



## Symposium Conclusions

### 1<sup>st</sup> Rhine-Mekong Symposium

#### “Climate Change and its Influence on Water and Related Sectors”

8-9 May 2014

Koblenz, Germany

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#### Preamble

Representatives from the International Commission for the Hydrology of the Rhine basin (CHR), the International Commission for protection of the Rhine (ICPR), and the Mekong River Commission (MRC), government representatives, experts and scientists met on 8 – 9 May 2014 in Koblenz, Germany, at the 1<sup>st</sup> Rhine-Mekong Symposium under the theme “*Climate Change and its Influence on Water and Related Sectors*”. The meeting enabled the river basin organisations to share knowledge, understanding and challenges on the different and common issues as well as to discuss potential cooperation.

The Symposium recognised that climate change has taken its toll on hydrological regimes, livelihoods and economies in both the Mekong River Basin and the Rhine Basin and acknowledged that mitigation of and adaptation to changing climate impacts are essential.

As the world’s tenth longest river, the **Mekong supports an** exceptionally diverse and productive freshwater ecosystem that provides livelihoods and food to about 60 million people. The rapidly-growing Mekong River Basin has experienced development pressures such as changes in land use, intensive irrigation, hydropower development, development of flood control structures and other infrastructures. The region is experiencing less predictable climate conditions and more extreme weather. Rising temperatures and unpredictable rainfall are bringing drought to some areas and flooding to others. Sea level rise is increasing saltwater intrusion to farmland in the Mekong Delta.

The **Rhine**, the third biggest European river accommodates approximately 60 million people and provides drinking water sources to 30 millions. For many centuries, the Rhine has played an important role in the social, political and economic development in Europe. Multiple uses, conflicting interests and environmental and flood problems in and along the river have highlighted the importance of an integrated approach. Climate change is taking its toll in the basin. For example, rising water temperatures have forced power plants to reduce their production in recent years. Extreme changes in water flow, especially long periods with very low discharges, will also have economic and social impacts. These extreme events, together with a range of other anthropogenic impacts, will bring about far-reaching consequences on the environment and economy in the Rhine countries.

Participants of this 1<sup>st</sup> Rhine-Mekong Symposium concluded that the two basins share common challenges and practices which provide a basis for potential cooperation amongst their river basin organisations.

## **Common challenges and practices**

1. The two river basins share many of the same challenges in addressing the impacts of climate change today and in the near future. Climate change in both basins can already be observed in the increase in temperatures, which have similar ranges (+0.08 to +0.18°C/decade). Whereas there are similar patterns in both basins for the observed sea level, recorded precipitation distributions remain more heterogeneous. However, there is a tendency in both basins of an increase of precipitation in the respective wet season. In spite of high uncertainty and a less precise model signal concerning future precipitation, an increase in heavy rain events is likely. Therefore the hazards are similar in both basins, but risks in Europe are mainly of an economic nature, while in South East Asia risks are of a more social nature (food security, health and livelihoods).
2. Climate change impacts on the basins' water resources, ecosystems and livelihoods are likely to be significant and a long-term issue. Similar approaches were chosen for both basins in order to provide the necessary basis for the development of a basin-wide adaptation strategy. In both basins, comparable studies assessing the climate and hydrological changes in the past and in the future have been conducted or are currently underway. Impact studies are investigating the response to common hazards in the same fields of interest. Sharing the existing study results and experiences will lead to mutual benefits and will create synergies and potential savings.
3. Transboundary aspects of adaptation to climate change should be seen as an integral part of a broader development policy, and not merely as an environmental issue.
4. Transboundary cooperation addressing changing climate impacts can enhance a broader set of benefits and opportunities than approaches by individual countries.
5. The roadmaps for formulating transboundary climate change adaptation strategies for the Mekong and the Rhine have adopted similar approaches. There are differences between the legal framework of the Rhine Commissions and the Mekong Agreement. Common challenges in both basins exist with regard to the uncertainty associated with future impacts from climate change as well as measuring the costs and benefits of adaptation. An adaptive management approach is therefore promoted in both basins.

## **The way forward**

6. The participants recognize the common challenges and differences and the potential for further cooperation. The participants invite the river basin organizations to convene the second Rhine-Mekong Symposium with the view of addressing the common challenges and differences.

Koblenz, Germany, on 9 May 2014.