

**Goal of Approach:****Study area: Water and Agriculture sectors of Nepal****Objective:**

- Assess the economic impact of climate change under a BAU scenario in the medium- and long-term
- Analyze costs and benefits of various climate compatible development policy options
- Identify, where appropriate, geographical variances in the economic impact of climate change
- Build the capacity of government officials and key stakeholders for carrying out economic assessment of climate change impacts

**Expected Outcome:**

- Headline (aggregate) and sectoral estimates of the impacts and economic costs of climate change
- A ranking of climate compatible development policy options, according to their economic efficiency

**Study Approach:** Stakeholder consultation, field verification, literature review, scenario based impact modelling

**Tools:** Regional Climate Modeling (including the PRECIS model), DSSAT model to look at the agricultural sector, a set of models to consider the effects on hydro-power generation including a long-term power system /generation investment planning model (Valoragua/WASP-4), and econometric models related macro economic linkages.

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**Main elements of the implementation strategy**

Study being conducted in Nepal is in line with Climate Change Policy 2011 and NAPA document of Nepal. During the study different stakeholders including Ministries, Academia, NGOs, Civil society are involved.

**Targeted beneficiaries**

The key beneficiary of the study is the government of Nepal. The study will provide a baseline data/information to formulate climate compatible strategy and policy options to effectively address the current and likely adverse impact of climate change. Further, it will help private sectors, whose business is related to the climate sensitive sectors (e.g. water, agriculture) of Nepal.

**Any significant lessons learned**

The project is at its early stage and lessons are yet to come.

**Resource requirements**

Assessing the impact of climate change and quantifying the loss and damages requires an exhaustive study and so claims huge financial resources, several data/information and human resources. Specifically, followings are the resource requirements:

1. Availability of appropriate modeling tools
2. Generation, availability of baseline data/information
3. Availability of multidisciplinary human resources

<b>Potential for replication or scaling-up</b>
<ol style="list-style-type: none"><li>1. Need resources and field verification</li><li>2. Exist possibility of scaling-up</li></ol>
<b>Any additional information</b>