

**MINUTES OF DISCUSSIONS OF
2nd MEETING OF THE JOINT COORDINATION COMMITTEE (JCC) FOR
THE SPACE PROGRAM MANAGEMENT PROJECT APPLIED TO
SOCIOECONOMIC DEVELOPMENT**

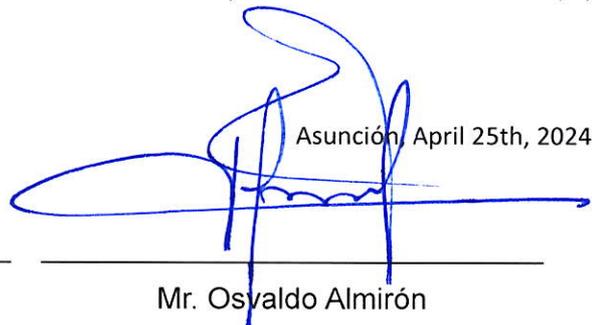
Japan International Cooperation Agency (hereinafter referred to as JICA) and the Space Agency of Paraguay (hereinafter referred to as AEP), together with JICA's team of Japanese consultants, have held the 2nd Meeting of the Joint Coordination Committee (hereinafter referred as JCC) with relevant ministries and institutions of Paraguay regarding the planning of the activities of the technical cooperation project "Space Program Management Project Applied to Socioeconomic Development" (hereinafter referred to as "the Project").

As a result of the meeting, both parties have reached an agreement on the implementation structure, content of the activities to be carried out as part of this technical cooperation detailed in Annexes I, II, III, and IV of this Minutes.

高田 千佳

Sra. TAKAHATAKE Chika
Chief Representative
JICA
Paraguay Office

Asunción, April 25th, 2024



Mr. Osvaldo Almirón
President
AEP

Annexes:

- I. Project Design Matrix
- II. Formal Establishments of Working Groups for Disaster Management and Agriculture-livestock
- III. Progress

Project Design Matrix (PDM)

Project Title: Project for Management of Space Programs applied to the Socioeconomic Development

2.0

Implementing Agency: Paraguayan Space Agency

Dated: April 25, 2024

Target Group: Personnel of AEP and related institutions(AEP)

Period of Project: October 2023 - September 2025 (2 years)

Project Site: Asuncion

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal (realises 3 years after project) Contribute to the development of national skills in the space sector and strengthen the country's social, economic, scientific and technological development	1. # of projects utilizing space related technology in public and private sector 2. # of public data based on geospatial information 3. # of users of data provided	- Government Statistics - Report from AEP and/or other institutions	Mechanism of data provision for governmental statistics or decision-making process is well established.		
Project Purpose (realises at the end of the project) The ability to utilize space-related technologies in Paraguay is strengthened and geospatially informed decision-making is promoted.	1. # of interagency projects in which AEP was involved 2. # of value-added satellite data products in and beside pilot projects by GEOLab, AEP 3. # of Paraguayan staff have training programs in Japan and Paraguay	Government Statistics, Project Report			
Outputs (Key components of the project)					
Output1: Human resources and infrastructure for AEP upstream and downstream will be strengthened.	1-1. # of trained persons considering gender balance 1-2. # of seminars and workshops 1-3. satisfaction of seminars and workshops	Project Report Project Report Project Report	- Counterpart personnel is continuously secured properly - Other institutions, such as government and universities accept involvement of pilot projects.		
Output2: AEP and related agencies implement pilot projects to improve capacity for analyzing disaster risk and preventing and responding to natural disasters.	Same as 1-1, 1-2, 1-3 # of PoC, # of practical plans from activity, # of papers and reports related to activity	Project Report Project Report			
Output3: AEP and related agencies implement pilot projects to improve capacity for management of agriculture and livestock information related to productivity and quality of products.	Same as 1-1, 1-2, 1-3 # of PoC, # of practical plans from activity, # of papers and reports related to activity	Project Report Project Report			

Activities	Inputs		Important Assumption
	The Japanese Side	The Paraguay Side	
1-1: Conduct an evaluation of AEP's existing technical methods and tools and make recommendations for future planning. 1-2: Develop enhancement plan based on a diagnosis of GEOLab, AEP. 1-3: Provide 6-month hands-on training in satellite development, including testing EM of GuaraniSat-2 at Kyutech between October 2024 and March 2025. 1-4: Provide training in satellite data and other processing and applications. 1-5: Liaison between AEP and Japanese governmental institutions, universities, and private companies.	- Short-term experts (Data utilization planning, Satellite development/testing, Data utilization in disaster risk reduction/agriculture and livestock sector) - Training for Counterpart Personnel in Japan - Local cost for the activities	- Allocation of counterpart personnel - Coordination among ministries and organizations - Arrangements between projects with other development partners, etc. - Arrangements for providing necessary data - Office space for Japanese professionals - Local costs (maintenance costs for existing equipment not covered by JICA support, meeting preparation costs, operating costs required for the project, etc.)	Pre-Conditions
2-1: Set up working groups consisting of AEP and related organizations to identify issues and implement pilot projects. 2-2: Identify issues where space-related technologies can be effectively applied in the field of disaster risk reduction. 2-3: Determine scope for applying space-related technologies to the issues and design pilot projects. 2-4: Develop plan and procure equipment (hardware and software) for satellite imagery and data collecting/processing. 2-5: Train personnel in the use of tools, methods, and techniques for disaster risk reduction. 2-6: Implement pilot projects with Working Group and existing agreements with academia and other governmental and non-governmental organizations. 2-7: Publish results of pilot projects locally and internationally.			
3-1: Set up working groups consisting of AEP and related organizations to identify issues and implement pilot projects. 3-2: Identify issues where space-related technologies can be effectively applied in the agriculture and livestock sector. 3-3: Determine scope for applying space-related technologies to the issues and Design pilot projects. 3-4: Develop plan and procure equipment (hardware and software) for satellite imagery and data collecting/processing. 3-5: Train personnel in the use of tools, methods, and techniques to improve productivity and quality in agriculture and livestock sector. 3-6: Implement pilot projects with Working Group and existing agreements with academia and other governmental and non-governmental organizations. 3-7: Publish results of pilot projects locally and internationally.			

Annex II

Formal Establishments of Working Groups for Disaster Management and Agriculture-livestock

Formal Establishment of Working Group for Disaster Management was declared at the 2nd Meeting of JCC at Asunción on April 25, 2024.

Formal Establishment of Working Group for Agriculture-livestock was declared at the 2nd Meeting of JCC at Asunción on April 25, 2024.

1. Purposes of Working Groups

1.1. Purpose of Working Group for Disaster Management

The objective of the Working Group is to identify issues in the Disaster Management Sector for which satellite data application is effective, then design and implement a pilot project to find a solution to the identified challenges. Even after the completion of this project, the Working Group is expected to continue to hold discussions regarding possible applications of satellite data for the development in Disaster Management system in Paraguay.

1.2. Purpose of Working Group for Agriculture-livestock

The objective of the Working Group is to identify issues in the Agriculture and Livestock Sector for which satellite data application is effective, then design and implement a pilot project to find a solution to the identified challenges. Even after the completion of this project, the Working Group is expected to continue to hold discussions regarding possible applications of satellite data for the development in Agriculture and Livestock system in Paraguay.

2. Outputs of Working Groups

2.1. Outputs of Working Group for Disaster Management

Outputs of Working Groups for Disaster Management are shown below:

- a. Design of Pilot Project,
- b. Results of Pilot Project, and
- c. Framework of Cooperation against Disaster by Members.

2.2. Outputs of Working Group for Agriculture-livestock

Outputs of Working Groups for Agriculture-livestock are shown below:

- a. Design of Pilot Project,
- b. Results of Pilot Project, and
- c. Framework of Cooperation for Sustainable Agricultural Production by Members.

3. Activities of Working Groups

3.1. Activities of Working Group for Disaster Management

Activities of Working Groups for Disaster Management are shown below:

- a. Identify issues in Disaster Management,
- b. Identify roles for disaster response,
- c. Identify issues for which satellite data can be utilized,
- d. Prepare a draft for the pilot project,
- e. Prepare for the pilot project,
- f. Prepare and hold a workshop.



3.2. Activities of Working Group for Agriculture-livestock

Activities of Working Groups for Agriculture-livestock are shown below:

- a. Identify issues in Agriculture and Livestock,
- b. Identify issues for which satellite data can be utilized,
- c. Identify roles in Agricultural and Livestock related data collections,
- d. Prepare a draft for the pilot project,
- e. Prepare for the pilot project, and
- f. Prepare and holding of a workshop.

4. Implementation Structure of Working Groups

Implementation Structure of Working Groups for Disaster Management and Agriculture-livestock is shown as Figure 4.1

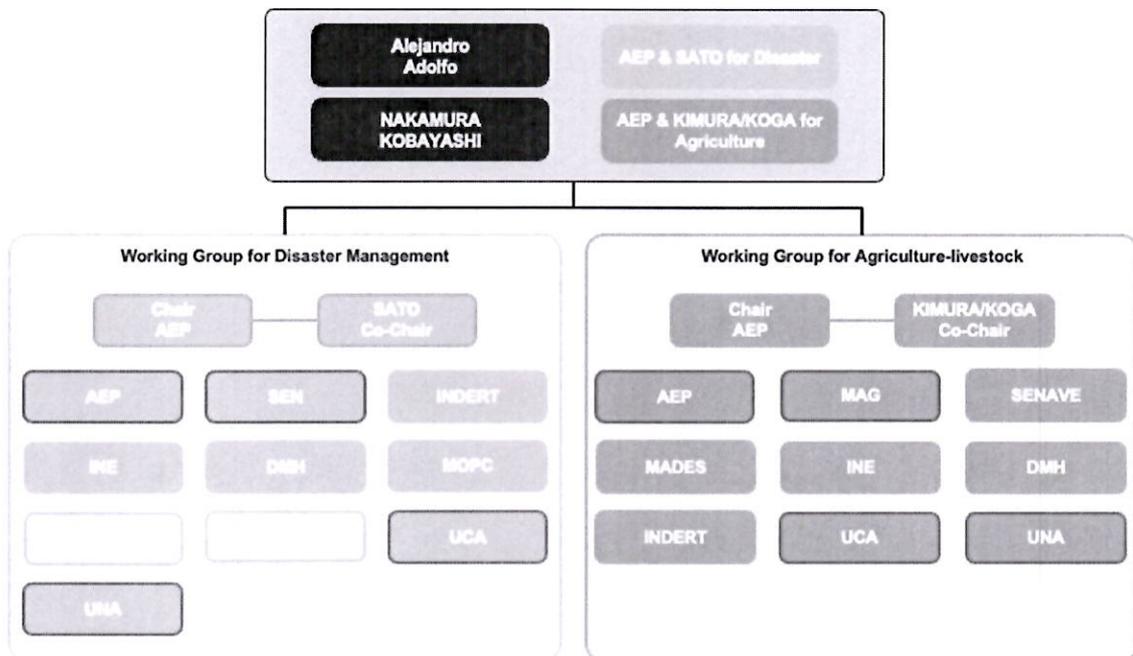


Figure 4.1.

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Annex III

Progress

The main progresses made during consultant team's first travel to the Project site are as follows:

For Output 1:

Activity 1-1: AEP colleagues and JICA Consultant Team took the Baseline Survey between February 26 and March 8, 2024 over the Internet. The results were translated by AEP colleagues, and JICA Consultant Team evaluated Paraguayan abilities of satellite data utilizations and applications. The targets of the Baseline Survey were: AEP, SEN, INDERT, INE, DHM, MOPC, MADES, INFONA, MAG, MEF, SENAIVE, UCA and UNA.

Activity 1-2: JICA Consultant Team began the arrangements of the Training Program in Japan. For visitations to Japanese companies were arranged with JICA Rwanda Project Team (Capacity Building Program for Space Sector in Rwanda) due to hold Training Programs in Japan in same period. JICA Consultant Team also arranged the program in Hokkaido for agriculture-livestock applications with Hokkaido University and Space LINK.

Activity 1-3: Through discussions, AEP colleagues and JICA Consultant Team agreed to have 6-month training program for satellite developments at Kyutech for enhancing AEP colleagues' basic capacities of satellite developments. The trainees would be selected as one of next activities/arrangements. The Activity 1-3 was updated and confirmed at the Extraordinary JCC Meeting held on April 24, 2024.

Activity 1-4: AEP colleagues and JICA Consultant Team continued to have discussions for designing the training programs.

Activity 1-5: Networking among AEP and Japanese ministries/institutions, universities and companies would be operated with training programs in Japan.

For Output 2:

Activity 2-1: AEP colleagues and JICA Consultant Team invited relevant Paraguayan institutions and had a pre-meeting for explaining about the purpose and activities of the Working Groups before their formal establishment. Working Group for Disaster Management was formally established at the Extraordinary JCC Meeting held on April 24. Members of Working Group are: SEN, MEF, INDERT, MOPC, INE, MADES, INFONA, DMH, UCA and UNA.

Activity 2-2: AEP colleagues and JICA Consultant Team had discussions to identify the issues in which space-related technologies can be effectively applied in the field of disaster risk reduction based on the results of the pre-meeting.

Activity 2-3: AEP Colleagues and JICA Consultant Team had discussions to design the outline of the pilot project. The pilot project would be developed through discussions in Working Group based on the outline.

Activities 2-4, 2-5, 2-6 and 2-7: Discussions for making clear issues and topics will be operated when Working Group established.

For Output 3:

Activity 3-1: AEP colleagues and JICA Consultant Team invited relevant Paraguayan institutions and had a pre-meeting for explaining about the purpose and activities of the Working Groups before the formal



establishment. Working Group for Agriculture-livestock was formally established at the Extraordinary JCC Meeting held on April 25. Members of Working Group are: MAG, MEF, SENAIVE, INDERT, INE, MADES, DMH, INFONA, UCA and UNA.

Activity 3-2: AEP colleagues and JICA Consultant Team had discussions to identify the issues which space-related technologies can be effectively applied in the agriculture and livestock sector.

Activity 3-3: AEP Colleagues and JICA Consultant Team had discussions to design the outline of the pilot project. The pilot project would be developed through discussions in Working Group based on the outline.

Activities 3-4, 3-5, 3-6 and 3-7: Discussions for making clear issues and topics will be operated when Working Group established.

5. Next Steps

Following items will be operated as the next steps:

- Training Program in Japan for Satellite Data Applications

JICA Consultant Team: JICA Consultant Team arrange and fix the Training Program in Japan for Satellite Data Applications on Disaster Management and Agriculture-livestock. The schedule would be arranged with JICA Headquarters.

AEP Colleagues: AEP Colleagues select trainees for the Training Program in Japan.

Both AEP Colleagues and JICA Consultant Team: AEP Colleagues and JICA Consultant Team enjoy the Training Program in Japan for Satellite Data Applications.

- Working Groups

Both AEP Colleagues and JICA Consultant Team: AEP Colleagues and JICA Consultant Team have discussions to design the pilot project.

JICA Consultant Team: JICA Consultant Team designs the target issues and drafts of pilot projects as preparations for discussions between AEP Colleagues and JICA Consultant Team for operating Working Groups.

AEP Colleagues: AEP Colleagues invite members of Working Groups and organize meetings for sharing and discussing the drafts of pilot projects and compile ideas for developing the pilot projects.

