Helpdesk Research Report: Overview of key governance issues related to natural resource management
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Query: Please provide an overview of the key governance issues related to natural resource management (including non-renewable resources)

Enquirer: UNDP Oslo Governance Centre

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1. Overview

There is a large and disparate body of literature relating to the governance of natural resource management. Much of this literature relates to the impacts of governance on issues such as the ‘resource curse’, climate change, and scarcity. This report will instead focus on the management issues and what seem to be the key debates.

One of the main issues relating to managing natural resource is the large and complex social, political, economic and ecological systems involved which makes it difficult to define a starting point of intervention. Another issue centres on targeting management of natural resources towards sustainable and inclusive growth. The key work on this is in the build up to the European Report on Development 2012, which aims to provide guidance to public and private actors to support these objectives.

General trends in governance have an impact on natural resource management. The trend towards decentralisation and strengthening local democracy has affected the comparative influence of actors at different levels on the exploitation of natural resources. Trade is also likely to become an increasingly pressing issue. It has profound impacts on domestic and local governance of natural resources though it does not, at present, come clearly under WTO rules. Finally there is the issue of transparency relating to natural resource extraction. This is best exemplified by the Extractive Industry Transparency Initiative (EITI). Improving governance through greater transparency seems to be correlate with greater voice and accountability and a stronger business climate, though it is unclear whether there are any causal links.

2. Complexity and Multi-Level Governance
Duit et al (2010) provide an overview of the contribution of complexity science to the debate of governance relating to natural resources. Governance systems have always operated under conditions of uncertainty, unpredictability and information deficit (Klijn, 2008). Duit et al (2010) argue that current converging trends of global interconnectedness and increasing pressures on ecological systems are transforming the tasks confronting policy-makers into a new and different state. Past behaviour is no longer a reliable predictor of future behaviour, even when circumstances are similar (Steffen et al., 2004). Conventional policy instruments, laws, and institutional configurations used to address social problems may be weak when responding to processes of rapid, fundamental, and possibly detrimental change.

However, new governance structures seem to be emerging, which address issues such as the spread of global pandemic diseases, the probable increase in forced environmental migration, and the management of global marine resources. Duit et al (2010) argue that a complex system perspective is essential for understanding and analytically capturing the dynamics of rapid, interlinked, and multifaceted processes of change in social–ecological systems.

Complexity management requires governance systems to be both flexible and stable (Voss et al., 2006). Flexibility is needed to adapt to new and unexpected circumstances but stability is important to ensure that governance systems retain their ability to regulate behaviour. These two contradictory demands are difficult to combine in the same governance model. It is thus important to match governance models with different types of processes of complex change.

Folke et al (2005) stress the importance of adaptive governance systems. These self-organise as social networks made up of teams and actor groups. These actors draw on various knowledge systems and experiences for the development of a common understanding and policies. Legislation and governmental policies should enable and support self-organization while promoting creativity for adaptive co-operative management efforts.

These trends suggest the need of a multi-level approach of natural resource management. To this end a project called GoverNat was set up. This project aimed to test the hypothesis that certain combinations of analytical and participatory processes improve multi-level governance. The focus was on water and biodiversity resources in Europe. The key findings from the final policy brief produced from this project (GoverNat, 2010), were that in a multi-level participatory process it was important to:

- Manage expectations
- Adapt to context
- Interact with multiple actors
- Involve bottom-up initiatives
- Recognise and share benefits and costs

The recent draft European Report on Development 2012 accepts the complexity of natural resource management governance (ODI 2010b). In particular it notes that one of the key sources of complexity in dealing with natural resources is the varying interests of different stakeholders. It is important to take a multi-actor approach to consider how different legitimate interests can best be balanced in natural resource management. At the same time it proposes that the onus on managing natural resources should fall very largely to national governments. External actors can provide support and knowledge. There may also be certain external aspects they can help regulate by supporting a conducive international framework. However, as a starting point the setting of an appropriate framework must be the responsibility of national authorities.

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1 See [http://www.governat.eu/](http://www.governat.eu/)
3. Management for Sustainable and Inclusive Growth

The upcoming European Report on Development 2012 (ERD 2012) will examine appropriate roles for the public and private sectors to best manage the new pressures on land, water and energy use and ensure that natural resource rents contribute to development (ODI 2011a, ODI 2011b). This report aims to outline appropriate governance processes to ensure the best possible contribution towards inclusive and sustainable growth in developing countries so that natural resources are managed equitably and sustainably for a better future.

In particular the focus will be on the land-water-energy nexus, including issues such as resource-efficient production, water access for productive uses, threats to food security, land acquisitions, and bio-fuels. It aims to produce concrete regulations/subsidies/taxes and punitive steps, and to support cooperative initiatives including public-private partnerships leading to better natural resource management.

The draft report argues that national authorities should be the main focal point for policy. They should work with the private sector and other political, economic and civil-society actors to establish a regulatory framework and incentives structure. This structure should be conducive to promoting the sustainable exploitation of natural resources, and include rules, regulations and incentives in the area of trade, investment, land, energy, water and other policies.

National authorities will have to police the system. They should ensure that all legitimate actors have adequate access to resources. They should ensure that those who are licensed to exploit them do so in ways that actively encourage wider local opportunities for economic growth. Failing that, they should at least contribute to the mobilisation of domestic resources so that the government itself is able to ensure the necessary redistributive effects.

A literature review undertaken for the forthcoming ERD report (Cantore et al., 2011) identified a number of specific issues:

- Despite there being different types of natural resources and management issues there are commonalities in relation to policy issues.
- Policy will require hard choices and trade-offs. It is important to differentiate between the multiple objectives and prioritise.
- Correcting market failures is crucial. Market mechanisms can fail and state policy measures are therefore vital in correcting outcomes. This includes creating positive incentives to encourage environmentally-friendly behaviour.
- International coordination is essential. This needs consideration of the trade and investment implications of domestic policies.

At the centre of the ERD report will be a discussion of the role of domestic accountability. Recommendations will aim to allow governments to best respond to the varying needs of different economic groups within society. Growth and development for some should not pass others by and create greater disparities in wealth.

There is some existing evidence examining natural resource management for sustainable and inclusive growth. A study in the Philippines (Catacutan et al., 2001) identified four socio-political and technical factors affecting the success and sustainability of local natural resource management. These are:

- Clear local financial investment,
- Enhanced local technical capacity,
- Sound political culture conducive to natural resource management, and
A supporting National Mandate

Catacutan et al (2001) argue that these factors are essential for sustainable natural resource management at the local level.

Ashley (2000) examined the application of a sustainable livelihood approach to natural resource management in Namibia and Kenya. The study found that the fit between natural resource management initiatives and rural livelihoods varied from context to context.

4. Local Democracy and Decentralisation

Decentralization can reshape the institutional infrastructure for local natural resource management, potentially establishing institutions for sustainable and equitable community representation and inclusion. At the same time natural resource management can become an essential component supporting decentralization and local democracy. Natural resources are a source of revenue and power, and offer potential legitimacy to new local government authorities (Joshie et al., 2008). Entrusting local resources with representative local government can engage local people with local government, and empower people, though this has not always been the case (Ribot, 2008). To support local democracy there must be downward accountability and significant discretionary power. Local participation in natural resource decisions should do so in sustainable ways and in a manner that does not hinder the institutionalisation of local democracy within local government.

The transfer of natural resource powers into the local institutional landscape can promote or undermine representative, accountable and equitable processes depending on which authorities are being entrusted. In one area of the Bhilwara District of Rajasthan, India, the effort of the village institutions has resulted in greater biomass availability in the commons governed by the community (Joshie et al., 2008). This is in contrast to the area not under community governance where degradation continues.

It is important to note that the local governance arrangements that govern natural resources can take a variety of forms. These can be customary, local or traditional structures acting as local government; parallel structures; and formalisation of traditional authorities in the state system (Nixon, 2007). There may be competing local structures vying for control of various resources including natural resources and decentralisation programmes can create a space for political negotiation at the district level. It is notable that decentralisation has not significantly increased the rural poor’s access to natural resources. (Baumann and Farrington, 2003).

5. Trade

Non-renewable natural resources – oil, gas, minerals and ores – account for approximately 15% of world trade (Collier and Venables, 2009). Many resource producers are almost totally dependent on resource exports for their foreign exchange and for a large part of their fiscal revenue. Trade rules help shape the economic and political environment in producing economies and influence investors’ decisions to seek and develop new resource deposits. Consequently regional and international trade rules would impact on domestic and local governance of natural resources.

Though other types of international transactions have come under a variety of ad hoc regulations, natural resource trade has bypassed the World Trade Organisation (WTO). Collier and Venables (2009) argue that there are distinctive features of natural resource trade, which mean that useful regulation should be distinctive rather than a mere extension of existing practices. Unlike other goods, natural resources are immobile, depletable, require long-term discovery and development projects and produce rents, which investors and consumer countries get a disproportionate share of. Consequently regulation must not include rules against cartels and rules against domestic sourcing of ancillary activities as is currently
standard. Rather than generate further rents, cartels would help to reassign rents between consumers and producers in the present and the in the future. As the rightful owners of these rents, the government of exporting countries should have the responsibility of deciding the pace of extraction that maximizes their value to citizens, present and future.

Governments should be allowed to spend some of the rents they receive on encouraging domestic production of the goods and services that are ancillary to resource extraction. In many low-income countries the natural resource sector can crowd out other export industries. Allowing ancillary industries can offset these detrimental effects. Trade rules should instead promote commitment to extraction, technologies for extraction and contingencies and improve the process of selling extraction rights.

A WTO report examining the trade of natural resources does not seem to respond to these concerns on the whole (WTO, 2010). It does however note that export taxes and other trade policies may be justified to address a variety of other policy objectives, including problems related to the volatility and dominance of natural resources in a domestic economy setting. Though subsidies can have rent-shifting and beggar-thy-neighbour effects, they may also be used to address legitimate policy objectives. The report also points out the effects of tariffs and taxes on shifting rents in natural resource trade. Import tariffs can shift rents from the exporting to the importing country; export taxes can shift rents from the extracting company to the government; and export quotas shift rent from the future to the present.

On other issues the report suggests that most evidence is ambiguous at best. Imperfections in some natural resource markets may affect trade patterns, although the impact of trade on resource management in these circumstances remains largely unexplored in the economic literature. The report argues that empirical literature on the natural resource curse has so far failed to reach unified conclusions. The socially optimal rate of resource extraction is hard to obtain as trade and conservation policies are influenced by special interest groups. Consequently the effect of trade opening on resource extraction in this context is ambiguous.

6. Transparency and Wider Governance

Natural resource revenue can make up a significant proportion, sometimes over half of government revenue in some low or middle-income countries. These countries may also have weak administrations, leaving scope for inefficiency and corruption. To respond to this challenge, many theorists have emphasised the essential role played by fiscal transparency in improving resource revenue management, and there is considerable agreement on a wide range of management practices (e.g. IMF, 2005).

The Extractive Industry Transparency Initiative (EITI) is a coalition of governments, companies, civil society groups, investors and international organisations aiming to strengthen governance by improving transparency and accountability in the extractives sector. As of March 2010, 31 countries have either completed the EITI validation process or are candidate countries given more time to complete the process. Countries that have adopted the EITI have arguably done so as policymakers, and citizens want to change perceptions of their country and/or want to change aspects of their governance behaviour (Aaronson, 2008). A comparison of EITI countries and non-EITI countries showed improved business climate and markedly improved voice and accountability in EITI countries. This suggests that governance reform in relation to natural resources may need to be accompanied by, or may even be dependent on, wider governance reforms especially those targeted at voice and accountability.

7. Bibliography

http://voxeu.org/index.php?q=node/1395


http://www.eanth.org/Policy/building_local_democracy.pdf

Preview: http://books.google.co.uk/books?hl=en&lr=&id=qTy684W9LNQC&oi=fnd&pg=Global+Change+and+the+Earth+System:+A+Planet+under+Pressure%E2%80%99&ots=KrMKX9jesR&sig=r8C1EnlNPhzSe4Vsjld78PtLcU

Preview: http://books.google.co.uk/books?hl=en&lr=&id=yYGZLbYKpxgC&oi=fnd&pg=Reflexive+Governance+for+Sustainable+Development&ots=kX9mbc83QS&sig=Sp3IfGUa0ea2OxrBF5bNeQSPtEl

http://www.wto.org/english/res_e/publications_e/wtr10_e.htm

Other resources

GoverNat: Multi-level Governance of Natural Resources: Tools and Processes for Water and Biodiversity Governance in Europe
http://www.governat.eu/

Preview: http://books.google.co.uk/books?hl=en&lr=&id=uEyz4kWrijEC&oi=fnd&pg=The+crisis+of+global+environmental+governance:+Towards+a+new+political+economy+of+sustainability.&ots=mRgmOvUcw0&sig=DgIDnT9ZxggBDQICQiDEraduJeo

South African Institute of International Affairs: Governance of Africa’s Resources Programme: Publications

Stockholm Resilience Centre: Research for governance of socio-ecological systems
http://www.stockholmrresilience.org/publications.4.235c0ace124479a1f7380004881.html

Additional information

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