Environment/Climate Change Statistics

Experience of Nepal

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Climate Change Issues in Nepal

• Nepal contributes only around 0.027 percent to total global emissions, although it is one of the countries most vulnerable to the impacts of climate change

• Nepal submits its second nationally determined contribution (NDC) document to UN outlining its targets for the next decade to reduce emissions and support vulnerable communities to adapt to the impacts of climate change

• The government strongly believes that these targets can be achieved as they have been set after consultation with various ministries, stakeholders and experts
Current status

• Separate Environment Statistics Section in CBS
• Regular publication of Environment Statistics (Censuses, Surveys, admin data)
• National Climate Change Impact Survey Report, Waste management Baseline Survey Report
• Second Nationally Determined Contribution (NDC) Report (Ministry)
• National Communication Report (Ministry)
• Community questionnaire is added in population census where one of the thematic area is environment/disaster
Both of these publications inform corresponding indicators in the Global Set
National consultation on the draft Global Set of Climate Change Statistics and Indicators

Formation of technical committee leading by CBS including from Ministry of Forest and Environment & other stakeholders

• Meetings conducted and discussed about how we can contribute

Consultation workshop with stakeholders

• The discussions were made to develop indicators which can respond to main climate change policy questions in an internationally comparable way

• As provisioned in UNSD framework agreed to keep these as five areas to be consistent with the UNSD framework.

• Basically, indicators in Agriculture, Forestry and Other Land Use (AFOLU), Energy, and Waste sectors were discussed in priority on the basis of relevancy of Nepal

• Consensus was made to omit some indicators from global set, which are not relevant in the context of Nepal for example, issues related with ocean and other statistics which were beyond the scope of national assessment
Climate Change Impacts on Crops, and Livestock

Climate change impact on crops and livestock in last 25 years

- 60% Yes, 46% No, 6% Not applicable for emergence of diseases in crops.
- 54% Yes, 34% No, 14% Not applicable for insects/pests in crops.
- 14% Yes, 0% No, 0% Not applicable for emergence of new diseases in livestock.
# Climate Change Impacts on Human Health

## Climate Change and Human Health

<table>
<thead>
<tr>
<th>Code</th>
<th>Area Description</th>
<th>Relevance</th>
<th>Methodological Soundness</th>
<th>Data Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2152</td>
<td>Number of people whose destroyed dwellings were attributable to climate change and humanitarian emergencies</td>
<td>Yes</td>
<td>Planning Commission</td>
<td>Yes Report on Climate Change Impact Survey 2016</td>
</tr>
<tr>
<td>2160</td>
<td>Increase of cases of climate-related diseases</td>
<td>Yes</td>
<td>Planning Commission</td>
<td>Yes Climate Change Impact Survey 2016</td>
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<tr>
<td>2161</td>
<td>Incidence of climate-related airborne diseases and conditions</td>
<td>Yes</td>
<td>Planning Commission</td>
<td>Yes Climate Change Impact Survey 2016</td>
</tr>
<tr>
<td>2162</td>
<td>Incidence of climate-related water-related diseases and conditions</td>
<td>Yes</td>
<td>Planning Commission</td>
<td>Yes Climate Change Impact Survey 2016</td>
</tr>
</tbody>
</table>

## Graph

- **Increase the incidence of vector borne diseases:** 81%
- **Increase the incidence of water borne diseases:** 79%

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*Climate change impacts on human health in last 25 years*
Climate Change and Natural Resources: Water and Biodiversity

Observed changes on water resources in last 25 years

- Changes on surface water
- Changes on water sources
Climate Change and Natural Resources: Water and Biodiversity...

Changes in the status of animal and plant species in last 25 years

- Insects: 57% changed, 21% not changed
- Birds: 78% changed, 12% not changed, 9% don't know
- Wild animal: 61% changed, 12% not changed, 13% don't know
- Aquatic plant: 15% changed, 20% not changed, 50% don't know
- Aquatic animal: 33% changed, 17% not changed, 38% don't know
- Grass / Fodder: 45% changed, 26% not changed, 24% don't know
- Herbal/ NTFPs: 24% changed, 24% not changed, 45% don't know
- Shrub / bush: 43% changed, 30% not changed, 24% don't know
- Tree: 70% changed, 17% not changed, 10% don't know

- Changed
- Not changed
- Don't know
- Not applicable
Adaptation measures (farm based) adopted in last 25 years

- Work on water and land conservation
- Start seed bank
- Use of cold storage
- Use of tunnel for vegetable farming
- Started mixed cropping
- Start agro-forestry
- Both livestock and crop farming
- Crop cultivation only
- Raise livestock only
- Agriculture insurance
- Livestock insurance
- Switch to another livestock
- Cultivate new crop
- Increase compost fertilizer
- Increase in-organic fertilizer
- Change crop cultivation time
- Improved seed
- Investment on pond
- Supplmental irrigation management
- Raise improved breed of livestock
- Change cultivation technique
- Agriculture skills training

Response (%)
Environment statistics on population census, 2021

• First time introduce community questionnaire in population census
• Each questionnaire filled in every ward (lowest administrative unit) of Nepal, 6743 wards in Nepal
• One of the module is environment/disaster/hazard
• Milestone for the base line data for disaster mapping and other special environment related surveys
Recent activities

• Shared the prefilled Global Consultation parts and discussed with the national focal point reporting to UNFCCC

• Conducted technical committee meeting and working on to develop the proposed Nepal specific climate change indicators

• Climate change indicators Nepal draft.docx

• Preliminary work is starting for the national climate change impact survey (second round)
Issues and challenges

• Data gaps
• Administrative data is not reporting on time
• Capacity development
• Coordination/collaboration
• Prevailing statistical laws and regulations have not been updated/amended
• Data sharing policy
• Weak statistical infrastructure
• Covid-19 Pandemic (First wave, second wave, ........)
Expectations & way forward

• Plans to use the Global Set as the framework for the Nepal-specific climate change indicators.
• Needs special surveys and censuses
• Improved institutional arrangements and structures
• Bilateral and international cooperation for knowledge and technology
• Strengthen data capturing mechanism in province and local governments
• Strengthen Environment Section/GIS of CBS
• Technical & financial support for the National Climate Change Impact Survey (second round)
Thank you !!!
Your comments and queries are highly appreciated !!!