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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT PAPER

ON A

PROPOSED ADDITIONAL LOAN

IN THE AMOUNT OF US\$150 MILLION

TO THE

STATE OF ACRE

WITH THE GUARANTEE OF THE FEDERATIVE REPUBLIC OF BRAZIL

FOR THE

ACRE SOCIAL AND ECONOMIC INCLUSION AND SUSTAINABLE
DEVELOPMENT PROJECT
(PROACRE)

September 10, 2014

Agriculture Global Practice
Brazil Country Management Unit
Latin America and the Caribbean Region

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CURRENCY EQUIVALENTS
(Exchange Rate Effective August 14, 2014)

Currency Unit = Brazilian Real (BRL)
US\$ 1.00 = R\$ 2.28

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ACS	<i>Agentes Comunitários de Saúde</i> – Community Health Agents
AEPI	<i>Assessoria Especial de Povos Indígenas</i> - Special Advisor of Indigenous Peoples
APP	<i>Área de Preservação Permanente</i> – Permanent Preservation Area
BRL	Brazilian Real
CadÚnico	<i>Cadastro Único</i> - Unified National Poverty Registry
CAP	<i>Comunidades de Atendimento Prioritário</i> - Priority Service Communities
CAU	<i>Comunidades de Atendimento Universal</i> - Universal Service Communities
CDP	<i>Planos de Desenvolvimento da Comunidade</i> - Community Development Plans
CFM	<i>Manejo Comunitário da Floresta</i> - Community Forest Management
COIAB	<i>Coordenação dos Povos Indígenas da Amazônia Brasileira</i> - Coordination of the Indigenous Peoples of the Brazilian Amazon
COP	<i>Comunidades Pólo</i> – Pole Communities
DEPASA	<i>Departamento Estadual de Pavimentação e Saneamento</i> – State Department of Water, Sanitation and Paving
ECD	<i>Programas de Desenvolvimento da Primeira Infância</i> - Early Childhood Development Programs
EIRR	Economic internal rate of return
EJA	<i>Educação de Jovens e Adultos</i> – Youth and Adults Education
ENPV	Economic net present value
FM	<i>Manejo Florestal</i> - Forest Management
FM	Finance Management
FUNAI	<i>Fundação Nacional do Índio</i> - National Foundation for the Indigenous Peoples
GDP	<i>Produto Interno Bruto</i> - Gross Domestic Product
GESTAR	<i>Gestão da Aprendizagem Escolar</i> – School Learning Management
GoAc	<i>Governo do Acre</i> - Government of Acre
GPV	<i>Valor Bruto da Produção</i> - Gross Production Value
HH	Households
IBRD	International Bank for Reconstruction and Development
IDEB	<i>Índice de Desenvolvimento da Educação Básica</i> - Basic Education Development Index
IDM	<i>Instituto Dom Moacyr</i> – Dom Moacyr Institute
IMP	<i>Plano de Mitigação do Impacto</i> - Impact Mitigation Plan
IMR	<i>Taxa de Mortalidade Infantil</i> - Infant Mortality Rate
IRR	Internal rate of return
MEC	<i>Ministério da Educação e Ciência</i> – Ministry of Education and Science
MOH	Ministry of Health
MSD	<i>Melhoria Sanitária Domiciliária</i> – Improvement of household toilets

NCDs	Non-communicable diseases
NTFP	<i>Produtos Florestais Não-Madeireiros</i> - Non-Timber Forest Products
OL	Original Loan
PACS	<i>Programa de Agente Comunitário de Saúde</i> - Community Health Agent Program
PAD	Project Appraisal Document
PCU	<i>Unidade de Coordenação do Projeto</i> – Project Coordination Unit
PDC	<i>Plano de Desenvolvimento Comunitário</i> – Community Development Plan
PDO	Project Development Objective
PGTI	<i>Planos de Gestão das Terras Indígenas</i> - Indigenous Land Management Plans
PLANO-VIDA	<i>A State's program that includes a financial health insurance "premium" paid to providers for receiving quality services to pregnant women enrolled, and neonatal health care services.</i>
POM	Project Operations Manual – <i>Manual Operacional do Projeto</i>
PSF	<i>Programa Saúde da Família</i> – Family Health Program
QIS-MN	<i>Fundo de Seguro de Incentivo à Qualidade</i> - Quality Incentive Insurance Fund
SAEB	<i>Sistema de Avaliação da Educação Básica</i> – Basic Education Evaluation System
SDCT	<i>Secretaria de Estado de Desenvolvimento, Ciência e Tecnologia</i> - State Secretariat of Development, Science and Technology
SEAPROF	<i>Secretaria de Estado de Extensão Agroflorestal e Produção Familiar</i> – State Secretariat of Agroforestry Extension and Household-Based Production
SEDENS	<i>Secretaria de Estado do Desenvolvimento Florestal da Indústria do Comércio e dos Serviços Sustentáveis</i> - State Secretariat for Forest Development, Industry, Commerce and Sustainable Services
SEDS	<i>Secretaria de Estado de Desenvolvimento Social</i> - State Secretariat for Social Development
SGA	<i>Secretaria de Estado de Gestão Administrativa</i> – State Secretariat for Management
SEMA	<i>Secretaria de Estado de Meio Ambiente</i> - State Secretariat for the Environment
SEME	<i>Secretaria Municipal de Educação</i> - Municipal Secretariat for Education
SEOP	<i>Secretaria de Estado de Habitação e de Infraestrutura e Obras</i> – State Secretariat for Housing, Infrastructure and Public Works
SEPLAN	<i>Secretaria de Estado de Planejamento</i> – State Secretariat for Planning
SEPN	<i>Secretaria de Estado de Pequenos Negócios</i> – State Secretariat for Small Business
SESACRE	<i>Secretaria de Estado de Saúde</i> - State Secretariat for Health
TIs	<i>Terras Indígenas</i> – Indigenous Lands
UCs	<i>Unidades de Conservação</i> – Conservation Units (Protected Areas)
VIGISUS	<i>Projeto do Sistema Nacional de Vigilância da Saúde</i> - National Health System Surveillance Project
WSS	Water Supply and Sanitation

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BRAZIL

Acre Social and Economic Inclusion and Sustainable Development Project (PROACRE)

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Acre Social and Economic Inclusion and Sustainable Development Project (PROACRE)

ADDITIONAL FINANCING DATA SHEET

Basic Information - Additional Financing (AF)	
Country Director: Deborah Wetzel Practice Manager/Senior Director: Laurent Msellati / Juergen Voegele Team Leader: Adriana Moreira Project ID: P130593 Expected Effectiveness Date: February 2, 2015 Lending Instrument: Investment Project Financing Additional Financing Type: Scale-up	Sectors: Sanitation (50%); General agriculture, fishing and forestry sector (20%); Health (15%); Primary Education (15%) Themes: Water resource management (40%); Pollution management and environmental health (40%); Education for all (10%); Other rural development (10%) Environmental category: A Expected Closing Date: 31 March 2020 Joint IFC: No Joint Level: No
Basic Information - Original Project	
Project ID: P107146 Project Name: Acre Social and Economic Inclusion and Sustainable Development Project Lending Instrument: Specific Investment Loan	Environmental category: A Expected Closing Date: 31 March 2015 (extension not expected) Joint IFC: No Joint Level: No
AF Project Financing Data	
[X] Loan [] Credit [] Grant [] Guarantee [] Other: Proposed terms: variable spread loan with a final maturity of 25 years including a grace period of 5 years.	
AF Financing Plan (US\$m)	
Source	Total Amount (US\$m)
Total Project Cost:	187.6
Cofinancing:	0
Borrower:	37.6
Total Bank Financing:	150.0
IBRD	150.0

Client Information

Recipient: Acre State Government

Responsible Agency: State Secretariat of Planning (SEPLAN)

Contact Person: Marcio Verissimo Carvalho Dantas

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AF Estimated Disbursements (Bank FY/US\$m)	2015	2016	2017	2018	2019	2020	
FY	10	30	40	30	30	10	
Annual	10	40	80	110	140	150	
Cumulative							

Project Development Objective and Description

1. The original **Project Development Objective (PDO)** will be maintained as follows: **“The objective of the Project is to contribute to the Borrower’s efforts to promote social and economic inclusion of its rural and urban poor, including its poorest and most disadvantaged population living in isolated areas of the Borrower’s territory.”**

2. **Project description:** The proposed additional loan will support scaling-up of existing activities in each of the original five Project’s Components, as well as the introduction of new activities under Component 1, as follows:
 - a) **Component 1 – Basic Services for Isolated Communities (US\$ 92.3 million, of which US\$ 73.8 million is IBRD financing).** This component supports the provision of basic services in health, education, agricultural extension, as well as new investments in integrated urban infrastructure and water supply, including technical and financial assistance, to the dispersed and most isolated communities.
 - b) **Component 2 – Social and Economic Inclusion in Rural Areas (US\$ 35.3 million, of which US\$ 28.2 million is IBRD financing).** This component seeks to improve the quality of education and health services in priority communities as well as the income levels of the population living in these communities by supporting selected production chains.
 - c) **Component 3 – Entrepreneurship for Selected Marginal Urban Communities (US\$ 23.6 million, of which US\$ 18.9 million is IBRD financing).** This component promotes social inclusion of urban communities in areas of high socioeconomic and environmental vulnerability by fostering entrepreneurship through the promotion of community enterprises, and vocational training for professionals and community members, through the preparation of a socio-economic survey which will define activities to be carried out as part of the Project.
 - d) **Component 4 – Public Policy and Institutional Strengthening (US\$ 27.6 million, of which US\$ 22.1 million is IBRD financing).** This component modernizes the Project Entities, fosters decentralization of the basic services in health and education, and introduces result-based management strategies in selected sectors of the Borrower’s public service.
 - e) **Component 5 – Project Management and Information Dissemination (US\$ 8.8 million, of which US\$ 7.0 million is IBRD financing).** This component supports overall Project coordination and supervision and strengthening effectiveness and quality of Project operation.

Safeguard and Exception to Policies		
	Safeguard policies triggered: Environmental Assessment (OP/BP 4.01) Natural Habitats (OP/BP 4.04) Forests (OP/BP 4.36) Pest Management (OP 4.09) Physical Cultural Resources (OP/BP 4.11) Indigenous Peoples (OP/BP 4.10) Involuntary Resettlement (OP/BP 4.12) Safety of Dams (OP/BP 4.37) Projects on International Waterways (OP/BP 7.50) Projects in Disputed Areas (OP/BP 7.60)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Is approval of any policy waiver sought from the Board (or MD if RETF operation is RVP approved)? Has this been endorsed by Bank Management? (<i>Only applies to Board approved operations</i>) Does the Project require any exception to Bank policy? Has this been approved by Bank Management?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
Conditions and Legal Covenants:		
Financing Agreement Reference	Description of Condition/Covenant	Date Due
Article V – Effectiveness; Termination. 5.01 (a) Schedule 2: Project Execution, Section I: Implementation Arrangements, A. Institutional Arrangements	Project Operations Manual (POM) and Procurement Plan satisfactory to the Bank. The Cooperation Agreements have been executed on behalf of the Borrower through SEPLAN and the Project Entities The Borrower shall continue to operate and maintain, until the completion of the execution of Part 3 (b) of the Project, a health insurance technical unit (Insurance Technical Unit) within SESACRE and with competent staff in adequate numbers with qualifications and experience satisfactory to the Bank and selected in accordance, as applicable, with the provisions of Section III of this Schedule, including the following key staff: a health sector coordinator, a health insurance specialist and a financial management specialist.	Negotiations Effectiveness Continuous

Conditions and Legal Covenants (continued)		
Financing Agreement Reference	Description of Condition/Covenant	Date Due
Schedule 2: Project Execution, Section I: Implementation Arrangements, A. Institutional Arrangements	The Borrower shall maintain, until the completion of the execution of Part 4 (b) of the Project, a technical unit within SEAPROF with competent staff in adequate numbers with qualifications and experience satisfactory to the Bank and selected in accordance, as applicable, with the provisions of Section III of this Schedule, maintaining the following key staff: a coordinator and a sustainable agroforestry specialist.	Continuous
Schedule 2: Project Execution, Section I: Implementation Arrangements, A. Institutional Arrangements	The Borrower shall continue to maintain, until the completion of the execution of the Project, a managing committee (the Managing Committee) to convene at least once every semester, and shall send the minutes of said meetings to the Bank.	Continuous
Schedule 2: Project Execution, Section I: Implementation Arrangements, A. Institutional Arrangements.	The Borrower shall, at least once a year during Project implementation on or about December 10, commencing on the first such date after the Effective Date, prepare and furnish to the Bank a plan (the Annual Operating Plan), satisfactory to the Bank, for the Project's operation during the following twelve months.	On or about December 10 each year.
Schedule 2: Project Execution, Section I: Implementation Arrangements, B. Cooperation Agreements	The Borrower, through SEPLAN, shall enter into new, or renew existing Cooperation Agreements, as the case may be, and make the proceeds of the Loan available to each of the Project Entities under said Cooperation Agreements between SEPLAN and said Project Entities, under terms and conditions agreed with the Bank as further specified in the POM.	Continuous
Schedule 2: Project Execution, Section I: Implementation Arrangements, B. Cooperation Agreements	The Borrower shall update and thereafter maintain the FUNAI Agreement at least until March 31, 2020.	Before withdrawals under category (1)(b) can be made
Schedule 2: Project Execution, Section I: Implementation Arrangements, E. Subprojects	The Borrower, through SEAPROF, SEPN, and SEMA shall enter into Grant Agreements appropriate for the carrying out of Parts 2 (c), and 2(d) of the Project, such agreements to be made in accordance with terms of the respective draft set forth in model forms approved by the Bank and included in the POM, in which SEAPROF, SEPN and SEMA shall obtain rights adequate to protect its interests and those of the Bank	Continuous
Schedule 2: Project Execution, Section I: Implementation	The Borrower, through SEE, shall enter into School Grant Agreements appropriate for the carrying out of Part 2 (a) of the Project, such agreements to be made in accordance with	Continuous

Arrangements, F. School Subprojects	terms of the respective draft set forth in model forms approved by the Bank and included in the POM, in which SEE shall obtain rights adequate to protect its interests and those of the Bank	
Schedule 2: Project Execution, Section V: Other Undertakings	The Borrower, through SEPLAN, shall: (a) have all the procurement records and documentation for Subprojects and School Subprojects for each fiscal year of the Project audited, in accordance with appropriate procurement auditing principles by independent auditors acceptable to the Bank; (b) furnish to the Bank as soon as available, but in any case not later than six months after the end of each such fiscal year, the procurement audit report of such audit by said auditors, of such scope and in such detail as the Bank shall have reasonably requested; and (c) furnish to the Bank such other information concerning said procurement records and documentation and the procurement audit thereof as the Bank shall from time to time reasonably request.	Annually
Schedule 2: Project Execution, Section V: Other Undertakings	The Borrower, through SEPLAN, shall no later than six months after the Effective Date, designate: (i) the independent auditors as referred to in Section II. B.3 of Schedule 2 of the Loan Agreement; and (ii) the procurement auditors as referred to in paragraph A ; all under terms of reference and with qualifications and experience satisfactory to the Bank and selected in accordance with the provisions of Section III of Schedule 2.	6 months after Effectiveness
Schedule 2: Project Execution, Section V: Other Undertakings	The Borrower shall: (i) carry out jointly with the Bank, a mid-term review of the implementation of operations under the Project, which shall cover the progress achieved in the implementation of the Project; and (ii) following such mid-term review, act promptly and diligently to take any corrective action as shall be agreed by the Bank	By Sept. 30, 2017 or such other date as the Bank shall agree upon

I. Introduction

1. This Project Paper (PP) seeks the approval of the Executive Directors to provide an additional loan in the amount of US\$150 million to the **Acre Social and Economic Inclusion and Sustainable Development Project (PROACRE), [P130593 Loan 7625 BR]**. It constitutes additional financing (AF) to allow for the scale-up of existing project activities and the introduction of new ones in support of the achievement of the Project's development objective (PDO).

II. Background and Rationale for Additional Financing

2. *An Original Loan (OL)* in the amount of US\$120 million was approved by the Board of Executive Directors on December 18, 2008, and became effective on January 30, 2009.
3. *Status of Implementation and Project Performance.* Progress towards the achievement of the PDO has been considered satisfactory throughout its implementation, reflecting the sustained commitment and efforts of the Government of Acre (GoAc). As of August 31, 2014, the Project disbursed approximately US\$ 89.8 million, equivalent to 75 percent of the original loan (OL), which exceeds the original disbursements estimates. While ratings have been generally satisfactory throughout the entire implementation period, some fiduciary issues impacted performance in the last year, and resulted in a downgrading of both financial management and procurement ratings to moderately unsatisfactory during January to September 2013.¹ Related fiduciary weaknesses have been identified and resolved through substantial technical assistance (TA) and capacity building. As a result of comprehensive measures taken by the Borrower to strengthen control of resources and operational capacity, both procurement and financial management ratings have been recently upgraded to moderately satisfactory.²
4. *Project Results* in terms of improving outcomes and expanding basic health and education services as well as increasing economic opportunities – particularly in poor and isolated communities of Acre – have been very positive. Acre's Basic Education Development Index³ (IDEB) ratings have met or exceeded targets; prenatal care, infant survival and ambulatory consultancy rates have all improved amongst target populations; while productive Subprojects have been initiated in more than half of all indigenous and other target communities.
5. *Rationale for Additional Financing.* The GoAc is seeking to scale-up these achievements and introduce new activities that contribute directly to enhancing Project's impacts.

¹The GoAc identified the disbursement of Project funds related to the implementation of the school subproject in two municipalities for non-eligible activities and took immediate measures to regularize the situation, including enactment of a law to establish stricter control on the transfer of resources to local level schools. Upon being informed of the situation, the Office of the Integrity Vice President of the World Bank Group decided that an investigation was not warranted based on actions taken by the State, which were mainly: prosecution of individuals involved, strengthening of supervision and auditing procedures. These funds were refunded and allocated to other eligible activities under the Project.

² The Procurement rating was upgraded in September 2013, and the Financial Management rating in March 2014.

³ The IDEB is a standardized national education performance index ranging from 1 (minimum) to 10 (maximum).

Drawing lessons from both challenges and successful implementation to date, the AF will make it possible to:

- a. **Scale-up existing Project activities**, for poor rural and urban populations by expanding the Project's productive inclusion activities to new areas and groups (including to a greater number of indigenous communities and of producers in targeted value chains), as well as scale-up of activities to increase the coverage and quality of education and primary health services throughout Acre. Capacity building and institutional strengthening, as well as project management and information dissemination activities will also be scaled up.
 - b. **Introduce new activities**, consisting of investments in integrated urban infrastructure and water supply and sanitation (WSS) services in small, isolated towns in the western region of the State where current federally funded programs are not reaching, with the objective of contributing to improved health outcomes (that is, improvements in water supply, sanitation, micro-drainage, solid waste disposal, river access and all seasons urban roads are expected to reduce the incidence of waterborne diseases, particularly in children); and assistance to micro-entrepreneurs in support of productive inclusion objectives. These activities under Component 1 are fully consistent with the original project design and contribute to the same PDOs.
6. *Consistency with the Brazil CPS*. The Project's objective and strategy as well as the proposed AF are fully consistent with the World Bank Group's Country Partnership Strategy (CPS) 2012-2015⁴. Activities funded through the proposed AF will contribute to the CPS's four pillars and activities for strengthening public sector management and public service delivery capacity are in full alignment with the Development Policy Loan 'Acre: Strengthening Public Policies for Improved Service Delivery' (P147913)⁵.

III. Proposed Changes

7. *The Project Development Objective (PDO)*. There are no changes proposed to the original project's PDO.
8. *Project outcome indicators*. Adjustments in the Project's expected outcomes and outcome indicators reflect the scale-up and new activities introduced, the details of which are included in Annex 1: Results Framework and Monitoring.
9. *Beneficiaries and Project Area*. The Project will continue to provide support to target beneficiary communities as described in Annex 3 – Detailed Description of New Project Activities. The AF will expand coverage of WSS services to small isolated municipalities in the Juruá, Tarauacá and Envira Rivers.
10. *Components and Activities*. The Project's components will remain the same under the additional financing with the addition of a new sub-component (1.4) in the area of Urban Infrastructure and WSS services. Project components and associated costs are summarized in Table 2. Details of Project components and activities are described in Annex 4 and in the Project Operations Manual (POM).

⁴ Report No. 63731-BR discussed by the Executive Directors of the World Bank Group on November 1, 2011.

⁵ Report No. 81327-BR approved by the Executive Directors of the World Bank Group on December 5, 2013.

Table 2: Project Costs by Component and Source of Financing

Components	Parent project		Additional Financing		Total	
	IBRD financing (million US\$)	GoAc financing (million US\$)	IBRD financing (million US\$)	GoAc financing (million US\$)	IBRD financing (million US\$)	GoAc financing (million US\$)
1. Basic Services for Isolated Communities	15.5	3.7	73.8	18.5	89.3	22.2
2. Social and Economic Inclusion in Rural Areas	40.6	5.8	28.2	7.1	68.8	12.9
3. Entrepreneurship for Selected Marginal Urban Communities	37.4	8.9	18.9	4.7	56.3	13.6
4. Public Policy and Institutional Strengthening	21.3	9.8	22.1	5.5	43.4	15.3
5. Project Management and Information Dissemination	5.2	1.8	7.0	1.8	12.2	3.6
Total	120.0	30.0	150.0	37.6	270.0	67.6

11. *Institutional Arrangements.* The Project's institutional arrangements will remain largely unchanged with the Secretariat of Planning (SEPLAN) as the central coordinating agency. The main changes in institutional arrangements consist of the integration of: i) the State Secretariat of Housing, Infrastructure and Public Works (SEOP) and DEPASA to implement the Project's new WSS and urban infrastructure activities; and of ii) the State Secretariat for Small Business (SEPN) to implement the Project's new small business development activities - replacing support for entrepreneurship previously implemented by the State Secretariat for Social Assistance (SAS) and to support productive value chain development previously implemented by State Secretariat for Forest Development, Industry, Commerce and Sustainable Services (SEDENS).⁶ Per Capita Payment for Sustainable Production implemented by SEDENS will not continue under the AF. The institutional arrangements for Project coordination and implementation under the AF will be revised and formalized through a technical cooperation agreement specifying the responsibilities of implementing partners, annual plan of activities, expected outcomes and allocation of resources from the Loan, which will be completed as a condition of effectiveness. Project staffing will be strengthened at all levels, including the Project Coordination Unit (PCU) and local agencies in the field responsible for Project implementation, including the hiring of water and sanitation, and civil engineers to monitor implementation of new water supply and sanitation services (WSS) and other urban infrastructure activities as detailed in the POM.

12. *Fiduciary Aspects.* The Project's Fiduciary Arrangements (financial management, disbursement and procurement) remain unchanged under the AF with additional capacity

⁶ Due to a change in government in Acre during implementation, the following institutional changes have occurred since the parent Project was designed. The State Secretariat of Forests (SEF) no longer exists and its activities have been divided between SEMA and SEDENS. The SAS has been renamed as State Secretariat for Social Development (SEDS). As well, in order to reduce the complexity of the Project's institutional arrangements, the following agencies which are part of the parent Project activities will not be responsible for activities under the AF: State Secretariat for Science and Technology (SDCT), Special Advisor for Indigenous Peoples (AEPI) and State General Warehouses and Emporium Company (CAGEACRE), under SEAPROF.

building measures to strengthen weaknesses identified during implementation and revised procurement thresholds for works contracts to be procured under NCB method.

13. *Safeguards*. The Project's original classification as environmental category A will be maintained under the additional loan. The Project's original environmental and social safeguards frameworks have been revised to reflect the adjusted scope of activities (namely, new WSS activities in small remote communities) which trigger the following new safeguards: Physical Cultural Resources (OP/BP 4.11), Involuntary Resettlement (OP/BP 4.12), and Projects on International Waterways (OP/BP 7.50). The revised frameworks include specific guidance for consideration in studies and engineering designs to be implemented under the new WSS sub-component 1.4.
14. *Closing Date*. The closing date of the original loan is March 31, 2015 and an extension is not anticipated. The proposed closing date of the additional loan (Loan 7625-BR) is 31 March 2020.

IV. Appraisal Summary

15. *Economic and Financial Analyses*. The following summarizes results of economic and financial analysis for Project investments in (i) productive inclusion; (ii) education and (iii) WSS services. Full analysis is provided in Annex 5.
16. An ex-ante cost-benefit analysis was carried out for investments to improve production in rural areas from the start of implementation (2009) to the Closing Date of the proposed additional loan (March 31, 2020). Main investments are support to related community-driven investment Subprojects; support to demonstration units; TA; sector and evaluation studies; development of an integrated socio-environmental monitoring system; and monitoring activities. Total estimated Project investment costs in productive activities are US\$ 43.2 million, of which US\$ 31.5 million is directly invested in 260 community associations and 34 indigenous communities (approximately 13,500 families) benefiting from the Project. Despite the conservative approach taken, financial analysis of productive activities presents robust results with an average internal rate of return (IRR) of 42%. The economic analysis of the base scenario assumes a Project success rate of 50% as a result of increased investment in TA, monitoring and management from 2014 onwards. Under this scenario the Project attains an ENPV of US\$ 7.3 million, for a 12% discount rate and period of analysis of 10 years, and an EIRR of 20%. This scenario shows strong robustness when tested against the Project's major risk factors.
17. For the purpose of the economic analysis of project investments in basic education, an economic benefit has been assumed, and thus a higher level of welfare, attached to each additional student that graduates upon completing secondary school. Under some assumptions, the benefit stream has been estimated on the basis of the expected increased earnings of each additional graduate and the increase in the number of graduates. The results indicate that the present value of net benefits from basic education is about US\$ 214 million, with a rate of return of investment of about 12.4 %.
18. The development of Urban Infrastructure and WSS services in the small isolated towns of Santa Rosa dos Purus, Marechal Thaumaturgo, Jordão and Porto Walter in the State of Acre is economic and financially feasible. A cost-benefit analysis (CBA) was utilized to prove the

feasibility of water services between 59 and 81 percent, and sanitation between 8 and 14 percent, varying significantly from town to town.

19. *Technical.* The education activities supported are consistent with the PDO and continue to support and expand education interventions that address the main challenges of Acre's education system, including the need to increase access, especially in the area of early childhood education, improve the efficiency of the various education systems and, in particular, to improve the quality of education. Proposed activities include to: (i) increase access to early childhood education in rural areas (CAUs and CAPs); and (ii) improve quality, through the promotion of education models that improve learning outcomes in various levels of education, including the development of school Subprojects in State schools.
20. The Project's health activities will continue to focus on the Project's health care interventions and will introduce the following: (i) provision of maternal and perinatal health care services and the expansion and treatment of preventive health services for cervical and breast cancer, including the implementation and expansion of 3 to 4 "maternal and patients' homes"; (ii) increasing the number of specialized consultancies in gynecology, pediatric and odontology visits in remote localities, emphasizing the measurement of social and medical risks of vulnerable populations, as well as managed care; (iii) implementing a Portfolio of health services through results-based performance contracts with the municipalities, and health facilities through "*Plano Vida*"; and, (iv) the health systems strengthening for measuring results, planning, and health surveillance. In addition, four studies will be undertaken for improving the State's knowledge on health, risk factors affecting health and its social determinants.
21. The Project will continue to support the development of productive activities based on participatory Community Development Plans (CDP). CDP guidelines for the identification of productive activities have been adjusted to reflect the lessons learned during implementation with regard to the efficiency, efficacy and sustainability of interventions. These revisions include additional measures to increase the participation of women and youth in the process of developing CDPs and in the identification of productive investments. These revisions are reflected in the updated POM. The guidelines for CDP formulation will be streamlined to shorten their formulation time and costs. The CDP will include measurable indicators and targets for one or two priority investment activities as well as an indication of commercialization channels, a simplified financial model and a TA plan. The budget for each investment subproject drawn from the CDP will be matched by at least 30% of its value by TA provided by SEAPROF or contracted services. Under the AF, the productive inclusion subcomponent will finance the formulation and implementation of 220 CDPs in addition to the 200 in the original Project. The AF will also provide support to the GoAc for carrying out strategic studies and diagnostics to further inform the Project's socio-economic development strategy and determine associated investments. The AF will provide technical and financial assistance for improving overall agro-forestry productivity and improving indigenous communities' livelihoods. Indigenous Land Management Plans (PGTI) guidelines have been revised and these revisions are reflected in the updated POM. In particular, the formulation process for PGTIs has been streamlined, with greater emphasis on the participation of women and youth, and the resulting documents will be more focused and specific regarding the investments to be made at the indigenous community level.

22. Integrated Urban Infrastructure and WSS Services. Four small and isolated towns that are prioritized for Project investment to improve water supply, sanitation, micro-drainage, solid waste disposal, river access, and all season urban roads were visited by the Bank team and all technical options were discussed with the Borrower and its consultants. These investments are expected to have a significant and direct impact on the health of the target population, particularly on the children. The concept of these works was discussed in detail and agreed before the preparation of engineering designs and procurement packages. The Bank team also identified the need for TA to modernize and improve the performance of DEPASA, as well as to ensure its activities are in compliance with Brazilian law. The following three-fold approach was agreed with the Borrower: (i) local WSS and urban infrastructure investments in the four priority small towns, including improvements in management, operation and maintenance; (ii) corporate development of DEPASA, comprising managerial, commercial, operation and maintenance, staffing and financial improvements; and (iii) development of state policies and regulatory governance and instruments, with emphasis on compliance with Federal Law 11445 of 2007 – National Guidelines Law for Water and Sanitation (water supply, sanitation, drainage and solid waste). Solid waste investments were not appraised at this stage as specific locations for landfills will be assessed and defined during project implementation.
23. Fiduciary. Financial Management arrangements will remain the same as those used under the parent Project. The State Secretariat of Planning (SEPLAN) has an experienced project financial management team within the Project Coordination Unit (PCU) which will be responsible for the financial management of the proposed AF. As in the original Project, financial data will be registered by the PCU in two separate systems. First, it will utilize the GoAc's Budgetary Administration, Finance and Accounting System (SAFIRA) tool where all public expenditures are recorded after being properly budgeted and committed, and through which all payments are made. Secondly, it will use the Project Monitoring and Reporting System (SPGP), which will be the basis for preparation of Financial Management Reports (IFRs), Project Financial Statements, and Physical Progress reports (of works). As a basic control procedure, a regular (monthly) routine reconciliation will be undertaken by the PCU among (i) bank statements made available by PCU and SEPLAN; (ii) total payments made, in SAFIRA and SPGP by PCU to contractors; and (iii) actual expenditures (to be reported in IFRs).
24. Disbursement arrangements will broadly remain the same as those under the parent Project. Disbursements will be made via Advances, Reimbursements and Direct Payments. The additional loan will have a segregated designated account in US Dollars opened at *Banco do Brasil* which and will have a Variable Ceiling based on a forecast for two quarters as provided in the quarterly IFR while the frequency for reporting eligible expenditures paid from the designated account will be quarterly. Supporting documentation required for documenting eligible expenditures paid from the designated account and for reimbursements will include Statements of Expenditure (SOEs), Customized Statement of Expenditures for Health Insurance Capitation Premia and Per Capita Payments under Parts 3(b) and 4(b), and Summary Sheets with Records. Direct payments will be documented by Records. The Minimum Application Size will be US\$ 2,400,000 equivalent. The AF will have a four month Application Deadline Date (Grace Period). Retroactive Financing up to an aggregate amount not to exceed US\$ 22,500,000 equivalent is available, for payments made within 12

months prior to the date of the Loan Agreement for payments for project activities under all Components of the Project except for Component 3 (b) and 4 (b).

25. Procurement. In September 2013, a mission assessed SEPLAN's procurement performance as Moderately Satisfactory. Bidding documents for the two initial WSS and other urban infrastructure works under the AF (in the municipalities of Jordão and Santa Rosa do Purus) have been prepared with the assistance of individual consultants hired by the WB. In addition, aiming to attract a competitive number of prospective bidders and competent contractors, and to achieve adequate responses to the bid notices, the Borrower will make additional efforts to widely advertise all bidding processes for new works under the AF, including sending communication to specific sectors and to all SINDUSCON offices (Contractors Associations) around the country. Measures to strengthen procurement processes (e.g. better filing of procurement documentation, stronger PCU and SEPLAN oversight mechanisms) are expected to improve procurement ratings in the medium term. Procurement under the AF will be carried out in accordance with the WB's *"Guidelines: Procurement under IBRD Loans and IDA Credits" dated January 2011*; *"Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated January 2011*; and the provisions stipulated in the Legal Agreement. A Procurement Plan for implementation of the proposed AF (including procurement financed by Loan proceeds and those financed by the Borrower) is being prepared and submitted through the SEPA System. It has also been agreed that each new implementing agency added under the AF will be staffed with at least one procurement specialist (individual consultant or staff) experienced in Bank-financed projects, mainly in procurement of civil works. In addition, SEPLAN will provide close supervision in all procurement matters overseen by the new agencies.
26. *Environment*. WB review of potential environmental impacts from new activities under the AF, in terms of their identification, measurement, interpretation, information and dissemination, was conducted in March and September 2012 and October 2013. New activities are expected to produce significant positive environmental impacts by continuing to support sustainable economic activities that favor forest conservation and by investing in the construction of wastewater treatment plants and sanitary landfills in isolated municipalities that currently lack these services. Paving and drainage works are expected to reduce erosion and siltation, while WSS works are expected to follow adequate procedures defined in the Environmental Assessment (EA) to reduce or mitigate local and temporary impacts from civil works. Upgrading access to river transport will consist of building floating docks for small boats attached to wharfs on the river bank in isolated communities where current access is extremely precarious, both subject to, and aggravating erosion processes. As a result of this review, the following safeguards, which were triggered under the OL, have again been triggered under the AF: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), and Pest Management (OP 4.09). As a result of the introduction of new WSS activities under the AF, the following safeguards have additionally been triggered: Physical Cultural Resources (OP/BP 4.11) and Projects on International Waterways (OP/BP 7.50).
27. The final EA has been revised to include the assessment of potential impacts from the new activities and has been updated as needed including identification of additional mitigation measures. The revised EA also includes in its annexes an Environmental Manual for Infrastructure Works and specific environmental checklists for each type of investment. The

draft revised version was made publicly available on August 17, 2013 and the final version was disclosed on the World Bank's external website on December 30, 2013. The GoAc is currently finalizing an improved system to monitor the implementation of the Environmental Management Plan for the current operation and for AF activities, which will be in place before effectiveness. In relation to the Physical Cultural Resources Policy (OP/BP 4.11), although there is very low potential for chance findings in urban areas, the new and WSS activities will involve excavation. Therefore, this policy is triggered and its principles were treated in the EA with the inclusion of framework procedures for eventual "chance findings", with relevant provisions to mitigate any potentially adverse impacts. Such provisions include compliance with the guidelines defined by the National Institute for Historical and Cultural Heritage regarding historical sites and/or archeological findings.

28. *Social.* The Social Assessment (SA) carried out during the AF project preparation covered the population groups that will be affected by activities under the AF. As a result of this Assessment, OP/BP 4.10 Indigenous People which was triggered under the OL will again be triggered under the AF. As a result of the introduction of new WSS activities under the AF, OP/BP 4.12 Involuntary Resettlement has additionally been triggered. The SA concluded that the Project would have a highly positive social impact on vulnerable isolated rural communities and urban populations living in the most remote and disadvantaged areas of Acre due to its decentralized, participatory approach and its focus on strengthening social capital and rural institutions at all levels. The Project has prioritized interventions for Indigenous Peoples, who comprise 14 different ethnic groups, represent 7.5 percent of Acre's rural population, and live in 34 Indigenous Lands. Most of them have benefited from the preparation of PGTIs, the financing of productive Subprojects following a community demand driven approach, the provision of culturally adequate TA, and activities for institutional strengthening and cultural revival. These activities were in compliance with the principles and guidelines established in the Project's Indigenous Peoples Planning Framework (IPPF). This IPPF has been revised for the AF and a new round of broad consultation with Indigenous Peoples has been carried out. Lessons drawn from the Project's implementation, as well as suggestions from Indigenous representatives have been incorporated in the revised IPPF. The final revised and consulted version of the IPPF was received on August 30, 2013 and made publicly available on the World Bank's external website on December 30, 2013.
29. The proposed AF operation adds new activities for WSS, mainly paving and drainage of urban streets, and improvement of access to river transport, to be focused on four of the most isolated municipalities of the State. Although it is highly unlikely that these activities will require land acquisition and cause adverse impacts related to involuntary physical and/or economic displacement, OP 4.12 has now been triggered. As the project designs for the new municipal sanitation systems, paving and drainage, and for upgrading river access are still being developed and specific areas of intervention will not be defined prior to negotiations, Resettlement Action Plans (RAPs) (establishing principles and guidelines for planning and implementing any location specific Involuntary Resettlement Plans that may be needed) is considered the proper safeguard instrument. The RAPs were properly consulted and received by the Bank on August 30, 2013. They were made publicly available on the World Bank's external website on October 25, 2013 after the final Bank approval.

30. *Risks.* The Project's safeguards framework and documents have been revised and consultations have been completed for the new activities under the additional loan. There is a risk of lapses in planning capacity and subsequent delays in the execution of WSS infrastructure investments. Funds flow, disbursements, monitoring, auditing and supervision arrangements have been designed to respond to identified financial management risks and appropriate mitigation measures have been designed. To mitigate the implementation capacity risks associated with the scaling-up of project activities, an institutional analysis was carried out in September 2013 in addition to careful phasing of activities and their geographical expansion. There is an additional moderate risk that counterpart funds may fail to be available on time or in a sufficient amount. This risk will be closely monitored and, if necessary, the issue will be elevated to the guarantor (Federal Government) in a preventive fashion in order to ensure the application of national remedies. A Procurement Capacity Assessment carried out for the three new executing agencies (SEOP, DEPASA and SEPN) found that these agencies are not entirely familiar with WB Procurement Policies. Given this lack of familiarity with Bank's procedures, additional measures have been agreed to strengthen the implementing agencies' capacity in procurement management.
31. *OP 7.50 International Waterways.* The water supply and sanitation (WSS) activities covered under the additional loan will use water from international waterways, downstream from the border, to supply the water treatment and distribution systems to be upgraded in two isolated municipalities. These were assessed as having negligible impact on the waterways. Thus, OP 7.50 (Projects on International Waterways) is being triggered. However, the exception to the riparian notification requirement under paragraph 7(a) of the OP 7.50 policy is applicable. This is based on the fact that: (i) the activities relate to ongoing schemes; (ii) they are downstream from the border with no appreciable impact on the upstream neighboring state; and (iii) they will not be adversely affected by possible water use by the upstream neighboring state, since the territory surrounding the rivers is very remote and there is no public information of current or planned activities that could negatively impact the rivers. Management approval for the exception to riparian notification was secured on December 20, 2013.

Annex 1: Results Framework and Monitoring

COUNTRY: BRAZIL

Acre Social and Economic Inclusion and Sustainable Development Project (PROACRE) P107146/130593 (Loan 7625BR) Results Framework

Revisions to the Results Framework			Comments/ Rationale for Change
PDO			
<i>Parent Project and Additional Financing</i>			
The objective of the Project is to contribute to the Borrower's efforts to promote social and economic inclusion of its rural and urban poor, including its poorest and most disadvantaged population living in isolated areas of the Borrower's territory.			Unchanged
PDO indicators			
<i>Current (PAD)</i>	<i>Results to date</i>	<i>Proposed change*</i>	
a) Improvements in the Basic Education Development Index (IDEB ⁷) for fundamental education grades 1-4 from 3.8 in 2007 to 4.7 in 2014, and for fundamental education grades 5-8 from 3.8 in 2007 to 4.7 in 2014.	a) IDEB for grades 1-4 reached target value of 4.7 in 2011; IDEB for grades 5-8 reached 4.2 in 2011 and is on track.	a) Improvements in the Basic Education Development Index (IDEB) of State schools for early fundamental education from 4.7 in 2011 to 5.0 in 2017; and upper fundamental education from 4.2 in 2011 to 5.0 in 2017 (all indicators to be disaggregated by gender).	a) To reflect MEC's updated projections for the IDEB (and changes in grade ranges for early and upper fundamental education) and to introduce gender disaggregation of education indicators.
b) Increase: (i) the percentage of women with 6 prenatal consultations from 34% to 56%; (ii) the percentage of surviving newborns with low weight at birth in Acre's hospitals from 90% to 96%; and (iii) the general ambulatory consultancies in excluded target population (CAU and CAP) from 7% to 67%.	b) As of June 2013, (i) the percentage of women with 7 ⁸ prenatal consultations increased to 38%; and (ii) the percentage of surviving newborns with low birth weight in Acre's hospitals reached nearly 100%. In 2008, (iii) general ambulatory consultancies in excluded target population (CAU and CAP) reached 70% and	b) Increase in: (i) the number of ambulatory consultancies with specialized PSF mobile health teams in Gynecology and Pediatrics in excluded target population (CAU & CAP) from 0 to 10,000 consultations; (ii) the number of mammographies performed in women from 40-69 years old, from 4,000 – 5,820; (iii) the number of preventive cervical cancer services provided to women from 25 to 64 years old increased by 10% per year from 42,000 to 50,820; (iv) the percentage of Acre's Municipalities adhering to the State's Healthy	b) To better reflect a more strategic measurement of the State's current challenges and strategic actions since 2012, and in particular, to better focus on women's double burden of disease, since maternal mortality is being substantially reduced.

⁷ The *Índice de Desenvolvimento da Educação Básica* (IDEB) index ranges from 1 (minimum) to 10 (maximum) and is used by MEC across the country.

⁸ Note that Official Health Systems (SUS) reporting data shifted the parameters of this indicator from 6 to 7 prenatal visits, which in part, accounts for the slower rate of target achievement than was projected by the parent Project in 2008.

Revisions to the Results Framework			Comments/ Rationale for Change
c) At least 30% of target population benefitting of income generating activities.	<p>indicator subsequently dropped.</p> <p>c) Productive subprojects have been initiated in 120 of the Project's 200 targeted communities (i.e. with PDCs); and in all 18 targeted indigenous communities (i.e. with PGTIs). Investments in productive value chain have also been initiated. However, baseline and final measurement surveys have not been conducted to measure impacts on income generation of the target population.</p>	<p>Municipalities Program from 0 to 50%</p> <p>c) 60% of beneficiaries satisfied with Project support and extension services for productive inclusion activities (disaggregated by gender and indigenous/non-indigenous communities)</p> <p>d) Increased population in isolated areas with improved urban environment (i.e. simultaneous provision to households of adequate urban roads, micro-drainage, WSS and solid waste disposal) from baseline of 0 in 2013 to 13,300 in 2015.</p>	<p>c) Adaptation of WB core indicator ("Target clients satisfied with agricultural services (percentage)") to be designed by Project Team and measured through a survey. Rating to be aggregated in the form of an Index to be build considering general satisfaction with the service as well as the beneficiaries' perception of the impact of the extension services on development of their economic activities. Beneficiaries to include those receiving project support under sub-components 1.3, 2.3, 2.4, 3.3</p> <p>d) New PDO indicator introduced to reflect new AF investments in WSS and other urban infrastructure in four small isolated towns.</p>
Intermediate Results indicators			
<i>Current (PAD)</i>	<i>Results to date: Absolute target value achieved (% target value achieved)</i>	<i>Proposed change*</i>	<i>Reasons for the change</i>
<p>1. Basic services for isolated communities (CAUs e CAPs) 1.1 Expansion of access to basic education services</p> <ul style="list-style-type: none"> 15,000 new children age 4 and 5 enrolled in ECD programs in rural areas and 30,000 new students in fundamental schools (grades 1-4) have received basic education through <i>Escola Ativa</i> Program. 	<ul style="list-style-type: none"> 9,269 new enrollments ages 4 and 5 (62% achieved); 53,8444 new enrollments grades 1-4 (179% achieved) 	<p>1. Basic services for isolated communities (CAUs & CAPs) 1.1 Expansion of access to basic education services</p> <ul style="list-style-type: none"> Increase in the net enrollment rate of fundamental education in rural areas from 92.1% in 2011 to 93% in 2017 through <i>Escola Ativa</i> Program, grades 1-5, and through <i>Asas da Florestania</i> Program, grades 6-9. Increase in the net enrollment rate of secondary education in rural areas from 35.5% in 2011 to 45% 	<p>The education indicators were replaced to reflect the expansion of the access to the overall education system. The new ones are measured by the National Household Survey (PNAD).</p>

Revisions to the Results Framework			Comments/ Rationale for Change
<ul style="list-style-type: none"> 14,400 new students in fundamental schools (grades 5-8) and 9,600 new students enrolled in secondary education have received basic education through <i>Asas da Florestania</i> Program. 4,500 youth and adult ages 15 to 35 living in rural areas have attended literacy programs and 5,000 youth and adult benefiting from the provision of EJA 1st and 2nd segment programs. 	<ul style="list-style-type: none"> 7,988 new enrollments grades 5-8 (55% achieved); 4,254 new enrollments in secondary education (44% achieved) 7,409 youth and adults attended literacy programs (165% achieved); 3,553 youth and adults benefited from EJA (71% achieved) 	<p>in 2017 through <i>Asas da Florestania</i> Program</p> <ul style="list-style-type: none"> Decrease the illiteracy rate in the population over 15 years old in rural areas from 27.4% in 2011 to 20% in 2017 through literacy programs 200 state schools benefiting from the implementation of school subprojects <p>Source: PNAD/IBGE.</p>	
<p><u>1.2 Improvement and expansion of health basic services</u></p> <ul style="list-style-type: none"> Increase in percentage of medical consultations for pregnant women from excluded population (CAU, CAP) per year from 5% to 50%. Increase the percentage of people registered in PACS from 0 to 80%. 22 municipal programs for social communication in health approved. 17,000 water filters (with chlorine treatment) distributed. 	<ul style="list-style-type: none"> Increased to 55% (111% achieved) Increased to 99% (123% achieved) This indicator was dropped at Mid Term Evaluation, since the State used a different strategy This indicator was achieved and dropped at Mid Term evaluation. 	<p><u>1.2 Improvement and expansion of health basic services</u></p> <ul style="list-style-type: none"> Reduction of State's C-Sections in Rio Branco's maternity from 42% to 28% for low or regular risk pregnancies. Number of health professionals and community agents trained with at least one certified health module in Primary Health Care on both health care lines: maternal/neonatal, and women's cancer (from 0 to 1000) 	<p>From the original four indicators of this component, one was achieved at Mid-term evaluation and dropped, another one was eliminated at Mid-term since the State's strategy changed in social communication, and last two indicators were recently achieved. Therefore two new indicators are proposed under AF.</p>
<p><u>1.3 Implementation of sustainable agro-forestry production systems</u></p> <ul style="list-style-type: none"> 100 Community Agents (CAs) trained and on duty; 200 sustainable family farming Demonstration Units (DUs) operational 	<ul style="list-style-type: none"> 43 Community Agents trained and on duty (43% achieved) Investments delivered to 106 family farming Demonstration Units (53% achieved) 	<p><u>1.3 Implementation of sustainable agro-forestry production systems</u></p> <ul style="list-style-type: none"> 250 Demonstration Units receiving Project support operational 	<p>The DUs supported by the Project will be integrated within the overall Project Agro-forestry extension strategy (i.e. CAs lose their former role as the centerpiece of the sub-component's extension strategy). The increase in productivity and production will be measured for all the communities participating in the Project through common indicators (i.e. 'at least 15% increase in the sales value of production' as per sub-component 2.3 indicator)</p>
		<p><u>1.4 Development of integrated urban infrastructure and WSS services in four small and isolated towns</u></p> <ul style="list-style-type: none"> Increase from 2200 to 3800 households with piped water connections 	<p>New WSS indicators introduced to</p>

Revisions to the Results Framework			Comments/ Rationale for Change
		<ul style="list-style-type: none"> • Increased from zero to 3300 households with piped sanitation connections • Improved solid waste disposal benefiting 13,300 people • Improved micro-drainage services benefiting 13,300 people • 20 km of new pavements will result from the Project • Increased river access benefiting 38 500 people (i.e. the total population of the four target municipalities) • Incidence rate of diarrhea reduced by 10% annually among children under five years in the four towns receiving Project investment in improved WSS. 	reflect new AF investments in WSS and other urban infrastructure in four small isolated towns and establish link with health outcomes. These WSS indicators are based on WB Core Indicators.
<p>2. Social and Economic Inclusion in Rural Areas.</p> <p><u>2.1 Expansion and improvement of quality of basic education services.</u></p> <ul style="list-style-type: none"> • 7,000 new children age 4 and 5 enrolled in ECD programs in COPs. • 26,000 new students in fundamental schools (grades 1-4) and 8,800 new students in fundamental schools (grades 5-8) benefiting from the implementation of a GESTAR I and II-like methodology. • 5,300 new students enrolled in secondary education programs. • 1,600 youth and adults ages 15 - 35 have attended literacy programs and 3,000 youth and adults living in COPs benefiting from the provision of EJA 1st and 2nd segment programs. • 134 schools benefiting from the implementation of school subprojects. 	<ul style="list-style-type: none"> • 12,571 (180% achieved) new children age 4 and 5 enrolled in ECD programs in COPs • 24,319 (94% achieved) new students in lower fundamental schools (grades 1-4) and 10,188 (116% achieved) new students in upper fundamental schools (grades 5-8) benefiting from the implementation of a GESTAR I and II-like methodology. • 6,214 (117% achieved) new students enrolled in secondary education programs. • 2,283 (143% achieved) youth and adults ages 15 - 35 have attended literacy programs and 6,609 (220% achieved) youth and adults living in COPs benefiting from the provision of EJA 1st and 2nd segment programs. • 483 (360% achieved) schools benefiting from the implementation of school subprojects. 	<p>2. Social and Economic Inclusion in Rural Areas.</p> <p><u>2.1 Expansion and improvement of quality of basic education services.</u></p> <ul style="list-style-type: none"> • <i>Unchanged</i> • <i>Unchanged</i> • <i>Unchanged</i> • <i>Unchanged</i> • <i>Unchanged</i> 	Since AF will not provide additional resources to the 2.1 education subcomponent, indicators for these Project activities remained unchanged.

Revisions to the Results Framework			Comments/ Rationale for Change
<p>2.2 <u>Extension and improvement of the quality of health services in CAPs and COPs.</u></p> <ul style="list-style-type: none"> • Increase the percentage of medical consultations per year per total population in CAPs and COPs from 12% to 72%. • Proportion of population registered in the family health program (mobile PSF and PACS) from 15% to 90%. 	<ul style="list-style-type: none"> • Increase the percentage of medical consultations per year per total population in CAPs and COPs from 12% to 94%. • Proportion of population registered in the family health program (mobile PSF and PACS) from 15% to 74%. 	<p>2.2 <u>Extension and improvement of the quality of health services in CAPs and COPs.</u></p> <ul style="list-style-type: none"> • Both indicators modified during mid-term evaluation are maintained. • At least 50% of Maternal and patient's homes have been certified. 	<p>Unchanged indicators. New data being used since Mid-term evaluation. A new indicator has been added in line with new AF activities.</p>
<p>2.3 <u>Strengthening of market chains of selected agricultural and forestry products.</u></p> <ul style="list-style-type: none"> • 200 Community Development Plans (CDPs) developed and being implemented. • Increase by 15% the average yearly volume of sustainable production processed by producer cooperatives or associations. • Increase by 15% the yearly value of sustainable production generated by producer cooperatives or associations. • 100 Community Development Agents (CDAs) trained and on duty. 	<ul style="list-style-type: none"> • 200 CDPs developed (100%) and 91 being implemented (65% achieved) • <i>No baseline or final measurement collected</i> • <i>No baseline or final measurement collected</i> • 47 CDAs trained and on duty. (47% achieved) 	<p>2.3 <u>Strengthening of market chains of selected agricultural and forestry products.</u></p> <ul style="list-style-type: none"> • At least 60% of communities receiving productive subprojects with at least 15% increase in the sales value of their production 	<ul style="list-style-type: none"> • The CDAs are no longer the central piece of the agro-forestry extension strategy. • It is expected that changes in cultural practices produce a maximum increase of 30% in productivity. Given that adoption rates cannot be expected to be 100% and that there is a need for time for technology uptake, the production target needed to be reviewed downwards. • The increase in the value of production generated by producer cooperatives or associations will depend to a large extent on the volumes of production. • Baseline will be collected for all communities receiving productive subprojects under component 2.3 and 2.4.
<p>2.4. <u>Sustainable agro-forestry development of indigenous lands</u></p> <ul style="list-style-type: none"> • At least 15 Indigenous Land Management Plans developed and being implemented. 	<ul style="list-style-type: none"> • 18 Indigenous Land Management Plans developed and being implemented (120%) 	<p>2.4. <u>Sustainable agro-forestry development of indigenous lands</u></p> <ul style="list-style-type: none"> • At least 30 Indigenous Land Management Plans developed and being implemented. • At least 60% of communities receiving productive subprojects with at least 15% increase in production volume. 	<ul style="list-style-type: none"> • It is expected that Indigenous Land Management Plans will be developed and implemented in all target communities. • Increased productivity measured by increased volume (instead of sales value) of production as not all Indigenous Communities have regular access to markets (and

Revisions to the Results Framework			Comments/ Rationale for Change
			increased productivity is expected to contribute instead to increased food security)
<p>3. Entrepreneurship for Selected Marginal Urban Communities</p> <p>3.1 <u>Education activities for social inclusion of the most disadvantaged groups living in urban ZAPs.</u></p> <ul style="list-style-type: none"> • 7,200 new children age 4 and 5 enrolled in ECD programs in urban ZAPs. • 66,900 students of fundamental cycle (grades 1-4), 52,650 students of fundamental cycle (grades 5-8) and 35,000 students of secondary cycle benefiting from the implementation of a quality improvement package. • 8,500 youth and adults ages 15 - 35 have attended literacy programs and 12,200 youth and adults benefiting from the provision of EJA 1st and 2nd segment programs in urban ZAPs. • 11,200 students of fundamental cycle (grades 1-4), 7,000 students of fundamental cycle (grades 5-8) and 10,000 students of secondary cycle regularized in terms of age-grade distortion. 	<ul style="list-style-type: none"> • 3,963 new children age 4 and 5 enrolled in ECD programs in urban ZAPs. (55% achieved) • 66,378 students (99% achieved) of fundamental cycle (grades 1-4), 60,549 students (115% achieved) of fundamental cycle (grades 5-8) and 54,803 students (157% achieved) of secondary cycle benefiting from the implementation of a quality improvement package. • 4,389 (52% achieved) youth and adults ages 15 - 35 have attended literacy programs and 20,805 (171% achieved) youth and adults benefiting from the provision of EJA 1st and 2nd segment programs in urban ZAPs. • 5,245 (47% achieved) students of fundamental cycle (grades 1-4), 13,574 (194% achieved) students of fundamental cycle (grades 5-8) and 8,407 (84% achieved) students of secondary cycle regularized in terms of age-grade distortion. 	<p>3. Entrepreneurship for Selected Marginal Urban Communities</p> <p>3.1 <u>Education activities for social inclusion of the most disadvantaged groups living in urban ZAPs.</u></p> <ul style="list-style-type: none"> • Increase in the net enrollment ratio of fundamental education in urban areas from 93.1% in 2011 to 95% in 2017 from the implementation of a quality improvement package. • Increase in the net enrollment ratio of secondary education in urban areas from 57.9% in 2011 to 70% in 2017 • Reduce the illiteracy rate in the population over 15 years old in urban areas of 10.8% in 2011 to 9% in 2017. 	<p>The education indicators were replaced to reflect the expansion of the access to the overall education system. The new ones are measured by the National Household Survey (PNAD) and MEC.</p>
<p>3.2 <u>Health activities for social inclusion.</u></p> <ul style="list-style-type: none"> • Increase in the percentage of pregnant women having at least 4 or more pre-natal consultations in Rio Branco, Cruzeiro do Sul, and Sena Madureira from 40% in 2007 to 70% or more in the last year of the project. 	<p><i>Modified at Mid-term evaluation</i></p> <ul style="list-style-type: none"> • Increase in the percentage of pregnant women having at least 4 or more pre-natal consultations in Rio Branco, Cruzeiro do Sul, and Sena Madureira from 40% in 2007 to 72% in 2012 (106% achieved). 	<p>3.2 <u>Health activities for social inclusion.</u></p> <ul style="list-style-type: none"> • Increase in the percentage of pregnant women having at least 7 or more pre-natal consultations in Rio Branco, Cruzeiro do Sul, and Sena Madureira from 40% in 2007 to 72% in 2017. • Increased “successful” and “very successful” deliveries (“<i>Parto bem sucedido</i>” and “<i>muito bem</i>” 	<ul style="list-style-type: none"> • The first indicator was opportunistically updated, increasing the number of pre-natal consultations from 4 to 7. • The second indicator was

Revisions to the Results Framework			Comments/ Rationale for Change
<ul style="list-style-type: none"> • Increase in the percentage of PSF coverage in Rio Branco, Cruzeiro do Sul and Sena Madureira from 42% in 2007 to 66% in 2014. 	<ul style="list-style-type: none"> • Increase in the percentage of PSF coverage in Rio Branco, Cruzeiro do Sul and Sena Madureira from 42% in 2007 to 47% in 2012 (21% achieved). 	<p><i>sucedido</i>”) from 0% to 10% in selected maternities from Rio Branco and Jurua.</p> <ul style="list-style-type: none"> • The percentage of Acre’s Municipalities adhered to the State’s Healthy Municipalities Program from 0 to 50%. 	<p>eliminated (to better reflect new policies under consideration on the health delivery model in urban areas), and two new indicators were added, in line with new AF activities.</p>
<p>3.3 <u>Entrepreneurship and small business development.</u></p> <ul style="list-style-type: none"> • 25,000 families registered and cared for by the Social Assistance Reference Centers and other social and assistance services (housing, sanitation, health, education, job and income). • 4,000 skilled and capable people to work in the services sectors (IT, business management, etc.), civil works, industry (clothing and food), commerce, arts and handicrafts and others. 	<ul style="list-style-type: none"> • 19,500 (78% achieved) families registered and cared for by the Social Assistance Reference Centers and other social and assistance services (housing, sanitation, health, education, job and income). • 4,450 (111% achieved) skilled and capable people to work in the services sectors (IT, business management, etc.), civil works, industry (clothing and food), commerce, arts and handicrafts and others. 	<p>3.3 <u>Entrepreneurship and small business development.</u></p> <ul style="list-style-type: none"> • At least 60% of businesses receiving start-up equipment still operating 1 year following receipt of equipment. 	<p>The focus and implementing agency of this subcomponent changed. The capacity development activities will address specific management and technical knowledge needs of the project beneficiaries who will also be supported in the setting up of their businesses. Some capacity building activities occur after the business has been set up.</p>
<p>4. Public Policy and Institutional Strengthening.</p> <p>4.1. <u>Public sector management interventions</u></p> <ul style="list-style-type: none"> • Increase access to information and e-services offered by the GoAc in 30% of the target communities (CAPs and COPS) by 2014. • Training of at least 80% of staff at the central level of the participating Secretariats in programs for improving managerial capacity. <p><u>Education sector management</u></p> <ul style="list-style-type: none"> • Adoption of RBM at agreements in education in, at least, 40% of the SMEs by 2014. 	<ul style="list-style-type: none"> • Increase access to information and e-services offered by the GoAc in 100% of the target communities. • Training target achieved but improvement of managerial capacity needs to be assessed. • Adoption of RBM at agreements in education in 100% of the SMEs. 	<p>4. Public Policy and Institutional Strengthening.</p> <p>4.1. <u>Public sector management interventions</u></p> <ul style="list-style-type: none"> • Definition of specific indicators for institutional and individual performance for State Secretariats completed • Implementation of continuous performance monitoring systems initiated <p><u>Education sector management</u></p> <ul style="list-style-type: none"> • Assess 110,000 students of the 3rd, 5th and 9th grade and 3rd year secondary school students • Implement the Management Agreement Program 	<ul style="list-style-type: none"> • Following completion of basic staff training during parent Project implementation, AF will support implementation of performance-based management systems in the public sector. • AF will build on results to date to further strengthen education sector management.

Revisions to the Results Framework			Comments/ Rationale for Change
<p><u>Health sector management</u></p> <ul style="list-style-type: none"> • Increase in the percentage of health units that signed the Terms of Agreement to the Clinic Management and Financial Management Decentralization Program from 0% in 2007 to 100% in 2014. • Municipal Hospitals Results Control System for basic health care attention implemented. • Increase in the percentage of health units that signed the Terms of Agreement to the Clinic Management and Financial Management Decentralization Program from 0% in 2007 to 100% in 2014. <p><u>Sustainable forest management</u></p> <ul style="list-style-type: none"> • Quality Program for the Forestry Sector agreed with and joined by at least 30% of the State's enterprises 	<ul style="list-style-type: none"> • All targeted health units achieved the indicator, but the State modified its policy, and re-centralized management in most units. • State's health policy, modified the spirit of this indicator. • Idem • Quality Program for the Forestry Sector agreed with and joined by 100% of the State's enterprises 	<p>between the Secretariat of Education Secretariat and 240 schools</p> <ul style="list-style-type: none"> • Implement Performance Evaluation of Professional Development for 4000 teachers • Assess the conditions of supply (of infrastructure, human resources, financial resources, teaching materials, classroom spaces, etc.) of 240 school <p><u>Health sector management</u></p> <ul style="list-style-type: none"> • Patient's Satisfaction index in Maternity of Rio Branco increased by 15% annually from baseline. • Number of approved reports produced by the health intelligence unit, from 0 to 10 	<ul style="list-style-type: none"> • All three previous indicators in the health sector will be eliminated, since they are no longer reflecting current situation. Two new indicators were added in alignment with AF activities.
<p>4.2. <u>Institutional strengthening and modernization of indigenous organizations.</u></p> <ul style="list-style-type: none"> • At least 15 indigenous organizations (cooperatives and associations) implementing strategic planning and management. 	<ul style="list-style-type: none"> • 16 indigenous organizations (cooperatives and associations) implementing strategic planning and management. 	<p>4.2. <u>Institutional strengthening and modernization of indigenous organizations.</u></p> <ul style="list-style-type: none"> • At least 80% of the 34 IP communities receiving Project support receiving capacity building for strategic subproject planning and management. 	<ul style="list-style-type: none"> • AF will support expansion of institutional strengthening and modernization to a larger number of indigenous organizations.
<p>5. Project Management and Information Dissemination.</p> <ul style="list-style-type: none"> • Implemented accountable and effective management system for project that tracks disbursements and results. • Established social communication 	<ul style="list-style-type: none"> • Project management, monitoring and Information systems tracking disbursements and results in place. • Social communication strategy 	<ul style="list-style-type: none"> • Improvement of existing Project Management, Monitoring and Information Systems • Lessons learned to be integrated into existing social 	<ul style="list-style-type: none"> • AF will support strengthening of the existing project management, monitoring and information systems

Revisions to the Results Framework			Comments/ Rationale for Change
strategy with program participants, affected peoples and civil society (outputs). • At least 70% of project implementation by governmental institutions in compliance with planned activities, budget and timeline, as verified by SIM (Integrated Management System).	being implemented • Target achieved	communication strategy	• AF will support strengthening of social communication strategy with a focus on dissemination of project results and lessons learned.

* Indicate if the indicator is **Dropped, Continued, New, Revised**, or if there is a change in the end of project target value

ANNEX 2: OPERATIONAL RISK ASSESSMENT FRAMEWORK (ORAF)

**BRAZIL: Acre Social and Economic Inclusion and Sustainable Development Project (PROACRE) – P107146/P130593
(Loan 7625BR).
Stage: Board**

Project Stakeholder Risks		Rating: moderate
Risk description: The Project may not succeed in being as participatory as needed to ensure that community programs respond to the needs of the beneficiaries.	<p>Risk Management: Supervision of CDPs will be carried out by the extension service provider and by PCU; clear evidence of community participation is a criterion for the financing of subprojects. Tested participatory processes and tools for the planning of forestry activities will be adapted and applied during CDP formulation. Extension service providers will follow-up implementation for a period of two years.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p>	
Because the Project is in the Amazon Region, NGO groups may seek to delay the Project or influence its design and/or implementation, posing a reputational risk for the Bank.	<p>Risk Management: Decisions will be made through a participatory process to foster social engagement and representativeness.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>	
Disagreement among different beneficiary groups with respect to Project activities, benefits, etc.	<p>Risk Management: Decisions will be made through a participatory process to foster social engagement and representativeness.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>	
Although currently the Borrower's commitment to the Project and its objective is very high this may change given that it spans more than the current GoAc term.	<p>Risk Management: World Bank dialogue with the GoAc is continuous during project implementation</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>	
Beneficiaries municipalities may not commit to the operations in their jurisdiction	<p>Risk Management: Municipalities (beneficiaries) have confirmed interest for operations during a meeting with the Governor and World Bank officials. Municipalities have satisfactorily worked on the Project's implementation. Sustainable improved capacity of the municipalities in the delivery of infrastructure activities remains a challenge however.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p>	

Implementing Agency Risks (including fiduciary)	
Capacity	Rating: High
<p>Risk description: The key financial management and procurement risks for the Project include the following: (i) weak fiduciary arrangements at decentralized level; (ii) the large number of fund receiving entities which may delay (a) the smooth flow of funds, (b) report on the effective use of funds, and (c) reception of supporting documentation; (iii) both the financial and technical audit reports (under Capitation Payments, to Health, and Sustainable Production) presented important findings and recommendations which should be addressed by SEPLAN; (iv) weakness on contract management procedures; (v) need of systems and mechanisms to increase the transparency and improving the supervision of procurement transactions, and (vi) unnecessary delays in the procurement time due to bottlenecks on procurement flow.</p> <p>These risks arise due to the following factors: (i) the Project's activities involve a large number of entities with geographical dispersion and accessibility; (ii) there are three additional agencies that will implement project activities, namely, SEOP; SEPN; and DEPASA which have weak fiduciary arrangements in place; (iii) the internal control structure at SEPLAN needs to be reviewed and strengthened; and (iv) the customization of the MIS budget system (SPGP) and assignment of SEOP, SEPN and DPASA State staff specialists to the Project's financial management activities.</p> <p>It is expected that there is a low likelihood that the risks above will materialize, mainly because the SEPLAN has a functioning internal control system that will be used to support SEOP, SEPN and DEPASA. These controls have been reviewed in under the Project and have been found to be in compliance with World Bank guidelines. Fiduciary supervision missions will review both the controls systems and compliance to the systems.</p> <p>However, due to the fact that the large size of the loan and the large volume of payments and procurement transactions that may be involved, it could have a high impact. As a result, the Financial Management risk is assessed as High and Procurement Risk is Substantial.</p>	<p>Risk Management: Improve the capacity of SEPLAN (Implementing Agency) to execute large number of project activities.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>
	<p>Risk Management: Adoption of a strong an comprehensive internal control system.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>
	<p>Risk Management: The World Bank will increase the ongoing support to SEPLAN and will continue to closely monitor the audit activities in order to achieve the Project's objectives</p> <p>Resp: Client and World Bank Stage: Implementation Due Date : Not yet due Status:</p>

Governance		Rating: moderate
Risk description:Continued commitment to the Project demonstrated through adequate and timely counterpart funding.	<p>Risk Management: The Project focuses on the State’s key objectives around which there is a consensus within the GoAc. Nonetheless, necessary changes, if any arise, could be addressed in the Mid-Term Review</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>	
Changing government priorities throughout project implementation may divert attention from project activities	<p>Risk Management: The Project’s coordination arrangements will be based on the existing government agencies that control budget allocations and key decision-making.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>	
Procurement: a lack of qualified contractors leads to increased costs and delays in execution.	<p>Risk Management: Carry out market research to identify potential contractors in order to inform and improve procurement planning with regards to civil works.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p>	
Potential for misuse of funds (FM & Procurement) transferred to municipalities and schools.	<p>Risk Management: A new Law was enacted establishing more controls for the use of resources transferred to the local levels, schools and municipalities. The GoAc will continue to closely monitor activities executed by the municipalities. The project intends to minimize the transfer of resources to municipalities unless a strong assessment of their capacity is developed.</p> <p>This Project will likely to continue to require intensive supervision of FM and procurement process. An action plan addressing the major procurement and FM issues was defined and agreed with the GoAc.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>	
Project Risks		
Design		Rating: Substantial
Risk description:Project complexity, involving activities in several sectors and corresponding implementing agencies may become difficult to coordinate and integrate. Sustainability of the impacts of project investments to improvement in WSS will require institutional strengthening of DEPASA. Capacity building of DEPASA will be needed to ensure that with the resources available, WSS reaches the greatest number of people possible, and attains the largest coverage possible (given the particular logistical challenges of service delivery to remote locations in Acre).	<p>Risk Management: The strong and multi-disciplinary Project Coordination Unit (PCU) has been showing exclusive commitment to project coordination. The AF includes additional technical assistance to DEPASA for improvements of operation and maintenance of services in the towns benefiting from investments and in other small towns in the State, as well as for corporate development. This assistance aims at improving DEPASA ability to provide sustainable and more efficient services. The project will also assist the GoAc in the development of regulatory governance and instruments for WSS services, providing external incentives for services efficiency and sustainability.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p>	
The Project is complex but the GoAc has strong coordination capacity. New agencies will be included but they already have experience implementing other projects	<p>Risk Management: Continued World Bank support and Technical Assistance during supervision to foster local organizations engagement and, with the help from Rural Planning Units and close supervision from PCU, improve coordination/implementation of planned activities.</p> <p>Resp: Bank Stage: Implementation Due Date: Not yet due Status:</p>	
Unlike most, this Project’s design involves components that are divided on a territorial instead of sector basis.	<p>Risk Management: Strengthening for coordination of sector programs has been included in the design of the project.</p>	

<p>Implementation of infrastructure services of water supply, sanitation, drainage, solid waste and paving of urban roads may have inadequate designs and poor cost estimations.</p>	<p>The World Bank team prior to appraisal visited all cities benefiting from these investments, and all concepts, designs and cost estimation were revised according to the World Bank recommendations. Bidding documents were prepared and submitted for review by the World Bank prior to appraisal and were considered technically satisfactory. All the bidding processes will be handled by SEPLAN, using the capacity built under the Project. DEPASA will benefit from technical assistance aiming at its modernization.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p>
<p>The PSF Mobile depends on the availability of health professionals which has been a constant challenge in the target area. This problem is expected to be exacerbated under AF which anticipates the deployment of specialists (pediatricians and gynecologists).</p> <p>The PlanoVida transferals depend on information system connected to the internet. This presents challenges for remote municipalities and generates inequalities in the distribution of resources.</p>	<p>Risk Management: State support to the municipalities for finding doctors will be of great importance. Also, the establishment of a suitable structure for health teams is expected to reduce the risk of attrition of health professionals. The establishment of a gradation of wages related to distance from the State capital, vulnerability of the target population, and other criteria is also expected to enhance successful hiring specialists for the mobile clinic.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p> <p>Risk Management: The Project will support the GoAC to develop alternative systems (i.e. not exclusively dependent on internet connectivity) to allow small and remote municipalities, to deliver their health statistics within required timelines.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p>
Social & Environmental	
<p>Risk description: Environmental risks especially lack of compliance with the Environmental Management Plan by the Implementing Agencies and of oversight by the State, especially for the sanitation sector.</p> <p>The Region is facing a changing reality, with increasing deforestation; the Project might be seen as supporting development of infrastructure that could lead to even further deforestation.</p> <p>Lack of oversight by the State to ensure safeguard compliance of the screening and implementation processes for productive subprojects.</p> <p>Indigenous Land Management Plans might not reflect actual and future needs of Indigenous peoples.</p>	<p>Risk Management: Social and Environmental Assessments have been carried out; compliance measures and extra funding needs were included in project costs for each implementing agency, as well as a monitoring plan which will be coordinated by the PCU which will send regular monitoring reports to the World Bank.</p> <p>Regular supervision missions will assess compliance of implementation with safeguards requirements, including documents.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p> <p>Risk Management: PROACRE is supporting the State Plan of Monitoring of Land Cover, coordinated by SEMA and based on the acquisition of high-resolution satellite imagery and field visits; the Plan will inform about deforestation rates and subproject compliance, and establish law enforcement measures.</p> <p>Resp: Client Stage: Implementation Due Date: Not yet due Status:</p> <p>Risk Management: Regular supervision missions will assess PCU's capacity to monitor safeguard compliance and lead activities with Indigenous peoples.</p> <p>Resp: Bank Stage: Implementation Due Date: Not yet due Status:</p>
Program & Donor	

<p>The multisectoral program is to be implemented by agencies with varying degrees of capacity.</p>	<p>Risk Management: Strengthening of coordination of sector programs included in the design of the project.</p> <p>Resp: Stage: implementation Due Date: Not yet due Status:</p>
<p>Delivery Monitoring & Sustainability</p>	
<p>Risk description: Changing government priorities throughout project implementation may divert attention from project activities.</p> <p>M&E: Capacity of PCU to monitor and document results and outcomes needs to be strengthened</p>	<p>Risk Management: Key systems to monitor delivery have been put in place under the Project (including participatory M&E). Project indicators are based on the GoAc development agenda and have Government buy-in. Technical assistance from the World Bank will assist the Project’s implementing agencies in establishing the mechanisms for data collection, treatment and analysis</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p> <p>Risk Management: Continued policy dialogue to ensure that the Project has ongoing support from the GoAc.</p> <p>Resp: Bank and Client Stage: Implementation Due Date: Not yet due Status:</p>
<p>Overall Risk Rating</p>	
<p>Implementation Risk Rating: Substantial</p>	
<p>The GoAc has experience with World Bank-financed projects and processes and has satisfactorily implemented previous projects, including the parent project, which is ongoing. The operation will be implemented in close coordination with other governmental policies and sectors and seek engagement of different actors at the local, state and national level to ensure political support and adequate financing for timely implementation</p>	

Annex 3: Eligible Expenditures

Category	Amount of the Loan Allocated (expressed in USD)	Percentage of Expenditures to be financed (Inclusive of Taxes)
(1) (a) Goods, works, non consulting services, consultants' services including audits, training, and scholarships for the Project except for Parts 2 (d), 4 (b) and 4 (c) of the Project	110,000,000	100%
(b) Goods, works, non consulting' services, consultants' services, and training for Parts 2 (d) and 4 (c) of the Project	5,700,000	100%
(2) Health Insurance Capitation Premia under Part 3 (b) of the Project	0	100% of amounts resulting by multiplying the Eligible Enrolled Population by the Fixed Amount as set forth in Section I.G.3, 4 and 6 of Schedule 2 of the Loan Agreement.
(3) School Grants	6,400,000	100% of amounts disbursed
(4) Per Capita Payments for Sustainable Production under Part 4 (b) of the Project	0	100% of amounts resulting by multiplying the Eligible Small Producers by the Unit Cost as set forth in Section I.D.3, 4 and 6 of this Schedule.
(5) Subprojects	7,900,000	100%
(6) Operating Costs	14,500,000	100%
(7) Front-end Fee	375,000	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07 (b) of the General Conditions
(8) Premia for Interest Rate Caps and Interest Rate Collars	0	Amount due under Section 2.07(c) of this Agreement
(9) Unallocated	5,125,000	
TOTAL AMOUNT	150,000,000	

NB - Categories showing zero in the table above (except for Category (8)) indicate that they will be financed out of the proceeds of the Original Loan (BR-7625) and that no Bank financing will be allocated for these Categories under this Additional Financing.

Annex 4: Detailed Description of Project Activities

Project Components

1. The basic structure of the Project Components remains unchanged, while existing activities in all components will be scaled up to new areas and key new activities under the proposed additional loan in the areas of WSS and integrated urban infrastructure will be integrated into the existing components. As a result, Project activities will be organized as follows:

2. **Component 1 – Basic Services for Isolated Communities (US\$ 92.2 million, of which US\$ 73.8 million IBRD financing).** This component provides support to the provision of basic services in primary health care, basic education, and agricultural extension services, including technical and financial assistance, as well as new investments to promote improvements in water supply, sanitation, drainage, river access, and solid waste infrastructure and services, and to all season urban roads to Acre’s dispersed and most isolated communities, through the following subcomponents:

3. **Sub-component 1.1 - Expansion of access to basic education services (US\$ 15.8 million of which US\$ 12.6 million IBRD financing).** This sub-component supports the expansion of access to basic education services: developing interventions to increase the access to education and quality of education with emphasis on early childhood programs, literacy, primary (*ensino fundamental*) and secondary education for children, youth and adults in isolated communities in the Borrower’s municipalities.

4. This subcomponent will include scaled up interventions to increase access to, and quality of, education, especially early-childhood development programs (ECD), fundamental and secondary education, and youth and adult education in the CAU and CAP communities in all 22 municipalities of Acre through the development of the ‘Little Wings of the Forest’ (*Asinhas da Florestania*) Program, Active School (*Escola Ativa*) Program, and Schools Subprojects. It will concentrate on expanding the coverage of ECD home-based programs to children of ages 0 to 3 years (from previous age of entry at ages 4 and 5), for approximately 3,000 children living in CAUs and CAPs, with the objective to guarantee universal enrollment. The provision of this type of program is a critical step to reduce over-age enrollment and overall internal inefficiency in fundamental education. The Project will develop non-traditional ECD programs with community agents trained to provide parenting training with home visits. Building on the success of these programs in the OL, the GoAC intends to continue expanding the programs and review the pedagogical proposal to better attend the needs of children in the isolated communities.

5. The subcomponent also supports the diagnostic study of ECD in the State coordinated by the SESACRE, called “1000 Days”. The study will create an Index to describe the development of a child in Acre during the first 1000 days of life (from minus 9 months to 3 years old) based on 35 ECD indicators in the areas of Health, Education, and Social Protection. The programs Little Wings of the Forest and 1000 Days study are based on the evidence that most effective ECD

programs provide direct learning experiences to children and families and are targeted toward younger and disadvantaged children.⁹

6. In addition, this subcomponent will support these policies by continuing the development of School Subprojects for schools following the strategies used by the original Project. School Subprojects will be implemented through School Grants to stimulate school autonomy to make key decision and control resources.¹⁰ School Subprojects, which may include activities for school rehabilitation and maintenance, as well as for quality improvements, will emphasize the implementation of activities that are essential to improved school performance and learning outcomes, identified in the planning tool supported by MEC - School Development Plan (PDE). The PDEs will contribute to increase school accountability and community participation. During the life of the Project, approximately 200 state schools located in CAUs and CAPs areas will prepare their PDEs and respective School Subprojects using the same methodology adopted by the original Project and as outlined in the MOP.

7. Subcomponent 1.2: Improvement and expansion of basic health services (US\$ 5.0 million, of which US\$ 4.0 million IBRD financing). This will be achieved by: (i) increasing the capacity of primary health care networks to meet the demand for these services by the poor and rural communities; and (ii) increasing municipal capacity to improve the quality, continuity and coverage of primary health care services for isolated communities. It will support the expansion of preventive services of two health care lines: maternal and neonatal health care, and women's cervical and breast cancer, through the continuous and regular performance of regular Family Health Program (PSF) mobile health teams, and trained midwives, in poor and remote communities. It will also increase municipal capacity to improve the quality and sustainability of both health care lines for the target populations.

8. The overall strategy to achieve these objectives includes: (i) use and training of the Community Health Agent program (*Programa de Agente Comunitário de Saúde - PACS*) to increase access to the *Plano Vida's* maternal and child health care line, and preventive services for cervical and breast cancer; (ii) use and training of Midwives for healthy deliveries, including early detection of risk in women, for reducing the maternal and child health care burden (including multisectoral tools for maternal and child health surveillance); (iii) social communication programs and campaigns for health promotion, preventive services, and health care risk management, and (iv) supervision of mobile PSF.

9. This subcomponent will finance: (i) salaries of health agents and midwives; (ii) costs associated with training of health agents, midwives, health teams and managers in municipalities - including materials and equipment; (iii) TA and consultancy services; (iv) operational costs and supervision; (v) costs associated with social communication programs and campaigns; (vi) costs associated with risk management activities.

⁹ Engle, Patrice L., et al. "Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world." *The Lancet* 369.9557 (2007): 229-242.

¹⁰ Bruns, Barbara, Deon Filmer, and Harry Anthony Patrinos. *Making schools work: New evidence on accountability reforms*. World Bank Publications, 2011.

10. Subcomponent 1.3: Implementation of sustainable agro-forestry production systems (US\$ 3.3 million, of which US\$ 2.6 million IBRD financing). The subcomponent will continue to improve agricultural productivity and promote diversification of food sources and sustainable use of natural resources, including timber and non-timber forest products (NTFP)¹¹, by supporting agricultural extension services and other outreach programs aimed at improving general livelihood conditions of isolated communities, and scholarships for community agents. As in the OL, the sub-component's activities will support agricultural extension services, having as main tool demonstration units (DU) and a farmer's exchange program. The main changes for the additional financing are the change in the DU selection methodology and the increase in the synergies between the extension activities of this subcomponent and those of sub-component 2.3, with the aim of improving the Project's efficiency and efficacy.

11. The DU to be supported under the additional loan can either be family farmer's production units or farmers associations/cooperatives where good practices on agro-forestry and/or association management have been identified by extension agents (SEAPROF or contractors) during the implementation of the Project or of other State Programs. The DU selection criteria include considerations on location and accessibility to Project participants, as well as on productivity, income, social and environmental aspects of the producers or associations to be benefited. The description of such criteria and selection methods will be included in the Project's Operations Manual.

12. The DUs will be incorporated in the overall Project agricultural extension strategy. Farmers or associations/cooperatives identified as DUs will receive investment supported by the Project (maximum of US\$7,500 per association). The extension agencies working with the Project will assist the farmers and the associations/cooperatives in the formulation of a plan with the proposed investment and quantifiable targets on the expected results. The AF will support 50 additional DUs; the support to the agricultural extension network and exchange programs will be financed through sub-component 2.3.

13. Subcomponent 1.4: Carrying out of integrated urban infrastructure and water supply activities (US\$ 68.2 million, of which US\$ 54.6 million IBRD financing). This will be done in small and isolated towns in the Borrower's west region, and will include new improvements in water supply, sanitation, drainage, solid waste and all seasons' urban roads. The investments are intended to increase the coverage and efficiency of water supply services, increase the coverage of sanitation (which is almost non-existent), implement micro-drainage, promote integrated solid waste management, expand all-season urban roads, and improve access to river docks in small and isolated towns. This subcomponent will also provide TA to the operational and corporate development of DEPASA, with focus on non-revenue water, energy efficiency, operational and commercial practices and training to ensure long term sustainability of Project investments. As the State needs to comply with requirements set by the National Basic Water and Sanitation Guidelines Law no. 11445 of 2007, particularly concerning the regulation of WSS, the Project will also assist the State in developing adequate sector policies, including institutional models and instruments for service provision and regulation. The design and implementation of new

¹¹ All community forestry operations are in compliance with Forest Stewardship Council (FSC) certification.

sanitary landfills will be developed during implementation, including the management and financing models to sustain these services in the long term.

14. With regard to solid waste management, micro-drainage, urban roads and access to rivers, although investments will be implemented by the State, future operations and maintenance will be under the responsibility of the benefiting municipalities, which need to improve institutional capacity. This is particularly relevant for solid waste management. The AF will support the state in identifying the best management model for these services and to support local government in carrying out these responsibilities in an improved way.

15. During project preparation, the Bank team assessed the technical solutions being considered for integrated investments for four priority small and isolated towns. The main features of the proposed investments are described below:

- a) Paving of urban roads – considering the absence of rocks and the difficulties of transportation, urban roads will be paved with local manufacturing of clay bricks, which are adequate for local conditions for both installation and maintenance/repair. The use of local bricks is the most efficient way and is being successfully used in the remote regions, with remarkable advantages against other paving materials, including the maintenance of partial soil permeability. Moreover, the installation of small scale brick factories also generates jobs for unskilled workers, invigorating local economies. The same material will be used in the construction of drainage and sanitation facilities. This technique is simultaneously low cost and environmentally friendly, as it maintains partial soil permeability.
- b) Urban micro-drainage – the Project will finance the installation of micro-drainage only in the most critical micro-basins, to avoid floods in flat areas. Micro-drainage is dimensioned for 25 years recurrence time, and concrete pipes will be used when needed.
- c) Water supply – water supply systems exist in all the small and isolated towns to be benefited by the project. However, most of the towns need upgrading of treatment facilities, expansion of the distribution network and improvement of commercial and operational practices. This task comprises the activities associated with the improvement of water supply services of the four isolated municipalities, encompassing about 13,300 inhabitants. The project includes the construction of four water treatment plants, about 15 km of pipes, four tanks and 1120 new piped household water connections, which correspond to an investment of US\$5.5 million. The new water treatment facilities to be installed – compact, conventional filtration plants are necessary to keep drinking water quality in line with health parameters set by the Ministry of Health. All connections will be metered, and the state utility DEPASA will be supported to modernize its operational, commercial and corporate practices. While the project will focus on the small and isolated towns, the borrower will also apply to receive TA from the Bank financed Federal INTERAGUAS Project to support a broader utility reform agenda.
- d) Sanitation – while limited wastewater systems exist in some cities, such as Porto Walter, there are no sewers and facilities in others. The local environmental conditions require

sanitation to improve health and living conditions. During preparation the Bank team assessed the proposed investments in sanitation in four cities: Jordão, Marechal Thaumaturgo, Porto Walter and Santa Rosa do Purus, influencing the technological choices to (i) reduce investment needs, (ii) facilitate operation and maintenance, (iii) reduce energy consumption and operational costs, and (iv) meet environmental requirements. The use of dynamic (network) and static (on site) systems are combined according to local topography and population density. All collection networks will be based on the *condominial* model, taking advantage of local topography and land occupation. Treatment facilities will be anaerobic, to reduce generation of sludge, either by Up Flow Anaerobic Sludge Blanket (UASB) reactors and septic tanks combined with anaerobic filters. UASB treatment technology is appropriate for Acre's tropical climatic conditions and for the rivers where treated effluents will be discharged. In smaller drainage areas septic tanks and anaerobic filters will be used. These technologies were selected through the design process mainly for their low operating costs with regards to energy consumption and simple operation procedures. The investments would have minor environmental impacts, mainly during construction. The proposed treatment plants are adequate for the scale of services and to the rivers which will receive treated effluents, while the adoption of technologies not requiring complex operation skills or equipment will facilitate operations in the medium – long term in remote areas. The number of pumping stations in the conceptual projects was reduced as much as possible, resulting that in some cities the treatment will be decentralized into two separated treatment facilities. In less dense areas, on site sanitation composed of septic tanks and anaerobic filters will be installed. In all cities, poorest households with no private toilets will receive household sanitary improvements. The project comprises the construction of 18 wastewater treatment plants, about 32 km of sewers, 667 individual on-site solutions, 3310 new piped household sanitation connections and 200 household toilets, corresponding to an investment of US\$15.4 million.

- e) Solid waste - the Project will also finance the implementation of landfills to the benefiting municipalities, ending the existing open dumps and significantly improving the urban environmental conditions of such cities. This activity will be accompanied by TA to the Borrower and the municipalities on the most adequate management and financing model to sustain the operation of solid waste services in the long run and in an integrated way.
- f) River Access – Access to river and boats will be improved in Jordão, Marechal Thaumaturgo and Santa Rosa do Purus. Access ramps will be constructed for access to the river and boats and the entire waiting area and access to maritime transport will be built and improved in the three municipalities mentioned. In Porto Walter there is already an access ramp so that only the waiting areas will be improved.

16. Socio-environmental actions or sanitation connections will be implemented to stimulate households to connect to the sewerage network and to promote health and environmental benefits of connecting and of the proper use of the sanitation facilities.

17. With the exception of the landfills to be implemented, the investments in service infrastructures will be implemented in an integrated manner in all municipalities benefiting from

the Project. While all engineering solution options are being defined for the towns of Porto Walter, Santa Rosa do Purus, Marechal Thaumaturgo and Jordão, the Borrower plans to bid all works together for each of the priority towns once the engineering designs are prepared. This integrated approach will facilitate the construction, particularly gaining scale for transportation of materials and equipment for each city through the rivers. At the same time, integrated construction will reduce the local impacts during implementation, and favor better schedule for every work.

18. Technical options for engineering designs and associated estimated costs for water supply, sewerage works and improvements in household sanitary conditions were discussed during preparation. High per capita costs can be attributed to: (i) topography (which influences the number of pumping stations required); (ii) low population density; (iii) logistics for transportation of construction materials and equipment from Rio Branco to isolated municipalities; and (iv) the distance of Acre and the municipalities from the industrial sites that produce construction materials. It should be noted, that only logistics and transportation of required materials and equipment represents about one third of the planned investments, highlighting the challenge of work in remote areas accessible only by boats and in the rainy season only.

19. The rehabilitation and construction works will follow the Brazilian standards for system dimensioning and the standards of quality of the National Environmental Council (*Conselho Nacional do Meio Ambiente*, CONAMA) for effluent discharged and sludge disposal. The Project will also finance supervision of works for the municipalities, with a cost estimation of BRL 4.6 million.

20. The proposed AF will support the development of the state WSS services in three dimensions: local, for investments in expansion, corporate, for operational improvements and institutional modernization, and state wide, for policy and regulation. For the corporate dimension, the Bank team and the State agreed on a short to medium term strategy: in the short term, individual consultants will be hired to develop a brief assessment of operational, commercial and corporate practices, identify key areas for development and prepare TOR for consulting firms to provide more detailed and deep support. These will be done at two levels: local services in the smallest municipalities, in which service provision are both more precarious and expensive; and corporate level. These activities will involve WSS operation and maintenance, NRW program, energy efficiency, staffing models and sizing; commercial practices; etc. The municipalities benefiting from investments expansion will benefit from these TA activities. For the policy and regulation, a similar approach was agreed: in the short term, the state created a working group for regulatory governance conformity, led by the State Chief of Staff. An individual consultant will be hired to support the state in identifying the key bottlenecks, support the working group in preparing the TOR for hiring consultants to develop a regulatory governance model that would be simultaneously coherent with the national legal requirements and adequate to the state reality, including a process of continued dialogue/consensus and an implementation plan. Tariff structure and regime issues will be addressed under two dimensions of the TA to be supported by the project: corporate modernization and regulatory governance. There is a consensus that the current regime and structure are not adequate, but any change has to be based on a gradual strategy and take into

account a political economic assessment. Some of the TA described above will be developed in coordination with the Bank financed Federal Integrated Water Project - INTERAGUAS.

21. Component 2 – Social and Economic Inclusion in Rural Areas (US\$ 35.3 million, of which US\$ 28.2 million IBRD financing). This component is improving the quality of education and health services in priority communities as well as the income levels of the population living in these communities by supporting selected production chains, through the following subcomponents.

22. Subcomponent 2.1: Expansion and improvement of quality of basic education (no new resources allocated). No new resources are allocated to this subcomponent under additional loan. The SEE decided to remove the activities of the education sector in the subcomponent 2.1 of PROACRE to reallocate resources to ensure the sustainability of its major program in subcomponent 1.1 and 3.1. Additionally, resources were redistributed to subcomponent 4.1 for the inclusion of three new programs (described further below) that will support the SEE Management Reform.

23. Subcomponent 2.2: Improvement of the quality of health services (US\$ 6.9 million, of which US\$ 5.5 million IBRD financing). This subcomponent supports the expansion, with municipal support, to a greater number of communities in the rural areas of the primary and secondary health services through mobile PSF units and training of community-based health agents to provide the required services.

24. The subcomponent will include the expansion of two health care lines through the PSF strategy by complementing existing units with specialized gynecological, pediatric and odontology mobile health teams, as well as through the intensive use of maternal and patient's homes in particular for pregnant women, and/or or women with cervical and breast cancer from rural areas that come to urban areas to receive specialized attention. Due to the long distances that separate these communities, and after the enormous success of the regular PSF mobile health teams that included land and river mobile health teams - as well as trained community-based health agents (ACS – *Agentes Comunitários de Saúde*) that provided primary health services - the State decided to add to the fixed and mobile PSF a new group of specialized gynecological, pediatric and dentistry mobile health teams, focused on three areas: (i) provision of perinatal health care services, and cervical; and breast cancer preventing including the implementation and expansion of the “maternal and patient's homes” and quality services in gynecology; (ii) increasing the number of specialized medical visits in gynecology, pediatrics and odontology with regular medical visits for the overall population in these localities - emphasizing the social and medical risks measurement of vulnerable populations, and preventive services for cervical and breast cancer; and (iii) implementing health regulation centers and health surveillance actions through results-based performance contracts with the municipalities.

25. Subcomponent 2.2 activities include: financing for the mobilization of specialized gynecological, pediatric and odontology mobile health teams; (ii) costs associated with the design and implementation of training programs for health teams in both health care lines, and municipal health managers, (iii) improvements in the infrastructure and equipment, materials and supervision for health facilities in both selected health care lines; (v) production of health promotion and preventing services, including media radio programs and guidelines to inform

community members about health procedures, health care, and how to utilize the services of health agents, and specialized gynecological and pediatric mobile health teams logistics.

26. This subcomponent finances: (i) salaries of health personnel of the specialized mobile health teams; (ii) costs associated with management and supervision of specialized mobile health team's personnel, including training, management and supervision. (iii) operational costs associated with Annual Management Agreements between SESACRE and providers that will be established, and with the Performance Agreements to be negotiated annually including specific targets for health outputs/intermediary outcomes directly linked to both health care lines; (iii) equipment, vehicles, and health boats for the specialized mobile health teams and their operational costs; (iv) costs associated with social communication programs and health promotion campaigns; and (v) costs of health surveillance and risk management activities.

27. Subcomponent 2.3: Promotion and enhancement of agricultural and forestry commercialization channels. (US\$ 22.7 million, of which US\$ 18.2 million IBRD financing).

This subcomponent provides technical and financial assistance in the following areas: (i) the preparation of community development plans for isolated rural communities; (ii) the carrying out of Community Subprojects based on said community development plans aimed at improving the overall production capacity and social entrepreneurship as well as of the market chains of selected products, such as, *inter alia*, timber, rubber, and Brazil nuts; and (iii) investments in the development and implementation of business plans to increase productivity and commercialization of selected value chains, such as, *inter alia*, honey, oilseeds, and coffee.

28. Subcomponent 2.3 will continue to support the development of productive activities based on participatory Community Development Plans (CDP). CDP guidelines for the identification and planning of productive activities will be adjusted to reflect the lessons learned during Project implementation. CDP formulation will be streamlined to decrease time and costs, and these plans will focus on types of activities which have shown potential for positive returns during the original loan. The formulation of CDPs will include participatory identification of production uses (marketing channels and/or self-consumption) and a simplified financial model and quantitative indicators and targets for expected results. New criteria for the selection of communities comprise considerations on environmental sustainability, commercialization potential, gender and economic characteristics of the beneficiary families; and will be included in the POM.

29. Under the additional loan, this subcomponent will finance the formulation of 60 and the implementation of 120 CDPs in addition to the 200 formulated and 140 implemented through the OL. The AF foresees an increase in the investment per CDP in agro-forestry extension and TA to commercialization. This subcomponent will also provide support to the GoAc for carrying out strategic studies to further inform the project socio-economic development strategy.

30. The subcomponent will finance *inter alia*:

- (a) The formulation of 60 and the implementation of 120 CDPs in addition to the 200 formulated and 140 implemented through the OL. The AF foresees an increase in the investment per CDP in agro-forestry extension and TA for commercialization.

- (b) A strategy for the development of the value chains with greatest development potential in the State. The study will, *inter alia*: identify, map and characterize the main actors in selected value chains (their level of production and organization), identify available markets, and characterize producers' access to information, credit and value addition strategies, such as certification (e.g. Brazil nut). As a whole the study should identify the opportunities, as well as the bottlenecks, and provide a strategy for the development of agro-forestry value chains. This study would be the foundation of the business plans for processing and commercialization activities also to be financed under this subcomponent.
- (b) Evaluation of the supply of TA to the Project. The success of this subcomponent – as well as of the remaining subcomponents supporting productive activities – depends in a large scale on the correct and effective implementation of TA. Thus, this subcomponent will support an evaluation study focusing on two main aspects: (i) lessons learned from the capacity development activities supported by project through subcomponents 1.3, 2.3, and 2.4; and (ii) assessment of beneficiaries' satisfaction and existing capacity in Acre to supply TA in relevant fields to the Project. The results of this study will be used to fortify the agro-forestry extension and commercialization TA strategies of the State and will be used for the measurement of the PDO indicator.
- (c) Training activities for Project extension and monitoring agents. These activities will comprise the participation in workshops both on Project implementation and monitoring processes and on technical aspects of agro-forestry and environmental management.

31. Subcomponent 2.4: Development of Sustainable Agro-forestry on Indigenous Lands (US\$ 5.7 million, of which US\$ 4.5 million IBRD financing). This will be achieved through (i) the preparation and update of indigenous land management plans (PGTIs) for designated indigenous lands; and (ii) the carrying out of Indigenous Subprojects based on said indigenous land management plans aimed at improving overall agro-forestry productivity and livelihood conditions of indigenous populations living in indigenous lands.

32. The process of Indigenous Subproject formulation will be improved through the introduction of additional participatory planning tools for production and commercialization activities. Subproject investment plans will include, *inter alia*, quantitative indicators and targets, as well as a simplified financial analysis. The subcomponent will finance the revision of 18 PGTIs and the implementation associated Subprojects, as well as the investments associated with the 16 PGTIs the formulation of which was financed through the OL. SEAPROF is responsible for ensuring the delivery of extension services to the communities, both through contracted external service providers or through its local offices. Extension service providers will be responsible for monitoring activities according to the monitoring framework outlined in the POM.

33. Component 3 – Entrepreneurship for Selected Marginal Urban Communities. (US\$ 23.6 million, of which US\$ 18.9 million IBRD financing). This component will promote social inclusion of urban communities in areas of high socioeconomic and environmental vulnerability by fostering entrepreneurship through the promotion of community enterprises, and vocational training for professionals and community members, through the preparation of a socio-economic survey which will define activities to be carried out as part of the Project.

34. Subcomponent 3.1: Education activities for social inclusion of the most disadvantaged groups living in selected urban priority areas. (US\$ 4.9 million, of which US\$ 3.8 million IBRD financing). The subcomponent supports the provision of basic education services targeting access to education and quality of education for regular students in the education system with emphasis on the development of accelerated education programs, literacy and secondary education programs targeting the youth and adults. Based on the SEAPE results, it will be possible to provide systematic annual feedback reports about student achievement to hone the design of teaching quality improvement activities supported through under subcomponent, including activities to (i) improve teaching quality in fundamental and secondary schools by training and accreditation of teachers in specific subject matters and on classroom management, (ii) strengthen the pedagogical management of elementary schools and middle schools through training and accreditation of school educational coordinators and principals; (iii) develop a new bonus pay program for the literacy instructors.

35. In addition to the teacher training supported in PROACRE, the SEE will design and pilot a new bonus pay program for the literacy instructors. That will be an incentive mechanism for literacy instructors based on results of student attendance and the achievement in the literacy assessment. The SEE aims to pilot the program for 60 instructors in the first year and from the second year implement for all 600 instructors.

36. The decentralization of school resources is based on the Survey of the Situation of the Schools (LSE - *Levantamento da Situação das Escolas*), a tool established by MEC to identify, in detail, the individual needs of municipal and state schools, compared with the State's minimum operational standards for schools. The MOP, which defines the eligibility criteria and activities to be financed by the School Subprojects, will be revised to reflect the specifics of schools in the selected urban areas. The State Education Secretariat will be responsible for providing TA and monitoring the implementation of the rehabilitation and quality improvement Subprojects. Only state schools will receive the grants supported by this subcomponent.

37. Subcomponent 3.2: Health Activities for Social Inclusion (US\$ 14.8 million, of which US\$ 11.9 million IBRD financing). This component supports the Borrower's municipalities to expand Family Health Program (PSF) and improve the quality of primary and secondary health services through the establishment and financing of the Health Insurance Capitation *Premia* of the Health Quality Insurance System Maternal Neo-Natal for the provision of mother and child care services and the financing of formal health teams. Following the success of the existing *Plano Vida* program, the Project will continue to support Acre's municipalities in expanding the quality of the maternal and child health care line through the continuity of the *Plano Vida* Fund for the provision of maternal and neonatal health care services, and will also continue to support the regular PSF.

38. The overall strategy for this subcomponent includes:

- (i) Strengthening the expansion of the *Plano Vida* Fund as the vehicle for financing the delivery of key services in the two selected health care lines (obstetric and neonatal health care, and cervical and breast cancer). The Bank will pay for each enrolled *Plano Vida* eligible person (pregnant woman) an amount equivalent to the 60% of the "per capita" defined, and the

additional 40% will be based after the achievement of a set of 10 indicators related to the two health care lines (detailed in the MOP). Each indicator of the ten will have equal value of 4%, and will be only disbursed once the annual goal has been achieved and confirmed by the SUS technical auditor. Performance agreements between SESACRE and Maternities, Municipalities, and other selected providers for breast and cervical cancer at third level of attention, will negotiate and sign annual performance agreements including specific targets for health outputs/intermediary outcomes directly linked to delivery of the health services portfolio of *Plano Vida*. As mentioned, Annual Management Agreements between SESACRE and providers will establish different payment mechanisms, including Preventive related groups (PRG), Disease Related Groups (DRG), *Baremo* or classic fee-for-service transfers to *Plano Vida*'s providers based on the agreed portfolio of services. Per-Capita "insurance premiums" value will be agreed annually, based on reviewed costs.

- (ii) Co-financing for improvements in infrastructure, and equipment for prenatal, neonatal and maternal health care, as well as for cervical and breast cancer in three maternities, and a maximum of 10 health units.
- (iii) Continuing the implementation of an accreditation system for obstetric and neonatal care units (two maternities) to be executed by SESACRE under results-based performance agreements between SESACRE and those Units
- (iv) Developing a strategic communication plan to support the implementation of all Project health activities.
- (v) Implementing a State program of clinical governance (*Gestão da Clínica*).
- (vi) Supporting the development, implementation, supervision, and incentives for the State's "healthy municipalities" initiative; and
- (vii) Financing of studies, including "healthy schools", one thousand days, and healthy schools, including case-control evaluations.

39. This subcomponent will finance: (i) per capita payments of the *Plano Vida* Fund mechanism and targets achieved; (ii) equipment and training for formal PSF; (iii) TA and consultancy services; (iv) operational costs related to the *Plano Vida* payment mechanisms system; (v) improvements in infrastructure, equipment and furniture for PSF health facilities, and cervical and breast cancer programs; (vi) equipment, vehicles and furniture for intensive care and other equipment for two maternities (Rio Branco and Jurua); as well as (v) training, management, and systems for strengthening the *Plano Vida* as an instrument for financing health services of the two selected health care lines (obstetric and neonatal health care); and cervical and breast cancer.

40. Subcomponent 3.3: Development of Entrepreneurship for Marginal Urban Communities (US\$ 3.9 million, of which US\$ 3.2 million IBRD financing). This will be achieved by promoting: (i) effective social and economic inclusion of the poor urban population located in selected urban priority areas by increasing supply of social services and investing in existing service centers on social assistance; (ii) small businesses; (iii) vocational training aimed at supporting exit strategies to social programs; and (iv) organizing information campaigns, promotional events, workshops for environmental education, and scholarships for community agents. This subcomponent will support the establishment or the development of 4,800 small businesses run by recipients of the *Bolsa Família* federal conditional cash transfer program, to which the Project aims to provide an exit strategy. The Project will mobilize communities in urban areas of the State and provide those interested in participating with

training on business management, marketing and accounting, as well as on specific technical subjects related to the businesses being promoted. Participants will prepare a business proposal as part of their training and those proposals which are approved will be receive a grant and equipment financed by the Project (detailed eligibility criteria and selection processes are outline in the MOP). Once the initial investment is made, SEPN and its partners will provide business incubation services and collect data for the monitoring of business development for a period of two years. Once these two years are over, SEPN will provide intermediation services for entrepreneurs who need further TA and SEBRAE.

41. Component 4 – Public Policy and Institutional Strengthening (US\$ 27.6 million, of which US\$ 22.1 million IBRD financing). This component modernizes the Project Entities, foster decentralization of the basic services in health and education, and introduce result-based management strategies in selected sectors of the Borrower’s public service, through, *inter alia*, the following subcomponents.

42. Subcomponent 4.1: Public sector management interventions (US\$ 26.2 million, of which US\$ 21.0 million IBRD financing) including the provision of TA for: studies and activities aimed at supporting the establishment of e-government strategies, the monitoring of governmental services and programs, the decentralization of basic services in health, education and environmental management, and the definition of new public administration models and procedures for effective, efficient and quality service delivery, including result-based management processes in selected sectors of the Borrower’s public administration; (ii) the capacity-building of the Borrower’s agencies in the areas of planning, implementation monitoring and evaluation of the Borrower’s programs and activities; (iii) the development of training programs on agro-forestry; and (iv) the design of quality standards in the forestry sector for certifying all processes and products of the timber productive chain in the Borrower’s territory. As well, this component will finance the preparation of studies on markets and productive chains, including marketing, logistics, industrial processing management and processes. It will also support capacity-building of the Borrower’s agencies in the areas of planning, implementation monitoring and evaluation of the Borrower’s programs and activities (agencies which will be involved in capacity-building activities include: SEE, SESACRE, SEAPROF, SEMA, SEPN, SGA and DEPASA.

43. This subcomponent includes support for the improvement of central financial management and procurement agencies making use of the PEFA instrument. It will also include provision of support and TA for the development and implementation of the INTOSAI procedures for the State’s oversight and control agencies *Tribunal de Contas do Estado do Acre* (TCE/AC), *Controladoria Geral do Estado* (CGE/AC) and *Procuradoria Geral do Estado* (PGE/AC).

44. In the education sector, the SEE will develop the State Policy of ECD based on a multisectoral approach and the cooperation with municipalities to scale up the state ECD programs, such as the expansion of the Little Wings to cover the infant and preschool population (0-3 years). The support of ECD policy rely on the active participation of municipalities in meetings, seminars and working groups to promote policy discussion and communities involvement. This policy will culminate in the preparation of the State Plan for Early Childhood Development that will define the goal of the ECD programs developed in the state, and

municipal participation and sectorial agencies in policy implementation. To develop such a policy, the Project will support the following activities: (i) meetings, seminars and other events with ECD specialists to provide guidance to municipalities on their responsibilities related to early childhood education; (ii) provide technical and financial assistance to municipalities to implement child development programs in the most vulnerable areas, including through home-visiting programs; (iii) develop educational materials and processes for multi-sectoral care of children between 0-5 years; (iv) broadcast on local radio to reach remote communities providing information to caregivers, young mothers and pregnant women about good practices to promote ECD.

45. This subcomponent aims to develop and implement new programs that will support the SEE Result-based Management Reform: (i) the expansion/supplement of the Students Assessment SEAPE to include not only proficiency in Portuguese language and mathematics, but also natural and social science programs; (ii) Integrated School Management Model – GIDE; (iii) Evaluation of the Management Performance and Professional Development – GDP. The GIDE is a management and reward mechanism based on the establishment of schools management contracts to define clear targets for state schools. Bonuses will be awarded to all staff (coordinators, teachers, support staff) working in top performing schools. Moreover, top performing students will also be rewarded with tablets/netbooks to promote student participation in the bonus program (which will allow for comparison of relative impacts of providing incentive bonuses at the individual student versus school levels). This program follows the recent increase in experimenting with ‘pay for performance’ programs that award teachers an annual bonus on the basis of their relative performance to motivate improved performance.¹² The GDP is an M&E system of the schools and secretariat management in conjunction with a teachers' performance evaluation based on the skills and competencies necessary to ensure effectiveness in the supply of quality education. This system will be associated to the design of an incentive mechanism for managers and teachers based on the assessment of teachers in specific contents and classroom activities.

46. In the health sector, the subcomponent will finance the strengthening and modernization of the strategic health planning unit, including, the following units; (i) health intelligence, (ii) health economics, and (iii) health studies and research units, as well as the strengthening of the SUS Technical Audit, in charge of measuring results of the *Plano Vida*. The studies will be supported and be designed in conjunction with the Banks' team.

47. **Subcomponent 4.2** will not receive any AF resources.

48. **Subcomponent 4.3 : Institutional strengthening of indigenous organizations (US\$ 1.4 million, of which US\$ 1.1 million IBRD financing)** including supporting the indigenous population in the Borrower's territory to supervise and develop their land and strengthen their organization in order to promote sustainable development in their territories by: (i) providing capacity building, equipment and material to indigenous associations; (ii) carrying out studies to

¹² Bruns, Barbara, David Evans, and Javier Luque. *Achieving world-class education in Brazil: The next agenda*. World Bank-free PDF, 2011.

evaluate the viability of a fund raising strategy; and (iii) providing training programs for the indigenous population including technical vocational training. These capacity-building activities will be implemented by SEMA and SEAPROF.

49. Component 5 – Project Management and Information Dissemination (US\$ 8.8 million, of which US\$ 7.0 million IBRD financing). This component supports overall Project coordination and supervision and strengthen effectiveness and quality of Project operation through, *inter alia*, the following subcomponents: (5.1) the financing of incremental operating costs of the PMU; (5.2) the financing of TA for designing and developing studies and systems; (5.3) the financing of equipment and supplies; and (5.4) the financing of development of Project M&E systems, auditing services and training services for the PMU staff, and other operational costs.

50. The Borrower's US\$ 37.5 million contribution to the Project will finance the following: operational costs associated with the PMU, including staff and consultant salaries, implementation of fiduciary and safeguards processes and mechanisms, IT and office equipment, travel and per diem, etc. As well, the Borrower will guarantee the beneficiary contribution to subprojects. In special cases, such as in poor, isolated as well as in indigenous communities, the Borrower will cover these local counterpart contributions to subprojects directly. Finally, the Borrower will also make a significant contribution to WSS works, including co-financing of paving and drainage systems, household water supply and sanitation, community river access, etc. Please see the POM for a detailed cost and financing breakdown by Project Component and Subcomponent.

Annex 5: Economic and Financial Analysis¹³

1. This annex provide ex ante financial and economic analysis for investments in (i) productive inclusion, (ii) education, and (iii) water and sanitation services (WSS), as well as urban roads and river access, infrastructure improvements.

I. Financial and Economic Analyses of the investment in productive activities

2. This section provides an ex-ante cost-benefit analysis of the investments being supported through three Project's sub-components: 1.3 *Implementation of Sustainable Agro-Forestry Production Systems*; 2.3 *Strengthening of Value-Chains for Selected Agricultural and Forestry Products* and 2.4 *Sustainable Agro-forestry Development in Indigenous Lands*. The analysis covers the period from the project onset to the end of its additional financing - 8 years.

Description of main initiatives under analysis

3. Main investment items under analysis are the formulation of Community Development Plans (CDP) and Indigenous Land Management Plans (PGTI) and the support to related community driven investment subprojects. The analysis considers a change in the TA approach from the OL to the additional financing which should contribute for a greater success and possible up-scaling of Project supported activities. As such it assumes two alternative scenarios, one with no changes to the extension and management approach and costs and a success/adoption rate of 30% and another with increased costs on agro-forestry extension and management and a success/adoption rate of 50%.

4. Given that the Project supports opportunities which are identified with active participation of communities and producers groups, there is no sole representative case for each of the proposed categories of investments. Hence, the financial analysis considers the six most common activities being supported through subprojects, which until December 2012 represented 84% of the Projects investment in Subprojects: sustainable agriculture, grain threshers, production transport, cassava processing unit, improved storage facilities, and poultry.

5. The economic analysis is based on the assumption that the financial models described above are representative of the investments made for each category. The distribution of investment between the categories is assumed to remain the same during the additional financing with exception of the poultry model, which is no longer considered from 2014 onwards. Estimated financial and economic impact indicators include incremental family annual net benefits; net present value of a ten-year benefit flow at a 12 percent discount rate and internal rate of return (IRR).

Financial analysis results

6. Despite the conservative approach taken for this financial analysis, it presents robust results. The initiatives in the different categories attain positive results, even considering a 20 percent decrease in incremental revenue. The exception is made for poultry, which technical model used

¹³ A more detailed version of this Economic and Financial Analysis is available in Project Files.

so far proved to be inadequate for Acre’s rural environment specificities. Field visits during project supervision indicate that there is virtually no adoption after the first cycle of production. The financial analysis results are summarized in Table 1.

Table 1: Summary of the estimated financial results

Categories	Investment (USD)	Incremental values per category		Incremental annual net benefit per family (USD/family)	Return on labor with project (USD/day)
		NPV (USD)	IRR		
		Sustainable Agriculture	257	761	48%
Grain thresher kits	19,266	21,110	36%	289	-
Production transport	15,199	15,891	36%	236	-
Cassava processing unit	14,200	47,709	78%	392	31
Improved storage Facilities	7,457	7,886	35%	221	34
Poultry	1,366	-192	-4%	44	19
Total/Weighted average			42%		

Economic analysis results

7. The economic analysis considers two scenarios: A – the base scenario – assumes that from 2014 there would be an improvement in the project success rate as a result of increased investment in TA, monitoring and management; and B, which characterizes a situation with no increase the investment per sub-project from the levels verified from 2009 until today. It is assumed that under the latter scenario the success rate of the Project would be of 30 percent.

Table 2: Summary of the estimated economic results with sensitivity analysis

Categories	NPV (USD)	IRR
Scenario A – Change in implementation procedures and costs		
Success rate of 50%	7,260,591	20%
Sensitivity analysis for Scenario A		
Success rate of 40%	2,027,299	14%
Success rate of 50% + 10% decrease in incremental revenue	4,498,157	17%
Success rate of 50% + 20% decrease in incremental revenue	1,735,723	14%
Success rate of 50% + No replacement of equipment	5,046,541	18%
Scenario B – No change in implementation		
Success rate of 30%	-155,412	12%

Fiscal Sustainability Analysis

8. It is estimated that the will bring an incremental annual spending below 0.10% of the State’s Annual Revenue (US\$ 433 million) during the seven years of project implementation and below 0, 05% during the remaining years of debt servicing.

II. Economic Analysis of Education Subcomponents

9. With the improved quality of education services as a result of Project interventions, from ECD programs through to primary and secondary education, students are expected not only to advance faster through the grades of primary education as their learning attainment improves, but also to fully complete primary and secondary education rather than dropping out of school, which in turn would have a positive impact on their productivity once they enter the labor market after graduation. For the purpose of the economic analysis of Project-financed investment in basic education, it has been assumed that there is an economic benefit, and thus a higher level of welfare, attached to each additional student that graduates after completing secondary education.

10. Furthermore, it has been assumed that a student graduating from secondary education would earn on average 14% more than a person who has not completed his or her education. To quantify the economic benefits, it has been conservatively assumed that, on entering the labor market after graduation, about 50% of Project-supported graduates would be able to obtain an increase in their income equivalent to 14% of the State's GDP per capita. In line with the conservative approach adopted for the economic analysis of investment in basic education under the Project, it has been assumed that project beneficiaries would be able to earn increased income over a working life period of only 15 years, which is clearly a low estimate. Under these assumptions, the benefit stream has been estimated on the basis of the expected increased earnings of each additional graduate and the increase in the number of school graduates. The results indicate that the present value of net benefit is on the order of US\$ 214 million, with a rate of return of investment of about 12.4%. There would be additional financial benefits from cost savings in the education system, as a consequence of both: (i) Project-financed education improvements, which would result in a better learning environment and, therefore, lower repetition rate, and; (ii) Project-financed education sector management interventions, which result in more cost effectiveness and operational savings. However, these benefits have not been quantified. Additionally, there would be benefits from education which would accrue to society as a whole rather than to individuals, but these have not been quantified. Some of these benefits could be, for example, better income distribution, health and nutritional benefits as a result of better overall household educational levels.

III. Economic and Financial Analysis of Water Supply and Sanitation Services

Overview

11. The improvement of Water Supply and Sanitation Services in the small isolated municipalities is economic and financially feasible. A cost-benefit analysis (CBA) was utilized to prove the feasibility of the project.

12. The four municipalities present homogenous characteristics. They are isolated with very difficult and expensive access. All of them have very low per capita incomes, relevant rates of population growth and a large percentage of rural population. Moreover, the lack of infrastructure is quite similar between them. In the four municipalities there is no sanitation and the water supply is precarious. Investments in each municipality correspond to similar unit construction costs.

13. The execution of water supply and sanitation works correspond to an investment of about US\$20 million. The isolation of the municipalities and the need of accessing them by boat increase the total cost by almost one third. Due to data constraints, the CBA analysis is only carried out to Santa Rosa de Purus and Marechal Thaumaturgo since the former is similar to Jordão and the latter to Porto Walter.

Improving Water Supply Services

14. This task comprises the activities associated with the improvement of water supply services of the four isolated municipalities, encompassing about 13,300 inhabitants. The project includes the construction of four water treatment plants, about 15 km of pipes, four tanks and 1120 new piped household water connections, which correspond to an investment of US\$5.5 million.

15. Operated costs projected for the “with” and “without project” situations are estimated according to the investments planned in each municipality. For the “without project” situation, operating costs are project based on DEPASA current operating costs in each of the municipalities where the water supply is provided. Operating revenues are based on the projected number of connections and assume future efficiency gains. It is assumed a small increase (20%) in the tariff system in Santa Rosa in the first year and in Marechal it is assumed that the costs, including maintenance investment, should be entirely recovered in a period of four years of convergence, leading to a 100% increase in the end. Note that for the “without project” scenario the same efficiency patterns were assumed, which cannot be the case.

16. In all cases after the tariff system adjustment, the projected revenues exceed the projected operating costs, highlighting that operation of the new infrastructure, once it has been built, will be financially sustainable for DEPASA. However, the revenues from tariffs are not enough to cover investment and operating costs, generating a net financial loss of US\$0.3 million for Santa Rosa and of US\$2.1 million for Marechal. When the subsidy (for the initial investment) is included, the project yields net financial benefits of US\$0.3 million for Santa Rosa and of US\$0.9 for Marechal.

17. In addition to the revenues collected from water supply tariffs, increased water supply coverage is expected to result in a reduction in the incidence of several waterborne diseases (e.g. gastrointestinal, hepatitis, typhoid fever, etc.). Thus, it results in savings concerning the treatment costs and loss of wages. The benefits are estimated using the data from different studies that calculate the economic benefits of water supply expansion. In each case the benefits were calculated by adjusting the estimated benefit to 2014 prices, and applying it to the estimated number of project beneficiaries (considering the population growth). Benefits were estimated over a 20 year period and discounted at 10 percent. Thus, the major benefits of the project are:

- a) The addition net revenue, which results from the collection of tariffs of the new household connections, and also from the increase in the consumption per capita that takes place with the improvement in the drinking water quality, corresponds to a NPV of US\$0.1 million for Santa Rosa and of US\$0.5 million for Marechal;

b) The connection of a new customer to the water piped network will decrease the percentage of the gastrointestinal diseases. In Acre the annual number of these occurrences is greater than the Brazil average. Considering that the situation of the small isolated municipalities is worse than that of Rio Branco, based on the information of *Trata Brasil* (2010) and on prices of 2014, there will be savings in treatment costs of US\$0.2 million for Santa Rosa and of US\$0.3 for Marechal;

c) Avoiding time lost to illness, the new customers who are newly connected to the water piped network will receive a percent increase in their average monthly income which is estimated at 4.2% for the Acre. The average salary in Acre was R\$798.77 per worker per month. Therefore, considering one worker and half per household and that the impacts for water and sanitation are similar (2.1% for each service) the NPV of the benefits corresponds to a US\$1.6 million for Santa Rosa dos Purus and US\$3.4 million for Marechal Thaumaturgo.

18. Thus, the benefits obtained with the health improvement and the higher income from avoided loss of working days (US\$1.8 million for Santa Rosa and US\$3.7 million for Marechal) are sufficient to justify the project investments in these two municipalities, as they exceed their present value during the lifetime of the project (US\$0.4 million for Santa Rosa and US\$2.5 million for Marechal). Adding the other benefits further increases this margin.

19. In sum, the economic analysis of water services shows net economic benefit (US\$1.6 million of net benefit and an IRR of 81% for Santa Rosa and of 54% and US\$6.6 million for Marechal). The distributive analysis also here shows that customers receive the bulk of benefits. Nevertheless, the government will bear net costs of several US\$ million, as a result of having to bear the investment costs.

Access to Sanitation Services

20. This task includes the activities associated with the construction of the sanitation systems of the four municipalities, embracing all their urban population. The project comprises the construction of 18 wastewater treatment plants, about 32 km of sewers, 667 individual on-site solutions, 3310 new piped household sanitation connections and 200 bathrooms, corresponding to an investment of US\$15.4 million.

21. Operating costs for the “with project” situation are estimated according to the investments planned in each municipality. The “without project” situation is not applicable since there are no operating costs by DEPASA. Operating revenues are based on the projected number of connections and the new tariff assuming that the operating cost should be trendily recovered in a period of four years of convergence. The sanitation charges were considered as a percentage of the water tariff (70%).

22. In all cases, after establishing a tariff system for the sanitation service, the projected revenues exceed the projected operating costs, highlighting that the operation of the new infrastructure, once it has been built, will be financially sustainable for DEPASA. However, for this task the revenues from tariffs are not enough to cover investment (initial and of maintenance) and

operating cost, thus generating a net financial loss of US\$2.1 million for Santa Rosa and of US\$3.6 million for Marechal. When the subsidy from the Government is included, the project yields net financial benefits of US\$0.2 million for Santa Rosa and of US\$0.3 million for Marechal.

23. In addition to the tariff collection, the access to the sanitation services is expected to result in a decline of the incidence of several waterborne diseases, reducing the treatment costs and loss of wages. The access to these services will also increase the value of properties, reducing the odor and improving the quality of life and ecosystems. These economic benefits are estimated by using data from various sources. They were calculated by adjusting the estimated benefit to 2014 prices, and applying them to the project beneficiaries. Benefits were estimated over a 20 year period and discounted at 10 percent. Therefore, the major benefits of the project are:

- a) The net revenues that will result from the collection of tariffs. They were estimated in US\$0.2 million for Santa Rosa and in US\$0.3 million for Marechal;
- b) The access to the sanitation services will decrease the percentage of gastrointestinal and other water related diseases. Following the same source and procedure considered in the water supply, US\$0.2 million were the benefits obtained for Santa Rosa and US\$0.3 million were those obtained for Marechal;
- c) The same happens with the percent increase in the average monthly income of households by avoiding time lost to illness. It corresponds to a benefit for Santa Rosa dos Purus of US\$1.6 million and of US\$3.4 for Marechal Thaumaturgo;
- d) The increase of property values due to the construction of sanitation infrastructure, including the decrease of odor. For ACRE the benefit estimated is 3.6% of the average value of the properties. It was assumed half of this value for Santa Rosa dos Purus and for Marechal Thaumaturgo due to their isolation and difficult access. The benefits of sanitation services represent US\$0.2 million for the first and US\$0.5 million for the second.

24. Thus, the benefits from health improvement, the higher income from avoided loss of working days, the increase in property value (US\$2.0 for Santa Rosa and US\$4.2 for Marechal) and the revenues from tariffs are nearly sufficient to justify the project investments (US\$2.4 million for Santa Rosa and US\$4.1 million for Marechal), as they exceed (or almost) their NPV during the project lifetime. Adding other benefits will further reduce this margin and close the small gap in the case of Santa Rosa.

25. In sum, the economic analysis of the access to sanitation shows important economic results (US\$0.2 million of net loss and an IRR of 8% for Santa Rosa and of 14% and US\$1.1 million of net benefits for Marechal). The distributive analysis also here shows that customers receive the bulk of benefits. Nevertheless, the government will bear net costs of several US\$ million related to the investment costs.