

Annexes IX and XII Hydropower Flood Control and Drought Management Services - Template for Case Studies Contributions

IEA Hydro's Annexes IX and XII are jointly collecting case studies of hydropower plants, dams and reservoirs providing flood control and drought management services. The main goal of publishing a compilation of case studies is to provide a global overview of the additional benefits from hydropower to flood control in wet season and augmentation of water availability in drought seasons.

The case studies can be related to flood control or drought management services provided in single or multiple catchments, from existing single or multiple hydropower plant systems. The case study reports should provide physical and socio-economic description of the studied catchments with reference to natural flood and drought regimes and their associated potential socio-economic impacts. The case study reports should also provide information about the hydropower plant(s) which have been built (or are planned to be built) in these catchments.

The main part of the case study reports should be devoted to assessments of the role and value, in the past or in the future, of hydropower plants operation in the mitigation of flood and drought socio-economic impacts.

Climate Change

As Annexes IX and XII activities are also concerned on how climate change can affect the quality and value of hydropower plant flood and drought services, descriptions of how climate change influences the effectiveness and efficiency of these services in the studied catchments are also welcome. The underlying assumption of Annex IX and XII activities is that hydropower reservoirs are important for flood control and drought management in today's climate conditions and will be even more important in the future of a climate-changing world.

Report Guidelines

The page format should be set to A4 (297 mm x 210 mm) size, and pages should NOT bear a company logo. Please type single-line spaced and in one column. Please use 12 pt Times New Roman, or a similar font, and adhere to the style of the sample pages. The report title should be 18 pt Times New Roman bold. We are expecting that each case study report would be within a length of <u>four</u> A4 sides, including figures and pictures. Please submit the contributions using a popular science language as both pdf and word documents. The next page contains instructions for producing the case study report.

XXXXX Hydropower Plant flood control and drought management services and climate change impacts

Introduction

The **Introduction** can be used to provide the physical and socio-economic description of the studied catchment(s) with reference to their natural flood and drought regimes and associated potential socio-economic impact. The **Introduction** can also provide information about the hydropower plant(s) which have been built (or are planned to be built) in these watersheds and provide (or will provide) flood and/or drought services.

Maps showing the main river and its tributaries and locations of hydropower plants and flood prone zones and drought vulnerabilities crop production areas and cities and rural communities are welcome. Tables and Figures can illustrate the flood and drought natural regimes.

Assessment of Flood and Drought Services

The Assessment session is to be used to describe the assessment of the <u>role</u> and <u>value</u>, in the past or in the future, of hydropower plant(s) design and operation in the mitigation of flood and drought socio-economic impacts.

Tables and Figures can illustrate the flood and drought regimes after the construction of the hydropower schemes and be compared with their natural counterparts. Please use a popular science language.

Climate Change

If available, descriptions of how climate change influences the effectiveness and efficiency of these services in the studied watersheds can be described in a separate session.

Conclusions

Conclusions with the main results should also come in a separate session.

References

Please provide references to papers, articles, reports and internet sites for further reading when available.

Submission

Please submit your case study report by the end of February 2020 to the Operating Agents for Annex IX and XII jointly:

damazio@cepel.br atle.harby@sintef.no