

# Science Sector – Mission to Central America

## Mission Report Marina Rubio

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<i>Division</i>	SC/HYD
<i>Travel Order:</i>	
<i>Dates of Mission:</i>	22-25 June 2015
<i>Type of Travel:</i>	Plane
<i>Country:</i>	Guatemala, Honduras and El Salvador
<i>Town:</i>	Guatemala City, Esquipulas, San Ignacio
<i>Region:</i>	Central America

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**Objective:** Technical mission in the framework of the Governance of Groundwater Resources of Transboundary Aquifers (GGRETA) Project, Trifinio region

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### ***Background to the Mission***

The objectives of the “Groundwater Resources Governance in Transboundary aquifers” project are: (i) improve the knowledge and recognition of transboundary groundwater resources, (ii) establish cross-border dialogue and cooperation between countries sharing the aquifer (iii) develop shared management tools; and (iv) facilitate governance reforms focused on improving livelihoods, socio-economic development and environmental sustainability.

The project is funded by the Swiss Agency for Development and Cooperation (SDC). The project will be implemented by UNESCO-IHP, as an integral component of the Transboundary Waters Assessment Programme (TWAP), a global multi-partner initiative co-financed by the Global Environment Facility (GEF) and UNESCO. The project includes three case studies; a) The Esquipulas-Ocotepeque-Citalá (Trifinio) Aquifer (Guatemala, El Salvador, Honduras), b) The Stampriet Aquifer (Botswana, Namibia, South Africa), and c) The Pretashkent Aquifer (Kazakhstan, Uzbekistan). The project adopts a two-step approach to multi-country resource management. Component 1 is focusing on the assessment of the hydrogeological, environmental, socio-economic conditions, legal and institutional frameworks, including the identification of transboundary concerns (diagnostic analysis) in the three pilot Transboundary Aquifers (TBAs). Component 2 is dedicated to establishing cooperation mechanisms among countries sharing the aquifers and facilitating priority actions and policy reforms.

The Trifinio case study is implemented in cooperation with the International Union for Conservation of the Nature (UICN) as local partner.

The objective of this mission was to meet the local and regional stakeholders to exchange views on the project and receive their feedback, as well as meeting the local consultant project team to review the execution of the activities and agree on the workplan for the period July-December 2015.

The Plan Trifinio (PT) is a trinational institution, headed by the 3 Vice-Presidents of the countries or their representatives, established almost 30 years ago to manage the development of the area as an “ecologically indivisible area”. Its logo includes the sentence “Agua sin fronteras” as water is seen as a unifying subject.

The agenda of the mission is attached.

### ***Activities undertaken during the mission***

22 June

- Meeting with Ms Rocio Cordoba, IUCN, Focal point for the project. Discussion on the current situation of the project and next activities.
- Meeting with Mr Leonel Armas, UNESCO Guatemala Office (UGO), to exchange information on the current situation in Guatemala and the relationship with the Guatemala Ministry of Foreign Affairs (MoFA Guatemala).

23 June

- Meeting with the Major of Esquipulas (Guatemala town in the Trifinio area) representative  
Highlights: in Esquipulas there is no water master plan, no enough knowledge on groundwater at municipal level (e.g., the person interviewed was in charge of water issues in the municipality but he thought that all groundwater had to be treated before its use and was not aware that a vulnerable shallow aquifer and a deeper aquifer were located under Esquipulas); urban growth without any planification or control and uneven number of inhabitants depending on the period of the year (consumption peaks); no legislation and no control at any level of well drilling; no inventory of wells. Positive considerations: the water supply in urban sector is sufficient since 3 years as result of technical interventions. An equipment to monitor the water quality in the area will be offered to Plan Trifinio in the framework of the project; it will be used to support the activities of the municipal Health Center. This Center organizes information meetings and specific trainings to change local population’s attitudes regarding pollution. He expressed the interest in the consolidated assessment and concrete recommendations to improve the local situation. [Note: the hotel where I stayed didn’t have any suggestion on water saving as it is usual in many hotels and this could be

addressed by the municipality – suggestion could be addressed to the municipality by the project]

- Meeting with the “Gerencia técnica” of the Plan Trifinio and territorial coordinators by country

Highlights – The technical management staff is very grateful to the project for its contribution to the knowledge on groundwater resources. They are happy to contribute to set a complete database on different aspects relevant to the interrelated natural aspects (forests, land use, etc) on the server donated by the project to the PT.

The Plan Trifinio, together with other institutions (municipalities, etc) are trying to make operational the GATT (Grupo de Accion Territorial del Trifinio), who will have a mandate to deal with transboundary issues.

The staff interviewed is also requesting technical training, in particular on information management and GIS, but also on how to address strategies for management (e.g., which indicators are useful) and how to convert numerical scientific information on simple messages calling to action.

The PT does not have technical staff devoted to gender issues and therefore no data on gender issues.

Note: this institution talks about water as a common regional good; however, they recognize that some political obstacles may arise regarding sharing of information.

Given the continuity and permanence of the institution, the Plan Trifinio should be the neutral repository of information, in which all countries trust. Groundwater is not visible, so trust from the countries is essential.

- Meeting with the responsible of the Office for Women at the Municipality of Esquipulas

Highlights - This Office is very active and reaches isolated communities. Among its roles, it provides trainings on different aspects aimed to improve their daily welfare as well as ecological attitudes (recycling plastic bags). It was agreed to evaluate the possibility to train some women regarding the importance of hygiene and sanitation and the role of water in these issues; a pilot case could have a final objective of building latrines and involve women in the promotion of their use and maintenance. Funds needed to support this activity would cover transportation of a trainer (could be a technician on environment) and some food for the communities, to attract them and to link the activity to an overall theme of the Office for Women, “healthy food”.

24 June

- Travel to El Salvador via Honduras to meet the Trinational Secretariat of the Plan Trifinio, the Country Directors and the Trinational Interinstitutional Team of Researchers on Groundwater that works under the coordination of the PlanTrifinio. This

team includes experts from academia and government institutions of the 3 countries and they played a consultative role for the GGRETA-Trifinio case study.

The results of the recent geophysics survey showing two aquifers, one located in the Esquipulas area (Upper Rio Lempa valley) and another one under the cities of Ocotepeque and Citala were presented. Elements of the technical work were explained in order to evidence a “high recent tectonic” element that avoid communication between both aquifers, even if an hydraulic connection is done through the Rio Lempa that acts a recharge and discharge area for the two aquifers. A round of questions from all experts was held and it was agreed to integrate these conclusions and the results of previous geochemical investigations for which a final report will be available very soon. The “sub-basin of the upper Lempa” will be the study area.

UNESCO-IHP and UICN provided a printed copy of the final report on geophysics to Ms Miriam Hirezi, current Executive Secretary of the Plan Trifinio.

During lunch time, UNESCO, IUCN and senior staff of Plan Trifinio exchanged views on the results of the project and in particular about next steps. Ms Hirezi thanked again UNESCO for its contribution and reiterated the will of Plan Trifinio to accompany upcoming activities.

Highlights: all representatives, including Mr Julian Muñoz, Director representing Guatemala, expressed their satisfaction for the concrete results. They all agreed that the unifying mandate of the institution provides a platform for cooperation at local level, even if the national level has to give the corresponding authorization. The staff of the Plan Trifinio uses without constraints the words “transboundary” and “cooperation”. UNESCO highlighted this unique role and reiterated its commitment to share all new studies results in order to provide the institution and the countries with the scientific information needed to improve the water resources management and with concrete recommendations that the countries can use. UNESCO informed that a new phase would have a particular focus on integrated surface and groundwater resources management at basin level, in strengthening the Plan Trifinio capacities and in organizing water diplomacy and gender-related activities.

There was not enough time for exchanges on the proposal for MoU between Plan Trifinio and UNESCO on water and protected areas issues, for which an official proposal will be sent to the Director of the Water Division and Secretary of the IHP.

- The meetings scheduled with the municipalities of El Salvador could not take place and then a field visit was organized with stops to look at the River Lempa in the three countries and the points where the geoelectrical survey was conducted.

25 June

- Technical meeting of UNESCO and UICN with the project consultant team, Ms Patricia Alvarado, coordinator and consultant on socio-economic aspects, Mr Fernando Samayoa, consultant on hydrogeological aspects and Ms Guadalupe Osegueda, gender component. Mr Luis Guifarro, GIS component, could not attend the meeting. Note: the team is trinational; the three nationalities are represented but each consultant work in the three countries.

All activities were reviewed to ensure consistency with the project methodology and full information of all the team.

The contract (International Partner Agreement) with IUCN from November 2014 to April 2014 being now closed, adjustments to the approved next one were discussed.

The upcoming Regional Seminar to be held in Guatemala the 17<sup>th</sup> July and the SDC Water Programme evaluation, which includes a mission of the evaluator to the region to assess Trifinio Case study and other projects end July, were also discussed.

- Meeting with Mr Julio Carranza, Director of UNESCO Guatemala Office and Mr Joram Gil, Chair of the UNESCO Chair on Water Resources Sustainability.

The political situation of Guatemala and the relationship with the MoFA of Guatemala were discussed. UNESCO informed about the results of the project and the activities of the next months, including the regional seminar and the evaluator mission.

It was evaluated that the Chair's involvement in the project had to be strengthened as it can provide trainings at different levels and as it is an institution trusted by the Government.

The Chair informed that a request of prolongation of the agreement, including all needed documents, was sent last year to UNESCO but no answer was received.

### ***Main achievements and major outcomes***

- Expression of high interest of all stakeholders regarding the project results and expression of support to the project activities.
- Request of dissemination of these results at different levels
- Request of trainings on groundwater resources management, information management and water issues for local communities on the basis of a diagnostic of the needs.
- Expression of formal support and will to cooperate from the executive and technical level of the Plan Trifinio
- Establishment of priorities with the local project team for the remaining period of the project
- Improvement of communication with the Guatemala Office and the UNESCO Chair