

WATER FOOTPRINT ASSESSMENT FOR THE PORCE RIVER BASIN, COLOMBIA

The National Study on the Water Footprint from the production perspective for Colombia (WWF, 2012¹), evaluated the water footprint from agriculture in the country. One of the key outcomes from this study consisted in the prioritisation of river basins in the country from the water footprint and water stress perspectives. The study recommends to deepen in the application of the water footprint assessment for the priority river basins, including other economic sectors and improving the temporal resolution.

The selected basin in this pilot project is the Porce river basin (see figure below), located in the Antioquia department (Colombia), with an area above 5.000 km². This basin is considered of national priority because of its high economic importance and the perceived anthropic pressure to which it is submitted. Additionally, the city of Medellin, the second biggest city in Colombia, sources its water from this river basin.

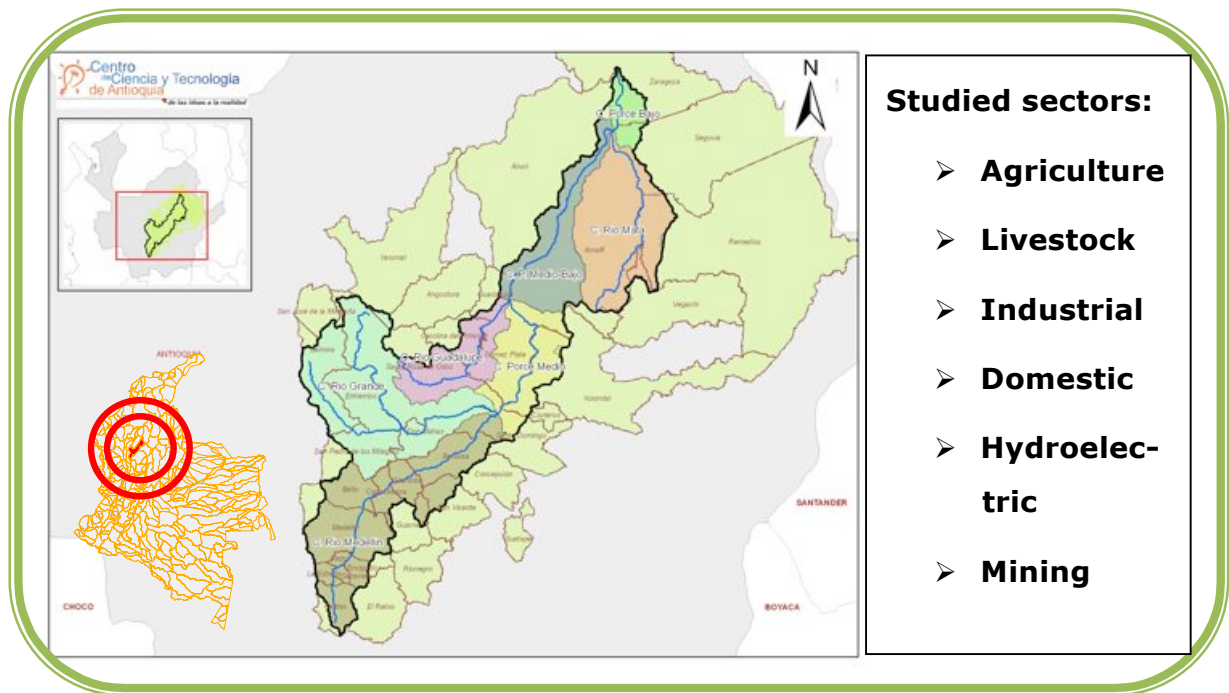
OBJECTIVE OF THE STUDY:

Conduct a water footprint assessment for the Porce river basin, including all economic sectors, with the final goal of formulating response strategies which could inform the policy discussion in the basin, and generating methodological guidelines for the geographical application of the water footprint assessment to river basins in Colombia.

Specific Objectives

- Calculate the water footprint of the processes taking place inside the Porce river basin, for the following sectors: Agriculture, Livestock, Industrial, Domestic, Energy and Mining; with a monthly temporal resolution.
- Conduct the environmental, economic and social sustainability assessment of the water footprints calculated per sector.
- Critically analyse the potential of the assessment results to inform local public policy and integrated water resource management in the basin.
- Formulate strategies for both the public and private sectors, aiming at achieving sustainability in the Porce river basin.
- Develop methodological guidelines for the application of the water footprint assessment for a geographical setting, namely a river basin, aiming at facilitating future applications of this type in the country.

¹ <http://www.wwf.org.co/?205138/Huella-Hidrica-Colombia>



METHODOLOGY:

This project is fully based in the Water Footprint Manual as developed by the Water Footprint Network (WFN), and in WFN's publications².

STAKEHOLDERS:

This is an interdisciplinary project in which several institutions will contribute with time investment, data, expertise and knowledge: Universidad de Antioquia, Universidad Pontificia Bolivariana, Escuela de Ingeniería de Antioquia, Universidad de Medellín, Tecnológico de Antioquia, Centro Nacional de Producción Más Limpia (CNPML), Catedra Unesco de Sostenibilidad de la Universidad Politécnica de Cataluña, Good Stuff International Suiza (GSI) and WWF Colombia. While the Centro de Ciencia y Tecnología de Antioquia CTA is technically leading the project, the Swiss Agency for Development and Cooperation (SDC, COSUDE in Spanish) has provided invaluable financial support to this project. Some of the institutions above mentioned are WFN partners or associates (CNPML, GSI, WWF and SDC), and have conducted the water footprint trainings offered by WFN and/or detailed water footprint assessments.

Other institutions involved in the project through technical and financial support are: Ministerio de Ambiente y Desarrollo Sostenible, CORANTIOQUIA, CORNARE, Área Metropolitana del Valle de Aburrá, Gobernación de Antioquia, Secretaría de medio ambiente de la Alcaldía de Medellín y Empresas Públicas de Medellín EPM.

² www.waterfootprint.org

TIMELINE:

Project on-going until March 2013.

ADDED VALUE OF THE PROJECT:

- Water Footprint Accounting per economic sector in the basin.
- Environmental, social and economic Water Footprint sustainability assessment for the basin.
- Proposition of policy guidelines for IWRM in the basin, based on results from the project.
- Formulation of strategies with the goal of achieving water footprint sustainability in the basin.
- Capacity building related to the geographical application of the water footprint assessment and its use as a tool informing policy.
- Methodological guidelines for the application of the water footprint assessment at the basin level.

MORE INFORMATION:

Centro de Ciencia y Tecnología de Antioquia - CTA
Tel (4) 444 28 72 ext. 117, Fax (4) 511 75 04
Carrera 46 No. 56 – 11, piso 15, Edificio Tecnoparque, Medellín
www.cta.org.co

Diego Arévalo - darevalo@cta.org.co
Claudia Campuzano - ccampuzano@cta.org.co
Jorge Garcia - jgarcia@cta.org.co