measures	GAP Implementation in PAMSIMAS
		 Training evaluations will include assessment of gender equity content Provide measures to give public recognition/reward to community facilitators who perform well in encouraging village women to participate 	• Training evaluation in the form of pre and post-test, understanding level, included gender equity aspect, esp. in community facilitators training.
6	Training service providers	 Requirement that all training teams must have a minimum of 30% female or male trainers. All training programs assessed by the national or provincial CD/Social Inclusion consultants on gender equity content prior to delivery 	 Record of training participants is gender segregated. As of 2015, trainings at community level involved in average 42% female participants, and other trainings 30%. Training curriculums and materials for all project players, esp. community facilitators, are assessed by TDS (Training Development Services) to ensure gender balanced approach.
7	Community processes	 Community facilitators to implement measures including advocacy to village heads, working with women leaders and women's groups from the start of the community process to encourage participation and when necessary, conducting separate men and women's focus groups Community facilitators to encourage women to stand for election in the village implementation team and village WSS management group and consider ways of achieving gender balance (eg men and women vote separately for male and female representatives) District consultants to monitor gender balance of women and men (from poor and better off groups) during community planning and implementation activities and address any gaps as they arise No CAP can be approved if the Village Implementation Team that prepared it is all –male and predominantly from the elite class of households., and without clear evidence that a substantial number of women and men have participated in the decision making process and have agreed with the CAP proposals. 	 Consultant and community facilitators are encouraged to work with existing local women groups (PKK, Arisan group, religious group, etc) to promote women involvement and participation throughout project cycles. Methodology of participatory approach (MPA) is used for community planning, implementation, operational and maintenance stage. MPA is a comprehensive method for community's social assessment, which recognizes the importance of gender and poverty-sensitive approaches. Inclusion of women and the poor as well as other disadvantaged group is assured by this approach. Social values (honesty, trustworthy, etc) and gender equity are the main basis for electing community organizations (KKM and BPSPAMS). Currently, KKM has in average 30% of women and BPSPAMS 28%. List of KKM and BPSPAMS members, and estimated participants of community training, which segregated by gender, are included in CAP. Key community meeting participants, segregated by gender, is recorded in minutes of meeting as well as in project MIS.
8	Community Capacity Building	 Provide leadership training for women villagers, including bidan desa and health cadres Emphasize gender and social equity requirements of the project for VITs and CAPs in project socialization and community capacity building. 	 Awareness training, which include leadership and gender equity, is provided to all project stakeholders from community, facilitators and consultants, as well as project management units at all level. Gender and social equity requirements is emphasized throughout project cycles at community level through the use of MPA; guidance and operational strategy in the manual and technical guidelines.

	Activities	Measures	GAP Implementation in PAMSIMAS
9	Socio- economic incentive funds	 Undertake a gender analysis in developing the operations of this fund to assess likely costs/benefits for women and men. Include performance in promoting gender equity in PAMSIMAS sub-project as an evaluation criteria for both institutional and community grants Encourage women's meeting (e.g. through existing women's groups) in participating villages to collect ideas for the village proposal. 	 Gender equity is included in impact evaluation study which was concluded in 2012. The study looked at several aspects of gender equity such as participation, access to training, and gender-specific improvements. Overall, the results showed equal benefits, slight higher results of women accessing community training. Some of the processes in MPA done in separate FGDs for women and men in better-off and poor groups of the community to ensure women and the poor have voice and choice in decision making.
10	Mainstreamin g and scaling up CDD approach for WSS	 Incorporate gender mainstreaming principles into strategy development for mainstreaming and scaling up CDD WSS Build capacity of NGOs or organizations or individuals for gender training to increase local resources available for scaling up Include gender data and analysis into advocacy kits and advocacy activities to decision makers to increase their awareness of importance of gender in WSS 	 The working group, at LGs level which responsible for mainstreaming and scaling up CDD WSS through institutionalized the approach into LGs' programming and budgeting, is encouraged to have gender balanced team. The program works with civil society in several process, for instance village selection, CAP evaluation, and CDD WSS mainstreaming. The representative from civil society is encouraged to be gender balanced. Gender and data analysis is possible to be done using the project MIS.
11	Monitoring and evaluation	 National/provincial CD/Social Inclusion consultants regularly conduct field visits and review progress in gender mainstreaming and mentor facilitators Ensure formats for Monev collect gender disaggregated data for participation in program training and community activities and this data is inputted to MIS Ensure that sustainability monitoring involves participation of women and men and that gender disaggregated data is collected and recorded. Besides monitoring project outcomes, this should be used also for performance evaluation of project implementers and managers. Central level CD/Social Inclusion consultant to conduct a regular gender analysis of sustainability monitoring data and provide report to CPMU Contractors include progress with gender outcomes in quarterly reports PMR to include a report on progress in gender participation and outcomes World Bank will include a gender specialist in each supervision mission 	 Regular monitoring and evaluation tools such as MIS, spot checking, field visits includes gender equity aspects such as women participation and involvement in community organizations (KKM and BPSPAMS). Women involvement throughout the project cycle processes and in community organizations (KKM and BPSPAMS) is monitored and recorded in the project MIS. Safeguards thematic review conducted by CMU in March 2015 selected PAMSIMAS as one of best practices for women involvement. It was revealed that "women in the village water management board (BPSPAMS) were key leaders clearly articulating issues related to system maintenance and book keeping".

	Activities	Measures	GAP Implementation in PAMSIMAS
12	Knowledge management	 Collect community stories on achievements in gender equity and disseminated through Website and newsletters and other forums Conduct mid-term in-depth gender review using third party assessors and develop an action plan in response to the review recommendations 	 Best practices on women involvement and leadership are disseminated in the project website and best practices book. Independent evaluation was conducted by AusAID (now DFAT) as the project received grants fund from Australian Govt. The evaluation includes gender mainstreaming aspect.
		• Community facilitators be encouraged to develop local facilitator forums that meets regularly with personnel from other projects in the district (eg KDP, UPP2, ILGR) and with NGOs	• Community facilitators and consultants are encouraged to collaborate with similar programs (eg PNPM, NGOs funded program, bilateral-funded program) on many aspects including gender mainstreaming efforts.

PAMSIMAS PROGRAM CYCLE

