Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country:	The Republic of Peru
Project:	Amazonas Rural Development Project
Loan Agreement:	January 9, 2013
Loan Amount:	2,905 million yen
Borrower:	The Republic of Peru

2. Background and Necessity of the Project

(1) Current State and Issues of the Northern Rural Development

Although Peru's economy has been steadily growing in recent years, the country has serious problems, including poverty and internal disparities. The Amazonas Region is one of the four regions in the northern inland part where the poverty rate and the extreme poverty rate are high. The poverty rate is 55%, far higher than the national average of 39% (National Institute of Statistics and Informatics 2007). The Region has no revenues from natural resources, such as oil or minerals, and no remarkable industrial revenues. As the main industry in the Region, almost self-sufficient agriculture accounts for 40% of the Region's GDP. The Region's serious poverty rate is reflected in its low infrastructure development rate and low levels in social indicators,¹ indicating a considerable delay in rural development.

On the other hand, recently, rich tourism resources in the Utcubamba Valley in the Region have been drawing attention from both domestic and foreign tourists. Among others, the numbers of tourists visiting the two major tourism resources, the Kuelap Ruins and the Gocta Waterfall, increased by factors of two and 3.8 times, respectively, in the four years from 2006 to 2010. Therefore, the tourism industry is expected to lead the economy of the Region. Given this situation, the development of tourism, centering on the Kuelap Ruins, was mentioned in a policy address made by then Prime Minister Lerner in August 2011 and has been emphasized as a national policy. Although the Amazonas Region has tried to reduce poverty by developing tourism as a distinctive industry in the Region, it faces various challenges, such as the development of tourism resources and facilities, the strengthening of administrative capacities for tourism, and the improvement of basic infrastructures that will facilitate access to tourism resources (including appropriate disposal of waste in anticipation of an increase in the number of tourists).

Under this situation, the activation of the regional economy and the improvement of the livelihoods of the rural inhabitants by increasing tourism revenues through tourism promotion and basic infrastructure improvement has become an urgent issue for the Amazonas Region, which has been making efforts for poverty reduction.

¹ Examples of indicators: electrification rate: 47% (national average: 73%); ratio of population enjoying the benefit of sewerage service: 29% (national average: 53%); elementary education completion rate: 50% (national average: 64%) (source: Fondo de Cooperación para el Desarrollo Social (FONCODES), 2005)

(2) Development Policies for Poverty Reduction in Peru, and Priority of the Project

With regard to anti-poverty measures, Peru's "Plan 2021" (Plan Bicentenario) states that Peru will reduce the poverty rate to 10% and the extreme poverty rate to 5% by 2021.² In the Plan Estratégico Nacional de Turismo (PENTUR) 2008-2018, the Ministry of Foreign Commerce and Tourism of Peru has designated the Northern Tourist Corridor,³ which includes the Amazonas Region, as the most important region for Peru's tourism sector to reduce poverty through economic development by vitalization of the tourism industry.

Based on the above-mentioned national development plans, the Regional Government of Amazonas established "Plan Desarrollo Concertado 2008-2012" to reduce poverty in the Region through comprehensive rural development, centering on tourism promotion. The purpose of the "Amazonas Rural Development Project" (hereinafter referred to as the "Project") is to support the Region's comprehensive rural development through further tourism promotion and basic infrastructure improvement (construction of roads and waste disposal facilities) in the Utcubamba Valley.

(3) Japan and JICA's Policy and Operations in the Northern Rural Development of Peru

In the Project Development Plan for the Republic of Peru, Japan has adopted "the development of social and economic infrastructures and the narrowing of disparities" as the priority sector for aid. JICA focuses on the development of industrial infrastructures and the support of the poor in the mountainous areas, where the poverty rate is especially high in Peru. Because the Project will be carried out in the Amazonas Region, which is located in a mountainous area, it is consistent with Japan's and JICA's aid policies.

As a part of the cooperation in the tourism industry in Peru, a two-phased support project was carried out to establish a National Tourism Development Master Plan. Based on the understanding that the tourism industry in Peru is an important sector for promoting economic development in Peru, JICA carried out the National Tourism Development Master Plan Phase I in 1999 and proposed a tourism strategy that centered on the two major tourist corridors - the Northern Tourist Corridor and the Southern Tourist Corridor. In Phase II in 2001, JICA established the master plan for the Northern Tourist Corridor, where development had been delayed, and proposed an action plan.

(4) Other Donors' Activities

The World Bank has been giving financial aid for the support of small and midsize companies and the improvement of agricultural productivity and has been constructing water supply and sanitation facilities in the mountainous areas. Italy has carried out a program for building rural women's capacities and a project for supporting the establishment of small businesses in the Amazonas Region.

² In 2011, the poverty rate and the extreme poverty rate were 27.8% and 6.3%, respectively in Peru. (Source: Instituto Nacional de Estadística e Informática (INEI), 2012)

³ The Northern Tourist Corridor is a belt tourist route in the northern part that includes Trujillo, Chiclayo, and Chachapoyas (the capital of the Amazonas Region). The purpose is not only to develop tourist sites locally but also to vitalize the northern part by connecting tourist routes within that part of the country.

(5) Necessity of the Project

As described above, it has become an urgent issue to give rural development support in Peru, including support for poverty reduction and the narrowing of regional disparities. To deal with this issue, it is necessary to use the potential of the tourism resources in the Amazonas Region, where the poverty rate is especially high in Peru, and promote comprehensive rural development through tourism development. Because this is consistent with Peru's development policy and Japan and JICA's aid policy, JICA's support in the implementation of the Project is highly necessary and relevant.

3. Project Description

(1) **Project Objective**

The object of the Project is to establish the base of rural development of the Amazonas region in Peru by improving tourism conditions along the Utcubamba Valley Touristic Corridor, through constructing, improving and/or rehabilitating tourism, transport and solid waste management, infrastructures, and institutional strengthening, and, thereby contributing to the equitable and inclusive rural economic and social development.

(2) Project Site / Target Area

Utcubamba Valley in the Amazonas Department (Chachapoyas, Bongara, and Luya Provinces)

(3) **Project Components**

- 1) Tourism promotion ((i) development of tourism resources and facilities; (ii) strengthening of administrative capacities for tourism; (iii) development of communities)
- 2) Construction of basic infrastructures ((iv) construction of roads (22.4 km); (v) construction of waste disposal facilities)
- 3) Consulting service

(4) Estimated Project Cost

4,218 million yen (yen loan amount: 2,905 million yen)

(5) Schedule

Planned for the period between February 2013 and February 2018 (61 months in total). The Project will be completed at the service opening of the basic infrastructures (February 2017).

(6) **Project Implementation Structure**

- 1) Borrower: The Republic of Peru
- 2) Executing Agency: The Regional Government of Amazonas
- 3) Operation and Maintenance System: The tourism component will be operated and maintained by each local government under the supervision of the Regional Tourist Bureau. The road component will be operated and maintained by the Regional Government, while the waste component will be operated and maintained by each

province.

(7) Environmental and Social Considerations/Poverty Reduction/Social Development

- 1) Environmental and Social Considerations
 - (i) Category: B
 - (ii) Reason for Categorization: Under the JICA Guidelines for Environmental and Social Considerations (enacted in April 2002), the Project is deemed not to have major unfavorable impact on the environment, in light of the characteristics of the sector, the project, and the region.
 - (iii) Environmental Permit: It is necessary to obtain the approval of the environmental impact assessment report from each competent government agency's environmental bureau during the preparation of detailed design according to the domestic standards in Peru.
 - (iv) Anti-Pollution Measures: To minimize the impact of noise and vibration during construction, construction for all the components must be avoided during the night. After the service opening, no special negative impact is foreseeable, because foul odors will be prevented by covering soil, and seeping water will be collected and disposed of appropriately in the final waste disposal facilities.
 - (v) Natural Environment: Because the target area of the Project is not susceptible to the influence of any national park and is not in the outskirts of any national park, the unfavorable impact to the national environment is supposed to be minimal.
 - (vi) Social Environment: Because the Project requires the acquisition of sites of 5,715 ha in total, the acquisition has been carried out according to the relevant procedures in Peru. No transfer of inhabitants is supposed to be needed, because Peru's domestic law provides that disposal facilities should be located more than 1 km away from any residential district.
 - (vii)Others/Monitoring: In the Project, the executing agency and each operating or maintaining agency will monitor air quality, water quality, etc. during the work and after the service opening.
- 2) Promotion of Poverty Reduction: Because an increase in the number of tourists is expected to increase revenue opportunities, poverty reduction and an increase in the income level of the inhabitants in the target area can be expected through vitalization of the rural economy.
- 3) Promotion of Social Development: Social development will be promoted through the development of the communities around the tourism resources.
- (8) Other Important Issues: As part of the development of communities, a "one village, one product" campaign and a roadside station program will be carried out during the Project. Moreover, the dispatch of experts has been in preparation to support the development of communities around the Kuelap Ruins, which is located in the target area of the Project.

This is expected to have a multiplier effect with the Project. In addition, the Project will contribute to a reduction in GHG emissions through the establishment of the final waste disposal system. Its effect on climate change mitigation will amount to about 3,500 tons/year in terms of CO₂.

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicators)

Component	Indicator	Baseline (Actual Baseline in 2012)	Target (2019) [2 years after project completion] ⁴	
Tourism promotion	Tourism consumption by tourists to Utcubamba Valley (soles/year) (i) $((i) = (ii) \times (iii))$	5,641,000 (2011)	54,851,000	
	Number of tourists to Utcubamba Valley (persons/year, Kuelap Ruins) (ii) - National - Foreigners	19,932 8,955 (2011)	84,106 37,787	
	Tourism consumption per person during stay (soles/person, tourist to Utcubamba Valley) (iii) - National - Foreigners	190 207	450 450	
	Number of tourists to Yumbilla (persons/year) - National - Foreigners	* (Note) * (Note)	482 261	
-	(Reference)			
	Percentage of working population that works in the Tourism Sector in Amazonas Region (%)	* (Note)	* (Note)	
	Percentage of rural families that are involved in a business related to the Tourism Sector. (%)	*0	*7	
	Household revenues of rural inhabitants who participated in community development			
	- Inhabitants who received	* (Note)	* (Note)	
	 orientation (soles/month) Small enterprises, inhabitants who have restored traditional houses (soles/month) 	* (Note)	* (Note)	

⁴ The year following the completion of the Plan Estratégico Nacional de Turismo (PENTUR) 2008-2018

	Annual Average Daily Traffic		
	(vehicles/day)		
	Chachapoyas - Airport		
	- Route 1		
	- Route 2	78	86
	Kaklik – Luya, Lamud	807	1194
	- Route 1	(17	002
	- Route 2	617 2207	903 3123
		2207	5125
	Average Travel Time (minutes)		
	 Chachapoyas - Airport Kaklik – Luya, Lamud 		
	- Kaklik – Luya, Lalliud	15	7
Deel		54	27
Road	Average Travel Velocity (km/h)	51	21
construction	Average Travel Velocity (km/h) - Chachapoyas - Airport		
	- Kaklik - Luya - Lamud Road	25	50
	Ruklik Duyu Dalilud Roud	20	40
	Travel Time saved by the Project	20	10
	(hours/year)		
	- Chachapoyas City - Chachapoyas		
	Airport	0	118,321
	- Kaklik - Luya - Lamud Road	0	287,364
	Vehicle Operation Cost saved by the		
	Project (soles/year)		
	- Chachapoyas City - Chachapoyas		
	Airport	0	1,611,200
	- Kaklik - Luya -Lamud Road	0	1,582,050
	Amount of solid waste treated in		
	sanitary landfill in the target city		
	(tons/day)	0	2.97
	- Luya-Chachapoyas North District	0	7.46
	- Luya District	0	6.38
	- Bongara District	0	6.23
	- Luya-Chachapoyas South District		
Waste	Amount of solid waste collection in		
management	the target cities $(\%)^{5}$		
	- Luya-Chachapoyas North District	4	100
	- Luya District	51	100
	- Bongara District	67	100
	- Luya-Chachapoyas South District	20	100
	The Number of Beneficiaries of the		
	service provided by the Project		
	(persons) ⁶	4,957	5,237

⁵ The ratio of collected waste in the target area in the base year and the target year. Because final disposal facilities are not constructed in the base year, waste is to be disposed of at existing dumping sites. However, all waste collected in the target year is to be disposed of at final disposal facilities by sanitary landfill.

⁶ The number of people who enjoy the benefit of waste disposal in the target area in the base year and the target year. As with the "waste collection rate in the target area," waste is to be disposed of at existing dumping sites in the base year,

- Luya-Chachapoyas North District	10,201	10,430
- Luya District	10,050	11,427
- Bongara District	9,583	10,028
- Luya-Chachapoyas South District		

With regard to the items with an asterisk, a baseline survey is planned to be conducted during the Project to set up baselines and targets.

2) Internal Rates of Return

Based on the assumptions below, the economic internal rate of return (EIRR) for the Project will be 11.1%. Although charges will be collected for waste management, one of the components of the Project, the financial internal rate of return (FIRR) has not been calculated, because this component is only a part of the Project and because the component is highly public and the investment cost is not planned to be recovered through the collection of charges.

[EIRR]

Costs: Project costs (excluding tax); operation, maintenance, and management costs Benefits: Increment in the amount that tourists to the Utcubamba Valley intend to pay Project life: 20 years

(2) Qualitative Effects

An increase in tourism revenues,⁷ creation of employment opportunities, and climate change mitigation

5. External Factors and Risk Control

Worsening of the political and economic situations and occurrence of natural disasters in Peru and in the areas around the target area

6. Results of Evaluations and Lessons Learned from Past Projects

(1) Results of Evaluations of Similar Past Projects

In the ex-post project evaluation of the tourism sector of the "Ajanta-Ellora Conservation and Tourism Development Project (1)," it was pointed out that the executing agency lacked the ability to coordinate the implementation of tourism business, which includes various sectors. The following have been pointed out for the Project: (i) consideration of introduction of a systematic coordination mechanism for efficient implementation of tourism business by several relevant agencies; and (ii) necessity for taking into consideration the development of human resources for retaining the effect of projects for the conservation of remains.

(2) Lessons for the Project

Based on the foregoing lessons, administrative capacities for tourism will be strengthened as a

while waste is to be disposed of at final disposal facilities by sanitary landfill in the target year.

⁷ This is an increase in the tourism revenues in the target area, including an increase in the relevant industries' revenues. Specifically, it is assumed that the relevant industries are taxi companies, souvenir stores, restaurants, agriculture for local consumption, etc.

subcomponent during the Project. Specifically, the relevant agencies will strengthen the regional tourism bureau staff's and the local government staff's capacities to manage the Project and tourism resources, including remains.

7. Plan for Future Evaluation

(1) Indicators to Be Used

As described in 4. Targeted Outcomes, (1) Quantitative Effects, 1) Performance Indicators (Operation and Effect Indicators) above

(2) Timing

Two years after project completion