

ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL
CARRIAGEWAY ROAD PROJECT, PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF.
5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF 2015.



Géminis Consultores Ambientales SAS



Chapter 11. PLANS AND PROGRAMS. 11.1.1.3. SOCIOECONOMIC PMA

San Juan de Pasto, March 2017



ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
 PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
 2015.

TABLE OF CONTENTS

11.1.1.3. SOCIOECONOMIC PMA.....2

INDEX OF TABLES

Table 11.1.1. 1 Socio-Economic Environment Programs.....2
No table of illustration elements are found.

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 1

11. PLANS AND PROGRAMS

11.1. ENVIRONMENTAL MANAGEMENT PLAN

11.1.1. Environmental Management Program (PMA)

11.1.1.3. SOCIOECONOMIC PMA

The Environmental Management Programs (PMA) for the socioeconomic environment will be implemented during development of the Rumichaca - Pasto Road Project, Pedregal - Catambuco Section, Concession Contract Under Scheme APP No. 15 of 2015, in each stage therein established.

Table 11.1.1.3.1. lists environmental management programs formulated from the socio-economic characterization of the area of influence and the environmental impact evaluation carried out for project implementation.

Table 11.1.1.3.1. Socioeconomic Environmental Programs

Program	Code
User Attention Program	MSC-1
Education and Training Program for project contracted Personnel	MSC-2
Labor contracting Program	MSC-3
Information and Community Participation Program	MSC-4
Institutional Management Capacity Support Program	MSC-5
Training, Education and Awareness Program to Project surrounding community	MSC-6
Road Culture Program	MSC-7
Socio-land Management Accompanying and Program	MSC-8

Source: (Gemini SAS Environmental Consultants, 2016)

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 2

Follows the charts of each environmental management program for the socioeconomic environment:

- Table 11.1.1.3.2 User Attention Program
- Table 11.1.1.3.3 Education and Training Program for project linked Personnel
- Table 11.1.1.3.4 Labor contracting Program
- Table 11.1.1.3.5: Information and Community Participation Program
- Table 11.1.1.3.6: Institutional Management Capacity Support Program
- Table 11.1.1.3.7: Training, Education and Awareness Program to Project surrounding community
- Table 11.1.1.3.8: Road Culture Program
- Table 11.1.1.3.9: Socio-land Management Accompanying and Program

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 3

Table 11.1.1.3.2. User Attention Program

MSC-1	User Attention	
	OBJECTIVES	
<p>Create and / or maintain an attention system to allow receiving and timely and efficient processing petitions, complaints, claims and suggestions (PQRS) from different social actors, personally submitted and through attention electronic means provided by the project.</p> <p>Timely and effective responses to citizen requests, through timely attention of PQRS.</p> <p>Guarantee physical and electronic media for the attention of neighbors and users of the project.</p>		
GOAL		
<p>Answer all PQRS submitted by the community and municipal authorities in the development of the project within the established times.</p> <p>95% or more of communications received are answered within the established time and less than 0.1% is left unanswered within five (5) business days following expiration of the deadline for the right of petition.</p>		
ENVIRONMENTAL EVALUATION		
Activity	Impact	
<ul style="list-style-type: none"> · Information processes and community participation · Land acquisition and easement · Labor contracting · Purchase and / or rental of goods and services · Mobilizing building materials, supplies, machinery and equipment · Installation and operation of camps · Installation and operation of process plants (asphalt, concrete, crushing) · Mobilization of construction materials, supplies, machinery, equipment, waste and vehicles. · Stripping · Demolition · Excavations and / or grading (possible use of explosives) · Toll facility 	<ul style="list-style-type: none"> · Change in employment dynamics · Changes of everyday life, customs and lifestyles · Modification of economic activities of AID families. Impairment of social and economic infrastructure · Generating employment expectations · Change in value of land expectations · Changing expectations of revenues from sales of goods and services · Generate community discomfort · Modification of institutional management participation · Change in relations: community-community, community-authorities, community-authorities-business. 	
IMPLEMENTATION STAGES		

Pre-operative	x	Construction	x	Decommissioning and Abandonment	x
TYPE OF MEASUREMENT					
Prevention		X	Correction		x
Mitigation		X	Compensation		
ACTIONS TO BE TAKEN					
<p>Overview</p> <p>In order to maintain continuous communication and harmonious relations with project stakeholders, it becomes necessary to have various service channels (offices, e-mail, call center, website), for the communities and stakeholders in the area of influence in order to meet requests, complaints, claims and suggestions -PQRS - that might arise during project implementation.</p> <p>Thus, las PQRS received during the project must be addressed in a timely manner similar to the time for a right of petition, to prevent possible conflicts that may affect relations and trust between work executors and the population living in the area of influence of the project, as well as with municipal authorities.</p> <p>According to the aforesaid, it is important to answer PQRS as established by Law 1755 of 2015 Article 14. Terms to resolve different types of requests.</p> <p>.. "Except for special legal norm and under penalty of disciplinary action, a petition must be resolved within fifteen (15) days of receipt. Resolution of the following requests shall be subject to a special term:</p> <ol style="list-style-type: none"> 1. Requests for documents and information must be resolved within ten (10) days of receipt. If the petitioner has not received a response within this period, it will be understood, for all legal purposes, that the respective request has been accepted and, therefore, the administration can no longer deny delivery of such documents to the petitioner, and as a result copies are delivered within three (3) days. 2. Requests whereby a query is raised to the authorities in relation to matters by them shall be resolved within thirty (30) days of receipt. <p>Paragraph. When exceptionally it is impossible to resolve the petition within the time limits set forth herein, the authority must report this fact to the person concerned before expiry of the period specified in the law, stating the reasons for the delay and indicating both a reasonable period for resolution or response, which may not exceed twice the originally planned.</p> <p>In this regard the attention program of community requests, complaints, claims and suggestions corresponds to the following:</p>					

- **Community attention offices:** corresponds to all fixed and mobile resources that may be available to meet the information needs of the community, like all PQRS arising from project implementation.
- **Attention mechanism and processing community requests, complaints, claims and suggestions:** refers to all the means, methods and strategies that enable responding to the statements submitted by users, on the occasion of project development.

According to the above, the attention procedure implement involves:

Receiving requests, complaints and / or claims: The mechanism for receiving and dealing with manifestations from social actors will be through the User Attention program managers, in a fix office, two mobile offices distributed in the road corridor, or through the office of the Concesionaria Vial Unión del Sur, located in the city of Pasto. Interested parties send their manifestations by traditional written media, free PQRS receiving line, suggestion box or email.

In the webpage the Concesionaria will enable a module for receiving PQRS where the user can fill out the form GCSP-F-134 ANI, which will be forwarded to email atencionalusuario@uniondelsur.co for respective processing.

Each submitted manifestation will be recorded in the intended format (GCSP-F-134: Receiving PQRS) transferring to magnetic media so there can be a compilation of what was presented by the community and local authorities, the corresponding procedure, the state of the PQR and close out thereof.

Processing of PQRS: PQRS will be handled by a Social Professional who will then forward the corresponding PQRS to the applicable area. Said professional must follow-up using form GCSP-F-135 in order to provide timely and effective response to the user within the established times.

In cases where the request warrants field visit, the corresponding area professional will travel and will prepare verification and evaluation records in the specified area, i.e. follow-up form GCSP-F-135 and photographic record GCSP- F-133. According to what is reported by the responsible area, the petitioner will receive a response and subsequently the request is closed-out via a document signed thereby, appending the photographic record of the before and after, if the solution to the request includes the construction of a work.

Community attention offices:

Given the importance of ensuring effective continuous, structured and culturally appropriate participation, and accepting the principle of Ecuador, No. 5 "Participation of stakeholders", the offices of customer service are areas of permanent exchange, where the processes of consultation by users, as well as dissemination and information is possible during the various phases of the project, seeking thereby to reduce the generated negative impacts and strengthen positive impacts.

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 6

The user attention offices seeks to meet the need for information, promote and guide the formation of groups of action and reflection, contributing to generating new positive attitudes towards the project, developed in the following stages:

Pre-operative step:

To install one (1) main User Attention Office, located in the municipality of Iles, El Capulí Sector, Kilometer 38 + 500, strategically located in a central point for all municipalities that are part of the Rumichaca - Pasto road corridor.

The fixed office will have adequate space to conduct activities associated with customer service, with lighting, ventilation and accessibility and equipment and facilities necessary for public attention and a meeting space for 10 or more people. This space will become a focal point between communities and the Concessionary.

The main office will have a 1,50mtrs X 0,50mtrs size telephone directory for consultation and identification, with names and telephone numbers of institutions or service companies established in the area of influence of the road.

- Hospitals
- Health centers
- EPS
- Civil defense
- Red Cross
- Firefighters
- Police
- Traffic office
- Service station
- Repair shops
- Cranes
- Tire changes

In addition, to have a map of the road corridor indicating the location of tolls, places of interest such as hospitals, service stations and tourist sites.

There will be one (1) Mobile User Attention Office: which will mobilize between the municipalities of Imués, Yacuanquer, Tangua and Pasto, making up the corridor of this section. Mobilization of the mobile office will be scheduled according to informational and attention needs presented by the communities, or the activities planned by the Concessionary. Programming the location of the mobile office will be recorded in form GCSP-F-137 and will be disclosed through different media where the Concessionary advertises or available thereto, through the information and community participation program.

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 7

The mobile office will maintain a guiding, clear and precise communication to build up trust with the individuals who come to the office. This tool, in addition to receiving the PQRS, will facilitate the promotion and dissemination of services and benefits offered with the implementation of Social Management programs of the Project.

The mobile office will be equipped with computer and communications equipment necessary to provide excellent service to the community which include:

- 28" TV
- Computer equipment
- Desk
- Attention chair
- Waiting Chair
- MFP
- Stationery
- Photographic camera

Construction Stage:

There will be a fixed and a satellite office in each functional unit, located equidistant to the users.

Operation stage:

There will be one (1) Mobile User Attention Office, whose mobilization will be scheduled taking into account the information and attention needs presented by the communities or according to the activities planned by the Concessionary. The schedule of the mobile offices will be recorded (format Code: 137-F-GCSP)

All offices in operation will have a notice indicating: Project name, institutional logos, name of the office "OFICINA DE ATENCIÓN AL USUARIO" and visibly the different service lines – mobile, website, social networking, e mail and office hours.

Attention schedule

The user attention offices will have the following parameters:

Main user attention office

Opening hours are: Monday to Friday: 8:00 am to 12 noon and 2:00 pm to 6:00 pm

Saturdays: 8:00 am to 2:00 pm

Mobile user attention offices

According to the monthly schedule established by the Concessionaire and / or the needs and requirements of the community.

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 8

IMPLEMENTATION SITE																																				
Minor Territorial Units of the area of influence of the Rumichaca - Pasto dual carriageway road project Pedregal - Catambuco section.																																				
PERSONNEL REQUIRED																																				
<ul style="list-style-type: none"> Ü Professional Social area Ü Social assistant 																																				
RESPONSIBLE FOR EXECUTION																																				
The Concesionaria Vial Unión del Sur will be responsible for executing and implementing this program by its contractors.																																				
FOLLOW UP AND MONITORING INDICATORS																																				
Goal	Indicator	Compliance	Frequency	Record																																
Timely respond community requests, complaints, claims and requests (PQRS).	No. of community PQRS handled during the period / No. of community PQRS submitted during the period * 100	90%	Quarterly	Instruments to collect requests, complaints, -F-GCSP 134 and GCSP -F-135																																
PQRS process	No. of PQRS closed in the period / No. PQRS received X 100.	90%	Quarterly	Instruments to collect requests, complaints GCSP-F-134 and F-135-GCSP.																																
IMPLEMENTATION SCHEDULE																																				
<table border="1"> <thead> <tr> <th>STAGE</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> </tr> </thead> <tbody> <tr> <td>Pre-operative</td> <td style="background-color: #cccccc;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Construction</td> <td style="background-color: #cccccc;"></td> <td></td> <td></td> </tr> <tr> <td>Decommissioning and Abandonment *</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> </tr> </tbody> </table>					STAGE	1	2	3	4	5	6	7	Pre-operative								Construction								Decommissioning and Abandonment *							
STAGE	1	2	3	4	5	6	7																													
Pre-operative																																				
Construction																																				
Decommissioning and Abandonment *																																				
* The abandonment phase ends when all program obligations are met.																																				

COSTS
The cost of implementing this measure is part of the operational costs of the project.

Source: (Gemini SAS Environmental Consultants, 2016)

Table 11.1.1.3.3 Education and Training Program for project contracted Personnel

MSC-2	Education and Training Program for project linked Personnel	
	OBJECTIVES	
<p>Train personnel directly and indirectly linked to the project on issues related to project characteristics, environmental management, social, safety and health at work measures.</p> <p>Reduce the degree of misinformation and generation of false expectations in the community from erroneous information provided by personnel related to the project.</p> <p>Strengthen skills and competencies which will help improve job performance and relations with stakeholders.</p> <p>Coordinate the various work areas in training and qualifications processes of personnel involved in the project.</p>		
GOAL		
<p>100% of personnel involved in the project will receive induction within thirty (30) days following their recruitment on their job characteristics, safety measures regarding the task, working hours according to their functions, etc.</p> <p>100% of personnel involved in the project trained on technical, environmental and social topics within three months after their recruitment.</p>		
ENVIRONMENTAL EVALUATION		
Activity	Impact	
<ul style="list-style-type: none"> · Information processes and community participation · Contracting labor · Installation and operation of residential camps · Installation and operation of temporary infrastructure · Mobilization of construction materials, supplies, machinery and equipment 	<ul style="list-style-type: none"> · Change in population dynamics · Change in employment dynamics · Generating employment expectations · Changing land value expectations · Change in income expectations from sale of goods and services Generate community discomfort Change in relations: community-community, community-authorities, community-authorities-business 	

<ul style="list-style-type: none"> · Installation and operation of process plants (asphalt, concrete, crushing · Installation and operation of camps 	Changes of everyday life, customs and lifestyles. Generating expectations
--	---

IMPLEMENTATION STAGES					
Pre-operative	x	Construction	X	Decommissioning and Abandonment	x

TYPE OF MEASUREMENT			
Prevention	X	Correction	
Mitigation	X	Compensation	

ACTIONS TO BE TAKEN

Overview
While the largest number of impacts generated during project execution relate to the construction phase, some are related to the behavior or actions of personnel involved in the works, due to ignorance of the sociocultural reality, concerns and expectations of the communities. In this regard the concessionary has planned to train engaged personnel in all project related implementation and environmental measures mandatory to avoid potential conflicts with residents neighboring the works and the respective local authorities, as well as to ensure the achievement PMA objectives.

Training
In order to reduce the degree of misinformation and generation of false expectations to the community surrounding the project from information provided by contracted personnel, the concessionary sees the need to strengthen the processes of personnel training with training activities addressed to personnel directly and indirectly linked thereto.

Training activities will be developed in three phases: identification of training needs, schedule training, implementation and evaluation of training plan.

a. Identification of training needs
To evidence training and / or briefing to personnel, management, directors, bosses, coordinators and / or supervisors in each area every three months, training needs of employees form will be filled out; in addition, the human resources departments shall complete semiannual performance evaluations, in order to publicize training requirements derived here from.

b. Training schedule
Based on identification of training needs, a training schedule will be prepared with a have a semi-annual cut, which should also include those training activities not listed in the schedule but required for some areas as an action of improvement. The training schedule must contain the matters specified in the Schedule of Activities format.

The training schedule plan should consider Concesionaria Vial Unión del Sur own internal processes and personnel programmed activities and time required.

c. Training plan execution

The training plan can be carried out by an internal supplier (member of the Organization) or by an outsourcer (person or specialized entity that does not belong to the organization), who will attest recognized competence regarding the topics or activities to develop according to the area to train.

The call to workers and / or employees to participate in various training events will be sent by email to the direct chiefs of each area. Specifying the event name, the time and place of training. Participants will fill out the Attendance Record to have a control of participating workers.

The frequency of the briefings and training will be in accordance with previously reviewed and adjusted semiannual schedule according to required needs.

In view of the foregoing it is proposed to develop the program in the following phases:

Planning phase: corresponds to the time the training program is structured, which includes the schedule, identifying training topics, beneficiaries and expected accomplishments.

A two stages training plan addressed to 100% of personnel directly and indirectly recruited will be designed: the first corresponds to the induction of personnel recently contracted to the work and the second to the mandatory training, which should include all personnel having contractual relations with the project. This plan will be designed quarterly.

Implementation Phase: are the spaces dedicated to training personnel linked to the project and corresponds to health and safety at work, Social, Human Resources, Legal, Environmental and Lands related topics.

This phase includes the following activities:

- ü Personnel induction: all persons involved in the project should receive induction on general project information.
- ü Training program: during the time personnel are linked to the project the company will be required to reinforce the general induction topics with a training program containing more specific and detailed information.

General topics directly related to the execution of the work and the PMA are:

- o Project description
- o Submit Environmental License requirements.

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 12

- Submit the Environmental Management Plan.
- Restrictions on hunting and wildlife conservation.
- Responsibility of workers regarding the environment.
- Environmental regulations in force
- Contingency Plan.
- Social, environmental and cultural aspects of the area of influence of the project.
- Induction on the activity or activities to be developed, including basic aspects of legal and enforceable nature. Training for drivers of vehicles and machinery on traffic rules and identifying critical areas of accident risk, as well as the conditions and routes arranged in the project for the transit of vehicles and machinery.

Records: each personnel training process will have the respective photographic and attendance record.

FORMS USED

- ü GCSP-F-131: Attendance Record
- ü GCSP-F-133: Photographic record
- ü GCSP-F-138: Minutes of Training Meeting
- ü GCSP-F-139: Education and training for workers consolidated record
- ü FTGI- R 006: Training requirements
- ü FT-RH-020: Training Evaluation

IMPLEMENTATION SITE

Places determined by the company for training and Project fronts.

PERSONNEL REQUIRED

- HSE Professional
- Environmental Professional.
- Social Management Professional.

RESPONSIBLE FOR COMPLETION

The Concesionaria Vial Unión del Sur will be responsible for executing and implementing this program by its contractors throughout project development

Goal	Indicator	Compliance	Frequency	Registry
100% recruited personnel receive induction within 30 days after signing the contract	(Total number of inductions made / Total reported recruits) * 100	90%	Quarterly	GCSP-F -131 Attendance Record GCSP-F-133 Photographic record
Train 95% of	No. of trained	90%	Quarterly	GCSP-F -131

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

personnel involved in the project.	workers / Number of contracted workers *100			Attendance Record GCSP-F-133 Photographic record GCSP-F-138 Minutes of training meeting.																																
Perform 100% of the training scheduled for the quarter	No. of training conducted / number of scheduled trainings x 100	90%	Quarterly	FTGI- R 006: Training Needs																																
IMPLEMENTATION SCHEDULE																																				
<table border="1"> <thead> <tr> <th>STAGE</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> </tr> </thead> <tbody> <tr> <td>Pre-operative</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Construction</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dismantlement and abandonment *</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					STAGE	1	2	3	4	5	6	7	Pre-operative								Construction								Dismantlement and abandonment *							
STAGE	1	2	3	4	5	6	7																													
Pre-operative																																				
Construction																																				
Dismantlement and abandonment *																																				
* The abandonment phase ends when all program obligations are met																																				
COSTS																																				
Implementation costs of this measure are part of the operational costs of the project.																																				

Source: (Gemini SAS Environmental Consultants, 2016)

Table 11.1.1.3.4. Labor Contracting Program

MSC-3	Labor Contracting
	OBJECTIVES
<p>Encourage labor employment relationship of the area of influence of the project, following the principle of merit.</p> <p>Further compliance with current regulations to promote gender equality and equal opportunities for women in recruitment processes.</p> <p>Offer work to reinserted and displaced individuals as certified by SENA who reside in the Area of Influence.</p>	

GOALS					
70% of skilled (MOC) and unskilled (MONC) labor with direct and indirect contract shall come from the Direct Area of Influence (AID).					
30% of the MOC and MONC staff involved in the project will correspond to female staff.					
ENVIRONMENTAL EVALUATION					
Activity	Impact				
<ul style="list-style-type: none"> All activities included in the project 	<ul style="list-style-type: none"> Change in population dynamics Changes of everyday life, customs and lifestyles Change in employment dynamics Generating employment expectations 				
IMPLEMENTATION STAGES					
Pre-operative	X	Construction	X	Decommissioning and Abandonment	X
TYPE OF MEASURES					
Prevention		Correction			
Mitigation	X	Compensation			
ACTIONS TO BE TAKEN					
Overview					
Infrastructure projects have an impact on generation of direct and indirect jobs, which become a source of income.					
This chart is related to direct skilled and unskilled jobs that may arise with the development of the works, however according to the socioeconomic characteristics of the area, not all unemployed labor identified in the area of project influence are highly qualified with certificates of their trades, therefore in partnership with SENA, processes of formal qualifications of their skills and job skills will be carried out. This will allow contracting the population to project development and trigger other processes resulting in improved levels of income and living; for such end, before starting the construction work the following activities are proposed:					
Application Process: So that the entire community living in the area of influence of the project has the opportunity be contracted to work in the project, an application process is proposed so that the AI population is informed in a timely manner, especially those likely to receive an impact on the economic					

activities carried out, because of the road project in the area.

This corresponds to the dissemination and socialization with communities and local authorities in the area of influence, employment opportunities, staffing requirements and other aspects related to the hiring of local labor for project implementation.

As part of the application the following activities will be conducted:

- ü Socialization and dissemination: during commencement meetings, pre-construction stage, staffing requirements will be reported (probable number of positions and profiles), work areas, recruitment policy, means of collecting resumes, the selection procedures and recruitment process should be led by legally incorporated employment exchanges in the AID project, such as SENA and Comfamiliar. This in order to reduce generating expectations and speculations about the project.
- ü Characterization of the labor offer: In order to inform personnel requirements, coordinate with construction contractor and HR area of the Concessionary the number of people, positions and profiles required for the implementation of the project, in tis different stages and phases.
- ü Résumés will be filed through the communication channels provided for by the concessionary.

Mechanisms for receiving résumés: Résumés will be received in the mobile or fix user attention offices, email and web pages. It is important to correctly fill out the job application, have complete information to enable opportunity in the requirement of candidates for different positions.

Database creation, maintain a database to sort the résumés according to the profile of the candidates, type of labor (skilled and unskilled), and origin will be determined and will be filed in the SENA.

Personnel contracting protocol implementation: This protocol is designed to ensure transparency in the recruitment process, which will be brought forward in accordance with internal policies and regulations in force, ensuring equal opportunities, as long as they meet the profiles for each position. Having completed the pre-hiring steps, where the community was informed, the database of candidates was created to work on the project, the respective training was conducted; the recruitment process will continue taking into account the principle of merit and subsequently contracting personnel, prior review of the documents of necessary contracting requirements according to applied profile. Contracting required documents are itemized according position type.

Document Review: Necessary contracting requirements according to applied profile will be requested and received. Follows a list of contracting required documents according to position type:

For Operating Positions:

- ü Original citizenship identification card and copy expanded to 150%
- ü Habitual resident certificate of the AID municipality issued by JAC or Ombudsman

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 16

- Ü Study certificates
- Ü Labor records
- Ü EPS and AFP Certificates
- Ü Bank certificate
- Ü Anti-tetanus vaccination certificate

For technical positions:

- Ü Original citizenship identification card and copy expanded to 150%
- Ü Habitual resident certificate of the AID municipality issued by JAC or Ombudsman
- Ü Study certificates
- Ü Professional card Copy
- Ü Labor certificates
- Ü EPS and AFP Certificate

Follow-up and evaluation: this corresponds to activities oriented to process control and allowing safeguarding information that will support compliance. The program will be evaluated with the data from monthly reported indicators, compliance or non-compliance thereof will imply designing an Improvement Plan. Such achievements and difficulties analysis evaluates directly and permanently achieving the set out objectives.

Forms used are:

- Ü FTGI- R 001: Job application form
- Ü GCSP-F-140: Consolidated record of project contracted labor
- Ü SEPG-F-027: Minutes of meeting
- Ü GCSP-F-131: Attendance record
- Ü GCSP-F-132: Visit record
- Ü GCSP-F-133: Photographic record

IMPLEMENTATION SITE

Territorial units of the area of influence of the project.

PERSONNEL REQUIRED

- HSE Professional
- Social Management Professional.
- Head of human resources

RESPONSIBLE FOR COMPLETION

The Concesionaria Vial Unión del Sur will be responsible for executing and implementing this program by its contractors.

Goal	Indicator	Compliance	Frequency	Record
70% of Skilled Labor (MOC) and unskilled (MONC) contracted to the project with direct and indirect	(Number of MONC and MOC contracted from the area of influence of the	70%	Quarterly	GCSP-F-140: Consolidated record of project contracted

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

contract will come from the Direct Area of Influence (AID)	project / total project workers) * 100			labor
	Number of hired skilled labor from the area of influence of the project / total skilled labor contracted by the project * 100	70%	Quarterly	GCSP-F-140: Consolidated record of project contracted labor
30% of the MOC and MONC personnel contract in the project correspond to female staff.	Number of female staff involved in the project / No. of total staff involved in the project * 100	30%	Monthly	GCSP-F-140: Consolidated record of project contracted labor

IMPLEMENTATION SCHEDULE

STAGE	1	2	3	4	5	6	7
Pre-operative	■						
Construction	■	■	■	■	■		
Decommissioning and Abandonment *						■	■

* The abandonment phase ends when all program obligations are met

COSTS

Implementation costs of this measure are part of the operational costs of the project.

Source: (Gemini SAS Environmental Consultants, 2016)

Table 11.1.1.3.5. Information and Community Participation Program

MSC-4	Information and Community Participation Program
	OBJECTIVES
	<p>Design and develop a communication system for the project that integrates community strategies and mass media, contributing to the generation of a positive and strong image of the project, the ANI and the Concessionary, improving social, cultural, organizational and media relations with the area of direct influence.</p> <p>Create spaces that allow permanent communication between the Concesionaria Vial Unión del Sur, the ANI, municipal authorities and communities in the area of influence of the Rumichaca - Pasto dual carriageway road project.</p> <p>Report timely, clearly and truthfully everything related to the activities undertaken in the different project phases: pre-operative (pre-construction, construction), operation and maintenance, decommissioning and abandonment of the work.</p>
	GOAL
	<p>Perform 100% of planned briefings on issues related to development of the road project for each functional unit the pre-operative (pre-construction, construction) abandonment, and decommissioning stages.</p> <p>Inform communities of the area of influence on the progress and status of the project.</p> <p>Create an Overseeing Committee composed of members of the community of the area of influence to ensure participation and social control.</p>
ENVIRONMENTAL EVALUATION	
Activity	Impact

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

<ul style="list-style-type: none"> · Information processes and community participation · Land acquisition and easement · Contracting labor · Purchase and / or rental of goods and services · Installation and operation of camps · Mobilization of construction materials, supplies, machinery, equipment, waste and vehicles. · Stripping · Operation and maintenance of machinery and / or equipment · Top soil removal · Removal of forest cover · Demolition · Excavations and / or grading (possible use of explosives) · Toll facility 	<ul style="list-style-type: none"> · Generating employment expectations · Changing expectations on land value · Changing income expectations from sales of goods and services · Generate community discomfort · Modify the economic activities of AID families · Impairment of social and economic infrastructure · Change in existing road infrastructure (Change mobility and accessibility to county and / or roads urban). · Changes of everyday life, customs and lifestyles · Change in relations: community-community, community-authorities. Community-authorities-business · Change in mobility conditions · Change in supply and demand for goods and services · Change in organizational capacity and management of social, union, civic community, public and private organizations
--	---

IMPLEMENTATION STAGES

Pre-operative	X	Construction	X	Decommissioning and Abandonment	
----------------------	----------	---------------------	----------	--	--

TYPE OF MEASUREMENT

Prevention		X	Correction	
Mitigation		X	Compensation	

ACTIONS TO BE TAKEN

Given the impacts that the project may produce in communities and institutions in the area of influence it is necessary to formulate and implement various mechanisms which foster the maintenance of cordial and harmonious relations with communities and local authorities thereof. To thus seek promoting acceptance of the project and facilitate adapting to changes that will surely involve different stages.

In this regard, the activities associated to the community information program correspond to the design and implementation of an information system comprising two main components:

- **Information activities and socialization:** this corresponds to all spaces encouraging dialogue between the Concessionary, the communities and local authorities, in regard project development in its different stages.
- **Other outreach strategies:** this corresponds to those reporting mechanisms in written form whereby information on project progress, contingencies and extraordinary activities arising from the constructive work of both communities in the area of influence, local authorities and road users is delivered.

Information and Socialization Activities

To maintain direct communication with local authorities and communities in general of the area of influence, the following will be carried out:

Information meetings: these will be held with local authorities and communities in the area of influence of the project and will be commencement, progress and completion.

Commencement meetings: (pre-construction phase) are spaces to present the road project, its scope, provisions of the environmental license and PMA approved by the Environmental Authority; the following topics will be covered:

- ü Concesionaria Vial Unión del Sur Policy
- ü Project Overview
- ü Road layout
- ü Permits covering project development
- ü Socio-environmental management measures to be adopted by Concesionaria Vial Unión del Sur
- ü Land negotiation process
- ü Concesionaria Vial Unión del Sur’s social management program, which will be implemented during the course of the contract
- ü Services in the operational stage (prior to commissioning of the dual carriageway)

Progress meetings: this is a moment to present the progress of work activities, results of the Social and Environmental Management programs, among others. A meeting is planned at 50% progress of work the execution and another at 90%. The focus of the meetings will be:

- ü Status of work execution
- ü Land management progress
- ü Progress in compliance with socio-environmental management adopted measures by Concesionaria Vial Unión del Sur
- ü Progress in compliance with the Social Management Program

Conclusion meetings: after completing project activities their final status is presented as well as their technical characteristics and the final Social and Environmental Management results during the construction phase of the Rumichaca - Pasto dual carriageway road project.

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 21

The focus of the meetings is as follows:

- Ü Final work status
- Ü Final land negotiation process
- Ü Compliance with socio-environmental management measures
- Ü Compliance with the Social Management Program, Services in the operational phase.

Extraordinary Meetings: during the construction process situations or events may arise that warrant convening the communities and institutions of the AI fields of the project, so it is considered important to hold meetings on specific topics, such as the case of partial road closures, temporary closures, temporary detours, temporary suspension of utilities, among other contingencies.

Call mechanisms: to ensure the presence of communities, representatives of institutions and local authorities for socialization meetings, the following call means will be implemented:

- Written call: distribute invitation letters to local authorities, representatives of grassroots groups, institutions and property owners. This will also be strengthened through posters in high traffic sites and flyers.
- Audio media call: Use perifoneo and according to project needs and the public to whom it is addressed, use local broadcasters or other appropriate means of transmission.

Other outreach strategies:

The dialogue spaces with communities will be strengthened by distributing written media to different population groups and neighbors of the work means road users, as a complement to the meetings. These information mechanisms refer to:

The concessionary will design and use necessary printed, radio and audiovisual media required to disseminate information, to strengthen participation, achieve positioning and project image management.

The informative and dissemination material implemented by the Concesionaria Vial Unión del Sur is as follows:

Project Video:

Make a sectorized video of the initial condition of the works to be updated every three (3) months showing the progress of the works. This video will last for 5 to 8 minutes, maximum.

Make filmic records showing the before, during and after benefits of the Social, Environmental and Land Management of the works. These filmic records will last between 5 and 8 minutes, maximum.

Brochure:

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 22

Annually the Concessionary will design and print a brochure showing the scope of the project, its benefits and its progress during the construction stage.

Brochure Features: full color and heavy paper, with a circulation of not less than one thousand (1,000) copies.

Information Publications:

The Concessionary will design and print a quarterly publication: a newsletter or newspaper letter o legal-size full color, with minimum 6 pages and a print run of no less than one thousand (1,000) copies for distribution in the area of influence of the project, in each one of the local governments, educational institutions, commercial area located in the project area, community action boards, sites of interest to the community in the provinces, counties and neighborhoods in the area of influence and road users.

The quarterly publication will present information related to project development, and tourism, cultural and recreational activities in the area of influence of the project will be promoted. This newsletter will publish among others the community consultation process, people's life stories, and stories of places with meaning for the community that have been incorporated into the project. Likewise, information submitted by the National Infrastructure Agency to the Office of Communications and Information of the Concessionary.

Web page:

The Concessionary will operate the website which will contain updated information on project development of a social, environmental and technical nature; visitors will receive information related to road conditions, regulations, concession services and cultural and tourist activities in the areas of direct influence.

In addition to these media and in accordance with the Media Plan developed by the Concessionary and its other communication strategies, brochures, inserts, banners, flyers, newsletters, brochures games, stories will be developed, among others. These media will help the communities adopt the project.

Media Plan:

The Concessionary will develop a mass media plan to spread at a national and regional level relevant project information; constant recall messages will be issued, seeking to position the project, the National Infrastructure Agency, the Concessionary and the slogan of the National Government.

IMPLEMENTATION SITE

Territorial units of the area of influence of the Rumichaca Pasto dual carriageway road project

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 23

PERSONNEL REQUIRED				
Social Management Professional, Communications Professional, Technical Area Professional.				
RESPONSIBLE FOR COMPLETION				
The Concesionaria Vial Unión del Sur will be responsible for implementing and enforcing this program throughout project development.				
FOLLOW UP AND MONITORING INDICATORS				
Goal	Indicator	Compliance	Frequency	Record
Socialization Project	No. of socialization meetings held / No. of scheduled socialization meetings x 100	95%	Quarterly	Attendance records, meeting minutes, filmic and photographic record
Commencement meetings	No. of commencement meetings held / No. of commencement meetings scheduled x100	95%	Monthly	Attendance records, meeting minutes, filmic and photographic record
Progress meetings	No. of progress meetings held / No. of progress meetings scheduled sx100	95%	Quarterly	Attendance records, meeting minutes, filmic and photographic record
Completion Meetings	No. of completion meetings held / No. of conclusion meeting scheduled x100	95%	Quarterly	Attendance records, meeting minutes, filmic and photographic record
Extraordinary meetings	No. of extraordinary meetings held / No. of extraordinary meetings scheduled x100	90%	Monthly	Attendance records, meeting minutes, filmic and photographic record

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

				c record
Informative material	No. of informative pieces distributed / No. of informative pieces produced	Minimum 80%	Quarterly	Record of information and communication material distributed
	No. of quarterly newsletters distributed / No. of quarterly newsletters produced	Minimum 80%	Quarterly	
	No. of videos disseminated and socialized / No. of videos produced x 100	Minimum 80%	Biannual	

IMPLEMENTATION SCHEDULE

STAGE	1	2	3	4	5	6	7
Pre-operative							
Construction							
Decommissioning and Abandonment *							

* The abandonment phase ends when all program obligations are met

COSTS

Implementation costs of this measure are part of the operating expenses of the project since this is an activity that is embedded within the Social Management Plan of the Concessionary.

Source: (Gemini SAS Environmental Consultants, 2016)

Table 11.1.1.3.6. Institutional Management Capacity Support Program

MSC-5	Institutional Capacity Management Support
	OBJECTIVES

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 25

Promote in coordination with different entities, the development and strengthening of initiatives and / or productive projects directly impacting the project and perform actions to prevent invasion of public space in the corridor given in concession.

Develop a training program for officials of local governments on road concession related issues.

Provide training to community organizations in the area of influence of the project, orienting them toward self-management in formulation and development of productive projects that contribute to social and economic development of families.

GOALS

Create and update a database for Functional Units 4 and 5.1 with identified social organizations to develop productive projects or those they may be interested in.

Identify training needs in groups or social organizations to strengthen productive projects and initiatives.

Conduct annual training on Concession issues, current regulations and responsibilities on prevention and recovery of public space to delegates from the municipal administrations of the area of influence.

Identifying at least one community productive project or initiative to be supported by any public or private institution.

Consolidate at least one partnership with a public or private institution that supports the implementation of a productive community project or initiative

ENVIRONMENTAL EVALUATION

Activity	Impact
<ul style="list-style-type: none"> • Labor contracting • Purchase and / or rental of goods and services 	<ul style="list-style-type: none"> • Generate employment expectations • Impairment of social and economic infrastructure
<ul style="list-style-type: none"> • Mobilization of construction materials, supplies, machinery, equipment, waste and vehicles. 	<ul style="list-style-type: none"> • Generate community discomfort • Changes in everyday life, customs and lifestyles • Modify the economic activities of AID families

IMPLEMENTATION STAGES					
pre-operative	X	Construction	X	Decommissioning and Abandonment	
TYPE OF MEASURES					
Prevention	X	Correction			
Mitigation	X	Compensation	X		
ACTIONS TO BE TAKEN					
<p>Identify, formulate, strengthen and / or develop productive projects:</p> <p>Training needs and initiatives of productive projects will be identified in order to find institutional arrangements that contribute to strengthening their implementation and to improve the quality of life of project surrounding communities.</p> <p>Agreements or institutional alliances can be made with governmental and non-governmental entities such as the City Hall of Nariño, Imués, Tangua, Yacuanquer and Pasto Municipal Town Halls, Ministry of Culture, Ministry of the Interior, Ministry of the Environment, Housing and Territorial Development, Autonomous Regional Corporations, SENA, among others; oriented to further development of productive projects by training people living in the concession corridor.</p> <p>The Concessionary will organize workshops and meetings establishing with social organizations, public and private entities the themes, activities and / or projects needed for the area, arranging concrete and specific goals set forth in a work schedule. As support of these meetings, minutes will be signed including attendance and film or photographic records.</p> <p>The process to be developed with the community will be made directly in the minor territorial units in the area of influence and through community action boards; participation of community members will be mobilized.</p> <p>An evaluation of the activity will be made at the end of each session to identify the opinion of the participants on their perception of the relevance of the themes, methodology and audiovisual supports. The results of the evaluation will be taken into account to improve the following activities.</p>					
IMPLEMENTATION SITE					
The site will be agreed with the social partners and municipal authorities, but in any case in the area of influence of the project.					

PERSONNEL REQUIRED				
Social Management Professional Technical Professional				
RESPONSIBLE FOR COMPLETION				
The Concesionaria Vial Unión del Sur will be responsible for executing and performing this program by its contractors throughout project development.				
FOLLOW UP AND MONITORING INDICATORS				
Goal	Indicator	Compliance	Frequency	Record
Community productive project initiatives	No. of strengthened Productive Projects / No. of Productive Projects identified x 100	Minimum 80%	Annual	Map of actors, Database - Inventory, GCSP-F-133 Photographic record, filmic record, GCSP-F-143: Identification of Alternatives
	No. of formulated productive projects. / No. of initiatives identified X 100	Minimum 80%	Quarterly	
Conduct training aimed at social organizations and municipal authorities on programs and activities developed by the Concession, to include regulations, prevention and recovery of public spaces.	No. of trainings held / No. of trainings scheduled * 100	95%	Quarterly	Call for training session. GCSP-F-142 Training meeting minutes. GCSP-F-138 Attendance record. GCSP-F-131 Photographic records GCSP-F-133

IMPLEMENTATION SCHEDULE							
STAGE	1	2	3	4	5	6	7
Pre-operative							
Construction							
Decommissioning and Abandonment *							

* The abandonment phase ends when all program obligations are met

COSTS

Implementation costs of this measure are part of the operational costs of the project.

Source: (Gemini SAS Environmental Consultants, 2016)

Table 11.1.1.3.7. Training Program, Education and Awareness to the surrounding community Project

MSC-6	Training, Education and Awareness Program to Project surrounding community
	OBJECTIVES
	<p>Create education and awareness opportunities in the communities surrounding the project, on issues that contribute to environmental conservation and improvement, relations between the different social actors, their interaction with the project and promoting social control in the execution of the works.</p> <p>Formulate and implement a Training Plan concerted and addressed to AID communities of road corridor.</p> <p>Procure interagency agreements with recognized public and/or private organizations in the area of direct influence of the highway corridor, in order to coordinate development of the training plan.</p> <p>Develop an education and awareness process, defining together with the community located in the vicinity of the road, possibilities and partnerships to strengthen local development.</p> <p>Establish management measures to mitigate or reduce conflicts in the road environment.</p>
	GOAL

Promote an ecological day every semester during project execution with the communities in the area of influence.

In each minor territorial unit of the area of influence, conduct annual education and awareness training to maintain or improve relations between social actors and their interaction with the project.

ACTIVITIES

The training program for the community surrounding the project considers the following activities:

Identifying training and awareness needs on social, environmental and social control issues, concerted with the AID community of the road corridor.

Procure agreements with public and private organizations in the area of influence of the project.

Implement the Training Plan to the broader community and the Overseeing Committee in the area of influence of the project, strengthening the social control in the project.

Development an education and awareness process, defining together with the community surrounding the road the opportunities and partnerships to strengthen local development.

Establish management measures to mitigate or reduce conflicts in the road environment.

ENVIRONMENTAL EVALUATION

Activity	Impact
<ul style="list-style-type: none"> · Labor contracting · Mobilization of construction materials, supplies, machinery, equipment, waste and vehicles. · Demolition 	<ul style="list-style-type: none"> · Changes in population dynamics · Change in employment dynamics · Changes in everyday life, customs and lifestyles · Change in quality of life · Changes in institutional management dynamics · Changes in organizational capacity and management of social organizations, union, civic communities; public and private · Changes in: community-community, community-authorities, community-authorities-business relations

IMPLEMENTATION STAGES

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 30

Pre-operative	X	Construction	X	Decommissioning and Abandonment	
----------------------	----------	---------------------	----------	--	--

TYPE OF MEASURES			
Prevention	X	Correction	
Mitigation	X	Compensation	X

ACTIONS TO BE TAKEN

Overview

Environmental education is a tool for awareness against the new challenges posed by climate change and other forms that impact the natural environment. Although today there are many media that have been paving the way towards the care of nature and its resources, it is necessary to support communities in solving problems within their reach because they are part of their daily lives and ways of interact with their immediate environment. In this regard it is proposed to apply the measure through the following phases:

- ü **Sensitization phase:** Through socialization meetings where disposition of the community towards the environment and care is explored, the training initiative in environmental education and the work methodology to be developed is presented in order to motivate the residents of minor territorial units to actively participate from structuring and implementation of the program.

In accordance with the aforesaid, the following will be carried out:

- ü Initial meeting: The intention is to approach the community and issue-oriented groups, to define the education and environmental training project and know their interests regarding the program.
- ü To also prepare the work schedule together with the communities, so that relevant topics, schedule and days are agreed, as well as the total time it will take to implement the program. When deciding the topics, the information obtained in the environmental impact study will be considered and discussed with the community.
- ü **Structuring phase:** Based on the needs and reality of the residents, the training program will be structured in coordination with grassroots organizations and the community in general, also involving environmental oriented groups.
- ü **Implementation Phase:** According to community availability, training program in environmental education will be developed, where training activities are executed including hands-on days.

Activities related to this phase are:

- Ü Skill development: According to what was agreed to with the community, the training sessions with a participatory methodology is implemented using ludic-pedagogical tools that allow theoretical-practical integration of the information provided. The participants can also create action plans, focused on environmental issues in the area and related to development of the Rumichaca - Pasto road project in each functional unit.
- Ü Ecological days: In addition to the above, ecological days will be promoted during project implementation, with the community in the area of influence, addressing topics regarding tree planting, garbage collection, among others; so as to contribute to the care and preservation of the environment.
- Ü Institutional agreements may be signed that contribute to the implementation of this plan, which will include environmental and social aspects, among others, contributing to the sustainability, accountability and social control, promoting community participation; generating democratic processes of encounter and integral development in the region.
- Ü Management measures will be implemented to mitigate or reduce conflicts in the road environment.

Monitoring training activities

Post-training surveys will be conducted to clarify the receptivity and the information provided to the community. Likewise and with the aim of determining the effectiveness of each action carried out, an opinion poll among participants will be used to know their perception of the relevance of the themes, methodology and audiovisual supports. The survey results will be taken into count to formulate and implement appropriate improvement actions.

For the development of this program the Concessionary will consider the following Area of influence information:

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 32

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

Unidad Territorial Mayor	Unidad Territorial Menor	Centros Educativos	Planes, Programas y Proyectos de las Administraciones Municipales
Imues	Pedregal	Institución Educativa Jesus del Gran Poder	Programa "Emprendimiento, Turismo y desarrollo sostenible"
Yacuanquer	Inantas Bajo	C. E. Inantas Bajo	El municipio de Yacuanquer es uno de los más promisorios en el departamento de Nariño en lo relacionado al ecoturismo.
	Inantas Alto	C. E. Inantas Alto	
Tangua	Cocha Verde	C. E. San Pedro Obraje	Potenciar el aprovechamiento sostenible de los activos naturales y la transformación productiva de la región, generando valor agregado propio y autodesarrollo mediante el impulso a sistemas productivos que respondan a la vocación de la región, la promoción de las capacidades asociativas de los productores, el fomento de la investigación
	El Tablón Obraje		
	San Pedro Obraje		
	Barrio Corazón de Jesús	C.E. Misael Pastrana Borrero	
	Barrio Fátima		
	Barrio Bolívar		
	El Vergel		
	La Buena Esperanza	C. E. Niño Jesús de Praga	
	El Cebadal	C.E. El Cebadal	
	Chávez	C.E. Chávez	
	El Tambor	LE Alberto Quijano	
	El Páramo	C.E. El Paramo	
	La Palizada	C. E. Juan Palo II	
	Marqueza Bajo	C. E. Marqueza Baja	
Los Ajos	C. E. Los Ajos		
Marqueza alto	C. E. Marqueza Alta		
Pasto	Gualmatán Alto	C.E. Gualmatan	El Plan Nacional de desarrollo se fundamenta en ocho grandes pilares: convergencia y desarrollo regional, crecimiento y competitividad, igualdad de oportunidades, consolidación de la paz, innovación, sostenibilidad ambiental, buen gobierno y relevancia internacional.
	Vocacional		
	Cubijan	C. E. Cubijan Bajo	
	La Merced	Escuela Rural Mixta La Merced	
	San José de Catambuco	Escuela Rural Mixta San José de Catambuco	
	Catambuco	Institución Educativa Santa Teresita - Institucion Educativa Guadalupe	
	Huertecillas		

IMPLEMENTATION SITE

Minor territorial units in the area of influence

PERSONNEL REQUIRED

- Environmental Professional.
- Social Management Professional.

RESPONSIBLE FOR COMPLETION

The Concesionaria Vial Unión del Sur will be responsible for implementing and enforcing this program throughout project development.

FOLLOW UP AND MONITORING INDICATORS

Goal	Indicator	Compliance	Frequency	Record
------	-----------	------------	-----------	--------

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 33

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

Hold at least 1 annual workshop during project implementation for settlements of each functional unit	No. of community workshops held in the area of influence of the project / No. of workshops scheduled for the community of the area of influence of the project * 100	95%	Biannual	Meeting minutes. FT-GI-C- 012 Attendance Record GCSP-F-131 Structured training program Photographic records GCSP-F-133
Promote semiannually ecological days during project implementation in each functional unit.	No. of ecological days held / No. of ecological days scheduled * 100	100%	Biannual	Meeting minutes. FT-GI-C- 012 Structured ecological conference program Attendance record. GCSP-F-131 Photographic records GCSP-F-133
IMPLEMENTATION SCHEDULE				

STAGE	1	2	3	4	5	6	7
Pre-operative							
Construction							
Decommissioning and Abandonment *							

* The abandonment phase ends when all program obligations are met

COSTS

Implementation costs of this measure are part of the operating expenses of the project as this is an activity that is embedded within the Social Management Plan of the Concessionary.

Source: (Gemini SAS Environmental Consultants, 2016)

Table 11.1.1.3.8 Road Culture Program

MSC-7		Road culture			
OBJECTIVES					
<p>Encourage appropriate conducts on infrastructure use to road users, contributing to preventing and reducing risks. Joint awareness-raising and education with the authorities responsible for road safety. Conduct educational activities that contribute to reducing the risk of traffic accidents.</p>					
GOALS					
<p>Procure and sign an agreement with authorities and institutions working on safety activities, road culture and accident prevention in the Department of Nariño. Arrange with competent entities agreement, planning and implementation of educational and informational activities on road safety and culture in each functional unit of the highway corridor. Campaigns to promote Road Safety Reduced risk of accidents that lead to protecting the life of the community and users of the highway corridor.</p>					
ENVIRONMENTAL EVALUATION					
Activity			Impact		
<ul style="list-style-type: none"> · Operating machinery · Mobilization of construction materials, supplies, machinery, equipment, waste and vehicles · Debris and excavation material Operation Management Zone (ZODME). · Installation and operation of process plants (asphalt, concrete, crushing) 			<p>Changes in existing road infrastructure Generate community discomfort Changes in mobility conditions</p>		
IMPLEMENTATION STAGES					
Pre-operative	X	Construction	X	Dismantlement and abandonment	X
TYPE OF MEASURES					
Prevention	X	Correction			
Mitigation	X	Compensation	X		
ACTIONS TO BE TAKEN					
Overview					
<p>Due to the changes associated with the arrival of the project that includes new mobility conditions, it becomes necessary for road users to suffer the least possible due to impediments to normal vehicles and pedestrian traffic during the construction phase, as well as conditioning the routes and all that entails new road infrastructure. Safe construction methods guaranteeing both permanent and safe mobility must be</p>					

adopted, as well as strategies for raising community awareness to assimilate the changes in temporary and / or permanent modes and travel times requiring a new attitudes, new habits and behaviors.

These strategies are to:

Interagency management: Procure cooperation agreements with responsible and competent safety entities at national, departmental and municipal levels. As applicable, these agreements will be procured by the legal department of the concessionary; institutional coordination processes are also managed through letters or minutes, requesting training or participation in road safety campaigns.

Road safety promoting campaigns: this corresponds to educational, informative and recreational activities for the population inhabiting the area of influence of the project, including schools and road users in order to promote road safety, accident prevention, developing safe habits and behaviors for proper road use and enjoyment of the environment.

Traffic management plan: current regulations and guidelines of the National Infrastructure Agency will be implemented and the Manual Signaling INVIAS 2015 will be consulted.

The traffic plan management, in addition to the above, will have the support of trained personnel to direct traffic for the safe passage of pedestrians and vehicles through the areas where the works are developed, as well as for partial lane closures and mobilization of machinery, heavy construction vehicles and equipment. For such end, the following will be implemented:

- ü **Access and detours management:** in cases where county roads, easements and access to lands are intercepted, connectivity and mobility of the community will be ensured through mechanisms reducing unsafe conditions and allowing the dynamics of the people. In this regard in addition to deploying and installing the respective above described works signage, mobilization, temporary detours and partial closures will be informed to the neighbors and users for prior knowledge. The mechanisms and media are detailed in the *Community and Institutional Communication Program*.
- ü **Traffic management plan dissemination:** to achieve expected goals with the traffic management plan, thus preventing trauma to the community and road users, alternative roads in each functional unit will be timely informed during development of the construction project.
- ü **Restoring accessibility:** considering that during the construction process access to lands, easements and county roads can be temporarily suspend for being intercepted with the road, the project needs to restore mobility conditions with the new road infrastructure, as well as the importance of giving the community works for their final use. Therefore the program will inventory intercepted and / or affected accesses, easements and county roads, including characterization of affected infrastructure.
- ü Any alternate route used should also be characterized by minutes of neighborhood in order to know and show its condition before use; in these minutes the concessionary must agree to return the road in the same or better conditions than before use.

Campaigns and activities to promote road safety: the design and implementation of campaigns to promote road safety is based on the sociocultural characteristics of the territorial units of the area of influence of the project, prevention needs, accident indexes and identification of user and / or sectors with highest risk of accidents. In this regard the activities associated with the program also aim at sensitizing people, creating new habits and behaviors regarding road culture through training sessions and awareness, so the new infrastructure is used and enjoyed with greater awareness of self-care and respect for others. In accordance with the foregoing the following is proposed:

- ü Identification of sensitive sectors and population: based on the characterization of the area of influence, punctual information can be obtained from sectors and users more prone to road risk situations, based on the following criteria:
 - o High population concentration neighboring or adjacent to the road
 - o Social infrastructure neighboring or adjacent to the road
 - o Intense social and economic relations with other sectors (counties, provinces and / or municipal seats) and necessarily warranting the use of the national route for traveling.
- ü Structuring activities and / or campaigns promoting safety in accordance with the needs of each sector, The following activities will be carried out:
 - o Training sessions: will be held with both the general community and with educational institutions in sectors neighboring the works, on issues related to road safety for pedestrians, cyclists, motorcyclists, and drivers for the proper use of road infrastructure and complementary works such as sidewalks and pedestrian bridges.
 - o Road safety campaigns and prevention: prevention sessions are held in situ especially in areas of high traffic complexity, in order to prevent unsafe road behaviors. Transport and Transit Direction will help coordinate and support in order to have all the devices for activities to be developed.

Above measures will apply to the following stakeholders:

- Educational institutions in the area of direct influence
- Local transport companies
- General road users (pedestrians, cyclists, motorcyclists, drivers of heavy and light vehicles)
- Resident population
- Traders neighbors of the road
- Social organizations

Support material: there will be educational materials containing information regarding appropriate behavior on the road and other road safety aspects, which will be distributed during training sessions and campaigns for road safety and prevention with the community and general users.

Forms used are:

FT-GI-C-012: Meeting Minutes

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 37

ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.

FT-GI-C-013: Attendance Record GCSP-F-131: Attendance Record GCSP-F-132: Record of visits GCSP-F-133: Photographic record GCSP-F-138: Minutes of training meeting GCSP-F-142: Call Meeting GCSP-F-190 Quarterly Report				
IMPLEMENTATION SITE				
territorial units under the area of influence of the project.				
PERSONNEL REQUIRED				
Social Management Professional, Communications Professional, Technical Area Professional (Resident construction engineer and / or civil engineers), SST professional.				
RESPONSIBLE FOR COMPLETION				
Concessionaire Road South Union will be responsible for the implementation and enforcement of this program throughout the construction project.				
FOLLOW UP AND MONITORING INDICATORS				
Goal	Indicator	Compliance	Frequency	Record
Sign an agreement with authorities and institutions working on safety activities, road culture and accident prevention at national, departmental and municipal levels.	No. of signed agreements / No. of agreements managed * 100	100%	Annual	FT-GI-C-012: Meeting Minutes GCSP-F-132: Record of visits
Road safety campaigns	No. of road safety campaigns executed / No. of road safety campaigns scheduled * 100	90%	Quarterly	FT-GI-C-012: Meeting Minutes FT-GI-C-013: Attendance Record GCSP-F-133: Photographic record Filmic record as appropriate

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

Road safety workshops	No. of traffic workshops held / No. of traffic workshops scheduled) * 100	90%	Quarterly	Record of training held FT-GI-C-013: Attendance Record GCSP-F-133: Photographic record Photographic and filmic record as appropriate																																
IMPLEMENTATION SCHEDULE																																				
<table border="1"> <thead> <tr> <th>STAGE</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> </tr> </thead> <tbody> <tr> <td>Pre-operative</td> <td style="background-color: #cccccc;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Construction</td> <td style="background-color: #cccccc;"></td> <td></td> <td></td> </tr> <tr> <td>Decommissioning and Abandonment *</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="background-color: #cccccc;"></td> <td style="background-color: #cccccc;"></td> </tr> </tbody> </table>					STAGE	1	2	3	4	5	6	7	Pre-operative								Construction								Decommissioning and Abandonment *							
STAGE	1	2	3	4	5	6	7																													
Pre-operative																																				
Construction																																				
Decommissioning and Abandonment *																																				
* The abandonment phase ends when all program obligations are met																																				
COSTS																																				
Implementation costs of this measure are part of the operational costs of the project.																																				

Source: (Gemini SAS Environmental Consultants, 2016)

Table 11.1.1.3.8. Social Land Management Support and Program

MSC-8	Social Land Management Support and Program
OBJECTIVES	
Provide social support during the adapting and adopting process of their new dwelling place or developing the productive activity, seeking to maintain or improve the quality of life of the social units whose lands are required for the project.	
Implement measures to prevent affecting public service infrastructures	
GOALS	

- ü Contact 100% of the owners of the land required by the project due to the project interventions to inform them of the Land Social Management process.
- ü Develop social support and 100% monitoring of social units transferred by project interventions, assessing that current conditions are equal to or better than those they initially had.
- ü Inform and disclose to 100% of the social units contingent suspension of utilities to the communities in the area of influence

ENVIRONMENTAL EVALUATION

Activity	Impact
<ul style="list-style-type: none"> · Land acquisition and easements 	<ul style="list-style-type: none"> · Change in population dynamics · Change in supply and demand for goods and services · Modification of the economic activities of AID families · Change of social and economic infrastructure · Change in expectations on the land value · Generate community discomfort · Changes of everyday life, customs and lifestyles

IMPLEMENTATION STAGES

Pre-operative	X	Construction	X	Dismantlement and abandonment	X
----------------------	----------	---------------------	----------	--------------------------------------	----------

TYPE OF MEASUREMENT

Prevention		Correction
Mitigation	X	Compensation

ACTIONS TO BE TAKEN

Overview:

Due to road development, land areas providing housing and / or commercial services for social units of the direct area of influence will be affected; situation involving some changes to the daily lives of people in relation to the property purchase process itself and eventual transfer.

In this regard, the activities associated with the Social Land Management support program are the following:

- Consultation of land planning regulations applicable to the municipalities in the area of influence of the project.
- Assessment of real estate supply and demand in the municipalities in the area of influence of the project or neighboring municipalities.
- Definition of a real estate services portfolio containing at least identified properties (plots, land areas, housing, identified in the area of influence), location, and characteristics of the property, owners and cost data.

- **Identify social units affected by the purchase of land:** this includes all actions allowing greater accuracy of affected land areas and social units associated therewith, which can have a legal, physical or economic dependence relationship on the property. This in order to define the level of vulnerability and compensation measures.
- **Identify, follow-up and monitor utilities:** considers all actions to ensure communication and disclosure against the possibility of suspended utilities to communities in the area of influence due to construction activities, to also follow-up on proper management of this infrastructure with the purpose of providing truthful information.
- **Technical, legal and social support during voluntary transfer:** this corresponds to the set of actions that allow providing support during the voluntary transfer of social units, when where they live and / or develop a productive activity is affected.
- **Social support in infrastructure and utilities management** (social support to the technical area in preparing neighborhood minutes, minutes of commitment and measures to prevent affecting identified infrastructures.
- **Management report:** this refers to the results of the process carried out with each social unit

Actions to be taken in each above described activity:

Identify social units affected by the purchase of land: to identify social units, the following actions will be taken:

- Identify areas required prior design materialization.
- Identify homes, buildings and establishments with economic or institutional use to be intervened
- Characterize social units and perform Socio-Economic and Cultural Diagnosis
- Census social units and their classification according to use.
- Make a photographic record of use by the Social Unit.
- Identify social units with a high degree of social vulnerability.
- Establish social factors indicating the current ANI resolution.

Based on the socioeconomic and cultural diagnosis of the affected social units, the degree of social vulnerability thereof and social support needs will be determined for transfer purposes. To this end the guidelines defined in Resolution 545 of December 2008 INCO (now ANI), regulations in force at the time of award of the contract shall apply. This in order to implement compensation measures that can address the impacts generated by the purchase of land so that sufficient support is given during the process.

Identify, follow-up and monitor utilities: In case networks/grids are intervened, the network management plan will be considered, which includes the following activities:

- Prior to intervention of networks, create workshops with companies providing the service and the Concessionary, in order to establish possible intervention sites and measures to be implemented so the provision of applicable service is

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 41

guaranteed.

- Coordinate with the companies providing communication services to the community that they will be used to communicate possible temporary service suspensions (flyers, radio spots, billboards) with official information.
- Coordinate with the owners of utilities infrastructure (county aqueducts, deep wells, fiber optics, etc.) and representatives of communities and community organizations owners of service network the transfer and service restitution.
- Establish contingency plans with owner companies or those responsible for transferring network transfer when for service continuity.
- Follow-up and monitor infrastructure condition with support from the technical area

Post-transfer activities:

Meetings and / or field visits with service entities and community user representatives as appropriate in order to verify compliance with network transfer activities and their proper operation.

Technical, legal and social support during the transfer process: implementation of this process requires establishing social support and advice activities, such as:

- Identify the expectations and needs of social units regarding the transfer.
- Social counseling regarding establishing social services networks (health and education), advice and actions to restore social roots conditions, psychosocial counseling to embrace change and possible feelings of loss, technical assistance to social units engaged in economic activities (social productive units and social mixed units).
- Real state advice (characteristics and types of properties, owner and location and costs data)
- Legal advice.
- Authorize social compensation measures to prevent and mitigate impacts.
- Monitoring the adaptation process in the new habitat or ex post evaluation to allow recording whether there was improvement or maintenance of living conditions.

This activity will be implemented whenever necessary to intervene social resident or productive units established in the areas and required for execution of the works. This activity strengthens the socio-land management promoted by the ANI in that impacts to these units from the project are handled, whether or not they are participants in the process of voluntary transfer, that is, by having a dependency relationship with the property being purchased.

Note: if during the process of legal information collection of properties, cases of irregular settlements are identified, provisions of Resolution 077 of 2012 and 1776 ANI 2015 will be considered

Community facilities management: In case of affecting a publicly owned infrastructure that provides a social service to communities and that by the effect a high impact is generated, the concessionary will identify the infrastructure and formulate alternative solutions to ensure service restoration, however, to keep in mind that the project took all measures to avoid affecting public facilities.

Social support in managing infrastructure and utilities: Minutes of Neighborhood will be signed before commencing construction activities, and the community will be informed of this activity noting the importance of the participation of the person responsible or the property owner.

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 42

In the event of identifying social infrastructure (parks, bus stops, religious or cultural assets), the JAC president will be informed and their support in the process of preparing the Neighborhood Minutes will be requested.

On the temporarily occupied premises, Neighborhood Minutes will be signed to identify the physical condition of the area before its temporary occupation, identifying the existence of utility networks.

Additionally and in the event alternate routes are used for project activities, minutes of roads will be signed in order to know and show the previous state of the road before use, this will take place with the support of a community leader

Management report: a management report will be prepared for each social unit, which must contain at least be following:

- ü Construction address of the Social Unit.
- ü Photographic record, name and surname of the Social Unit responsible party.
- ü Social Unit type
- ü Type of tenure against the property.
- ü Kind of advice received.
- ü Evaluation of advice received
- ü Social compensation factors received.
- ü Replacement housing address.
- ü Photographic record of replacement housing.
- ü Qualitative and quantitative evaluation to allow determining if the social unity restored or improved its initial socioeconomic conditions.

Forms used will be:

- FCSPs-F- 146: Follow-up of transferred social units
- FCSPs-F-147: Follow-up visit to social units transferred
- GCSP- 014: Characterization of productive social unit
- GCSP-F-014: Photographic record of social chart
- Social forms established by the NIA for the process of acquiring properties

IMPLEMENTATION SITE

In the area of influence, particularly in areas required thereby.

PERSONNEL REQUIRED

Social Management Professional, Land Management Professional, Social Assistant, Professional Legal

RESPONSIBLE FOR COMPLETION

The Concesionaria Vial Unión del Sur will be responsible for executing and implementing this program by its contractors throughout project development.

FOLLOW-UP AND MONITORING INDICATORS

Goal	Indicator	Compliance	Frequency	Record
------	-----------	------------	-----------	--------

	ENVIRONMENT EFFECT INVESTIGATION	CSH-4-AM-AM-EIA2-GG-0013-7
		March 2017
		Page 43

**ENVIRONMENTAL IMPACT STUDY FOR THE RUMICHACA - PASTO DUAL CARRIAGEWAY ROAD PROJECT,
PEDREGAL – CATAMBUCO SECTION, UF. 4 AND UF. 5.1, CONCESSION CONTRACT UNDER SCHEME APP NO. 15 OF
2015.**

Support to affected social units	(Number of affected units receiving social support / total number of affected social units) * 100	100%	Permanent during the program, from pre-construction period or throughout the land acquisition process	Socialization Meeting Minutes Attendance list Filmic record as appropriate GCSP-F-014: Social chart photographic record
Identification of social units	No. of social units per type in the project / No. of social units identified in the project x 100	100%		FCSPs-F- 146: Follow-up social units transferred Attendance list Filmic record as appropriate GCSP-F-014: Social chart photographic record
Social support during the process of social unit transfers.	No. of social units with support / No. of identified social units x 100	80%		FCSPs-F- 146: Follow-up of transferred social units Attendance list Filmic record as appropriate GCSP-F-014: Social chart photographic record
Applied compensations	Number of social compensations applied / No. of social compensations identified * 100	Applied compensations		ANI forms
Neighborhood minutes – Road minutes	No. of neighborhood minutes signed / No. of neighborhood minutes scheduled x 100	95%	Permanent during the program, from the construction period and abandonment.	Neighborhood minutes
	Number of road minutes of signed / No. of roads used by the project.	80%		Road minutes

Source: (Gemini SAS Environmental Consultants, 2016)