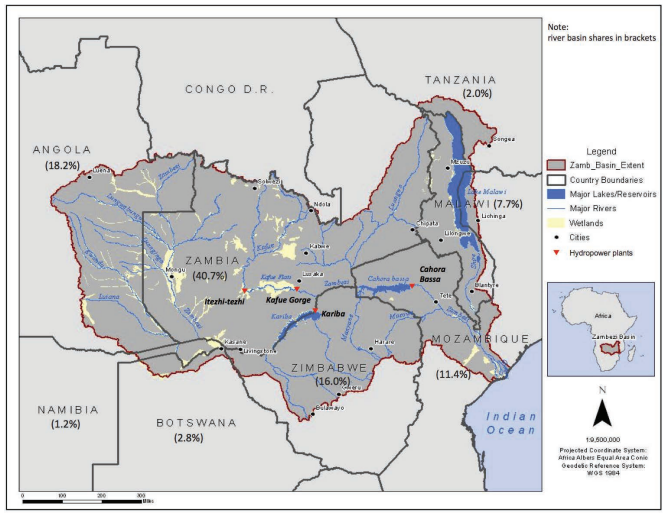
CASE STUDY

ZAMBEZI RIVER BASIN

Local partners: UNZA, EMU

The Zambezi River Basin is the fourth largest basin of Africa with an area of 1.32 million km^2 shared by eight countries (Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe) and populated by almost 40 million inhabitants. In 2004 an agreement among the eight riparian states was signed to create the Zambezi Watercourse Commission (ZAMCOM) with the purpose of enhancing the cooperation over the shared water resource of the Zambezi River Basin to increase agricultural yields, hydropower production and economic opportunities.



(Source: based on Water Balance map (http://waterbalance.org/projects-page/zambezi/)

DAFNE

Decision Analytic Framework to explore the water-energy-food Nexus in complex transboundary water resources of fast developing countries

The overall objective of DAFNE is to establish a decision-analytic framework (DAF) for Participatory and Integrated Planning (PIP). The DAF is a multi-step procedure that will enable the extensive, quantitative analysis of the anticipated effects of alternative planning options on the broad range of heterogeneous and often competing interests in transboundary river basins ultimately facilitating comparison and negotiation based on

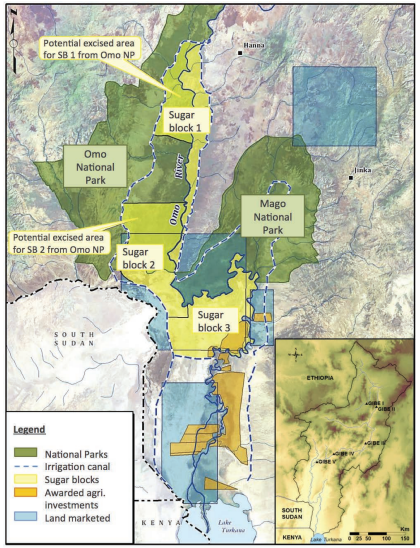
- **active engagement of stakeholders from the two case studies** in the process from the outset of the project, and
- integration of multiple and diverse international and local academic expertise ranging from natural sciences, water engineering, and environmental economics, to water governance and laws in order to develop **tools to facilitate social understanding of the impact and support comparative analysis of the alternative** through negotiations.

CASE STUDY

OMO RIVER BASIN

Local partners: IWMI, AMU, ACCESS

While Ethiopia is one of the countries with the highest hydropower potential in Africa with 45,000 MW, only about 5% has been exploited. To satisfy energy and water demands and enhance the national economy, the Government of Ethiopia is developing the Gibe Hydroelectric Cascade scheme (4,600 MW) and the Kuraz Sugar Development Project of about 175,000 hectares in the Omo-Gibe basin. However, a decrease in the flow of the river, a change in the natural flow pattern and silt trapping, due to the above mentioned projects, would considerably affect the biodiversity of the Lower Omo Valley and also the Lake Turkana, in Kenya, since 80% of its inflow depends on the Omo River.



(Source: based on Human Rights Watch map)

Omo River South Ethiopia,
Africa, 2015.

DAFNE

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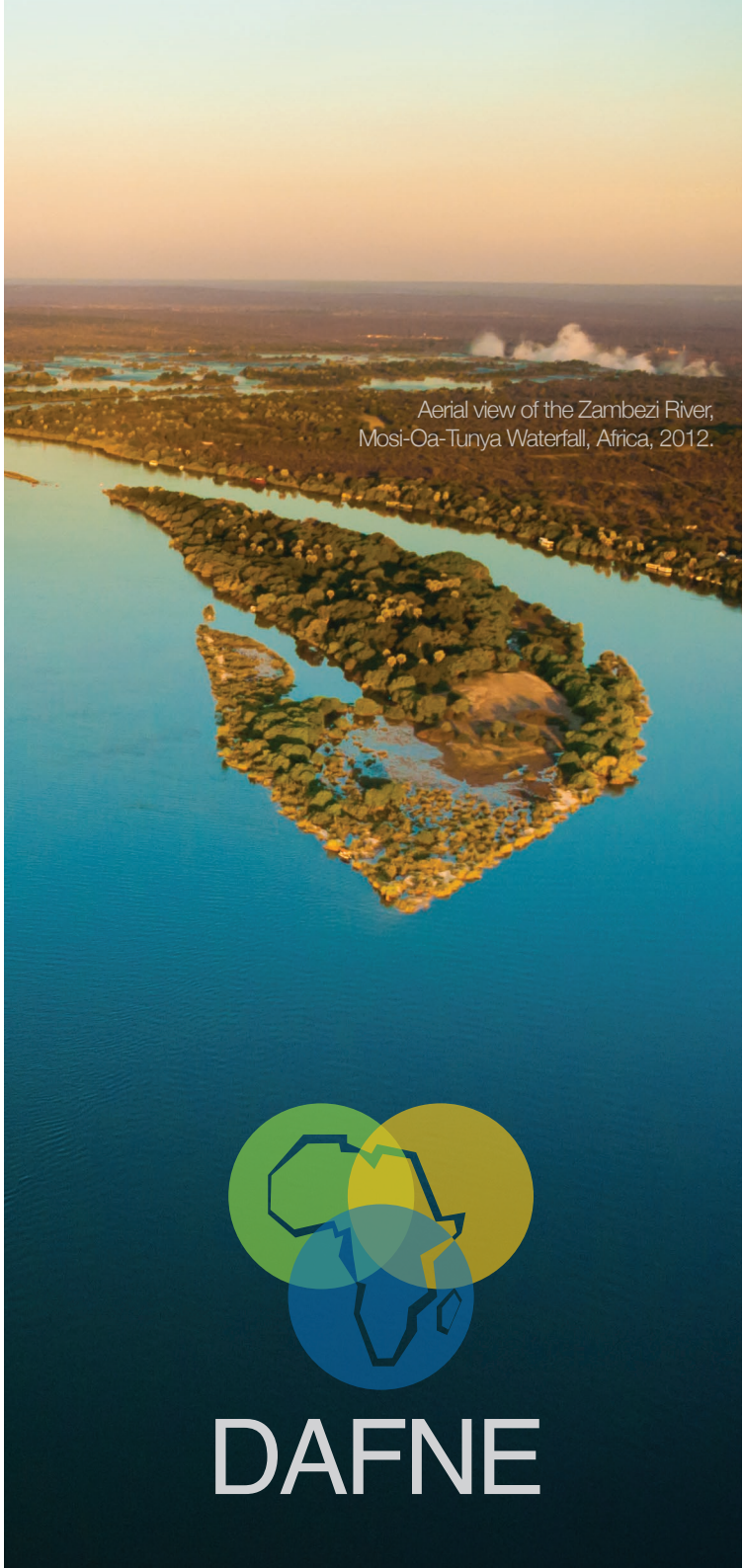

Aerial view of the Zambezi River,
Mosi-Oa-Tunya Waterfall, Africa, 2012.

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