Governing climate change in India and Europe – opportunity structures of multi-level governance

Presentation for:
Zukunft der Umweltpolitik - Umweltpolitik der Zukunft
Since 2008: German-Indian Sustainability and Climate Change Dialogue / Student Exchange with India (DAAD, Erasmus plus, FU-PROMOS)

Selected topics of the study stays:

Securitisation of climate change in India

Finance structures of fossil fuel projects in India

Renewable energy policies in Germany and the EU
Indian-European Multi-Level Climate Governance Research Network

About

The transition towards a low carbon economy is one of the key challenges for mankind in the 21st century. It is crucial that climate change is kept at manageable limits. At the same time, the realization of a low-carbon society offers enormous economic potential.

Low carbon transition processes are largely driven by policies and political programmes developed by multiple actors at various levels of governance, from the local level up through the supra- and international levels. Our Indian-European research network was developed in order to provide for a better understanding of emerging forms of multi-level climate governance in India and Europe. The network aims to shed light onto the question of whether - and how - multi-level climate governance structures in both countries yield pathways for effective low
Multi-level governance: empirical trends

Ceding of power to supranational organizations (Europeanization) (Hooghe and Marks)

Political decentralization in both developing and old industrialized countries (Hooghe and Marks)

Reduction of the size of government and shift to new forms of governance

Types of problems cause increasing interdependencies between policy levels: *climate change*
Multi-level governance: analytical concepts

- Solve a public problem (common not private good)
- Involvement of public and private collective actors
- Involvement of general-purpose or functional jurisdictions (e.g. joint board) that enjoy some degree of autonomy within a common governance arrangement
- Processes (political negotiations, coalition building, lobbying, persuasion…)

(Zürn et al. 2010)
Prominence of multi-level governance in the context of climate change

Epoch 1 thinking:

Hierarchical *government* top-down approach

Epoch 2 thinking:

Decentralized approach, subnational states and local levels constitute the primary loci of *governance*

Epoch 3 thinking:

Coping with interdependencies and policy overlap through multi-level governance?

Betsill & Rabe 2009: 2002
Multi-level climate governance provides opportunity structure

- Multi-level reinforcement (for EU context: Schreurs Tiberghien 2007, 2010),

- Offer multiple access points for leadership: pioneering member states (for EU context: Andersen, Liefferink 1997), supra-national actors,

- International comparative research: facilitate policy experimentation and diffusion of best practices

- Cross-sectoral and multi-actor structure provides additional opportunities to address a broad variety of co-benefits (Jänicke forthcoming)
Exploring multi-level climate governance in India

Do India’s states experiment with initiatives driven by regional context and requirements?

Is the scale and scope of the proposed action either ambitious or cautiously incremental?

Co-benefits: Do India’s states climate action plans combine renewable energy policy objectives with the generation of desired effects in other policy areas /sectors simultaneously?
India’s federal states
59.2% of the population live on less than 2,00 $ per day (World Bank 2014)

300 million people no access to electricity

India represents 17% of the world’s population/ produces 6% of worldwide CO2 emissions

70 % of CO2 generated in the energy sector

India will likely overtake China in the next decade “as the primary source of growth in global energy demand” (Bloomberg 2015)

de-carbonization: India’s energy emissions per GDP higher than that of the EU but lower than that of the US
Multi-level climate policy in India

Climate Convention, BASIC Countries, Bi-lateral Cooperation

Union Government: NAPCC 2008: 15% of the total energy from renewable energy sources by 2020.

INDC 2015: 40% share of non-fossil fuels in the installed electricity mix by 2030, 100 GW Solar capacity by 2030

29 State governments: Climate action plans
(SAPCC) 19 plans published in 2015

Panchayats
4000 cities

Private a. public actors
India

Installed wind power capacity MW

State wise RE distribution

Sources: GSI Research Report 3/2014 (GWEC (2012b); Indian Wind Energy Association (InWEA) (2012)).
### Table 1. Renewable energy in states in India: resource profile, applications and policy framework.

<table>
<thead>
<tr>
<th>State</th>
<th>RE resource focus in SAPCC</th>
<th>Specific RE application identified in SAPCC</th>
<th>State level RE policy framework/Policy directives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chhattisgarh</td>
<td>Solar, wind, waste to energy</td>
<td>Irrigation/Energisation of pump sets; village electrification through DDG</td>
<td>Biogas policy 2014–15Chhattisgarh solar policy 2012Policy directives on allotments of sites and incentives to small hydel projects 2012Wind energy policy 2002</td>
</tr>
<tr>
<td>Haryana</td>
<td>Solar, wind, biomass, small hydro, waste to energy</td>
<td>Irrigation/Energisation of pump sets</td>
<td>Policy for promoting generation of electricity through renewable energy sources 2005Haryana solar power policy 2005</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>Solar, biomass, small hydro, waste to energy</td>
<td>Waste to energy</td>
<td>Jharkhand energy policy 2012Jharkhand solar policy 2013</td>
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<tr>
<td>Karnataka</td>
<td>Solar, wind, biomass, small hydro, waste to energy</td>
<td>Irrigation/Energisation of pump sets; waste to energy</td>
<td>Karnataka solar policy 2014–2021Karnataka renewable energy policy, 2009–2014</td>
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<tr>
<td>Kerala</td>
<td>Solar, wind, biomass, waste to energy</td>
<td>Irrigation/Energisation of pump sets; waste to energy</td>
<td>Kerala solar energy policy 2013Wind energy policy 2004Renewable energy policy 2002</td>
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<tr>
<td>Madhya Pradesh</td>
<td>Solar, wind, biomass</td>
<td>Village electrification through DDG</td>
<td>Policy for promotion of solar power based projects in Madhya Pradesh 2012Wind power policy 2012 (amended in 2013)Bio</td>
</tr>
</tbody>
</table>

Jörgensen, Mishra, Sarangi 2015
Co-benefits: renewable energy in non-energy sectors

Table 2. Cross sector spread of renewable energy interventions in SAPCCs.

<table>
<thead>
<tr>
<th>State</th>
<th>Agriculture, forestry, fisheries and coastal area management</th>
<th>Industrial sector</th>
<th>Urban development</th>
<th>Transport</th>
<th>Energy</th>
<th>Tourism</th>
<th>Sustainable habitat</th>
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<tbody>
<tr>
<td>Chhattisgarh</td>
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<td>Jharkhand</td>
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<tr>
<td>Kerala</td>
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<td>14</td>
<td>1</td>
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<tr>
<td>Madhya</td>
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<td>Pradesh</td>
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<td>10</td>
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<tr>
<td>Bengal</td>
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Multi-level governance lens makes sense

- Deployment of wind power and solar energy: variation of state policies and outcomes, states experiment with individual approaches tailored to regional specifics

- Variation in subnational Climate Action Plans – scope of proposed action cautiously incremental

- States take advantage of co-benefits related to economic and development assets

(Jörgensen, Mishra, Sarangi 2015)
Literature


Ostrom, Elinor, 2010, Nested externalities and polycentric institutions: must we wait for global solutions to climate change before taking actions at other scales?
