Annex I

Project Status Report on Cajamarca Water Supply and Sewerage Improvement and Expansion Project Loan Agreement No PE-P35 Fourth Quarter Report

Organization Information

Borrower	**Dirección General de Endeudamiento y Tesoro Público** **Ministerio de Economía y Finanzas** Person in Charge Carlos Linares Peñaloza Director General Contacts Address: Jr. Junín № 319 Lima 1 - Perú Phone/FAX: 51-1-3115931 / 51-1-6269921 Email:
Executing Agency	**Unidad Ejecutora de Programas Regionales – PROREGION** **Regional Government of Cajamarca** Person in Charge José Panta Quiroga Director Ejecutivo Contacts Address: Jr. Sta. Teresa de Journet 351, Urb. Horacio Zevallos – Mz. G-5, Cajamarca, Perú Phone/FAX: 51-076-344364 Email: jp_consultor@hotmail.com
Implementing Agencies	**EPS SEDACAJ** Person in Charge Luis Llanos Ramírez Gerente General Contacts Address: Jr.Cruz de Piedra No 150-Cajamarca-Perú Phone/FAX: 51-076-362121 / 51-076-362167 Email: sedacaj@terra.com.pe **EPS Marañon** Person in Charge Marino Soto Herrera Gerente General Contacts Address: Jr.Mariscal Ureta Nol912 -Jaen - Perú Phone/Fax:51-431-618 Email:epsmaranon@speedy.com.pe
Monitoring Agency	**Vice Ministerio de Construcción y Saneamiento** **Ministerio de Vivienda, Construcción y Saneamiento** Person in Charge Felix Agapito Acosta Vice Ministro Contacts Addre ss: Av. Paseo de la República 3361 - San Isidro - Lima - Perú Phone/ FAX: 51-1-2117930 Ax. 1801 / 51-1-2117945 Email: afelix@vivienda.gob.pe

Outline of Loan Agreement:

Source of Finance	JICA: Not exceeding ¥ 4,995 mil. Government of the Republic of Peru: ¥6,138 mil.
Terms and Conditions	For JICA -Interest Rate: 0.8 % p.a.fWater Supply) 0.4 % p.a.(Sewerage) 0.01 % p.a.(Consulting Service) -Repayment Period: 15 years, including 5 years of grace period -Tying Status General Untied

1: Project Description (Relevance)

1-1 Project Objective

Original: *(P/M)*

To improve sanitary conditions of Region of Cajamarca by rehabilitating and expanding the water supply and sewerage facilities in 11 provincial cities, thereby providing safe and reliable services.

Modified objective and its reason(s):(P/R *ami PCR.)*

1-2 Necessity and Priority of the Project

Consistency with development policy, sector plan, national/regional development plans and demand of target group and the recipient country.

Original: *(P/M)*

(1) Sanitation Sector in Peru

1. The Millennium Development Goals (MDGs) states one of its goals as "Ensure Environmental Sustainability" (Goal 7) and sets "Reduce by half the proportion of people without sustainable access to safe drinking water and sanitation" (Target 10) as one of the targets to be archived. In Peru, in order to achieve such target, National Plan on Sanitation 2006-2015 of Peru advocates modernization of management system, improvement of sustainability and quality of services provided and financial conditions of service provider, and expansion of existing potable water and sewerage system. Its specific goals include:

Table 1: Main goals stated in National Plan on Sanitation 2006-2015
(Sanitation Indicators)

	2005	2010	2015
Connection Rate (Potable Water)	76%	79%	82%
Connection Rate (Sewage)	57%	66%	77%
Sewage Treatment Rate	22%	54%	100%
Service Hours a Day	17h	22h	23h
Micrometer Coverage	54%	92%	95%

2. In order to achieve these goals, the Government of Peru (GOP) represented by Ministerio de Vivienda, Construcción y Saneamiento (MVCS) estimates that until 2015 it needs USD 4,042 million for investment to the sector, and establishes the following basic financing policy;

Area	Service responsibility	Resources l o r investment	
		Water supply	Sewerage
Large urban area	Large and Medium EPS	- EPS's own resource - Loan repaid by EPS - Private participation	- EPS's own resource - Loan repaid by EPS - Private participation
Medium urban area	Small EPS and Municipalities	- Own resource	- Own resource
Small urban area and rural area	Municipalities and communities	- GOP budget	- GOP budget

3. The GOP aims that the investments by the GOP budget should be minimum, concentrating mainly to the small urban area and rural area where financial autonomy of the municipalities and communities is very hard to achieve, and that in large urban area the EPS should be responsible for investments. However, it is becoming clear that in some cases the service responsible entities are not capable to finance their investment needs, especially for (i) large scale of sewerage projects because the large scale investment for sewerage facilities (especially treatment) is sometimes not rentable even for large EPS, and (ii) projects in medium urban area, because the investment scale is often too large for small EPS and the municipalities, due to their limited financial capacities by their smaller size of activities.

4. The GOP has started in 2006 the Program "Agua para Todos" to support investments of EPS and the municipalities with GOP budget. However, since the needs for investment exceed the resources allocated to the PAPT, the GOP now is studying the introduction of alternative financial scheme by combing the external loan with the participation of the Regional Governments.

(2) Sanitation Sector in Region of Cajamarca

1. The Region of Cajamarca, which consists of 13 provinces and 127districts, is located in the northern part of Sierra(highland) of Peru. It is the 4th poorest region among 25 regions in Peru, whose living conditions are much lower than the national average[1];

	Region of Cajamarca	Peru
% of the population living below poverty line and those who live below extreme poverty	74.2% below poverty line 36.9% blow extreme poverty	51.6% below poverty 19.2% below extreme poverty
Average Income (year)	S/. 468.81 (Per month)	

2. The major part of water supply and sewerage facilities in provincial cities of Cajamarca were constructed during 1960s and 1970s by national government. Due to principally long period of usage and sometimes lack of adequate and timely investments and O&M (operation and maintenance), these water supply and sewerage systems have serious problems such as (i) deteriorate water quality, (ii) limited water service hour, (iii) contamination through untreated waste water, among others.

[1] Peru Opportunities for All, Peru Poverty Assessment, World Bank, December 2005,p.l8 and 173.

(Unit:%)

	Cajamarca	Peru			Latin America		
	Urban	Total	Urban	Rural	Total	Urban	Rural
Water coverage rate	72.2	83	89	65	91	96	73
Sewerage coverage rate	73.6	63	74	32	77	86	49
Waste water treatment rate	15*1	24*2	N.A	N.A	N.A	N.A	N.A

Source : Joint Monitoring Programme, WHO&UNICEF
*1 Only two cities (Cajamarca and Jaen) have WTPs to treat sewage.
*2 índice Tratamiento Aguas Servidas
http://www.sunass.gob.pc/doc/indicadores/2005/evolucion indicadores 9705.pdf

Current Situation of Water Services:

City (Population)	Water Service hour	Years since installation	water coverage	Micro meter (%)	Unaccounted for Water (%)	Sewerage Coverage	Waste Water Treatment
Cajabamba (14,528)	16	50 years	59.4%	24.28%	50.1%	84.7%	0%
Celendin (16,721)	14 (dry season) 24 (rainy season)	40 years	75.1%	87.4%	41%	75.1%	0%
Conrumazá (3,221)	24	40 years	87.1%	90.5%	36.3%	83.8%	0%
San Pablo (2,940)	4 (dry season) 14 (rain)' season)	30 years	79.6%	0%	45%	75.8%	0%
San Miguel (3,635)	20 (rainy season) 12 (dry season)	40 years	81.5%	92.7%	36.6%	71.1%	0%
San Marcos (7,619)	22 (rainy season) 6 (dry season)	40 years	77.7%	94.0%	32.9%	58.6%	0%
Bamba marca (17,763)	24 (lower city) 1 (upper part)	40 years	45.6%	74.34%	35.6%	46.4%	0%
Chota (18,454)	3 (rainy season) V2 (dry season)	30 years	67.7%	0	51.8%	56.1%	0%
Cutervo (15,341)	9	40 years	65.1%	0	70.2%	74.7%	0%
Hualgayoc (1,433) '	16 (rainy season) 6 (dry season)	40 years	87.6%	0	62.96%	86.5%	0%
Jaen "4 (78,097)	14	35 years	73.7%'^	23%	52.5%	63.4%	100%*'

*3 There is one waste water treatment plant in Jaen, however, it doesn't have enough capacity to treat inflow of sewer.
*4 The total of the population of Jaén (64,766), Fila Alta (6,799) and Bellavista 6,532) *j*
*5 For the population of Jaén only(Fila Alta and Bella vista are not included) since the pipeline and connection for Jaén is included in the scope of the Project. Bella Vista is considered only for the calculation of demand of the production of potable water.
*6 For the population of Jaén and Fila Alta only, since Jaén and Fila Alta are located in the same district and integrated into the same sewerage system whereas the construction of pipes and connection for Fila Alta is not included in the scope of the Project.

3. Before such situation, the Regional Government of Cajamarca (RGC) has proposed to the GOP an alternative financial scheme to the rehabilitation and expansion projects of water and sewerage systems in urban area of the Region, putting its CANON distribution revenue as the resource for repayment and counterpart fund for the external loan.

Attachment(s):

_____

Actual: *(P/R,PCR)*

Attachment(s): required only when they are revised.

1-3 Rationale of the Project Design

- Timing, scale, technology of the project

Original: *(P/M)*

(1) Timing

Water supply and sewerage systems in these provincial cities, sometimes constructed over forty years ago, are coming to end of their life.

(2) Scale

The Project is designed taking into account (i) current situation of deterioration of water supply and sewerage system and (ii) projected demand of the area up to 20 years.

(3) Technology

Technology of WTPs and WWTPs are selected based on the facility and continuity in , as follow,

Cities	WTP	WWTP
Cajabamba	Mixed Rapid	Imhoff tank +Thricking Filter+ Secondary Sedimentation
Celendin		Rafa (existing)+ Secondary Lagoon
Contumaza		Anaerobic Lagoon + Facultative Lagoon (Non-JICA)
San Pablo		Anaerobic Lagoon + Facultative Lagoon (Non-JICA) Septic Tank
San Miguel		Anaerobic Lagoon + Facultative Lagoon (Non-JICA)
San Marcos	Slow Filter	Lagoon (Non- JICA)
Bambamarca		Anaerobic Lagoon+ Thricking Filter +Secondary Sedimentation Septic Tank
Chota		Anaerobic Lagoon+ Thricking Filter +Secondary Sedimentation
Cutervo		Anaerobic Lagoon + Facultative Lagoon
Hualgayoc		Imhoff Tank +Soil Treatment
Jaen	Rapid Filter	Anaerobic Lagoon+ Facultative Lagoon

Actual: *(P/R, PCR)*

2: Project Implementation (Efficiency)

2-1 Project Scope

Table 2-1-la: Comparison of Original and Actual Location

Location	**Original:** *(P/M)* **Water Supply and Sewerage** **(11 provincial cities)** Bambamarca, Cajabamba, Celendin, Chota, Contumaza, Cutervo, Hualgayoc, Jaen, San Marcos, San Miguel, San Pablo **Attachment(s):Map**	**Actual:** *(P/RandPCR)* **Attachment(s):Map**

Table 2-1-lb: Comparison of Original and Actual Scope

Items	**Original**	**Actual**
Water Supply		
Intake	- 9 cities -14 intake points (1 construction: 11.00 1/s, 13 rehabilitation: 211.04 1/s)	- 9 cities -14 intake points (1 construction: 11.00 1/s, 13 rehabilitation: 211.04 1/s)
Treatment Plant	- 4 cities - 4 plants (3 construction: 229.6 1/s, 1 rehabilitation: 10 m^3)	- 4 cities - 4 plants (3 construction: 229.6 1/s, 1 rehabilitation: 10 m^3)
Conduction	-10 cities (2 construction: 19.1 km, 10 rehabilitation: 57 km)	-10 cities (1 construction: 14.114 km, 10 rehabilitation: 68.817 km)
Reservoir	- 8 cities -18 reservoirs (07 construction: 7,440 m) (11 rehabilitation: 3,934m^3)	- 8 cities -18 reservoirs (07 construction: 7,440 m) (11 rehabilitation: 3,934m^3)
Pipe Line (Primary and Secondary Line)	- 65.416 km (construction) -191.020 km (rehabilitation)	- 89.521 km (construction) -201.715 km (rehabilitation)
Connection	• 30,365 • 21,033 (rehabilitation) • 9,332 (construction)	• 31,350 • 23,327 (rehabilitation) • 8,023 (construction)
Sewerage		
Connection	• 30,551 • 18,383 (rehabilitation) • 12,168 (construction)	• 28,399 • 15,900 (rehabilitation) • 12,499 (construction)

Items	Original	Actual
Secondary Line	- 11 cities - 257.726 km - 188.396 km .(rehabilitation) - 69.330 km. (construction)	- 11 cities - 281.915 km - 180.358 km .(rehabilitation) - 101.557 km. (construction)
Pumping Station	- 2 cities - 3 pumps (3 construction: 360.28 m / day)	- 2 cities - 3 pumps (3 construction: 360.28 m / day)
Primary Line	- 08 cities - 15.215 km - 3.457km (rehabilitation) - 11.758 km (construction)	- 08 cities - 10.355 km - 3.207 km (rehabilitation) - 7.148 km (construction)
Treatment Plant	- 8 cities -12 plants (6 lagoons, 2 Imhoff, 4 septics tanks), 4 plants constructed by counterpart fund) (11 construction: 18,517 rrf/day) (01 rehabilitation: 293.8 m^3/day)	- 8 cities -12 plants (6 lagoons, 2 Imhoff, 4 septics tanks), 4 plants constructed by counterpart fund) (11 construction: 18,517 rrf/day) (01 rehabilitation: 293.8 m^3/day)
Consulting Services	1) Preparation of EI A 2) Detailed Design 3) Assistance for Preparation of Bidding Documents 4) Tendering Assistance 5) Supervision of Civil Works 6) Technical Assistance and Start-ups 7) Technical Assistance (Awareness raising: hygiene education, promotion of house connection, Institutional Capacity building, Advisory services)	1) Preparation of EI A 2) Detailed Design 3) Assistance for Preparation of Bidding Documents 4) Tendering Assistance 5) Supervision of Civil Works 6) Technical Assistance and Start-ups 7) Technical Assistance (Awareness raising: hygiene education, promotion of house connection, Institutional Capacity building, Advisory services)

2-1-2 Reason(s) for the modification if there have been any.

(P/R and PCR)

2-2 Implementation Schedule

Table 2-2-1: Comparison of Original and Actual Schedule

Items	Original	Actual
[P/M] * it will be modified according to the final version of the Implementation Schedule of the mission of this time.	*(P/M)*	*(P/R,PCR)*
Signing of Loan Agreement	March, 2009	March, 2009
Preparation of Short List, TOR and Invitation Letter and JICA Concurrence	December, 2008 - February, 2009	
Invitation and Evaluation of Proposal and JICA Concurrence	March- May, 2009	March 12, 2009
Negotiation and Signing of Contract and JICA Concurrence	June - July, 2009	April 28, 2009
Detailed Design Preparation of Tender Documents for Civil Works and JICA Concurrence	August, 2009 - January, 2010 November, 2009 -July, 2010	December 29, 2009
Tender Period	February - April, 2010	June 30, 2010
Tender Evaluation and JICA Concurrence	April, 2010	
Negotiation and Signing of Contract and JICA Concurrence	May - July, 2010	Group A – July 27, 2010 Group B - July 27, 2010 Group C - July 27, 2010
Project Completion Date*	November 2011	Group A -January 2012 Group B – May 2012 Group C – April 2012

2-2-2 Reasons for any changes of the schedule, and their effects on the project.

1. EXTENSION OF TERM

- Group "A": Different conditions of land and electromechanical part,

Cessation of regional unemployment

- Group "B": the extension of goals for more meters.

Cessation of regional unemployment

- Group "C":

Easement issues in phase 1

Different conditions in step 3

Stroke change collector AD 1

Change of diameter in the transmitter

(P/R and PCIV

2-3 Project Cost

2-3-1

Table 2-3-la: Comparison of Original and Actual Cost BY ITEM (Unit: Million)

Breakdown of Cost	Original								
	Foreign Currency Portion			Local Currency Portion			Total		
	Total	JICA Portion	Peru Portion	Total	JICA Portion	Peru Portion	Total	JICA Portion	Peru Portion
Item	millionJPY			million SOL			millionJPY		
Procurement/Installation	154	78	76	312	140	172	11,133	4,995	6,138
1- South Zone	0	0	0	84	42	42	2,937	1,471	1,466
Water Supply Portion	0	0	0	32	16	16	1,161	581	580
Sewerage Portion	0	0	0	52	26	26	1,776	890	886
2- Central Zone	0	0	0	78	39	39	2,761	1383	1,378
Water Supply Portion	0	0	0	32	16	16	1,128	565	563
Sewerage Portion	0	0	0	46	23	23	1,633	818	815
3- North Zone	0	0	0	58	29	29	2,042	1,023	1,019
Water Supply Portion	0	0	0	24	12	12	846	424	422
Sewerage Portion	0	0	0	34	17	17	1,196	599	597
Total of Civil Work	0	0	0	220	110	110	7,740	3,877	3,863
Consulting Services	70	70	0	23	23	0	876	876	0
Price Escalation	4	4	0	0	0	0	4	4	0
Physical Contingencies	4	4	0	12	7	5	431	238	193
Land Aquistion	0	0	0	0	0	0	14	0	14
Administration	0	0	0	8	0	8	272	0	272
Tax and Duties	0	0	0	49	0	49	1,720	0	1,720
Interest during Construction	56	0	56	0	0	0	56	0	56
Commitment Charge	20	0	20	0	0	0	20	0	20
Total	154	78	76	312	140	172	11,133	4,995	6,138

(Note) Exchange Rate: (1) USD 1=TPY111, (2) USDl=Sol 3.16, (3) Soll=IPY35.2

Base Year for Cost Estimation: October 8, 2008

(Unit: Million)

Breakdown of Cost	Original								
	Foreign Currency Portion			Local Currency Portion			Total		
	Total	JICA Portion	Peru Portion	Total	JICA Portion	Peru Portion	Total	JICA Portion	Peru Portion
Item	millionJPY			million SOL			millionJPY		
Procurement/Installation	154	78	76	392	150	239	11,804	4,628	7,175
1- South Zone	0	0	0	116	47	67	3,307	1,379	1,928
Water Supply Portion	0	0	0	52	19	32	1,481	567	915
Sewerage Portion	0	0	0	64	28	35	1,825	812	1013
2- Central Zone	0	0	0	99	41	57	2,846	1,199	1,646
Water Supply Portion	0	0	0	37	14	23	1,072	410	662
Sewerage Portion	0	0	0	62	27	34	1,774	789	985
3- North Zone	0	0	0	78	32	46	2,258	932	1,326
Water Supply Portion	0	0	0	40	15	25	1,160	444	716
Sewerage Portion	0	0	0	38	17	21	1,098	488	609
Total of Civil Work	0	0	0	293	120	170	8,411	3,510	4,900
Consulting Services	70	70	0	23	23	0	876	876	0
Price Escalation	4	4	0	0	0	0	4	4	0
Physical Contingencies	4	4	0	12	7	5	431	238	193
Land Aquistion	0	0	0	0	0	0	14	0	14
Administration	0	0	0	8	0	8	272	0	272
Tax and Duties	0	0	0	49	0	49	1,720	0	1,720
Interest during Construction	56	0	56	0	0	0	56	0	56
Commitment Charge	20	0	20	0	0	0	20	0	20
Total	154	78	76	385	150	232	11,804	4,628	7,175

(Note) Exchange Rate: (1) USD 1=TPY111, (2) USDl=Sol 3.16, (3) Soll=IPY35.2

Table 2-3-lb: Comparison of Original and Actual Cost BY YEAR

*Fiscal Year starring in January and ending in December (Unit: Million)

Breakdown of Cost	Original			Actual		
	JICA Portion	Others	Total	JICA Portion	Others	Total
Year	(YEN)	(YEN)	(YEN)	( )	( )	( )
2009	205	*64*	*269*	279.3	*34.02*	*313.32*
2010	*2,088*	*2,619*	*4,707*	*2,203*	*1,820*	*4,022.58*
2011	*2,702*	*3,427*	*6,129*	*2,147*	*5,322*	*7,468*
2012	*0*	*28*	*28*	*0*	*0*	*0*
Total	4,995	6,138	11,133	4,628	7,175	11,804

Note: Exchange Rate used: (1) USD 1=TPY111, (2) USDl=Sol 3.16, (3) Soil=JPY35.2

You can use any currencies in this chart, i.e. you may use your local currency as well as Yen for each figure.
If there were the portion of the financial resources such as of World Bank, IDB and so forth, other than your own budget, please fill in another column between "JICA Portion" and "Others" and fill in the figures of them

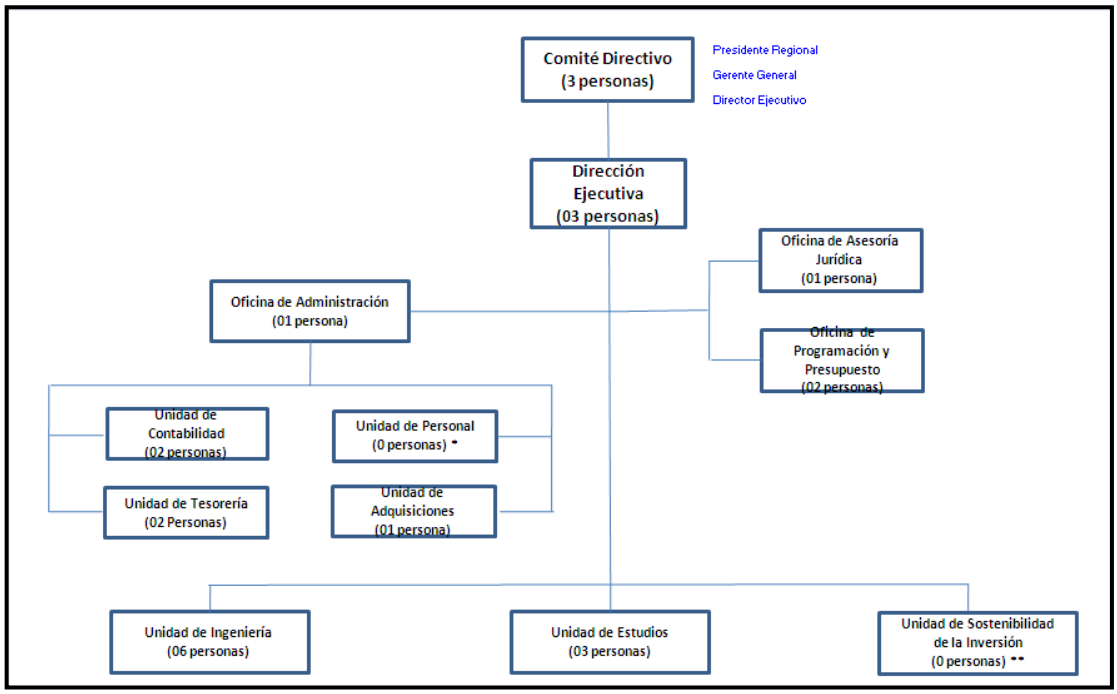
2-3-2 Reason(s) for the wide gap between the original and actual, if there have been any, the remedies you have taken, and their results.

(P/R, PCRJ

2-4 Organizations for Implementation

2-4-1 Executing Agency:

Organization's role, financial position, capacity, cost recovery etc,
Organization Chart including the unit in charge of the implementation and number of employees.



- **(*)The unit this of personnel assuming these functions the administrator**
- **(**)The Division of sustainability of the investment is not activated.**

Original: *(P/M)*

(1) Regional Government of Cajamarca (RGC)
[Position] Executing Agency
[Role] Authorized agency to submit any official request for JICA, in charge of all function necessary for the execution of the Project, except those in charge of EPS SEDACAJ and EPS Maranon.
[Total personal] 300(excluding supporting staff)
[Responsible unit] Proyectos Especiales
The Project will be implemented through U.E 005 Programas Regional (PROREGION) to be created in GRC, established under Gerencia General Regional of GRC and GRC will be responsible for the supervision of die implementation of the project and financing and repayment of the project.

(2) EPS SEDACAJ and EPS Marañon

	ESP SEDACAJ	**EPS MARANON**
Position	Implementing Agency	Implementing Agency
Total Personal	145 (excluding supporting staff)	60 (excluding supporting staff)
Responsible Unit	Gerencia Operaciones	Gerencia Operaciones
Provinces	San Marcos, Cajabamba, Celendin, Hualgayoc, San Pablo, Bambamarca, Chota, Cutervo, Contumaza, San Miguel	Jaen
Responsibilities	Responsible for operation and maintenance after the completion of the Project and subscription of civil work contracts.	Responsible for operation and maintenance after the completion of the Project and subscription of civil work contracts.

(3) Ministerio de Vivienda, Construcción y Saneamiento (MVCS)
[Position] Monitoring Agency
[Role] In charge of the monitoring of the activities of RGC and SEDACAJ and MARANON
[Responsible unit] Dirección Nacional de Saneamiento (DNS)
MVCS will monitor the activities of the Executing and Implementing Agencies and, if necessary, provides assistance. It also provides a part of resources necessary for counterpart fund of the Project.

Actual, if changed: *(P/R and PCR)*

2-4-2 Contractor(s)/ Supplier(s), and Consultant(s) and Their Performance:

2-4-2-1 Procurement and Consultant

Contract Package	Selection Method Original: *(P/M)*	Actual: *(P/R and PCR)*
1. Group A (south) 2. Group B (central) 3. Group C (north)	ICB with PQ* ICB with PQ* ICB with PQ*	Keep it
Consultant (Engineering, EIA preparation, support for bidding process, supervision and project management and capacity building)	Short-list	Keep it

* p_{re} Qualification will be implemented with the Bidding process.

2-4-2-2 Performance

(P/R and PCR)

Information on the Contractor(s)/ Supplier(s):

GROUPS OF WORK	CITY	(%) PHYSICAL ADVANCE			
		WATER SUPPLY	SEWERAGE	TOTAL TRIMESTRE	AVANCE GENERAL
GROUP`"A"	CONTUMAZA	18.42	25.85	22.68	81.83
	CELENDÍN	4.6	8.42	6.65	60.61
	SAN MIGUEL	7.97	6.98	7.57	65.64
	SAN MARCOS	12.71	6.25	9.99	74.04
	CAJABAMBA	7.66	15.85	13	64.73
	SAN PABLO	8.08	10.99	10.1	79.55
GROUP "B"	CHOTA	4.57	4.6	4.59	27.86
	HUALGAYOC	3.33	5.75	4.6	19.4
	BAMBAMARCA	1.53	3.55	2.71	21.19
	CUTERVO	4.79	4.48	4.55	31.46
GROUP "C"	JAÉN	3.88	2.14	3.03	43.44

Note: Valuation of work N º 18 (December 31, 2011)

Evaluation:

The Group "A":

In The City Of Celendin

- Demand of the residents in the neighborhood asphalt layer repositioning of the Porvenir and shutute

In The City Of San Marcos

- Lack of information on the benefits of the project, generates little sensitivity in the population for the construction of systems

In The City Of San Pablo

- Lack of information on the benefits of the project, generates little sensitivity in the population for the construction of systems

The Group "B":

In The City Of Chota

- Failure to pay the workers generates paralyzation of the work and conflict with committee work

In The City Of Hualgayoc

- The land Of PTAR have not been released.

In The City Of Cutervo

- delay in the repositioning of floor stripping and pick appropriate causes discomfort in the population

Information on the Consultant(s):

Evaluation:

2-5 **Precautions (Measures To Be Adopted/Points Which Require Special Attention)**

- Risks and issues, if any, which may affect the project implementation and planned countermeasures to be adapted, in terms of physical, environmental or social aspects.(e.g., land acquisition, resettlement, HIV awareness and prevention program, gender consideration and EIA clearance).
- Environmental Checklist or report of monitoring indicator (if applicable).

Original issues and Countermeasure(s)	Actual issues and Countermeasure(s)
(P/M)	*(P/R and PCR)*
(1) WWTPs in 4 sub-projects Following 4 WWTPs will be constructed by own resources of GOP. The progress of such WWTPs shall be informed in P/R. - San Miguel (MVCS) - Contumaza (MVCS) - San Pablo (GRC) - San Marcos (GRC)	a) With regard to the Plant of Treatment of San Miguel, the construction has been reached by the EPS SEDACAJ SA, and nowadays the observations are getting up. b) The Plant of Contumaza's Treatment, nowadays he is in bidding and still the works do not begin. c) In the Plant of Treatment of San Pablo, works of conditioning are beginning. d) In the plant of Treatment of San Marcos, the works already have been concluded.
(2) Water Right In Hualgayoc, San Miguel and San Marcos, it is necessary to obtain right for more use of water to Autoridad Nacional del Agua del Ministerio de Agricultura , before the consulting services begins.	Already one possesses the Law of the Water.

2-6 Photographs of Output of the project (P/R and PCR)-.Attachment

3: Benefit Derived from the Project (Effectiveness)

3-1 Operational and physical condition of each facility developed/supplied by the project.

Facilities	Description of condition	Problems, its Background and Remedial Action Plan
(P/R and PCR)	*(P/R and PCR)*	*(P/R and PCR)*

3-2 Precautions (Measures To Be Adopted/Points Which Require Special Attention)

- Risks and issues, if any, which may affect the project outcome and planned countermeasures to be adapted, in terms of physical, environmental or social aspects.
- Environmental Checklist or report of monitoring indicator (if applicable)

Original issues and Countermeasure(s)	Actual issues and Countermeasure(s)
(P/M)	*(P/R and PCR)*
(1) Land Acquisition 9 cities except Contumaza and San Pablo need Land Acquisition and yet to be acquired. It is expected to end at least before the consulting services begins.	The land has been acquired by local govermments
(2) EIA clearance EIA will be prepared by the consulting services. EIA approval will be obtained before the civil work begins.	Corrently has the EIA

3-3 Environmental and Social Impacts

- Major environmental and social impacts have occurred during project implementation (e.g. involuntary resettlement, poverty reduction, natural environment)

Issue(s)	**Action or countermeasure(s) taken and remaining problem(s)**
(PCR)	*(PCR)*
(1) Involuntary Resettlement The Project does not expect any involuntary resettlements.	
(2) Poverty Reduction Poverty rate in Cajamarca (74%) is higher than National rate (51%). In addition, free domestic connections are included in the project to assist the poor, who otherwise will not have house connections.	

3-4 Qualitative and Quantitative Data of Monitoring Indicators

- Operation and Effect Indicator, EIRR and/or FIRR
- Supporting data for computing EIRR and/or FIRR.

EIRR and FIRR for the Project

Water Supply and Sewerage		
EIRR	Original <u>14.74% (Water Supply)</u> -Cost: Project cost (excluding escalation, tax) and O&M cost. -Benefit: (a) Saving time and cost for supplying water, (b) benefits by continuing water services -Project life: 20 years <u>11.90% (Sewerage)</u> -Cost: Project cost (excluding escalation, tax and duties) and O&M cost. -Benefit: (a) Improved health conditions (saving money for health cost), (b) increased number of tourists -Project life: 20 years	**Actual** Keep it
FIRR	<u>6.47% (Water Supply + Sewerage)</u> -Cost: Project cost (excluding escalation, tax and duties) and O&M cost. -Benefit: (a) revenue accrued from increased service recipients -Finance: JICA financing -Project life: 20 years	Keep it

EIRR and FIRR: Indicators JICA.

Indicators for Water supply and Sewerage components

Group A

Cajabamba

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr1)
1 Total Population served	8,631		13,255
2 Water Supply Hours/day	16		24 hours
3 Percentage of Population Served (%)	59.4 %		90.0%
4 Number of House Connections	2,105		3,233
Indicators for Sewerage			
1 Total Population Served	12,300		13,255
2 Amount of Wastewater Treated (m / day)	0		1,122
3 Percentage of Population Served (%)	84.7 %		90.0%
4 Number of House Connections	3,000		3,233
5 Effluent BOD² (mg/1)	-		78

2 Measuremet for 5 Effluent BOD is taken from the exit of WWT, before being discharged into rivers. Therefore, the rate of effluent BOD is not equivalent to the Peruvian standard.

Celendin

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr1)
1 Total Population served	12,564		15,322
2 Water Supply Hours/day	24 hours (rainy season) 16 hours (dry season)		24 hours
3 Percentage of Population Served (%)	75.1%		90.0%
4 Number of House Connections	3,255		3,969
Indicators for Sewerage			
1 Total Population Served	12,564		15,322
2 Amount of Wastewater Treated (m / day)	0		1,303
3 Percentage of Population Served (%)	75.1%		90.0%
4 Number of House Connections	3,255		3,969
5 Effluent BOD (mg/1)	-		67

Contumaza

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr1)
1 Total Population served	2,804		2,996
2 Water Supply Hours/day	24		24 hours
3 Percentage of Population Served (%)	87.1 %		93.0%
4 Number of House Connections	827		884
Indicators for Sewerage			
1 Total Population Served	2,698		2,996
2 Amount of Wastewater Treated (m/day)	0		210
3 Percentage of Population Served (%)	83.8 %		93.0%
4 Number of House Connections	796		884

SAN MIGUEL

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr 1)
1 Total Population Served	2,964		3,494
2 Water Supply Hours/day	20 hours		24 hours
3 Percentage of Population Served (%)	81.5%		93.0%
4 Number of House Connections	912		1,075
Indicators for Sewerage			
1 Total Population Served	2,584		3,494
2 Amount of Wastewater Treated (nf/dav)	0		252
3 Percentage of Population Served (%)	71.10%		93.0%
4 Number of House Connections	795		1,075
5 Effluent BOD (mg/1)	-		-

San Pablo

Indicators for water supply	**Original (Yr 2007)**	**Present (Yr)**	**Target (Yr l)**
1 Total Population treated	2,346		2,775
2 Water Supply Hours/day	4 hours (dry season) 14 hours (rainy season)		24 hours
3 Percentage of Population Served (%)	79.6%		93.0%
4 N umber of House Connections	841		995
Indicators for Sewerage			
1 Total Population Served	2,232		2,775
2 Amount of Wastewater Treated (rn/day)	0		265
3 Percentage of Population Served (%)	75.8%		93.0%
4 Number of House Connections	800		995
5 Effluent BOD (mg/I)	-		-

San Marcos

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr l)
1 Total Population treated	5,919		7,081
2 Water Supply Hours/day	22 hours (rainy season) 6 hours (dry season)		24 hours
3 Percentage of Population Served (%)	77.7%		90.0%
4 Number of House Connections	1,506		1,802
Indicators for Sewerage			
1 Total Population Served	4,464		7,081
2 Amount of Wastewater Treated (m /day)	0		709
3 Percentage of Population Served (%)	58.6%		90.0%
4 Number of House Connections	1,136		1,802
5 Effluent BOD (mg/1)	-		-

Group B

Bambamarca

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr1)
1 Total Population Served	8,104		15,541
2 Water Supply Hours/da}'	Lower area 24hours Upper area 1 hour		24 hours
3 Percentage of Population Served (%)	45.6%		85.0%
4 Number of House Connections	2,412		4,625
Indicators for Sewerage			
1 Total Population Served	8,242		15,541
2 Amount of Wastewater Treated (m/day)	0		1,444
3 Percentage of Population Served (%)	46.4%		85.0%
4 Number of House Connections	2,453		4,625
5 Effluent BOD (mg/1)	-		62

Chota

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr1)
1 Total Population Served	12,491		16,927
2 Water Supply Hours/day	3 hours		24 hours
3 Percentage of Population Served (%)	67.7%		90.0%
4 Number of House Connections	4,220		5,719
Indicators for Sewerage			
1 Total Population Served	10,360		16,927
2 Amount of Wastewater Treated (m/day)	0		1,531
3 Percentage of Population Served (%)	56.1 %		90.0%
4 Number of House Connections (thousand)	3,500		5,719
5 Effluent BOD (mg/1)	-		60

Cutervo

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr1)
1 Total Population Served	9,992		13,402
2 Water Supply Hours/day	9 hours		24 hours
3 Percentage of Population Served (%)	65.1%		85.0%
4 Number of House Connections	2,791		3,744
Indicators for Sewerage			
1 Total Population Served	11,456		13,402
2 Amount of Wastewater Treated (m'/day)	0		1,102
3 Percentage of Population Served (%)	74.7%		85.0%
4 Number of House Connections	3,200		3,744
5 Effluent BOD (mg/1)	-		80

Hualgayoc

Indicators for water supply	Original (Yr 2007)	Present (Yr)	Target (Yr1)
1 (Total Population Served	1,256		1,354
2 Water Supply Hours/day	16hours (rainy season) 6 hours (dry season)		24 hours
3 Percentage of Population Served (%)	87.6%		94.5%
4 Number of House Connections	405		437
Indicators for Sewerage			
1 Total Population Served	1,240		1,354
2 Amount of Wastewater Treated *(ni*/day)	0		134
3 Percentage of Population Served (%)	86.5%		94.5%
4 Number of House Connections	400		437
5 Effluent BOD (mg/1)	-		15

GRUPO C

Jaen

Indicators for water supply	**Original (Yr 2007)**	**Present (Yr)**	**Target (Yr1)**
1 Total Population Served	47,736		59,447
2 Amount of Treated Water (L/ day)	14,515,200		21'697,314
3 Water Supply Hours /day	14 hours		24 hours
4 Percentage of Population Served (%)	73.7%		89.0%
5 Number of House Connections	12,529		15,603*
Indicators for Sewerage			
1 Total Population Served	45,396		59,447
2 Amount of Wastewater Treated *(m^3*/day)	7,599		9,806
3 Percentage of Population Served (%)	63.4%		89.0%
4 Number of House Connections	10,499		15,603*
5 Effluent BOD (mg/1)	342		32

(*) The project of code SNIP 82443 at the expense of the municipality of Jaen, it has the same area of intervention (Huito's San Jose) that partly there forms the Project " Improvement and Extension of the system of drinkable water, sewer and treatment of waste water of the city of Jaen " with code SNIP 61434 at the expense of the Executing Unit - PROREGIÓN; nevertheless the latter already has been executed by the contractor - RECEIVES FACILITIES AND SERVICES S.A.

3.6 Monitoring Plan for the indicators

Monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term and so forth.

Original: (P/M and PCR)

EPS SEDACAJ and EPS Marañon shall conduct monitoring of the above mentioned indicators (other than health indicator) every three months in accordance with SUNASS regulation and Ministry of Health and will conduct monitoring of the health indicator once a year.

Actual: (P/R and PCR)

3.7 Achievement of the Project Objective

(PCR)

4: Operation and Maintenance (O&M) (Sustainability)

4-1 O&M and Management

- Organization chart of O&M - Operational and maintenance system (structure and the number /qualification and skill of staff or other conditions necessary to maintain the outputs and benefits of the project soundly, such as manuals, facilities and equipment for maintenance, and spare part stocks etc)

Original: *(P/M)*

O&M Scheme:

1. Once the civil work components are completed, EPS SEDACAJ and EPS Marahon will be responsible for O&M. 8 cities currently served by the municipalities will be incorporated to the service area of SEDACAJ, as shown below.

City	Entity
Cajabamba	EPS SEDACAJ
Celendin	EPS SEDACAJ
Contumaza	EPS SEDACAJ
San Pablo	EPS SEDACAJ
San Miguel	EPS SEDACAJ
San Marcos	EPS SEDACAJ
Bambamarca	EPS SEDACAJ
Chota	EPS SEDACAJ
Cutervo	EPS SEDACAJ
Hualgayoc	EPS SEDACAJ
Jaen	EPS Marañon

(8 cities to be incorporated to EPS SEDACAJ are identified by color)

2. Since EPS SEDACAJ and EPS Marañon has limited experience with Water and Waste Water treatment plants, O&M training will be provided by consulting services.

3. O&M Cost

O&M Cost will be recovered by water service fee.

4-2 O&M Cost and Budget

- The actual annual O&M cost for the duration of the project up to today, as well as the annual O&M budget.

(PCR)

5: Evaluation

5-1 JICA and Borrower/Executing Agency Performance

Please evaluate the performance of the two bodies.

JICA:

(PCR)

Borrower/Executing Agency:

(PGR)

5-2 Overall evaluation

Please describe your evaluation on the overall outcome of the project.

(PCR)

5-3 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future JICA assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

(PCR)

Annex II

Forecast Disbursement Schedule

CY	2009					20_
Item	Jan-Mar	Api-Jun	Jul-Sep	Oct-Dec	Total	
Total						

Anne