

"Water Security for Peace and Development"

Session 3E3: "Promoting capacity development through training cooperation projects"



Institutional and Technical Cooperation for the Integrated Water Management

Portoviejo river basin in Ecuador



Ministerio del Ambiente, Agua
y Transición Ecológica



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In 2016, through the initiative of the French Embassy in Ecuador and the Government of Ecuador, a cooperation between the two countries was designed for the Integrated Water Management.



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Joint actions were assigned in Ecuador to the Water Authority and in France through financing from the Adour-Garonne Water Agency (AEAG) and technical assistance from the International Office for Water (OiEau).

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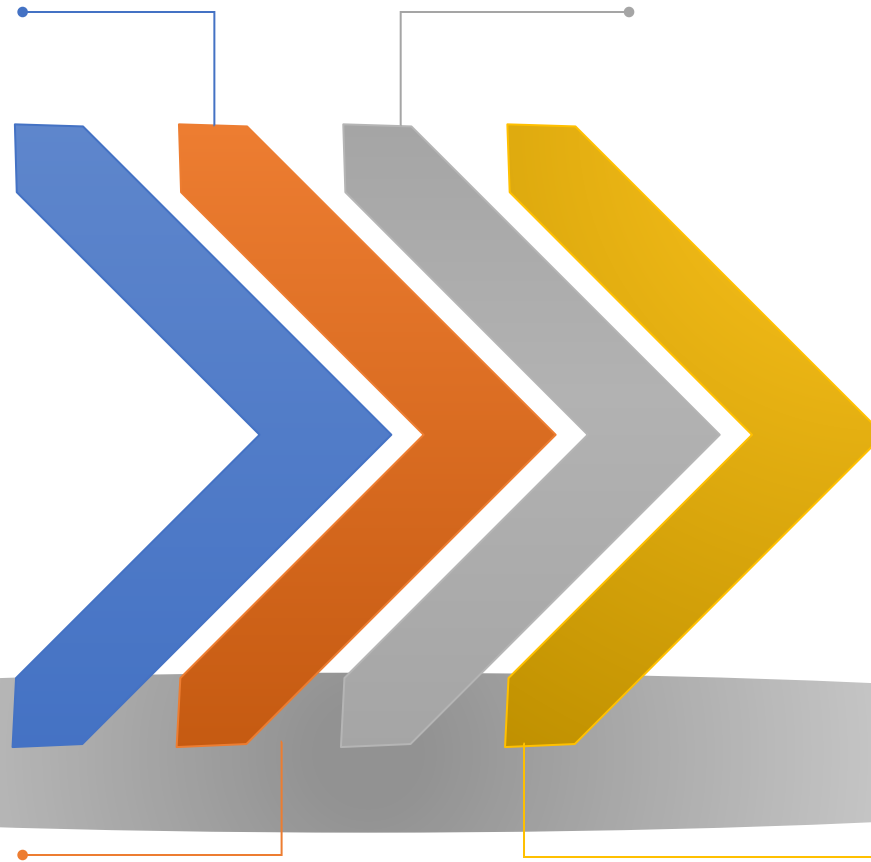
Components of the cooperation

Governance

Creation and activation of Basin Councils to ensure participatory and sustainable management of water resources.

Information systems for the IWRM

Development of information systems for integrated water resources management



Water resources planning

Development of planning instruments, mechanisms for the protection, conservation and recovery of water resources and their ecosystems, integrating the dimension of adaptation to climate change.

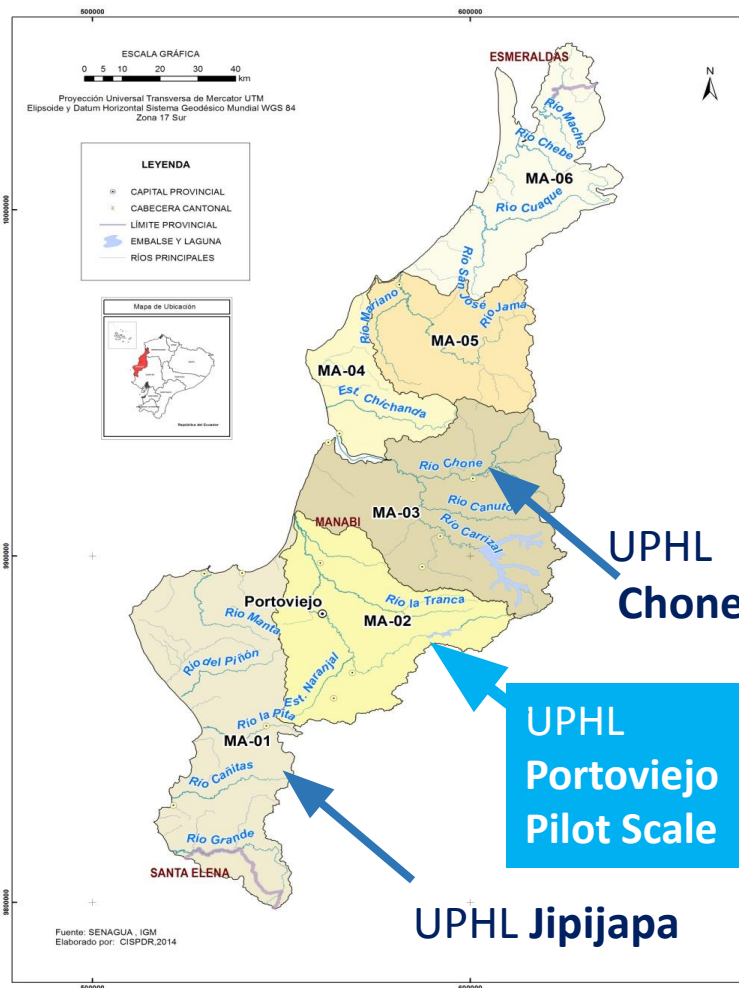
Sustainable financing mechanisms

Development of sustainable financial mechanisms for water resources management at the river basin level.

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Project pilot scale



Portoviejo river basin

- 2 090 km²
- 357 000 habitants
- watershed drains to the pacific ocean
- Medium temperature: 24-25°C
- Precipitation 60mm-2000mm
- Agriculture





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Key products:

2019

- ✓ Statement of the Basin Council
- ✓ Baseline of the Portoviejo River Basin
- ✓ Stakeholder map
- ✓ Diagnosis of pressures
- ✓ Prioritization of objectives

2020

- ✓ 1st Action Plan of the Portoviejo River Basin Council
- ✓ Portoviejo River Basin Council Action Program
- ✓ Strategic note on the articulation of planning instruments
- ✓ Proposal for a resolution between municipal governments for the Portoviejo River Basin Planning Commission.

2021

- ✓ Roadmap for supporting the Portoviejo River Basin Council: DZM 4-Basin Council - OiEau.
- ✓ Articulation of experiences on IWRM in Ecuador, Colombia, Cuba, France: reflections on the creation of the Basin Council Management Unit, and prospects of strategic alliances to be developed for IWRM in the Portoviejo River Basin.



2021-2022

Ministerio del Ambiente, Agua y Transición Ecológica (MAATE)
 Agencia del Agua Adur-Garona (AEAG)
 Oficina Internacional del Agua



(Visita de la presa de Poza Honda (Misión enero de 2022))



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Water Resource Governance and Planning

- Support for the logic of participation and dialogue between inter-institutional actors for IWRM at the local level (universities, authorities, ministries, private sector, local associations, community leaders)
- Presentation of territorial planning instruments with the participation of local governments.
- Exchange of experiences with the Chira-Piura Watershed Council in Peru, in coordination with other cooperating partners.

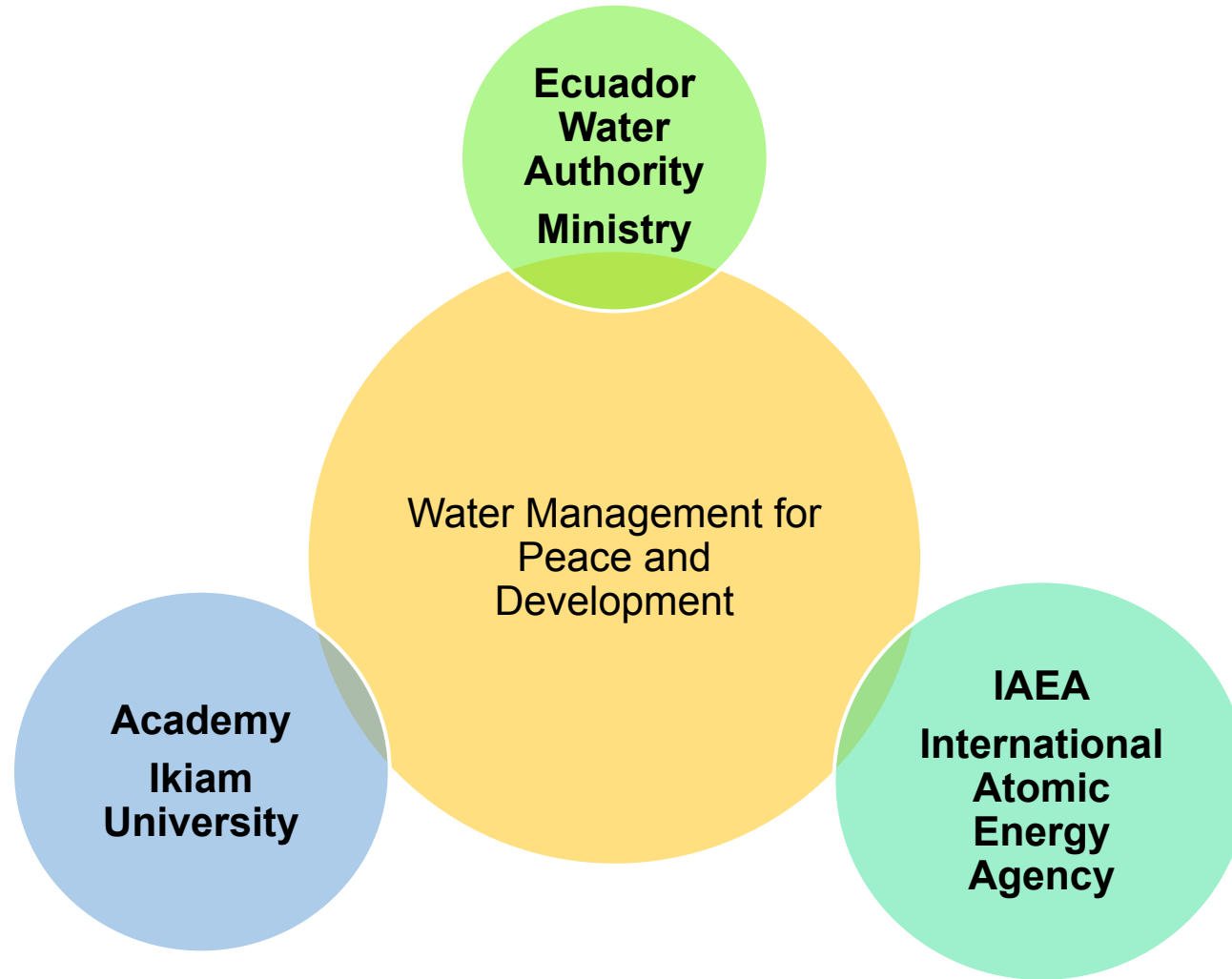
Information Systems

- MAAE-PUCE cooperation for data collection and update of the characterization of the Portoviejo and Chone watersheds.
- First cooperation (February-August 2020): Integration of drinking water supply data produced by the Drinking Water and Sanitation Boards in Chone and Portoviejo;
- Second cooperation (June-August 2021): Valorization of historical data (gauging, water quality, meteorology).

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Cooperation Projects International Atomic Energy Agency and articulation with the Academy

Interinstitutional Cooperation Agreement with the Academy: Specific Interinstitutional Cooperation Agreement between the Ministry of Environment, Water and Ecological Transition and the Regional Amazonic University - Ikiam.

Objective: To articulate a strategic alliance for the development of research on water and aquatic resources that promotes joint actions in the areas of research, management and services related to these resources.



Cooperation Projects International Atomic Energy Agency and articulation with the Academy

Project: Strengthening the Management and Control of Water Quality in the Zamora River Basin through the Application of Isotopic Techniques – ECU7007.

Objective: Strengthen the management of water resources through the application of isotopic techniques in mining areas around the Zamora River basin.

Project: Application of Radioanalytical and complementary techniques to monitor the presence of pollutants in aquaculture (ARCAL CLXXI) - ARCAL RLA 5079

Objective: Evaluation of the different contaminants derived from shrimp farming activities, which affect the public water domain; with the purpose of guaranteeing food sovereignty, through the issuance of policies and standards for integrated and integrated water management with an ecosystemic approach and by hydrographic systems.



Cooperation Projects International Atomic Energy Agency and articulation with the Academy

Interinstitutional Cooperation Agreement with the Academy: Specific Interinstitutional Cooperation Agreement between the Ministry of Environment, Water and Ecological Transition and the Regional Amazonic University - Ikiam

- Implementation of the National Water Reference Laboratory (LNRA).
- Technological strengthening with the first Isotopic Hydrology Area - Stable Isotopes (Deuterium and Oxygen 18), for services and research with new isotopic analysis techniques.



Cooperation Projects International Atomic Energy Agency and articulation with the Academy

Benefits and Achievements

Project: ECU7007

- Collection of primary information and analysis of data from the monitoring network of 57 points corresponding to rainwater, groundwater, surface water and sediments in the study area (Zamora River basin).
- Implementation of the Isotopic Hydrology Area - Stable Isotopes (Deuterium and Oxygen 18) in the LNRA.
- Strengthening of technical and technological capacities in groundwater issues and application of isotope techniques for Water Resource Management.



Cooperation Projects International Atomic Energy Agency and articulation with the Academy

Project: ARCAL RLA 5079

- Strengthening national water quality laboratories (LNRA and LANCAS) through the provision of inputs and reference material for the analysis of water samples from aquaculture use.
- Develop technical support for the issuance of criteria for the consumptive use of water in shrimp farming activities.





Thank you and
Regards from Ecuador