

Inception Report

Applicants to the program are required to submit Inception Report in the format below together with the application forms. This report will be used as reference in the selection of the program's participants. Therefore, this report must be completed. Any HANDWRITTEN or INCOMPLETE report will be DISQUALIFIED. The report should be within 6 pages.

1. Applicant's Information

1. Name	Ramos Parado Isabel
--Nationality	Peruvian
--Contact	Tel. 989947609 Fax.
	Email address: isabelrmsprd@gmail.com / iramos@cenepred.gob.pe
2. Name of Organization	National Center for Estimation, Prevention and Reduction of Disaster Risk
3. Your professional Status	Modeling and Meteorology Specialist
--Your duties in charge (Please itemize)	Contributed to the development of geospatial hydrometeorological models and risk scenarios by integrating meteorological, climatological, and hydrological data using GIS. Assessed hazards associated with extreme rainfall, and El Niño and La Niña events, identifying potentially affected areas and critical infrastructure to support risk assessment and decision-making.
--Your relationship with JICA volunteers and/or the other JICA's activities, if any	None.
4. Organization Chart (Mark your position)	Please attach the organization chart. <pre> graph TD OCI[Órgano de Control Institucional] --- JEFATURA[JEFATURA] JEFATURA --- SG[Secretaría General] JEFATURA --- DFTA[Dirección de Fortalecimiento y Asistencia Técnica] SG --- OA[Oficina de Administración] SG --- OAJ[Oficina de Asesoría Jurídica] SG --- OPY[Oficina de Planeamiento y Presupuesto] SG --- OCRI[Oficina de Cooperación y Relaciones Internacionales] DFTA --- DGPro[Dirección de Gestión de Proyectos] DFTA --- DME[Dirección de Monitoreo, Seguimiento y Evaluación] DFTA --- SDFTA[Subdirección de Fortalecimiento y Asistencia Técnica Local] SDFTA --- SDNL[Subdirección de Normas y Lineamientos] SDFTA --- SDPP[Subdirección de Política y Planes] SDFTA --- SDGI[Subdirección de Gestión de la Información] </pre>

2. Current situation in your country

Introduction: Purpose of the Country Report

The development of transportation infrastructure, including hill roads, is intricately linked to socio-economic progress and geopolitical factors. Consequently, the approach to such development varies significantly across countries. This training program is planned to facilitate cross-border knowledge exchange among participants hailing from diverse countries. Each trainee is tasked with comprehending the current situations and challenges in hill road development and maintenance management within their professional context. They are then expected to devise action plans for resolving these challenges and subsequently implement and share their solutions with their respective organizations.

Moreover, in the spirit of fostering "Co-Creation," participants in this training are encouraged to share best practices drawn from their country's experiences with other participants from different countries. This report will be prepared with the overarching objectives mentioned above, aiming to analyze the pertinent issues faced in your country's current landscape and to delineate the training goals for each participant.

Section 1 : Hill Road Projects in Our Country

From the perspective of comprehensive national development in your country, please introduce representative hill road project that is most expected to be constructed in the near future in your country.

Name of the project: Nueva Carretera Central (Daniel Alcides Carrion)

Section/distance/number of lanes: 185 kilometers

Budget amount/funding source: Approx. S/ 24,000 million PEN (approx. USD 6.5 million)

Economic and social impacts: Direct connectivity between Lima, the central Andes, and the central rainforest. Drastic reduction in logistics costs, enhanced food security supply chains, and safe, uninterrupted transit avoiding high-frequency landslide corridors along the Rímac valley.

Technical challenges in construction: Complex Andean topography with steep slopes and high seismicity

URL: <https://pmovias.com/es/proyectos/nueva-carretera-central>

Location map (attachment available):



Please introduce a representative current hill road project.

Name of the project:

Section/distance/number of lanes: Carretera de la sierra central

Budget amount/funding source: Approx. 965 km traversing Junín, Huancavelica, Ayacucho, Apurímac, and Ica | 2 lanes (mountain highway standard)

Economic and social impacts: Primary logistics axis for the Southern and Central Andean communities, connecting agricultural hubs and mining corridors with the coast, reducing travel times and transport costs.

Technical challenges in construction: Maintenance and rehabilitation along high mountain terrains prone to rockfalls, severe landslides, cut-slope erosions during the wet season, and drainage system collapses.

URL: <https://www.gob.pe/proviasnac>

Location map (attachment available):

Regarding the current project listed above, please answer the following questions using four options. Additional comments are welcome.

AA: Working cross sectionally by the entire organization,

A: Working properly in accordance with the regulations,

B: There are regulations, but they do not function well,

C: Not being implemented.

Question 1-1: Is the plan considered the optimal route from a lifecycle cost reduction perspective?

AA/ A/ **B**/ C (select an answer)

Comments if any: _____

Question 1-2: Is disaster prevention the mainstream of the hill road planning?

AA/ A/ **B**/ C (select an answer)

Comments if any: _____

Question 1-3: Are the risks of all types of slope hazards adequately assessed in route planning?

AA/ A/ ☒ B/ C (select an answer)

Comments if any: _____

Question 1-4: Are environmental issues associated with road construction (especially excavation work for cutting) being appropriately addressed?

AA/ ☒ A/ B/ C (select an answer)

Comments if any: _____

Overview: _____

URL: _____

Question 1-5: When formulating the construction plan, is there sufficient coordination and cooperation with related organizations and stakeholders?

AA/ A/ ☒ B/ C (select an answer)

Comments if any: _____

Question 1-6: Are road construction materials (cutting waste) used for local economic development? For example, it can be used to build disaster prevention bases.

AA/ A/ B/ ☒ C (select the answer)

Comments if any: _____

Question 1-7: Are there any problems with land compensation negotiations?

If there are any problems, what is the main issue?

AA/ A/ ☒ B/ C (select the answer)

Comments if any: _____

《Training theme 2: Establishing and improving the knowledge and skills necessary for hill road management》

Question 2-2-1: Are there standards for hill road construction or rehabilitation?

☒ Yes/ No (select an answer)

Names of documents (if yes) <https://www.gob.pe/institucion/mtc/informes-publicaciones/4504137-normas-vigentes-en-materia-de-infraestructura-vial>

Question 2-2-2: Are there any survey or design standards for constructing embankments or cut slopes?

Yes/ No (select an answer)

Names of documents (if yes) <https://www.gob.pe/institucion/mtc/informes-publicaciones/4504137-normas-vigentes-en-materia-de-infraestructura-vial>

Question 2-2-3: Is there a system for recording and periodically inspecting roadside slopes in disaster prone sections? How does the system work?

Yes/ No (select an answer)

System working status (if yes) Conducted periodically by PROVIAS

Question 2-2-4: If there is a system for recording and regularly inspecting roadside slopes, is it compiled into a database?

Yes/ No (select an answer)

Comments (if any) _____

Question 2-2-5: Are records of roadside slope disasters compiled into a database?

Yes/ No (select an answer)

Comments (if any) _____

Question 2-2-6: If there is a database of roadside slope disaster records, how is it utilized?

Main user: Stakeholder

Main purpose: Disaster risk scenario formulation, historical damage evaluation, emergency declaration justification, and priority spatial planning

Question 2-2-7: Is there a training system for roadside slope inspections?

Yes/ No (select an answer)

Comments (if any) _____

Question 2-2-8: If there is a training system for roadside slope inspection, let us know the detail.

Organizer: _____

Target participants: _____

Number of participants (yearly): _____

Question 2-2-9: Are there practical manuals that can be used as references when investigating roadside slope disasters, designing countermeasures, or supervising construction? If so, let us know the details.

Technical specifications of each construction work: _____

Quality control/finish control manual: _____

Project cost estimation manual: _____

Question 2-2-10: Does the client have the technical ability to inspect the quality of the hill road survey or design report prepared by the consultant?

Sufficient/ Good/ **Fair**/ Insufficient (select an answer)

Comments (if any) _____

《Training theme 3: Developing the organizational structure necessary for hill road management》

Question 2-3-1: Is there a department that specializes in hill road projects and deals with slopes?

Yes/ No (select an answer)

Name of organization (if yes): PROVIAS

Question 2-3-2: If there is a department that specializes in hill road projects, is that project progressing smoothly?

Sufficient/ Good/ **Fair**/ Insufficient (select an answer)

Comments (if any) _____

Question 2-3-3: Regarding non-structural measures such as (1) identification of hazards, (2) risk communication with stakeholders, (3) Monitoring and early warning system, do your organization collaborate daily with related agencies such as environment, forestry, rivers, geology, mining, meteorology, etc.?

Sufficient/ **Good**/ Fair/ Insufficient (select an answer)

Comments (if any) _____

Question 2-3-4: Do your organization establish a disaster prevention system and developed a disaster prevention plan in case a wide-area emergency such as a typhoon or earthquake occurs?

Sufficient/ **Good**/ Fair/ Insufficient (select an answer)

Comments (if any) _____

Question 2-3-5: Is there a business continuity plan (BCP) in the event of a large-scale disaster?

Yes/ No (select an answer)

Name of plan (if yes): Institutional continuity plans

Summary of plan (if yes): _____

Question 2-3-6: If there is a BCP, are the training conducted based on the BCP?

Organizer: _____

Participant: _____

Number of participants: _____

Frequency: _____

Question 2-3-7: When a road becomes impassable, prompt removal of the road will greatly contribute to saving lives, transporting emergency supplies, and even aiding recovery and reconstruction. Is there a road clearing plan to quickly resume traffic?

Yes/ No (select an answer)

Name of the plan (if yes): _____

Question 2-3-8: If there is a road clearing plan, which organization is responsible for its implementation?

Command organization: MTC

Implementing organizations: PROVIAS

《Training theme 4: Necessary tasks for hill road management》

Question 2-4-1: Do your organization outsource the implementation of hill road projects?

If you outsource, which ordering method are used? No

For development: _____

For maintenance management: _____

For emergency response such as slope countermeasures:

Question 2-4-2: Regarding the budget for hill road projects in your country, please tell us about the concept behind the budget proposal, budget size, and degree of sufficiency.

For development: budget planning concepts _____

Annual budget amount _____

Budget sufficiency (%) _____

For maintenance: budget planning concepts _____

Annual budget amount _____

Budget sufficiency (%) _____

For slope countermeasures: budget planning concepts _____

Annual budget amount _____

Budget sufficiency (%) _____

Question 2-4-3: Please tell me about your ability to plan budgets for hill road projects.

For development: Sufficient/ Good/ Fair/ Insufficient (select an answer)

For maintenance: Sufficient/ Good/ Fair/ Insufficient (select an answer)

For slope countermeasures: Sufficient/ Good/ Fair/ Insufficient (select an answer)

《Training theme 5: Improving the vitality and capacity of the private sector to support hill road management》

Question 2-5-1: Do private consultants have various technical and practical capabilities related to hill road development and maintenance?

Sufficient/ Good/ Fair/ Insufficient (select an answer)

Comments (if any): _____

Question 2-5-2: Is there a technical qualification system for hill roads?

Qualification name: _____

Number of qualified engineers: _____

Question 2-5-3: Is there an authority that provides administrative consultation regarding hill road management?

Authority name: _____

Number of human resources: _____

Question 2-5-4: Is there an organization where the government, universities, and private sectors work together to make recommendations regarding hill road projects in general?

Organization name: _____

Member composition: _____

Section 3: My Opinion

(Question 3) Please feel free to write about your expectations and your enthusiasm for this training.

As a Meteorologist and Modeling Specialist at CENEPRED, my main motivation is to bridge the gap between atmospheric science and road infrastructure resilience in Peru. My primary expectation is to master Japanese methodologies regarding mechanisms of rain-induced disasters, slope stability analysis, and monitoring technologies. In recent years, recurring extreme precipitation events in the Peruvian Andes have severed strategic road corridors, disrupting supply chains, passenger mobility, and regional economies. Through this training, I am committed to developing an Action Plan to upgrade CENEPRED's risk scenarios for the National Road Network. By translating dynamic weather forecasts and rainfall trigger thresholds into actionable geotechnical hazard assessments, CENEPRED will provide specialized geospatial to prioritize proactive slope mitigation and ensure resilient national connectivity

That's all. Thank you very much