



Role of Local Government in implementing Climate Change Policy in Bhutan



Royal Government of Bhutan

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Outline of Presentation

- Country Context
- Impact of Climate Change on various sectors
- Existing Policies & Strategies on CC at National & Local level policy
- Role of LG in implementing CC Policies & Strategies





Country Context

- Population – 634,935 approx;
- Population predominantly agrarian with nearly 70% of the rural population depending on agriculture and allied services and use of natural resources;
- 23.2% of the population under the poverty line- 98.1% are rural based & 1.9 % reside in urban areas;
- Elevations-ranging from about 100m in the foothills to about 7,000m to the north;
- Climate-3 zones: 1) the southern plains with a typical subtropical climate with high humidity & rainfall; 2) the central belt of flat valleys characterized by cool winters & hot summers & moderate rainfall and 3) the high valleys with cold winters & cool summers;
- Mean air temp-ranges between 10 °C in the winter months to 18 °C in the summer months;
- Total annual precipitation on average- varies from 1,020 mm to 1,520 mm



Impacts of CC on Various Sectors

- More than half of Bhutan's GDP (53%) is directly attributed to sectors dependent on natural resources (2008): Agriculture, livestock, forestry; Hydropower; and Tourism.
- For Bhutan: an average increase of between 1.0 ° C to 3.0 ° C over the next 20 years is projected based on the global models (A-OGCMs). This will have a significant effect.
- An average increase in rainfall of at least +10% in the summer months and an average decrease of at least -10% in the winter months is projected. This will affect agriculture, run-off, drainage and water supply.
- Key sectors that will be impacted include agriculture, forestry, water resources, hydropower production, infrastructure, especially roads, health and tourism, and increase in climate sensitive health outcomes (Vector-borne diseases).
- Changing weather patterns evident at local level-more localised rain, shifting annual rain patterns, more summer hailstorm & winds



Policies & Strategies Related to CC

- **Constitutional Mandate:** maintain 60% of forest cover at all times. Current forest coverage 72% (of which 51% protected area).
- **Gross National Happiness (GNH):** Environment is one of the pillars of GNH
- **Bhutan as a Net Carbon Sink:** COP 15, Bhutan declared that it will forever remain carbon neutral and serve as a net carbon sink.
- **Regional Coordination on Climate Change:** At the 16th SAARC summit, climate change was adopted as the theme.
- **Mitigation and Adaptive Measures:** NAPA Projects (GLOF mitigation measures, Second National communication (SNC), National Capacity for Self Assessment (NCSA) etc.).
- **Environmental Laws and Regulations:** National Environment Protection Act 2007; Environmental Assessment Act 2000.
- **Incentivizing Green Economy:** Economic Development Policy & its complementary policies clear in their intent to ensure growth and development of a green and sustainable economy.



Policies & Strategies Related to CC

- **Local Government Act(2009);**
 - Regulate water, air and noise pollution and other environmental degradation; Regulate and allocate safe and clean drinking water; Regulate allocation of irrigation water; custodian of community land and community forests and resources,
 - Conserve and protect water sources, lakes, springs, streams and rivers
- **Local Development Planning Framework**– Integrated area based development/land use, Environment/CC checklists,
- **Annual Grants System**- expenditure functions/eligible list - pursue a strong prioritization for cross cutting issues/themes –poverty reduction, CC, environment, sustainable natural resource management etc



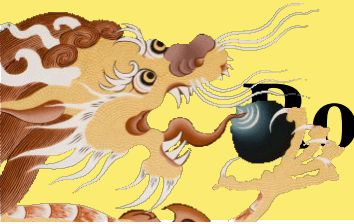
Issues & Challenges of Local CC policy implementation & adaptation

- Lack of awareness to CC & lack of adaptive capacity in formulating responses, undertake assessments for the sectors of concern.
- Lack of good quality and reliable data.
- Diverse & difficult terrain of the country, remoteness & isolated valleys with largely rural population, precarious eco-systems further contribute to higher vulnerability, also increase sensitivity and limit adaptability.
- Weak planning, prioritization & monitoring-limit mainstreaming CC/environmental issues/concerns.
- Low level of concern for CC/environmental issues.
- Significant funding gaps(30-20%) & additional financing hinder implementation of timely adaptation measures & meet greater cost of local development initiatives.
- Own source revenues limited.



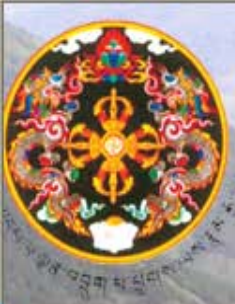
Role of LG in implementing CC Policy

- **Predictable Annual Grants(resources):**
 - Ensure objective utilization of Grants.
 - 80% shall be used for initiatives defined in the 10FYP. 20% for new initiatives/projects outside the Plan. Flexibility to respond to local needs & vulnerability, and integration of CC concerns& adaptation measures.
- **Planning and Public Expenditure Mgt:**
 - To be more involved, active and responsible for planning, implementation & monitoring- financing & adapting infrastructure & goods/service delivery to CC, tracking expenditures.
 - Pursue strong prioritization of mainstreaming CC/environment in plans & programs, formulate appropriate responses for any CC consequences.
 - Proper review and approval of LG plans and budget.
- **Local Fiscal Revenues**
 - Through taxes, fees & charges to provide incentives/disincentives for CC mgt. Also support resource mobilization & sustainability



Role of LG in implementing CC Policy

- **Natural Resource Management:**
 - Delegating the stewardship of forest management to the community by designating community and private forestry through proper management plan.
 - Continue to conserve & maintain forests, wetlands & other ecosystems
- **Environmental Clearance:**
 - Issue EC any infrastructure development in accordance with EA Act 2000, in keeping with the principles of environment friendly construction.
- **Capacity Development:**
 - To address mainstreaming & adaptation, use of local knowledge, to undertake expenditure review etc.
- Coordinate and work closely with CSOs and other relevant agencies.



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Gross National Happiness Commission. Royal Government of Bhutan



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