Economic Impact Assessment of Climate Change in Key Sectors in Nepal

Integrated Development Society (IDS) Nepal
In collaboration with
Practical Action Consulting (PAC) Nepal
and the
Global Climate Adaptation Partnership (GCAP), UK

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Presentation outline

- Project Rationale
- Objectives of the Project
- Project Plan and Activities
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- Methodology and Approach
- Sectors and sub-Sectors for study
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- Project Team

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Project Rationale

- Nepal's economic growth : climate dependent
- Large proportion of GDP and employment : associated with climate-sensitive sector, such as agriculture
- Climate change impacts and social vulnerability: unevenly distributed across regions of Nepal and segments of society
- Current climate variability and climate-induced events: already lead to major economic losses and costs (including social). Nepal experiences adaptation deficit and requires urgent action
- Assessment of the current and potential losses and benefits urgently needed
- Rigorous economic analysis of climate change impacts required to design climate compatible development

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Objectives of the Project

- 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

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Project Plan and Activities

1. Inception Phase: (First 3 months)

- Establish a Governance Structure
- Hold a series of kick-off meetings
- Hold the thematic consultation workshops
- Review and synthesize the available literature on impacts, vulnerability and adaptation
- Identify capacity building opportunities for government officials and stakeholder institutions and develop a capacity building plan
- Draw up a stakeholder communication plan
- Develop implementation work plan for the main implementation phase
- Hold an inception meeting where the proposal for the main work of the implementation will be finalized

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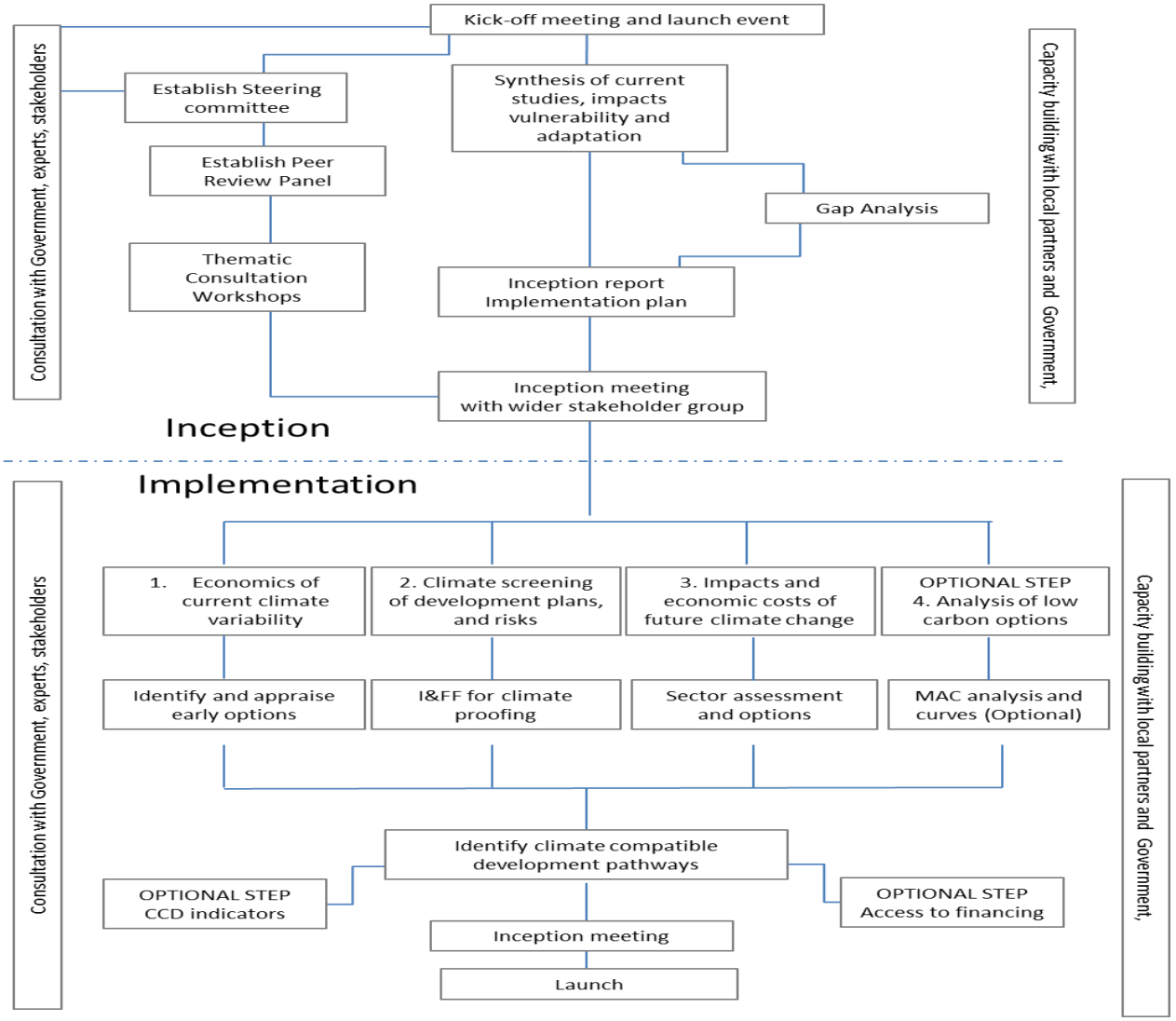
Project Plan and Activities…

2. **Implementation phase: (subsequent 15 months)**

- Detailed analysis of economic impacts, costs and benefits of action (policy response)
- Number of alternative approaches for this phase combing high level aggregated analysis, national sector modeling and local case studies
- Assessment includes four main work streams:
  - Costs of current climate variability and extremes
  - Climate change associated risks to current plans over the short-medium term
  - Longer term (>2030) impacts and costs of future climate change
  - Potential low carbon options available- optional
- Synthesis of information to build up climate compatible development pathways
- Capacity building of Government officials and national experts
- Last three months: Finalization of the report (incorporation of suggestions and advice from steering committee /advisory board)



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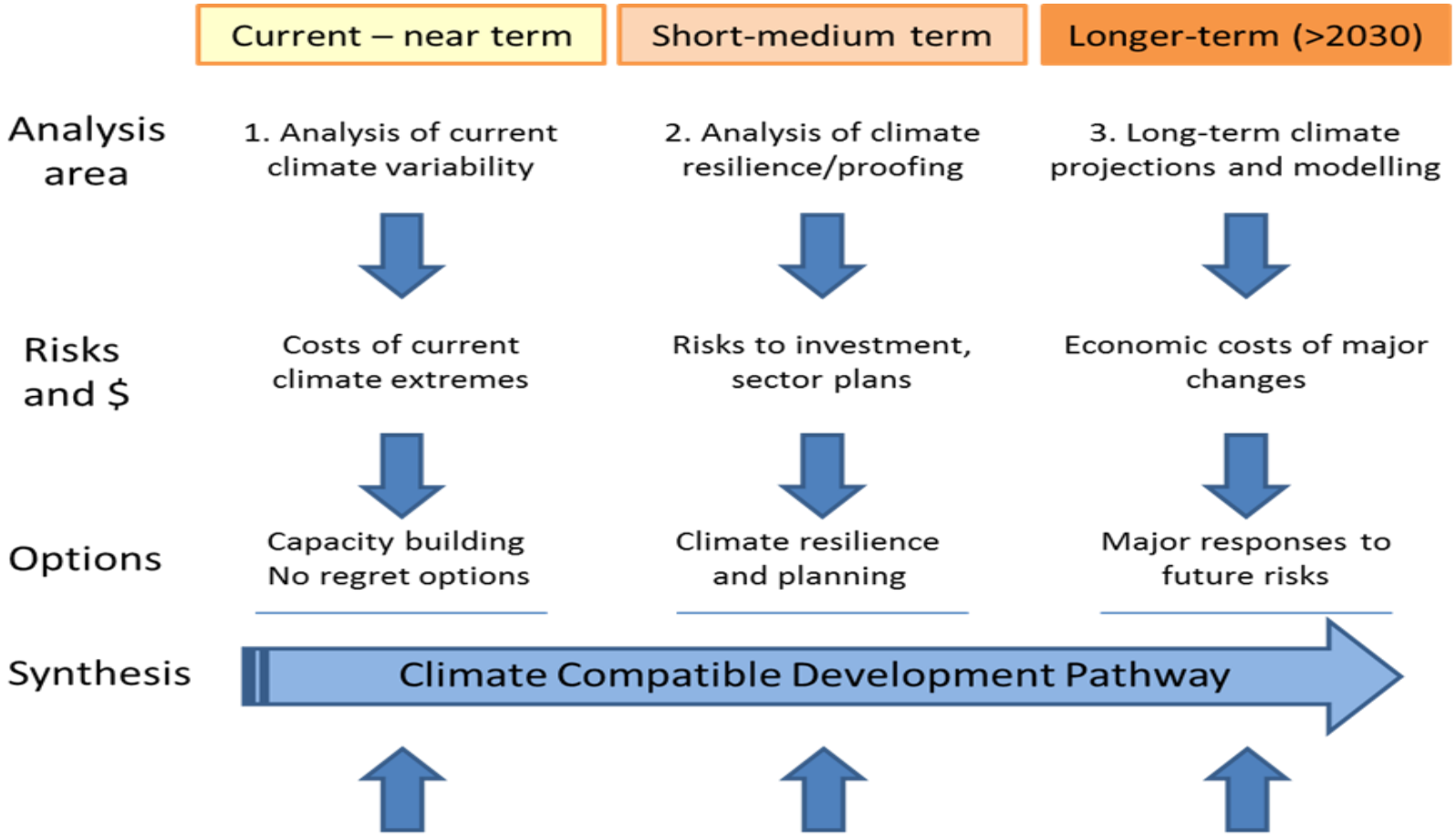
Proposed Work Streams



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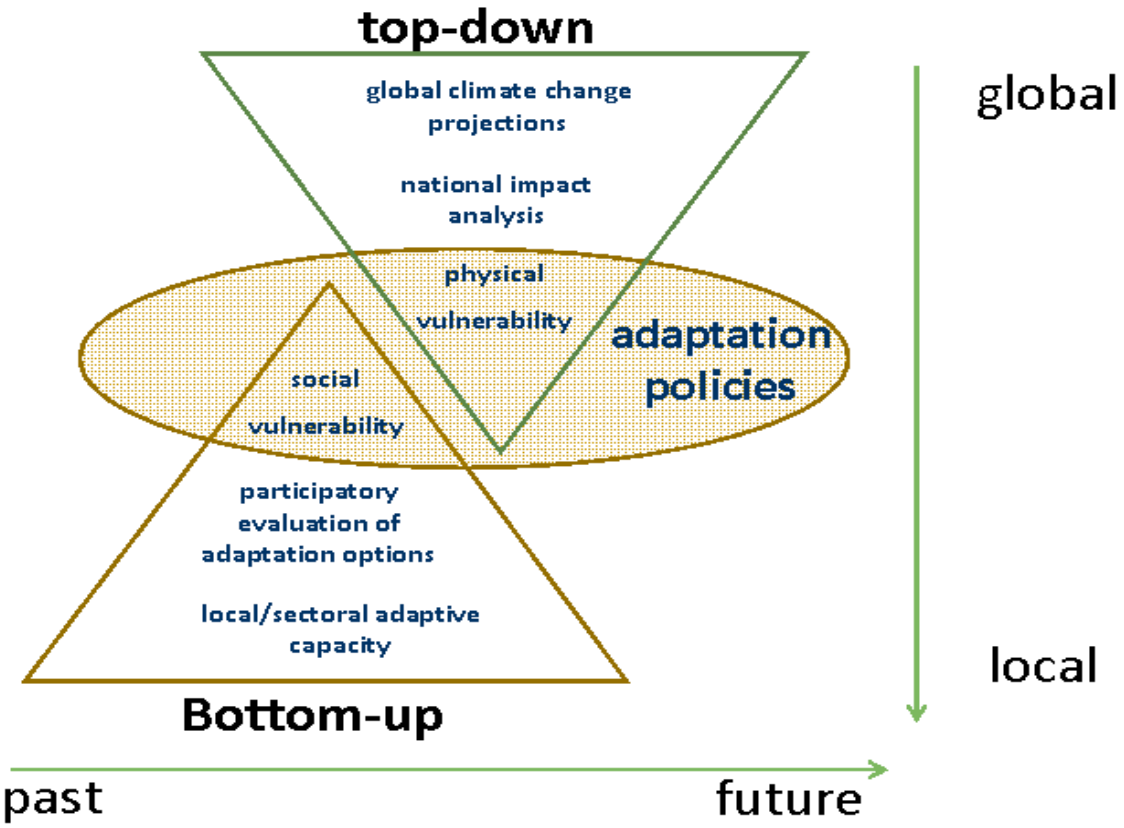
Methodology and Approach

We believe that it is useful to use both top-down and bottom- up approaches to ascertain plausible estimates that meet the objectives of this study



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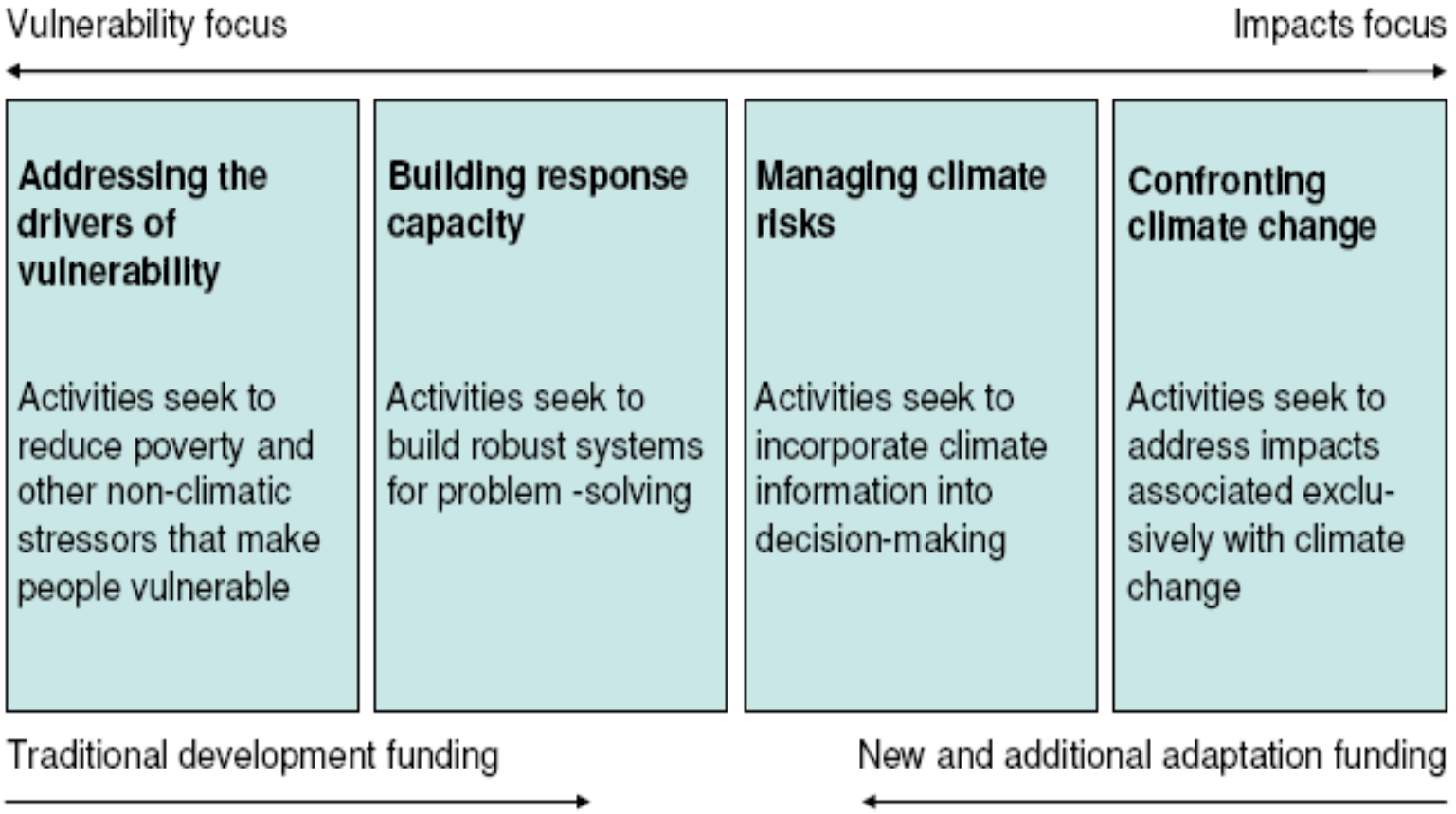
Methodology and Approach…

Climate Compatible Development (adaptation) needs to tackle several different elements



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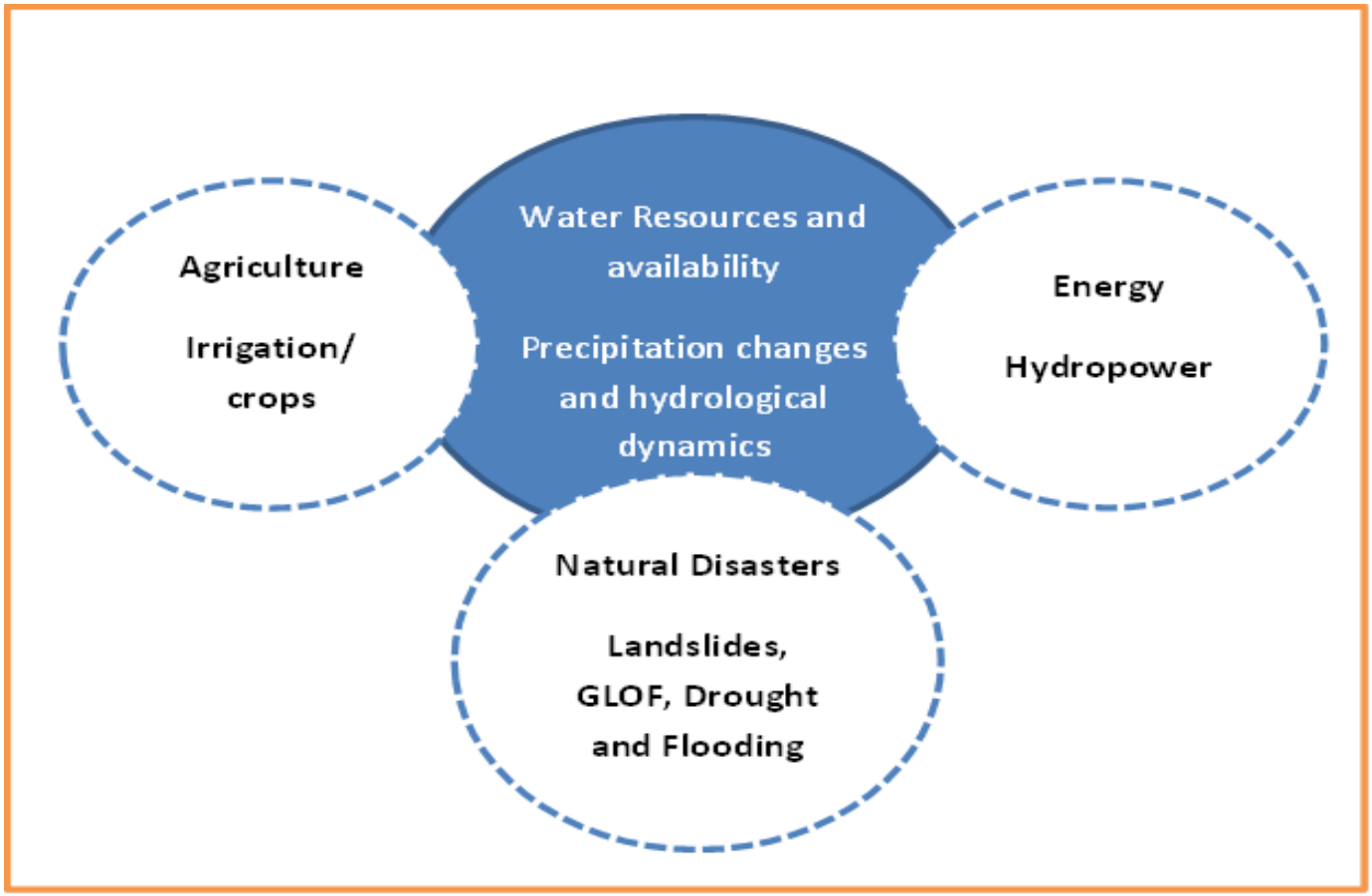
Assessment of Sectors and linkages between them



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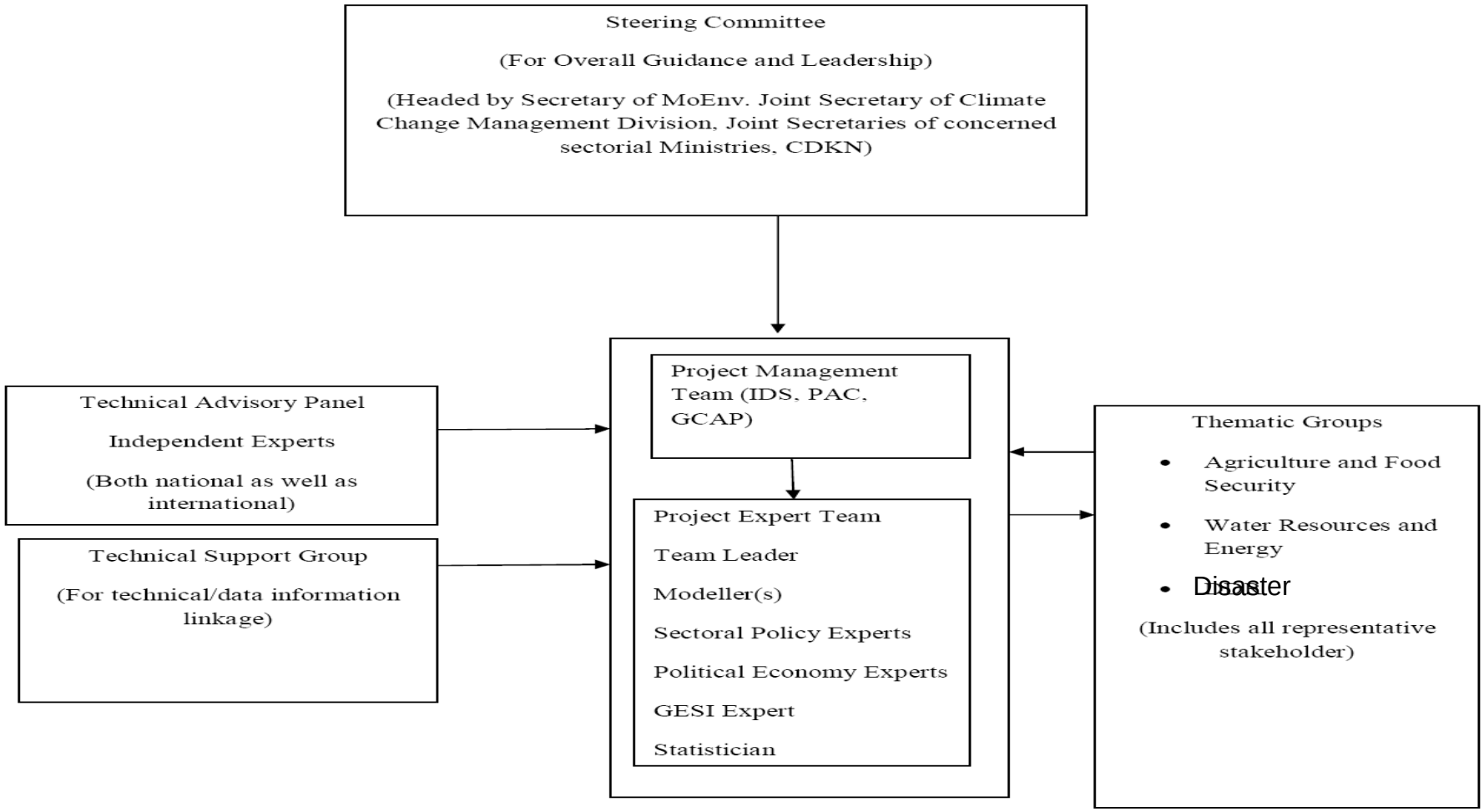
(For Overall Guidance and Leadership)

Governance of the Project



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Project Steering Committee Composition

- Coordinator- Joint secretary CCMD
- Member secretary-under secretary, CCMD
- Members- Representative of NPC, MoF, MoEn, MoAC, DWIDP

➢ Expert Members:

- Dr. Arun Rijal, Member, Climate Change Council
- Dr. Posh Raj Pandey, Economist
- Prof. Dr. Punya Prasad Regmi, Agro Economist

➢ Other Members

- Representative of CDKN
- Representative of IDS Nepal and Team Leader

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CDKN Climate & Development Knowledge Network

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Deliverables

Inception Phase:

- Project Steering Committee
- Capacity building plan
- Stakeholder communication plan
- Inception Report
- Implementation work plan

Implementation Phase

- Economic model used for impact assessment. Data Sets on which the economic assessments would be made
- Policy Briefs and other knowledge products summarizing the findings of the study and the policy implications

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Deliverables…

- Activity Report (s) summarizing policy dialogues (plus terms of reference of any follow-up initiatives proposed).
- Activity Report summarizing dissemination and awareness raising activities.
- Quarterly Reports for CDKN highlighting the progress and impact of the project, as well as guest blogs for the CDKN website, photos and interviews documenting impact.
- Peer- reviewed Journal Article (s) summarizing the key findings, outcomes or approach of the project of interest to the international research community.
- Final Report on Economic Impacts of Climate Change containing economic analysis documenting the results of economic modeling of climate change impacts and the costs and benefits of policy options
- Final M&E Report evaluating Economic Impact Assessments and the impact that the project has had on policy-making in Nepal.

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Expected Outputs

- 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

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Project benefits to Government

It is expected that the project will help Government:

- Conduct assessment of losses and benefits from climate change in various geographical areas and development sectors,
- strategically determine where investments are needed in the short, medium and long-term to adapt to current climate variability and future climate change, and identify where mitigation opportunities can be achieved,
- identify where the capacity development is required, where institutional frameworks need to be strengthened and where further studies and research are needed, and
- increase access to climate finance and technological support.

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Project team
(by consortium partner)

- **IDS Nepal**

➢ Prof. Dr. Govind Nepal, Lead Expert/Team Leader

➢ Dr. Dinesh C. Devkota, National Climate Change and Policy Expert

➢ Ms. Prabha Pokhrel, Focal Point for CDKN/ National Social development, Gender and Social inclusion Expert

➢ Dr. Tara Nidhi Bhattrai, National Water, Energy, Infrastructure and Natural Hazards Analyst

➢ Dr. Ram Sharan Kharel, Modelling Expert

➢ Mr. Kamal Devkota, Project Administration and Finance

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Project Team

- **PAC Team**

- Ms. Moushumi Shrestha, Project Manager - Planning, Monitoring and Quality Assurance
- Mr. Gehendra Gurung, National Climate Change, Agriculture, DRR and Adaptation Expert
- Dr. Ram Manohar Shrestha, National Resource Economist, Expert in National Economics and Energy
- Mr. Apar Paudyal, Project Coordinator
- Dr. Michelle Slaney, International Climate Change Specialist
- Ms. Pooja Shrestha, Project Administration and Finance
- Mr. Steven Hunt, International Energy and Low Carbon/Climate Compatible Development Expert

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Project Team

- **GCAP Team**

➢ Mr. Paul Watkiss, Lead Expert on International Economic Impact Modelling and Assessment

➢ Mr. Tom Downing, International Expert Advisor on Agriculture and Adaptation

➢ Mr. Hefin Gwyn Rees, International Expert on Climate and Water

➢ Mr. Alistair Hunt, International Climate Change and Adaptation Economist (Senior Economist)

➢ Mr. Matt Savage, International Investment and Financial Flow Expert (Senior Economist)

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On behalf of the entire team,

Thank you for your attention!

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