

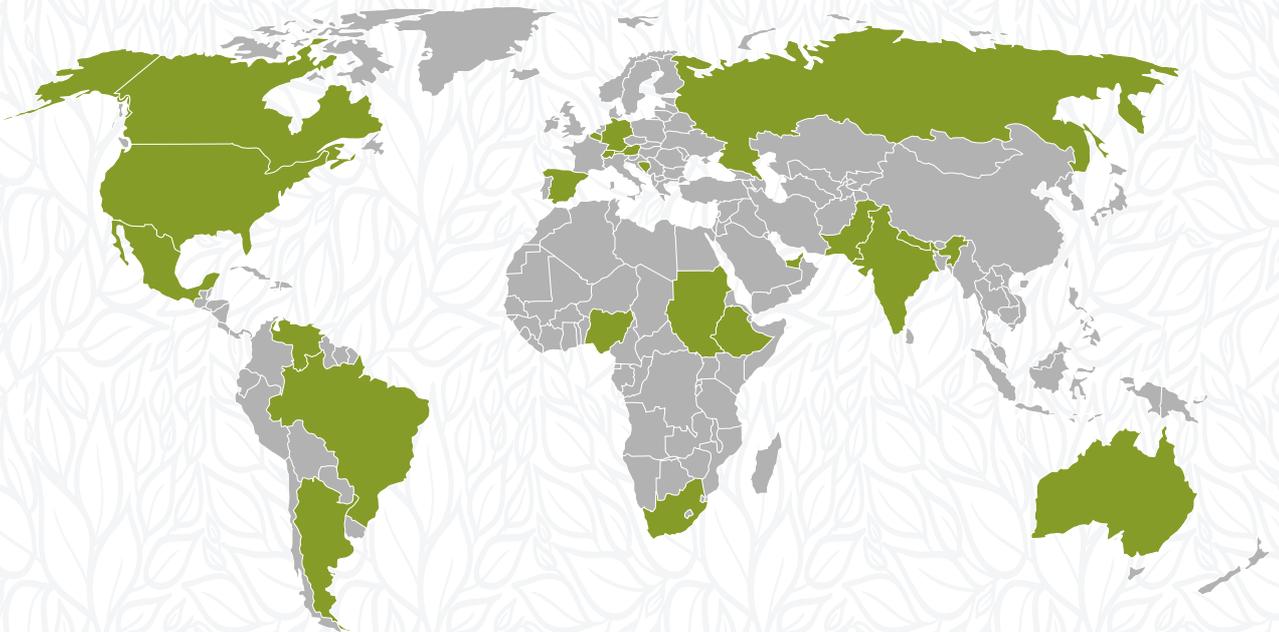
GREEN FEDERALISM

EXPERIENCES AND PRACTICES

Editors

P G DHAR CHAKRABARTI

NIDHI SRIVASTAVA



The Energy and Resources Institute



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Foreword

Environmental issues are becoming increasingly pertinent as globalization processes increase the human impact on our surroundings. The way societies shape the conditions in which they live and marshal the natural resources around them, and the methods by which National governments manage this process, is a fundamental element of state building. In a context of environmental and demographic challenges of an ever-growing global population, a commensurate intensification of the competition for natural resources, and shifting climactic conditions caused by global working, effective governance policies which address environmental issues are a crucial element of state administration, and one which will only increase in importance in the future.

For developing countries the challenges presented by environmental governance issues are particularly relevant. As nations transition away from traditional small-scale agrarian societies to more diversified economies in a process that often involves a far greater exploitation of the environment and natural resources, government capacity to implement policies that manage this process in an effective fashion is crucial. In these countries, the environmental conditions and the policies that govern them often have a direct impact on the quality of life of the citizens. Access to clean water, sewage systems, and procedures for the disposal of solid waste, are just some of the areas that are the responsibility of government authorities.

Federal and multilevel governance systems have an ability to effectively meet these types of environmental governance challenges. The principles of decentralization and subsidiarity that are fundamental to the federal conception of administrative powers can be significantly advantageous in this endeavor. In a federal system, sub-national and local levels of government potentially have the autonomy to establish environmental governance policies which take account of specific local conditions. The proximity of Local government to specific areas should allow for the implementation of local solutions to local problems, which are potentially more effective and efficient than blanket national policies. Moreover, in this kind of multilevel structure environmental issues which cross state or local boundaries, and that necessitate more broadly distributed governance in order to achieve holistic solutions, can be addressed by all levels of government (Federal, State, and Local) in a process in which the perspectives of all governance stakeholders can be taken into account.

Despite the inherent advantages that federal structures appear to possess in facilitating the development of effective environmental governance policy, achieving this goal depends on a range of factors, as it does in any other area of federal administration. Federal systems are not identical: different federal countries have different distributions of powers, responsibilities, and authority between the various levels of government. The ways in which a highly centralized

federal nation addresses environmental issues may therefore vary considerably from the methods utilized by a highly decentralized nation. Fiscal issues, an area of considerable importance in federal governance generally, is also very significant in relation to environmental policy. How fiscal resources are allocated to sub-national units, and the ability of those units to raise and expend funds in the design and implementation of environmental policy impacts on the effectiveness of those policies. The status and processes of a federal nation's intergovernmental relations also cannot be neglected in any assessment of environmental federalism. The role of the local and sub-national units, who are often the primary actors in the design and implementation of environmental policies, and their relationship to the federal level of government, also has profound implications for those policies.

While these factors may have an impact on many areas of federal governance, a number of specific themes and emergent questions are particularly relevant to the field of environmental federalism and attempts to develop effective policy making in this area. The extent to which environmental policy, and the governance powers associated with it, are devolved to sub-national units is one area of debate. Another pertinent question is whether the adoption of a competitive or collaborative model of federalism leads to more effective environmental decision making, and which model is most appropriate for which kind of federal system. Revenue allocation and generation is an area of particular interest, especially in relation to the disbursement of funds from the federal level to the state and local levels, and the abilities of sub-national units to raise revenue to expend on environmental policies. Furthermore, the processes by which different federal nations address trans-boundary natural resource management issues, and the mandates, responsibilities, and actions of the various administrative units in these processes, is a sphere of environmental federalism which warrants further study.

This volume conveys expert knowledge on the environmental federalism experiences and policies of variety of federal nations, both large and small, and highly developed and developing. Naturally, some of the nations addressed in this book encounter very different environmental challenges. The burden faced by Nigeria, for example, in terms of natural resource management is very different to that of Switzerland. But a greater understanding of the environmental federalism experiences of different federal nations, the conditions in which they operate, and the policy solutions they employ, brings a clarity and comprehension that can ultimately contribute to the development of better governance in the field. Moreover, the volume facilitates comparative analysis between different nations and systems. Comparative assessment should enable stakeholders in this field to establish common themes and principles of environmental federalism, and identify examples of best practice. This, ultimately, should lead to improved environmental policy in federal systems.

This volume emerged from the International Conference on Strengthening Green Federalism held in New Delhi in October 2012, and the individual chapters are based on papers originally presented at that event. The book represents a significant contribution to the intellectual capital on environmental federalism and is an essential foundational work upon which further comparative study can be based.

Rupak Chattopadhyay
President and CEO, Forum of Federations

Preface

The Energy and Resources Institute (TERI) has been working in the areas of environment, energy, climate change, and sustainable development for over three decades at the global, national, and Local levels. While in general, the approach in recent years towards environmental protection has received increasing attention at the global level, it is essentially due to policies formulated by National governments, combined with Local knowledge, experience and voices at the grassroots level, which have driven action and have brought about implementation of plans to protect the environment. “Think globally, act locally” has indeed been the motto of all the major initiatives that have influenced environmental governance.

The concept of sustainable development really emerged as a global issue after the release of the report of the World Commission on Environment and Development, more popularly referred to as the Brundtland Commission. In simple terms, the definition articulated and popularized by that Commission put forward the concept of sustainable development as a form of development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs. TERI was set up through the vision of its founder Mr Darbari Seth essentially to deal with a range of issues, particularly in the energy sector, all of which form the heart of sustainable development. Over the years TERI has grown and diversified its activities, and has worked with different levels of governments. The Institute has been active at the international plane and has provided major inputs to governments even when the UN Framework Convention on Climate Change (UNFCCC) was being developed. Subsequently, it has taken well-researched positions based on in-depth analysis that not only have assisted the Government of India but also the world at large in dealing with the elements of the UNFCCC, the Montreal Protocol and other global agreements that deal with the global commons. Through this experience and research, TERI has found that sustainable development cannot be the preserve of government at any single level, but that it has to percolate down to the very grassroots level and to Local governments and communities. In India, in particular, it is only through the activation of the Federal structure that we can move towards a green form of development.

The pattern of environmental governance has been shaped largely by the system of governance in other countries. In the unitary system, as is prevalent in many countries of the world, there are clear and specific divisions of jurisdictions and responsibilities between National and Local governments. This is not so in large Federal countries, such as the United States, Canada, India, Brazil, Russia, Germany, Argentina, Nigeria, Australia among others, where responsibilities for policy-making, legislative powers, and implementation are divided

between different levels of government – Federal, Provincial, and Local. This tripartite system of governance creates its own challenges, but it also provides opportunities for formulation, implementation, and financing of environmental actions and programmes.

As environmental issues are relatively new in the agendas of governments, the older Federal constitutions like those of the United States, Canada, and Australia, did not include specific references to the environment, thereby making it a residual subject of exclusive jurisdictions of the Provinces or States. Establishing Federal authorities on environmental matters had to follow rather long, difficult, and complex processes of constitutional amendments, judicial interpretations, rigorous negotiations, and consensus building with the provinces through fiscal and other incentives. Even some of the relatively new Federal constitutions, like the Constitution of India, can be termed perhaps as “environmentally blind”, and it took considerable time for the Constitution to be amended or adapted to enable Central laws on the environment. Notwithstanding such legislation, the Provincial governments in every Federal country exercise considerable authority over the use of natural resources such as land, water, minerals, forests etc., which raises complex issues of sharing of resources between the Federal and Provincial governments and among the provinces. Every Federal government has tried to develop innovative ways to resolve some of these issues of “*resource federalism*”, with varying degrees of success, while there are many unresolved issues that continue to create tensions within Federal structures and in inter-governmental relationships.

At the other end of the spectrum, Federal legislation on the environment has entrusted enormous responsibilities to Provinces and States without corresponding financial and technical resources for implementation and delivery, which has created gaps between environmental promises and actual performance. Every Federal government has tried to bridge this gap by setting up incentives for the adoption and implementation of national programmes, but these have not always met with complete success.

Environmental governance in urban and rural self-governments in Federal structures is another issue that continues to be problematic in many countries. Many have, therefore, empowered Local governments with responsibilities for environmental governance, as is logical, but necessary powers and resources have not been devolved from the Provincial to Local governments, making it difficult for the latter to discharge their responsibilities effectively. Developing the technical and managerial competence of these bodies is another critical issue that remains inadequately addressed in many countries.

It is in this context that TERI, in collaboration with the Forum of Federations, an inter-governmental organization based in Ottawa, the Ministry of Environment and Forests and the Inter-State Council Secretariat, respectively, of the Government of India, as well as the World Bank, organized in New Delhi a national workshop on *Greening the Indian Federal System* on July 6, 2012 followed by an international conference on *Strengthening Green Federalism* on October 29–30, 2012. The former focussed on India-relevant issues, while the latter brought together scholars and practitioners from several Federal systems such as from Argentina, Brazil, Canada, India, Nigeria, Russia, Switzerland, South Africa, and the USA to better understand and share good practice on green policy design and implementation of programmes.

This volume brings together, probably for the first time ever, the experiences of different Federal systems across continents in managing the environment and natural resources within the framework of multilevel governance. It provides an overview of issues, both theoretical and practical, on environmental federalism, and presents case studies on how each Federal country has tried to resolve issues of coordination and cooperation among different levels of government in its own unique way. While every country presented a different set of issues within its specific context, several problems and challenges were seen as common to all Federal countries. These include how “*cooperative federalism*” can be developed on critical issues of the environment, climate change, and sustainable development; how Federal diversity can be accommodated to the maximum possible extent within a common framework for the common good; how resource bearing provinces can be compensated for their contributions to the environment and the economy; how trans-boundary issues among provinces can be resolved; how resources can be matched with responsibilities at all levels; and how needs and capacities of the Local governments and populations can be factored into Federal-Provincial relations.

Experiences from various Federal systems underscore the need for robust “*fiscal federalism*” to ensure that the provinces are able to address green concerns proactively. Access to, and control over, revenue sources are key to effective devolution of powers. Theory and experience also make a strong case for adequate revenue sources with Local bodies for financing Local public services. Given that there is usually a mismatch between revenues of sub-national governments and their expenditure responsibilities, inter-governmental transfer programmes become imperative. Inter-governmental transfers could also be useful in reducing asymmetry in knowledge and capacity. In its report to the 13th Finance Commission of India, TERI had recommended that Centre-State fiscal architecture should be so designed that it rewards environmental performance; creates incentives for improvements in key areas; builds resilience to climate change impacts; and assists Local bodies to improve the delivery of minimum environmental protection services.

Division of roles and responsibilities, functions, and finances amongst different levels of government is integral to the debate on *green federalism*. However, it must be appreciated that federalism is not just about the distribution of powers across different levels of government; it has to be meaningful in and relevant to addressing the needs and aspirations of the people in a changing environment. Ultimately, the discourse on environmental federalism would remain incomplete unless it is connected and synergized with the goals of inclusive and sustainable development.

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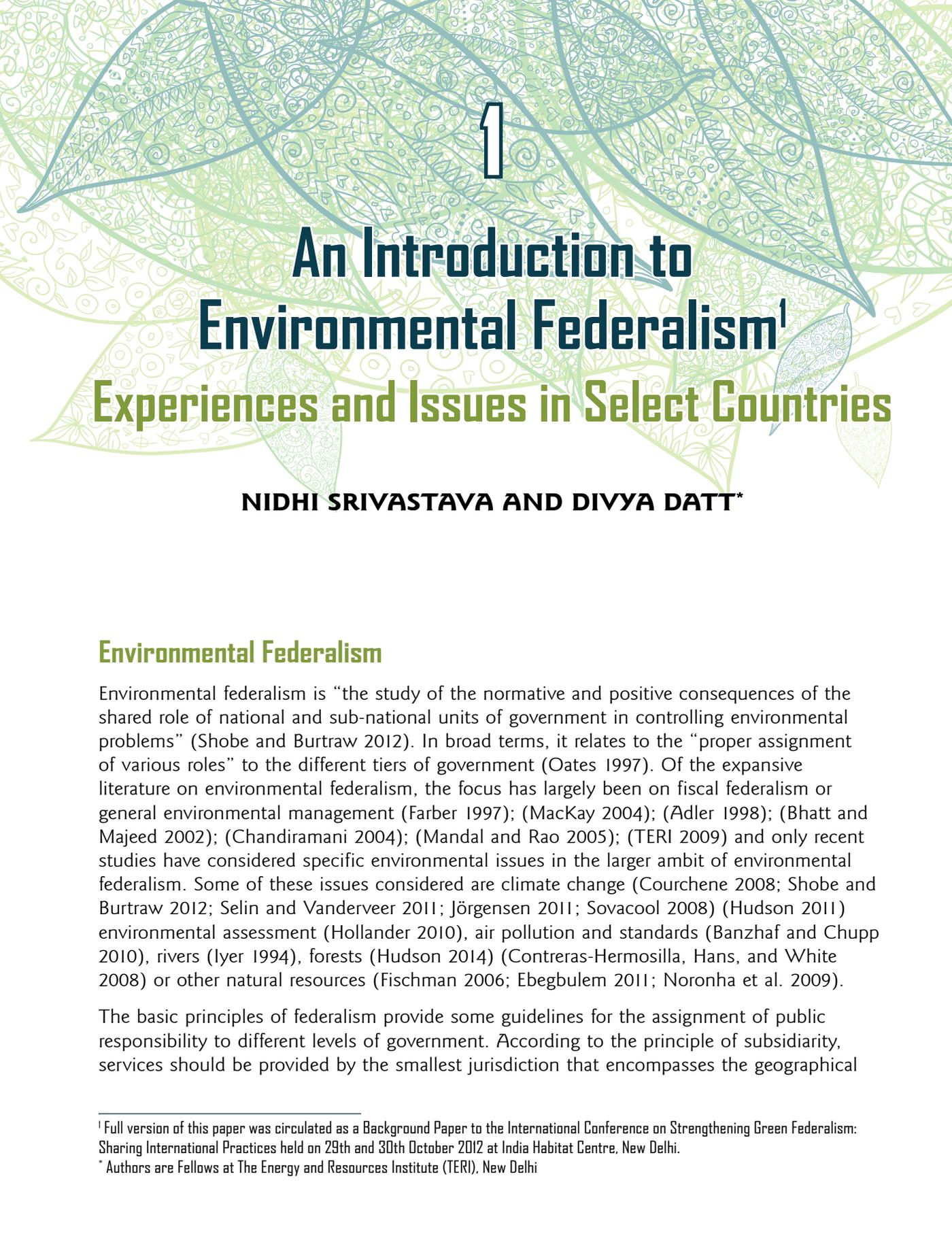
This book emanates out of the International Conference on Strengthening Green Federalism held on 29–30 October, 2012 in New Delhi. Scholars and practitioners from various disciplines and federal systems participated in the conference.

We gratefully acknowledge the contribution of Dr Vijay L Kelkar, distinguished economist and former Chairman of the Forum of Federation, and Dr Ligia Noronha, our former colleague, who were the main motivating force behind the International Conference on Green Federalism and the book. Thanks are also due to Mr Tapas Paul of The World Bank, and officials of the Inter-State Council Secretariat, Government of India and Ministry of Environment and Forests, Government of India for supporting the conference and workshop that preceded it.

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1

An Introduction to Environmental Federalism¹ Experiences and Issues in Select Countries

NIDHI SRIVASTAVA AND DIVYA DATT*

Environmental Federalism

Environmental federalism is “the study of the normative and positive consequences of the shared role of national and sub-national units of government in controlling environmental problems” (Shobe and Burtraw 2012). In broad terms, it relates to the “proper assignment of various roles” to the different tiers of government (Oates 1997). Of the expansive literature on environmental federalism, the focus has largely been on fiscal federalism or general environmental management (Farber 1997); (MacKay 2004); (Adler 1998); (Bhatt and Majeed 2002); (Chandiramani 2004); (Mandal and Rao 2005); (TERI 2009) and only recent studies have considered specific environmental issues in the larger ambit of environmental federalism. Some of these issues considered are climate change (Courchene 2008; Shobe and Burtraw 2012; Selin and Vanderveer 2011; Jörgensen 2011; Sovacool 2008) (Hudson 2011) environmental assessment (Hollander 2010), air pollution and standards (Banzhaf and Chupp 2010), rivers (Iyer 1994), forests (Hudson 2014) (Contreras-Hermosilla, Hans, and White 2008) or other natural resources (Fischman 2006; Ebegbulem 2011; Noronha et al. 2009).

The basic principles of federalism provide some guidelines for the assignment of public responsibility to different levels of government. According to the principle of subsidiarity, services should be provided by the smallest jurisdiction that encompasses the geographical

¹ Full version of this paper was circulated as a Background Paper to the International Conference on Strengthening Green Federalism: Sharing International Practices held on 29th and 30th October 2012 at India Habitat Centre, New Delhi.

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expanse of the benefits and costs associated with the service (Oates 1997). Traditional theory also lays down a set of tax-assignment principles in accordance with the respective responsibilities of different tiers of governments. Thus, Local environmental management and provision of basic environmental/civic amenities, such as clean drinking water, sewage and solid waste management should fall under the purview of Local bodies, as indeed is the case in most countries. Experience with respect to fiscal decentralization is diverse, but in general adequate revenue assignment to Local bodies remains the most conspicuous problem, especially in the developing world. Fiscal policy – including taxes, other incentives and disincentives, and programme spending – of each tier of the government can have direct or indirect impacts on resource use and the environment. These impacts may be local or inter-jurisdictional.

Environmental implications of specific fiscal measures and the application of fiscal instruments, such as taxes, charges and fees, to environmental problems have been extensively studied in the literature. Inter-governmental fiscal issues look at the allocation and scope of Federal, State, and Local revenues and expenditures; and the nature and scope of inter-governmental fiscal transfers, in the context of environmental management.

One of the often cited criticisms of environmental decentralization is the “race to the bottom” thesis, though there is little empirical evidence to prove the theory in applying the principle of subsidiarity. In fact, differences in State policies may not necessarily lead to “race to the bottom” or exacerbate rivalry and rather result in positive spillover effects, such as drawing lessons from each other – especially when applying in a variety of contexts (Jørgensen 2011). The case for decentralization for environmental management is very strong on account of greater proximity to Local concerns, improved representation, legitimacy, and efficiency. However, it has been established that several issues concerning the environment cannot remain Local because environmental problems and the effects of environmental mismanagement cross State and National boundaries – most prominently in the case of the impacts of climate change. Environmental degradation originating at one place goes on to affect a much bigger geographical area and involves not just the Local governments but requires intervention from State and Central governments too.

Several environmental issues (for e.g., transboundary pollution or conservation of rare species) or their solutions (for e.g., knowledge and research on environmental management) are characterized by spillovers or exhibit economies of scale (for e.g., solid waste management). The National government may also be concerned about equity in the provision of basic services. These reasons justify the involvement of a higher tier of government. Inter-governmental grants are an important fiscal means used by National governments to incentivize Local governments to internalize spillover effects or larger national objectives.

The concept of environmental federalism requires an examination of the appropriate jurisdiction for the management and provision of environmental goods and services. It is crucial for Federal governments to play a role with regard to the environmental regulation that requires assuming responsibility for those activities that have important environmental spillover effects across jurisdictional boundaries. State and Local governments need to engage in regulation of environmental quality and services, and design and implement programmes that meet their objectives as well as objectives that are important for sustainable development

at a national and global level. Therefore, there is a need for distributed governance of the environment across multiple levels of the government, and Federal systems are uniquely placed for this challenge.

Environment in Various Federal Systems

Given that most Federal constitutions do not demarcate environmental jurisdictions, Federal and Provincial legislation largely govern their approach towards the environment. However, the constitutional structure in each country determines how legislation is developed and how it is applied.

Examining the constitutions of the various Federal systems, old and new, there seem to be four main trends of how environment has come to be treated within different Federal models: (i) using residuary powers; (ii) interpreting environment and conservation as an offshoot of ownership over resources; (iii) via amendments; and (iv) clear lists in new constitutions.

First, countries with constitutions which are silent on environment, and matters related to it, have made use of the residuary powers to define competence of Federal or State governments on environment. For example, there are no explicit powers to legislate for environment in the Australian Constitution.² However, powers held by the commonwealth and states can be exercised for the purpose of environmental protection. States enjoying the power to legislate on residuary matters had environmental matters too open for their control. Initially, the performance of states vis-à-vis environmental regulation was patchy (Davis 1985). By the late 1970s, the commonwealth government began testing its competence on matters through the channels of marine environment³, heritage sites and international obligations. The Federal government can use its jurisdiction over trade and commerce, financing, and external affairs to make laws pursuant to environmental objectives (Bates 2010).

Second, environmental concerns are seen as an extension of rights or competence over natural resources, often linked to ownership. Many legislative jurisdictions are offshoots of ownership over resources. “Every discussion of environmental problems must begin with the question of ownership” (Gibson 1973). Like most of the older constitutions, environment as a matter is not assigned in the Canadian Constitution. Environmental matters often overlap with other areas of Federal or concurrent jurisdiction, such as clearances under the domain of Federal Department of Fisheries and Oceans. However, Provincial governments have been more “aggressive in asserting their jurisdiction” where both the levels of government have certain legislative jurisdiction (Fafard 1998).

Third, environmental rights and competences have found their way into some of the constitutions through amendments. In some cases, existing competences have been reallocated to address the needs of the times and political conditions. The Swiss Constitution, even before it was totally revised by the 1999 version, had begun the process of including environment related provisions. Also provisions relating to protection of nature, flora, and

² Section 51 of the Constitution of Australia on legislative powers of the Parliament

³ Establishment of the Great Barrier Reef Marine Park



fauna (as a cantonal concern)⁴, and the protection of environment against harmful acts, such as air pollution and noise (concern for Confederation)⁵ were added in the Constitution of Switzerland over the years before it was finally replaced by the 1999 version. Environment protection was introduced in the Indian Constitution as a directive principle of State policy in 1977, whereby the National State was enjoined with the duty to protect and improve environment and safeguard the forests and wildlife of the country as a part of the directive principle of the State policy and the citizens enjoined with the duty to protect and improve the natural environment. The same Constitutional amendment also changed the Centre–State jurisdiction on important environmental matters like forests. The Pakistani Constitutional amendment Act of 2010 had an opposite approach, whereby environment pollution and ecology were moved from concurrent list to provincial list. The Constitution of Argentina was amended in 1994 to recognize the Federal government’s duty to regulate minimum protection standards, and the provinces’ duty to reinforce them.⁶

Amendments are an important tool for introducing changes in the existing scheme of distribution of powers and responsibilities. For example, in Mexico, in 1987, an amendment introduced a new power for the Congress to make laws that establish agreement of the Federal government and of the governments of the States and Municipalities, on matters of environment and ecology.⁷ However, amendments can be a double-edged sword. On the one hand, it may be useful for some corrective measures or means to keep pace with the changing needs of the nation and society at large; and on the other, these amendments can sometimes exacerbate the conflict between different levels of government.

Fourth, newer constitutions, including newer versions of some older ones, give due regard to environmental concerns. The 1988 Constitution of the Federative Republic of Brazil gives concurrent powers to the Federal government, the states, the Federal district and the municipalities to protect the environment and to fight pollution; and to preserve the forests, fauna and flora.⁸ Legislative powers on forests, fishing, fauna, and preservation of nature, protection of the environment and control of pollution are listed clearly as concurrent shared between the Federal and State governments.⁹ Under the South African constitutional scheme, environment, disaster management, nature conservation, and pollution control matters are all listed as concurrent subjects.¹⁰ The Constitution of Switzerland of 1848 was revised by the Constitution of 1999 and introducing explicit provision on newer concepts like sustainable development too, whereby “the Federation and the Cantons are engaged to establish a durable balanced relationship between nature, particularly its renewal capacity, and its use by human beings”.¹¹

⁴ Article 24 sexies

⁵ Article 24 septies

⁶ Article 41, Constitution of the Argentina

⁷ Art XXIX-G

⁸ Article 23, clause VI and VII of the Constitution of the Federative Republic of Brazil

⁹ Article 24, clause VI of the Constitution of the Federative Republic of Brazil

¹⁰ Schedule 4, Part A, Constitution for the Republic of South Africa

¹¹ Article 73, Constitution of Switzerland

Irrespective of the model of federalism and the approach adopted to address Federal-State relations in environmental domain, some issues emerge as the most important and controversial ones.

Decision-making and Enforcement

For a long time, most of the discourse on federalism focused on the need and role for transfers and grants in aid for an enhanced sharing of powers and functions between the Centre and States. However, there is more to federalism than transfer and devolution from higher levels of government. In a Federal system, States are “not agents of some National government hierarchy” but have a role of their own in the government system (Agranoff 2001). It is a network of larger and smaller arenas as against higher and lower (Elazar 1998).

The principle of subsidiarity is seen as one of the bases for federalism and sharing of powers amongst Centre and States. (Esty 1996) The principle, from a common sense perspective, lays down that “decisions should be taken at the level closest to the ordinary citizen and that action taken by the upper echelons of the body politic should be limited” (European Commission 1992). This principle per se does not distribute powers amongst different levels of government, but simply aims at governing the use of such powers and “justify their use in a particular case” (Lenaerts 1993). However, it lays the basis for distribution of powers and functions. It justifies environmental decentralization as the sub-national and local levels are directly impacted by environmental actions and externalities.

In environmental decision-making, the two dominant models of federalism are that of collaboration and competition. While cooperative decision-making may avoid duplication and conflict, it may lead to “race to the bottom”. However, conflicts per se are not bad as it may foster competition (MacKay, 2004) and enhance efficiency (Farber 1997). Besides, cooperative federalism may itself not be sufficient to secure a voice for states in the decision-making. As Arora points out, the political process dominated by Federal coalitions and State-based parties has been more successful in making the national policy-making more participatory than cooperative federalism (Arora 2007). Different systems have dealt with environment and its domains differently depending on the structure of government and the stage of development and environmental governance.

The Canadian Constitution Act, the then British North America Act was planned to create a strong centre (Lidden 2005). The Canadian Constitution had a list of subjects divided between Centre and State and anything not mentioned there was left for the centre to legislate upon.¹² Initially forests did not feature in the Constitution but the position was changed with the “Resource Amendment” in 1982, whereby a separate section was inserted on “*Non-Renewable Natural Resources, Forestry Resources and Electrical Energy*”.¹³ The amendment not only paved way for provincial administration of resources¹⁴, but also

¹² Section 91 and 92, Constitution of Canada

¹³ Art 92 A, Constitution of Canada, inserted by the Constitution Act, 1982

¹⁴ Art 92 A recognized the legislative authority of provincial legislatures on exploration, development, conservation, and management of forest resources



spelled out legislative rights of provinces on matters of taxation on forest resources.¹⁵ As a result, Canada adopted a provincial approach to forestry (Agnoletti 2006). The Indian Federal system also divides matters into Union, State, and concurrent lists¹⁶. Learning from Canada's experience with short lists, India made a more detailed list adding specifically to the concurrent lists (Hueglin and Fenna 2006) to make sure that the competence of States emanates from a written constitution subject to a final interpretation by the judiciary (Singh 2001). Modelled on the Government of India Act, 1935, the list placed forests under the states' competence¹⁷. However, in 1976, the forests were taken away from the exclusive jurisdiction of states and put under the concurrent list.¹⁸ The transfer of the subject was made on the ground that forests were not being adequately dealt with by the states. (Bakshi 2012)

Other developing countries, such as Brazil have gone through phases which are “neither one of consistent centralization, nor of consistent decentralization” (Piancastelli 2006). Therefore, a common trend may be difficult to establish. However, the current Constitution gives concurrent powers to the Federal, State, and Municipal governments to protect the environment. This concurrence has given rise to tensions when states or municipalities have tried to utilize this constitutional power, especially in the case of forests (Benjamin 2003). In US, where the Federal government has not used the constitutional space with respect to climate change as yet, States are free to promulgate their own rules and regulations in this regard. There has been greater experimentation on climate policy from the States, cities, and some regional collaboration. For instance, climate change adaptation has evolved as a completely local agenda with States and cities formulating disaster management plans that are tailored to their needs and vulnerabilities. Even in the case of climate change mitigation, regional, and State level carbon cap and trade programmes have been more popular and effective than the 60 Federal programmes — ranging from mandatory, incentive-based and voluntary — to reduce carbon emissions. While the states and cities experiment with policies and tools to reduce carbon emissions and adapt to a changing climate, the Federal government plays a key role in improving the knowledge and understanding of the causes and impacts of climate change.

State-led initiatives have not always been opposed. In the case of US climate policies, regional, and State level programmes have been effective. States have not played such a proactive role in other countries. In India, sub-national governments are often merely implementing the policies designed at the Central level, resulting in over-centralization within the Federal structure (TERI 2012).

In 1999, the Environment Protection and Biodiversity Conservation Act of Australia was developed as a result of conflicts and debates between Federal government and the states, especially regarding jurisdiction over environmental matters (Boer and Gruber 2010). However, a review of this Act revealed how its operation too was inefficient due to, *inter alia*, overlaps and duplication in assessment and authorization processes (Commonwealth of Australia 2009). In order to avoid duplication, environmental assessments have been delegated to

¹⁵ Article 92A (3), Constitution of Canada

¹⁶ Schedule VII read with Article 246 of Constitution of India

¹⁷ State List, entry 19, Constitution of India; Now repealed.

¹⁸ Entry 17 A, Concurrent List; Added vide 42nd Amendment of 1976 to the Constitution of India

the States in Australia (Bates 2010). There is no horizontal harmonization of assessment or clearance procedures, the states seek to reduce overlap and duplication, whether through a single integrated system or a two tier regime with Local government (Hollander 2010). In Argentina, 14 out of 23 provinces have enacted environmental laws. Therefore, environmental problems are handled differently in different jurisdictions and do not take into account regional ecological problems and overlapping jurisdictions (Nonna 2002).

Lack of harmonization is one of the main arguments in favour of a centralized environmental policy. Inger Weibust examines the various arguments in favour of locating environmental decision-making at sub-national levels and concludes that centralization results in more stringent environmental policies as cooperation in environmental federalism is rare (Weibust 2009). This can be observed in the case of South Africa where the Constitution itself provides for a framework for cooperation. In the absence of any real cooperation, a law facilitating cooperation was passed but still left a void for clarification of roles and responsibilities (Murray 2006).

Judiciary and other institutions have had a great impact on Federal–State relations on environmental and related matters. In India, some of the judgments on protection of environment and conservation of natural resources have added an additional level of stress in these relations (TERI 2012). In the famous *Massachusetts versus EPA* case, the US Supreme Court has upheld states' right to protect their interests against climate change in the absence of "EPA's steadfast refusal to regulate greenhouse gas emissions". The inherent tensions in the federalism remain and require some degree of compromise and coordination (Biering and Biering 2008).

Transboundary resources and issues require a cooperative and co-dependent approach for management of ecosystems. However, political boundaries, including those within the federal systems, divide the environment itself in the process of dividing roles and responsibilities (Hollander 2010).

Of all the ecosystems, river ecosystems have been the most common cause of conflict while managing shared resources. Some constitutions, like that of India, recognize the Federal government's jurisdiction on inter-state water issues while other Federal governments interpret their powers in provisions, relating to inter-state commerce. In the United States, the Congress has introduced rules for the management of the Colorado since Federal laws supersede State laws (Getches 2001).

Treaties, agreements, and rulings often divide the transboundary river ecosystems into compartments. In some jurisdictions, the courts have played an important, albeit mixed role in resolving inter-state river disputes. For example, the jurisprudence on transboundary water law developed by the US courts and the Indian courts in the Cauvery dispute, 1963. The US Supreme Court laid down in *Arizona versus California* how the Colorado basin was to be apportioned. Since then, several conservation related laws at the Federal level have been passed which govern the basin either directly or indirectly.¹⁹ While these laws do not alter the apportionment, they put constraints on how States can use their allocations (Heinmiller 2009).

¹⁹ For e.g., Clean Water Act, Federal Land Policy and Management Act, National Forest Management Act and Endangered Species Act, Colorado River Basin Salinity Control Act, and the Grand Canyon Protection Act



In another scenario, states themselves have exacerbated the problem of sharing transboundary resources. In India, the Cauvery water dispute has been marred by confrontationist positions of states fuelled by party politics. While interstate water dispute is clearly a federal subject, the Central government has been accused of being “unable or unwilling to play its constitutional and statutory roles” (Iyer 2012).

Fiscal Issues

In a Federal system, fiscal policy – including taxes, other incentives and disincentives, and programme spending – of each tier of the government can have direct or indirect impacts on resource-use and the environment. These impacts may be local or inter-jurisdictional. Environmental implications of specific fiscal measures²⁰ and the application of fiscal instruments (such as taxes, charges, and fees) to environmental problems have been extensively studied in the literature. Given below is a discussion on inter-governmental fiscal issues – allocation and scope of Federal, State, and Local revenues and expenditures; and the nature and scope of intergovernmental fiscal transfers, in the context of environmental management.

The basic principles of federalism provide some guidelines for the assignment of public responsibility to different levels of government. As discussed earlier, one of these is the principle of subsidiarity – that, services should be provided by the smallest jurisdiction that encompasses the geographical expanse of the benefits and costs associated with the service (Oates 1997). Traditional theory also lays down a set of tax-assignment principles in accordance with the respective responsibilities of different tiers of governments. Thus, Local environmental management and provision of basic environmental/civic amenities, such as clean drinking water, sewage, and solid waste management should fall under the purview of Local bodies, as indeed is the case in most countries. However, when it comes to fiscal decentralization in terms of devolving “revenue handles” for the delivery of such functions, the experience is diverse though in general it may be said that adequate revenue assignment to Local bodies remains the most conspicuous problem, especially in the developing world.

Allocation and Scope of Environment-related Revenues and Expenditures

Theory and experience make a strong case for adequate revenue sources with Local bodies for financing local public services. On the one hand, inadequate revenues can undermine democratic decentralization and the quality of public services. On the other, the absence of a hard budget constraint can make Local government too dependent on intergovernmental transfers or debt issues for financing their budgets, thus providing incentives for them to raid the “fiscal commons” and extend public programmes well beyond efficient levels (Oates 2005). Either way, the matching between revenues sources and expenditures is necessary for greater efficiency in delivery and accountability of public functionaries.

²⁰ For e.g., “environmentally perverse” subsidies in energy and agriculture sectors have been extensively studied

While it is difficult to isolate the distribution of environment-related revenues and expenditures in Federal economies, a review of overall State of finances of Local bodies can be indicative. A local revenue source or instrument is one where the Local body determines the rate and base of the instrument and also retains the resulting revenue for financing local services. The principles of public finance suggest that “users pay”, “beneficiaries pay”, and “polluters pay” are the desirable principles for financing local infrastructure and services, such as water supply, sewerage, drainage, and roads. Ideally, Local governments should rely on user charges to finance goods that provide measurable benefits to identifiable individuals within a single jurisdiction, and taxes on immobile bases to finance services for which it is difficult to identify individual beneficiaries and to measure individual costs and benefits (RBI 2007).

Actual experience with the devolution of revenue sources to Local bodies is mixed and the patterns of local revenues vary widely across countries depending upon a range of factors. In general, fiscal autonomy at the sub-national level has lagged behind functional decentralization. It is, however, necessary to analyse the factors underlying this “gap”. As Rajaraman (2007) points out, because the principles underlying revenue rights and expenditure responsibilities in any federation originate from independent considerations, there will be a gap (at usually lower than national level), where its magnitude is not necessarily indicative of incomplete or unfair allocation of taxation rights.

Even for the Organization for Economic Cooperation and Development (OECD), while the expenditure share of Sub-Central Governments (SCG) has increased, their tax share has remained near static implying greater dependence on intergovernmental grants (OECD 2009a)^{21, 22}. While efficiency and accountability call for a higher share of SCG spending covered by own taxes that has not been easy since increasing property taxes — the most suitable tax for SCG — usually meets with strong resistance (OECD 2009a). At the same time, a review of OECD taxation indicates that although tax autonomy varies widely across countries, most Sub-Central Governments have considerable discretion over their own taxes. On average, the tax revenue share with full or partial discretion amounts to more than 50% for State and almost 70% for Local government (OECD 2009b). Further, there is a visible trend in OECD countries towards more effective utilization of user charges by Local governments. This is attributed partly to citizens’ preference for user charges over general taxes (RBI 2007).

Needless to say, there are marked differences within these general trends. While the US is an example of flexible fiscal federalism with states showing great diversity in the fiscal autonomy granted to Local bodies, Australia has a far greater centralized federal structure. Local governments are seen as under-resourced and over-regulated by higher tiers of government. Local government in Australia has the fourth lowest share of taxation among the 30 industrialized nations of the OECD and are largely dependent on higher tiers for resourcing (Brown and Bellamy 2007). The mismatch between the finances and functional mandate

²¹ Over the period 1995 and 2005 the share of Sub-Central Governments (SCG) in total government spending increased from 31% to 33% while the SCG tax share remained stable at around 17% (OECD 2009)

²² While equal access to public services is the most common justification for such grants, the grant systems of most countries are much larger than required by equalization. Moreover, rather than smoothing out SCG revenue fluctuations over the cycle, grants often tend to exacerbate them. Finally, there is some evidence that grants reduce SCG tax effort, inflate SCG spending, and increase SCG deficits and debt

of Local bodies (which includes town planning, health and environmental protection, the provision of water and sanitation services among others) led to the signing of the Intergovernmental Agreement on Cost Shifting in 2006. The agreement provides a framework for intergovernmental consultation such that when a responsibility is devolved to Local government, the financial and other impacts on Local government are taken into account (IGA 2006). The Australian Local government Association has argued that financial assistance grants should be replaced with a share of commonwealth taxation revenue to provide more stability and greater buoyancy to their revenues, in keeping with their enlarged responsibilities (Brown and Bellamy 2007). In countries of the EU, such as in Germany while Local bodies follow the broad mandates of the states, they have considerable autonomy in the manner in which to do so.

In the developing world, though generalizations may be difficult, Local fiscal autonomy is likely to be weaker as compared to the OECD. In many developing countries including India, Municipal revenue base is typically low with inordinate dependence on intergovernmental transfers while user charges remain grossly underexploited. As a result, rural Local bodies in India play an abysmally small part in public service provision, often acting as agencies of State governments. Urban Local bodies, on an average spend less than 75% of what is required for providing the minimum level of civic amenities. Interestingly, underspending is found to be strongly correlated, positively, with dependency for resources on upper tiers of government and negatively, with decentralization of revenue-raising powers²³ (RBI 2007).

Intergovernmental Fiscal Transfers

Given that Local own-source revenues generally do not cover Local government expenditure responsibilities, intergovernmental transfer programmes are inevitable in all Federal systems. These transfers finance about 60% of sub-national expenditures in developing and transition economies (Shah A 2003). In OECD countries, the figures vary widely anywhere from 13% in the United Kingdom to 65% in Austria, the average figure being about 40%²⁴ Intergovernmental transfers serve multiple, often interrelated purposes, the important ones being (Shah A 2003):

- To bridge the fiscal gap and supplement inadequate local own-source revenues to improve the ability of Local governments to meet their expenditure responsibilities
- To correct fiscal inequities and fiscal inefficiencies arising from differentials in regional fiscal capacities
- To compensate for benefit spillovers, thus incentivizing the correct levels of services that yield benefits to residents of other jurisdictions

²³ *Dependency* was measured by the share of grants a Municipal corporation receives in relation to its total expenditure. *Decentralization* was measured by the proportion of the Municipal corporation's per capita revenue to the states' per capita revenue receipt

²⁴ OECD fiscal decentralization database. http://www.oecd.org/ctp/fiscalfederalismnetwork/oecd/fiscaldecentralisationdatabase.htm#SEC_B_6 accessed on September 10, 2012

- To set and ensure national minimum standards to preserve internal common market and attain national equity objectives
- To influence Local priorities in areas of high national but low local priority
- To create macroeconomic stability in depressed regions

Several of these objectives constitute a basis for transfers to address environmental concerns and improve the provision of environmental services. In particular, Federal governments of the world overuse IGTs to augment the resources of sub-national governments to provide basic minimum standard of public services, such as drinking water and sanitation. Increasingly, transfers are also being used to encourage sub-national governments to improve their pollution control infrastructure as well as to compensate regions for the opportunity cost of preserving certain ecosystems or resources. This is particularly relevant since the decision to conserve ecosystems are typically taken by higher governments while the costs of foregone economic activity are borne by the lower, mostly Local governments which are in any case cash strapped. Particularly in the developing world, where resource-rich regions are also among the poorest, inter-governmental transfers based on ecological indicators can often meet the dual objectives of poverty reduction and environmental sustainability.

Grants can take various forms — these can be unconditional or conditional. Unconditional transfers come as budgetary support with no strings attached while conditional transfers typically specify the type of expenditures that can be financed. In addition, they may also specify matching requirements from the recipient, which may be open-ended (grants will match recipient resources without any limit) or closed-ended (grants match recipient funds upto a pre-specified limit).

Internationally, there is considerable use of IGTs to address environmental concerns across tiers of the governments depending on the Federal system in question. In three-tier structures for instance, there may be very diverse principles to guide transfers from the states to the Local bodies within a single country as is evident in Germany. Some German states integrate specific ecological aspects, such as mining externalities while determining fiscal needs of Local bodies. Others incorporate ecological functions in their fiscal equalization structure through conditional grants for measures related to sewage disposal, water supply and waste disposal, remediation of contaminated sites, etc. There are also some limited examples of fiscal equalization laws that incorporate water and landscape conservation (Ring 2002). While these transfers may be most relevant given that many aspects of environmental management vest with Local bodies, systematic documentation of these experiences may be sparse, more so for developing world.

At the Federal-State level too, the use of specific grants to address environmental objectives is common. For instance, the Indian Federal government routinely provides assistance to States and Local bodies through its Central ministries and the Planning Commission for various urban and rural infrastructure projects which directly impact on the quality of the environment. Often, these constitute part of larger national programmes, for example the Ganga and Yamuna Action Plans, or the JNLNURM (Jawaharlal Nehru Urban Renewal Mission). More recently, the Finance Commission which deals with formulaic grants to States has

also sought to address the issue of environmental performance. Likewise, the US EPA provides Federal pollution prevention technical assistance grants to States (Zarker and Kerr 2008).

Several countries have also used performance indicators as criteria in disbursing grants. While the use of performance-based sector-specific grants is more common, there are now initiatives aimed at systematically integrating performance indicators into the overall framework of inter-governmental general-purpose grants.

An example of a sector-specific performance-based grant is the one provided by the Brazilian Federal government for water treatment which uses output indicators based on the quality of wastewater discharged. Brazil (Ecological Tax over Circulation of Goods and Services or the Ecological ICMS) and more recently Portugal (Amended Local Finances Law, as of 2007) have also introduced ecological indicators, such as protected areas, for the redistribution of intergovernmental fiscal transfers to the Local level. The underlying rationale is to compensate municipalities for the restrictions and costs associated with protected areas. Both countries have introduced the size of protected areas as a simple and easily available additional indicator for the distribution of intergovernmental fiscal transfers to Local governments. Other countries, like Germany and Norway are actively exploring the potential of introducing conservation-related indicators into their fiscal transfer schemes to the Local level (Ring, Drechsler, van Teef, Irawan, and Venter 2010).

These examples also bring out the importance of the appropriate choice of performance indicators to determine the level of grants. Grants are best based on actual output or quality of services rather than on inputs and processes. In general, while it is necessary to monitor the use of funds in meeting the desired objectives, too much process-related conditionalities not only undermine fiscal efficiency but also raise concerns of micromanagement and infringement of Local autonomy thus creating a trust-deficit between different tiers. This is evident in the controversial compensatory afforestation programme and fund in India. While on the one hand there has been much concern about the appropriate use of the monies by State governments, the latter have argued that over-involvement of the Central government in the management of the funds is intrusive and often causes delays and inefficiencies in the execution of projects.

There have also been some recent initiatives linking inter-governmental transfers as a whole to performance indicators that also include the environment as an overarching objective along with gender, social inclusion, and poverty reduction. These grants are largely discretionary but generally directed at financing capital investments and capacity-building activities of Local governments. Uganda piloted the process in mid 1990s and at least 15 developing and middle-income countries are using similar approaches, either nationwide or on a pilot basis [(Qibthiyah 2011) (Steffensen 2010) for reviews]. To date most PBGSs (performance-based grant systems) tend to focus on leveraging generic aspects of Local government performance (such as planning, budgeting, financial management, transparency, governance, etc.), where improvements to such “processes” can impact on a broad spectrum of end-outputs or outcomes. The way these have been designed, PBGSs rely on two types of indicators: (i) Minimum Conditions (MCs), which are categorical (“yes/no” triggers), and which need to be complied with in order to gain access to basic grants; and (ii) Performance Measures

(PMs), which are more “qualitative” and “calibrated” than MCs, and determine the size of grants allocated to LGs. Apart from indicators of general performance of Local bodies, many countries including Uganda and Tanzania also have environment as a cross-cutting issue in the set of performance indicators. Though these initiatives are relatively new, there is evidence to suggest that they have yielded positive outcomes (Steffensen 2010).

It is important to note here that various other forms of grants are used internationally, depending on the type of Federal systems, the role of different jurisdictions, and the specific constitutional and environmental legislation in force. In Brazil, for instance, the focus is on compensating municipalities and there are almost no instruments that directly support private land users in their role as conservation actors. In contrast, instruments for compensating for Local spillover benefits in the European Union and its many federally organized member States have targeted almost exclusively the private land user, be it in agriculture, forestry, or aquaculture (Ring, Drechsler, van Teef, Irawan, and Venter 2010).

Finally, it is necessary to point out that politics plays an important role in the distribution of grants from higher to lower tiers of government. Boex and Martinez-Vazquez (2005), provide a survey of international experience of the political influence on discretionary grants and Arulampalam et al (2009) provide evidence on how Centre–State transfers in India are influenced by the electoral goals of the Central government. TERI (2009) documents how the disbursement of non-formulaic environmentally relevant Central grants to States in India is shaped by politics. The presence of significant levels of such discretionary funds can undermine the effectiveness of objective or performance-linked grants. In multi-party federations like India, a related issue is the disbursement of grants by the Federal government to the lowest tier — this may be viewed as an infringement of the powers of the State government especially when the latter is not a political ally of the Centre.

References

- Adler J H. 1998. **A New Environmental Federalism**. *Forum of Applied Research and Public Policy*. 13.
- Agnoletti M. 2006. **Man, Forestry, and Forest Landscapes: Trends and Perspectives in the Evolution of Forestry and Woodland History Research**. *Schweiz Z Forstwes* **157**(9):384–392.
- Agranoff R. 2001. **Managing within the Matrix: Do Collaborative Intergovernmental Relations Exist?** *Publius*. **31**(5):31–56.
- Arora B. 2007. **India’s Experience with Federalism: Lessons Learnt and Unlearnt**. Paper presented at an International Seminar on “Constitutionalism and Diversity in Nepal”, Kathmandu.
- Arulampalam W, Dasgupta S, Dhillon A, and Dutta B. 2009. **Electoral Goals and Centre–State Transfers: A Theoretical Model and Empirical Evidence from India**. *Journal of Development Economics Volume*. **88**(1): 103–119.
- Bakshi P M. (n.d.). **A Background Paper on Concurrent Powers of Legislation under List III of the Constitution**. Retrieved October 1, 2012, from Law Commission of India: <http://lawmin.nic.in/ncrwc/finalreport/v2b3-3.htm>

- Banzhaf S and Chupp A. 2010. **Heterogenous Harm vs. Spatial Spillovers: Environmental Federalism and US Air Pollution**. National Bureau of Economic Research. Working Paper 15666. Cambridge, MA, USA
- Bates G. 2010. **Environmental Law in Australia**. *LexisNexis Butterworths*.
- Bhatt S and Majeed A. 2002. **Management and Federalism: The Federal Experience**. Uppal Publishing House. New Delhi.
- Biering R and Biering B. 2008. **Massachusetts vs. EPA: Rescuing Icarus with Environmental Federalism**. *Journal of Environmental Law and Litigation*. **23** (1).
- Black J. 2008. **Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes**. *Regulation and Governance*. **2**: 137–164.
- Boer B and Gruber S. 2010. **Legal Framework for Protected Areas: Australia**. IUCN-EPLP No. 81.
- Boex J and Martinez-Vazquez J. 2005. **The Determinants of the Incidence of Intergovernmental Grants: A Survey of the International Experience**. *Andrew Young School of Policy Studies*.
- Brown A J and Bellamy J A. 2007. **Federalism and Regionalism in Australia: New Approaches, New Institutions?** ANU Press.
- Chakraborty I. 2006. **Determining Environmental Quality in a Federal Setting: An Empirical Analysis of Subnational Governments in India**. Munich: MPRA Paper No. 7605.
- Chandiramani N. 2004. **Environmental Federalism: An Indian Viewpoint**. *ICFAI Journal of Environmental Law*. **3**(2).
- Chhatre A. 2008. **Political Articulation and Accountability in Decentralisation: Theory and Evidence from India**. *Conservation and Society*. **6**(1):12–23.
- Commission on Centre-State Relations. 2010. **Report of the Commission on Centre-State Relations: Taskforce on Environment, Natural Resources, and Infrastructure**. Government of India. New Delhi.
- Constituent Assembly Debates. 1948. **Constituent Assembly Debates**. Book I Volume 6 (ed.) Lok Sabha Secretariat. New Delhi.
- Contreras-Hermosilla A, Hans G, and White A. 2008. **Forest Governance in Countries with Federal Systems of Government**. *Center for International Forestry Research*.
- Courchene T J. 2008. **Climate Change, Competitiveness and Environmental Federalism: The Case for a Carbon Tax**. Ottawa.
- Davis B W. 1985. **Federalism and Environmental Politics: An Australian Overview**. In R L Mathews *Federalism and the Environment*. Centre for Research on Federal Financial Relations. Canberra. ANU.
- Dudley N. 2008. **Guidelines for Applying Protected Areas Management Categories**. Gland: IUCN.
- Ebegbulem J C. 2011. **Federalism and the Politics of Resource Control in Nigeria**. *International Journal of Humanities and Social Science*. **1**(12):218–229.
- Elazar D E. 1998. **Contrasting Models of Democracy**. Retrieved on June 30, 2012 from <http://jcpa.org/dje/articles2/contmodels.htm>
- Esty D C. 1996. **Revitalizing Environmental Federalism**. *Faculty Scholarship Series, Paper 450*.
- European Commission. 1992. **Communication on the Principle of Subsidiarity**. Brussels: Principle Bulletin. EC 10.

- Fafard P. 1998. **Green Harmonisation: The Success and Failure of Recent Environmental Intergovernmental Relations.** In H Lazar, *Canada: The State of the Federation 1997: Non-Constitutional Renewal* (pp. 203–228). Institute of Intergovernmental Relations.
- Farber D A. 1997. **Environmental Federalism in a Global Economy.** *Virginia Law Review.* **83**(7):1283–1319.
- Fischman R. 2006. **Cooperative Federalism and Natural Resources Law.** Bloomington: Indiana University Legal Research Paper Number 32.
- Getches D H. 2001. **The Metamorphosis of Western Water Policy: Have Federal Laws and Local Decisions Eclipsed the States' Role?** *Stanford Environmental Law Journal.*
- Gibson D. 1973. **Constitutional Jurisdiction Over Environmental Management in Canada.** *University of Toronto Law Journal.* **23**(1):54–87.
- Government of India. 2009. **Report of the Thirteenth Finance Commission.** Finance Commission of India, New Delhi.
- Heinmiller B T. 2009. **Path Dependency and Collective Action in Common Pool Governance.** *International Journal of the Commons.* **3**(1).
- Hilderbrand M E and Grindle M S. 1994. **Building Sustainable Capacity: Challenges for the Public Sector.** Retrieved on June 20, 2012, from <http://mirror.undp.org/magnet/cdrb/parti.htm>
- Hollander R. 2010. **Rethinking Overlap and Duplication: Federalism and Environment Assessment in Australia.** *Publius.* **40**(1):136–170.
- Honadle B W. 2001. **Theoretical and Practical Issues of Local government Capacity in an Era of Devolution.** *The Journal of Regional Analysis and Policy.* **31**(1):78–90.
- Hudson B. 2011. **Climate Change, Forests and Federalism: Seeing the Treaty for the Trees.** *University of Colorado Law Review.* **82**(2):363–428.
- Hudson B. 2014. **Dynamic Forest Federalism.** *Washington and Lee Law Review.* **71**:1643–1714.
- Hueglin T O and Fenna A. 2006. **Comparative Federalism: A Systematic Inquiry.** Broadview Press. Canada.
- IGA. 2006. *The Inter-governmental Agreement Establishing Principles Guiding Inter-governmental Relations on Local government Matters, Australian government.* Retrieved on October 20, 2012, from http://www.dpac.tas.gov.au/__data/assets/pdf_file/0006/46392/Intergovernmental_relations_on_Local_government_matters.pdf
- Iyer R R. 1994. **Federalism and Water Resources.** *Economic and Political Weekly.* **29**(13).
- Iyer R R. 2012. **Bridge over the River Cauvery.** Retrieved on October 20, 2012, from *The Hindu*: <http://www.thehindu.com/opinion/lead/bridge-over-the-river-cauvery/article4000026.ece>
- Jha A. 2011. **Much Ado about the State Action Plans on Climate Change: Its Business As Usual.** Pairvi. New Delhi.
- Jørgensen K. 2011. **Climate Initiatives at the Sub-national Level of the Indian States and their Interplay with Federal Policies.** Paper Presented at the 2011 ISA Annual Convention, March 16–19, 2011. Montreal.
- Lenaerts K. 1993. **The Principle of Subsidiarity and the Environment in the European Union: Keeping the Balance of Federalism.** *Fordham International Law Journal.* **17**(4):846–895.
- Lidden A M. 2005. **Flexible federalism: The Canadian Way.** In B S Markesinis and J Fedtke, *Patterns of Regionalism and Federalism.* Hart. UK.

- MacKay W R. 2004. **Canadian Federalism and the Environment: The Literature.** *Georgetown International Environmental Law Review*. **17**(1).
- Majeed A. 2004. *Republic of India*. Retrieved on June 15, 2012, from www.federalism.ch/files/categories/IntensivkursII/indiag1.pdf
- Mandal S and Rao M G. 2005. **Overlapping Fiscal Domains and Effectiveness of Environmental Policy in India.** National Institute of Public Finance and Policy Working paper No:25. New Delhi.
- Millar H. 2011. **Accountability Frameworks and Multilevel Governance in Canada.** Paper presented at “**Comparing Modes of Governance in Canada and the European Union: Social Policy Engagement across Complex Multilevel Systems**” on September 30, Canada.
- Mishra A, Pandey N, Upadhyay H, Gupta P, and Kumar A. 2011. **Sub-national Actions on Climate Change in India and Implications for International Collaboration.** TERI. New Delhi.
- Murray C. 2006. **Republic of South Africa.** In K L Roy and C Saunders, *Legislative, Executive, and Judicial Governance in Federal Countries* (pp. 258–288). McGill-Queen’s University Press.
- Noronha L, Srivastava N, Datt D, and Sridhar P V. 2009. **Resource Federalism in India: The Case of Minerals.** *Economic and Political Weekly*, **44**(8):51–59.
- Oates W E. 1997. **On Environmental Federalism.** *Virginia Law Review*. **83**(7):1321–1329.
- Oates W E. 2005. **Toward a Second-Generation Theory of Fiscal Federalism.** *International Tax and Public Finance*. **12**(4):349–373.
- OECD. 2009. **Taxes and Grants: On the Revenue Mix of Sub-Central Governments.** *OECD Network on Fiscal Relations across levels of Government*.
- OECD. 2009. **The fiscal Autonomy of Sub-Central Governments: An Update.** *OECD Network on Fiscal Relations Across Levels of government*.
- Piancastelli M. 2006. **Republic of Brazil.** In A Majeed, R L Watts, and D M Brown, *Distribution of Powers and Responsibilities in Federal Countries* (pp. 67–91). McGill-Queen’s University Press.
- Qibthiyah R M. 2011. **Review of Incentives and Sanctions Linked Intergovernmental Transfers.** ADB-INO. TA 7184-Local government Finance and Governance Reform.
- Rajaraman I. 2007. **The Political Economy of the Indian Fiscal Federation.** *India Policy Forum*. **4**(1): 35.
- Rao M G. 2000. **Fiscal Decentralization in Indian Federalism.** Institute for Social and Economic Change. Bangalore.
- Rao M G, and Singh N. 2004. **Asymmetric Federalism in India.** SantaCruz International Economics [Working Paper No. 04-08]. SantaCruz.
- RBI. 2007. **Municipal Finance in India – An Assessment.** Department of Economic Analysis and Policy, Reserve Bank of India. New Delhi.
- Ring I. 2002. **Ecological Public Functions and Fiscal Equalisation at the Local Level in Germany.** *Ecological Economics*. **42**(3):415–427.
- Ring I, Drechsler M, van Teef A, Irawan S, and Venter O. 2010. **Biodiversity Conservation and Climate Mitigation: What Role Can Economic Instruments Play?** *Current Opinion in Environmental Sustainability*, 50–58.
- Sankar U. 2009. **Ecology, Environment and Sustainable Development in Indian Fiscal Federalism.** Madras School of Economics WORKING PAPER 47/2009. Chennai.

- Selin H, and Vanderveer S. 2011. **Federalism, Multilevel Governance and Climate Change Politics Across the Atlantic**. Presented at the EUSA Twelfth Biennial International Conference, Boston.
- Shah A. 2003. **Intergovernmental Fiscal Arrangements — Lessons from International Experience**. Retrieved on October 15, 2012, from <http://www.eclac.cl/ilpes/noticias/paginas/6/13526/AnwarShah.pdf>
- Shah A, and Shah S. (n.d.). **The New Vision of Local government and Evolving Roles of Local Governments**. The World Bank. Washington.
- Shobe W, and Burtraw D. 2012. **Rethinking Environmental Federalism in a Warming World**. Resources for the Future—RFF DP 12-04. Washington.
- Singh M P. 2001. **Towards a More Federalized Parliamentary System in India: Explaining Functional Change**. *Pacific Affairs*. 74(4).
- Sinha G N. 2012. **Decentralised Forest Governance and Federalism**. Paper presented at the Workshop on “**Greening the Indian Federal System**”, held on July 6, 2012, organized by TERI, New Delhi.
- Slocombe D S. 2008. **Forty Years of Institutional Change and Canadian Protected Areas, or, Are Things Getting Better or Just More Complicated?** Retrieved on October 20, 2012, from <http://dspace.ucalgary.ca/bitstream/1880/46879/1/Slocombe.pdf>
- Sovacoo, B. 2008. **The Best of Both Worlds: Environmental Federalism and the Need for Federal Action on Renewable Energy and Climate Change**. *Stanford Environmental Law Journal*. 27: 397–476.
- Steffensen J. 2010. **Fiscal Decentralisation and Sector Funding Principles and Practices (Performance-based Grant Systems—Concept and Internations Experiences)**. DANIDA.
- Steffensen J. 2010. **Performance-based Grant Systems: Concept and International Experience**. UN Capital Development Fund. New York.
- TERI. 2009. **Integrating Environment, Ecology and Climate Change Concerns in the Indian Fiscal Federalism Framework**. TERI Report to the Finance Commission [No. 2007EM04]. New Delhi.
- TERI. 2012. Summary of the Proceedings of the Workshop on “**Greening the Indian Federal System: Views from the Centre and the States**”. July 6, 2012. The Energy and Resources Institute. New Delhi.
- Vogel D, Toffel M, Post D, and Aragon N. 2010. **Environmental Federalism in the European Union and the United States**. *Harvard Business School*. Working Paper 10-85.
- Western Ghats Ecology Expert Panel. 2011. **Report of the Western Ghats Ecology Expert Panel**. Retrieved on October 22, 2012 from Ministry of Environment and Forests: <http://moef.nic.in/downloads/public-information/wg-23052012.pdf>
- Wheare K C. 1963. **Federal government**.
- Zarker K A. and Kerr R L. 2008. **Pollution Prevention through Performance-based Initiatives and Regulation in the United States**. *Journal of Cleaner Production* 16:673–685.

AUSTRALIA



Population – 22.7 millions

Land area – 7,682 sq. km

GDP – 1,532.40 (\$ billions)

Capital – Canberra

States

- New South Wales
- Queensland
- South Australia
- Tasmania
- Victoria
- Western Australia

Territories

- Australian Capital Territory
- Northern Territory



2

Environmental Assessment in Australia: Current Dynamics and Emerging Issues An Academic Perspective¹

GARRY MIDDLE*

The Environmental Assessment Processes of Federal and Constituent Units

History

In Australia, many of the functions of government were given to the states of the federation in 1901, including environmental protection. It remained the sole responsibility of the states until the mid-1970s, although the Commonwealth showed little interest in Environmental Assessment (EA) until the 1990s. The Commonwealth interest in environmental protection was initially based on the requirement to address international treaties it had signed. The first commonwealth environmental legislation was passed in 1974, but it was the Environment Protection and Biodiversity Conservation Act 1999 (EPBC) that allowed the Commonwealth to carry out serious EA. However, in recognition of the states' leading role in EA, the EPBC Act limited EA to matters of national significance.

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The States

At the State level, EA is generally comprehensive covering all proposals deemed likely to have a significant effect on the environment. Each State has developed its own thresholds of significance both for screening (whether an EA is required or not) and for significance of impacts. This leads to difference across States.

There is also a difference as far as the jurisdiction of EA is concerned. For example, in Queensland EA is carried out under three different pieces of legislation involving three different departments and ministers as given below.

- State Development and Public Works Organisation Act 1971 (amended in 1999) requires government agencies to carry out an Environmental Impact Assessment (EIA) for its projects considered significant;
- The Integrated Planning Act 1997 allows for EA for either prescribed development proposals or community infrastructure – the Minister for Planning is the final decision-maker; and
- Environmental Protection Act 1994 allows for EAs for certain mining and other proposals – the Environmental Protection Agency (Department) undertakes the EAs.

In Victoria, EAs are carried out under the Environment Effects Act 1978. It is not an approval process, but an EA provides advice to the responsible decision-making authority – ministers, Local government, and statutory authorities – to enable them to make informed decisions about whether a project with potentially significant environmental effects should proceed. The Minister for Planning plays a key role by deciding whether an EA is required. He or she also provides an assessment of the proposal which is passed on to the relevant decision-makers. The Department of Planning and Community Development coordinates the entire process.

In Western Australia (WA), all EAs are carried out under the Environmental Protection Act 1986, with the assessments being carried out by the EPA (an independent statutory authority) and the Minister for the Environment, the final decision-maker.

The Commonwealth

Under the EPBC Act, an EA is required if an “action” is likely to have a significant impact on matters of national significance such as:

- World heritage sites
- National heritage places
- Wetlands of international importance
- National threatened species and ecological communities
- Migratory species

- Commonwealth marine waters
- Nuclear activities

Operations of the Two Types of EAs

The Commonwealth EAs act like a “horizontal” cut through the State EA process where certain matters are taken out for special consideration by the Commonwealth. Whilst the EPBC Act allows for bilateral agreements between individual states and the Commonwealth so as to minimize duplication of assessments, significant duplication still occurs even where a bilateral agreement has been drawn. There are two reasons for this. Firstly, there is no agreement between the States and the Commonwealth as to what is deemed significant, which means the Commonwealth often has to do a supplementary assessment after the State has finished its own assessment. Second, EAs at the State level are of proposals and plans, whereas the Commonwealth considers actions. Actions maybe specific parts of a proposal or the very end of the land-use planning process (subdivision or development). This often means that the Commonwealth EA occurs very late in the decision-making process after key project or planning decisions have been made. The Commonwealth is attempting to address this by focusing more on strategic assessments (see below). Notwithstanding this recent change of emphasis, many involved in the development industry at the State level express frustration about the continued late involvement of the Commonwealth in the decision-making process, and its emphasis on individual species rather than habitats and ecosystems.

Emerging Issues

Overview

A survey was conducted amongst the EA practitioners who are members of the International Association of Impact Assessment (IAIA). They were asked to identify what they thought were the key emerging issues in EA in Australia. Nearly 96 individuals were emailed with only 16 responses received (16.7% response rate). These responses were tabulated and four key issues emerged. These issues are:

- Need for strategic assessments and examination of alternatives
- Timeliness and cost pressures
- Increased number of Commonwealth EAs, and that these EAs come late in the decision-making process
- Independence of EIA being challenged – politicization of EA
- Better integration of environmental planning and EA into land-use planning
- Increasing uncertainty in predicting impacts

Need for Strategic Assessments and Examination of Alternatives

In Australia, EA is dominated by project EIA, with only minimal, although growing, interest in Strategic Environmental Assessment (SEA). Most legislations give little attention to assessment of plans, programmes, and policies, although in some states (such as New South Wales) EA is integrated into the land-use planning process and assessment of plans is not a separate process (integrative SEA). The Commonwealth EPBC Act allows for strategic assessments, but the focus has been on single agency management plans and planning scheme amendments covering relatively small areas. The Commonwealth is yet to carry out an assessment of a regional land use strategy, although it has shown interest in getting involved in the current round of regional land-use planning being carried out in the north of WA.

In WA, that Act allows for formal SEA, but examples of this have been limited to date. This has not stopped the EPA from carrying out “informal” SEAs. Since the 1990s, the EPA has provided public advice on environmental issues associated with strategic land use plans to the lead land-use planning agency, the Western Australian Planning Commission. It has developed a tiered approach to assessment, where public advice is given at the regional strategic level, and generally formal assessment of schemes or proposal is only required when the initial EPA advice has been ignored.

Observations

SEA is clearly underdeveloped in Australia, which is partly explained by the work load of assessing agencies in dealing with the major resources and infrastructure projects being considered. These agencies have been unable to dedicate resources to SEA. There is a need to focus on EA which as the government stresses on fast track approvals for major resource proposals. These proposals are seen as a way of significantly addressing the downturn in the Australian economy due to the global financial crisis. The Commonwealth and some States have embarked on ambitious infrastructure building programmes to provide an additional boost to Local economic activity and to fast track EAs for these proposals. It has also been observed that making space for SEA is becoming more difficult.

Timeliness and Cost Pressures

There is increasing pressure on the EA process to deliver outcomes more quickly and to reduce the cost to proponents. As noted above, the global financial crisis has only added to this pressure. The community is beginning to react, as more timely EAs mean fewer opportunities for community involvement. This is particularly the case for major resource proposals. A spin off to this has been increasing calls in states like WA to better integrate all the approval processes (including indigenous planning approvals).

Observations

The problem for EA practitioners is that this debate is based as much on perception as reality. There is very little data available on EA timelines, which makes it easy for critics to claim that EA is both long and costly. There is an urgent need for quality research in this area, including the costs and time delays of rushed and poor EAs. The published timelines of the project

that have undergone EA since 2000 in WA was examined as part of a research survey by the author.

It was noticed that there are two types of EAs in WA.

- 🌿 Quick EAs, where the assessment process is shortened by combining the early phases of EA into one step
- 🌿 Full EAs, where all the key steps of EA are carried out sequentially

Quick EAs are generally used for proposals that have few environmental issues and limited public interest. A total of 45 quick EAs and 43 full EAs were included in this research. The first part of this research was to determine the total time taken for each, which was as follows:

- 🌿 For quick EAs, the time from initial referral to the EPA till the conditions were finally published
- 🌿 For full EAs, the time from when the EPA formally decided to carry out an assessment to when the conditions were finally published.

Figure 2.1 shows the results of this analysis, using 100 day groupings. The times for quick and full EAs have been separated.

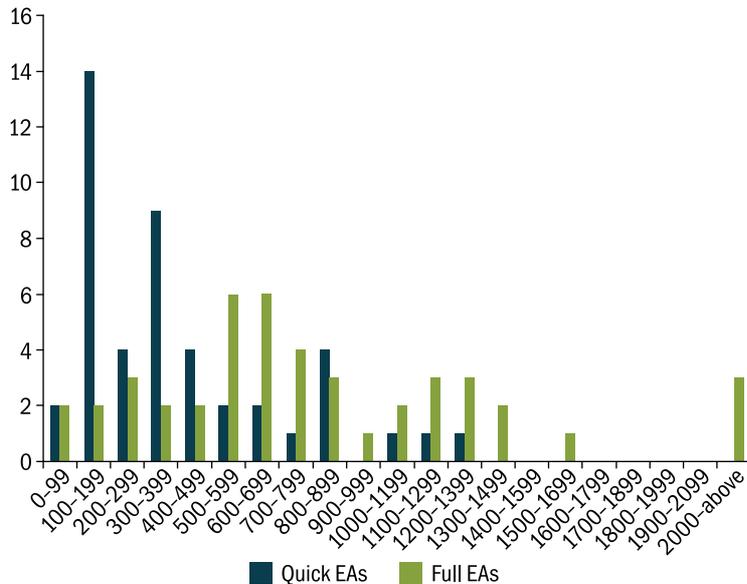


Figure 2.1: Time taken to complete EAs

The average time for each EA type are as follows:

- 🌿 Quick EAs—410 days
- 🌿 Full EAs—890 days.

A quick and superficial glance at these figures suggests that timelines for EAs, especially full EAs, are long. A closer look at these figures tells a different and more meaningful story.

After further analysis, five key phases or steps in the EA process in WA were identified:

- 🌱 Phase 1 – Time taken for the proponent to produce its EIS
- 🌱 Phase 2 – The public submission period
- 🌱 Phase 3 – Time taken for the proponent to respond to public submissions
- 🌱 Phase 4 – Time taken for the EPA to complete its assessment once the proponent's response to public submissions have been received
- 🌱 Phase 5 – Time taken to determine any appeals on the EPA's assessment (it should be noted that not all EPA assessments were appealed)
- 🌱 Phase 6 – Time taken to set the condition following the determination of any appeals

Figure 2.2 shows the average time taken for each phase. To provide some further differentiation, EAs greater than 1,000 days were considered separately from those of less than 1,000 days. Figure 2.1 also shows the data for all EAs.

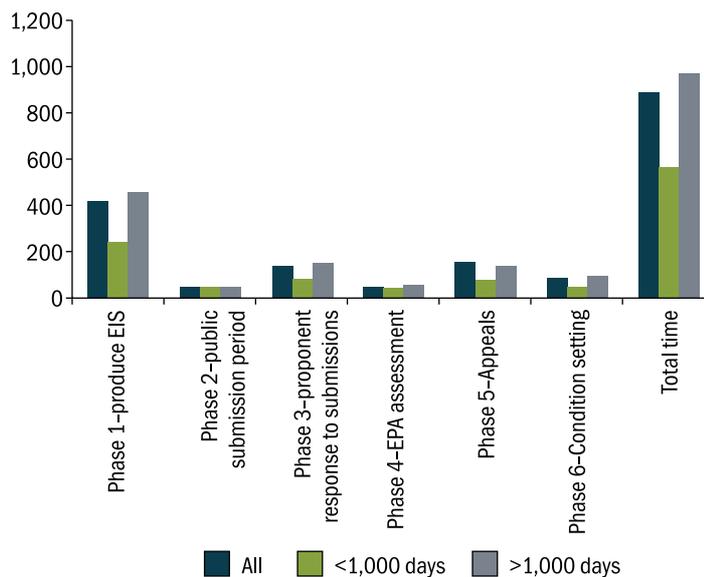


Figure 2.2: Average times for each phase of EAs

A number of observations are significant, as given below:

- 🌱 The phase that takes up the most time is the preparation of the EIS, which is largely the responsibility of the proponent
- 🌱 The public submission period is generally the shortest phase – this period is set at the start of the assessment based on the level of assessment, and is rarely varied
- 🌱 The actual time taken by the EPA for its assessment is both relatively short and remarkably consistent irrespective of the overall length the of assessment
- 🌱 Appeals take up a significant portion of the time

These observations are confirmed in Figures 2.3 and 2.4 which shows the average percentage of total time taken up by each phase for full EAs.

These data and other similar research needs to be reported to decision-makers so that a proper debate about timeliness can occur. Critical to this debate is the question of effectiveness of EAs, which seems to have been lost in the calls for more efficient EAs.

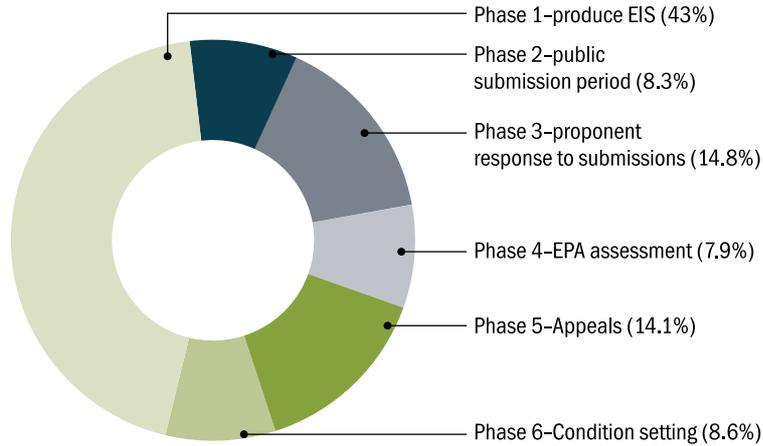


Figure 2.3: Percentage of total time taken for each phase – EAs with assessment times less than 1,000 days

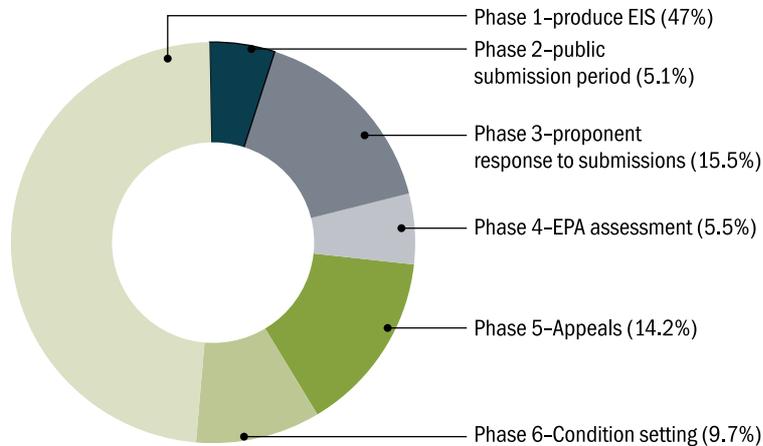


Figure 2.4: Percentage of total time taken for each phase – EAs with assessment times greater than 1,000 days

Given how significant the time taken to produce the EIS is to the overall assessment time, further research is required to examine the reason behind this; for example, is it the complexity of the work required as set through scoping, or is it that proponents are electing to delay assessments?

The picture for quick EAs is not clear. The first four phases of the EA process are combined into one with the proponent required to develop its EIS and consult with the community prior to referral to the EPA, and the EPA prepares its assessment report, and at the same time announces that a formal assessment is required. Figure 2.5 shows these limited data.

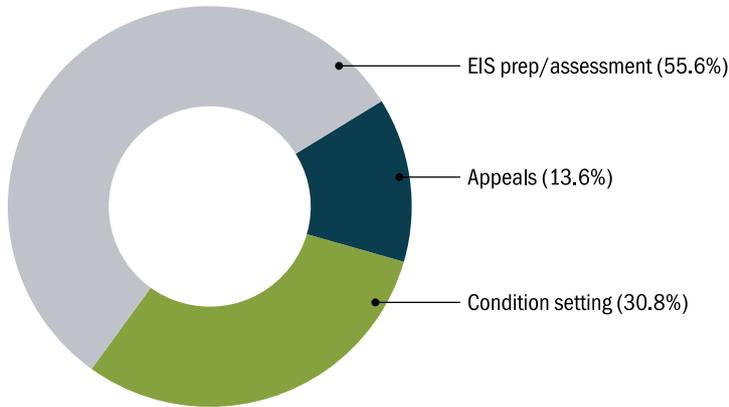


Figure 2.5: Average percentage of time taken with each phase for quick EAs

The only notable observation is the increased proportion of time taken for the condition setting process in these quick EAs. This may simply reflect the fact that condition setting has a relatively consistent time frame irrespective of the complexity of the assessment (i.e., the overall average times of assessments for quick EAs is much shorter than full EAs). Also one sees an increased number of Commonwealth EAs and these EAs come late in the decision-making process.

There is a growing concern in most states about the increasing involvement of the Commonwealth in EAs, where, as discussed above, these EAs appear late in the overall approval process and introduces issues and concerns not considered in the State assessment processes; protection of individual species is of particular concern.

Observation

Primarily, there is a fatal flaw of the EPBC Act, which is that the Commonwealth can only assess “actions”. SEA provides a mechanism for the Commonwealth to avoid late assessments, but two problems remain. First, issues of rare and endangered species and ecological communities will remain of concern in highly urbanized areas where most of the land is “up” zoned and has not been subject to Commonwealth assessment. The Commonwealth could choose to “write-off” these areas and focus its efforts on SEA of new non-urban land, but the record till date suggest that the Commonwealth will continue to assess actions on these up-zoned areas and conflict between the States and developers and the Commonwealth will remain. Second, the Commonwealth is yet to seriously embrace SEA of strategic land-use planning, and until it does, it will continue to carry out assessments late in the decision-making process.

Independence of EIA being Challenged – Politicization

With the pressure to deliver more timely and cost effective EAs, it has been observed that the EA process is becoming less independent and becoming more political. As noted above, the independence of the EA processes in each State varies, but even in WA, which arguably has the most independent EA process, concern about increased politicization is growing, especially at the end of the process.

Observation

The governments are trying to redress what they perceive as a lack of balance where the EA process has had significant primacy over other factors and approvals processes (the socio-economic). It is becoming more common for governments to announce their support for a proposal well ahead of the EA process being complete. There are many who see this change as well overdue (for example, land-use planners). The EA faces a difficult time ahead to remain independent and central to decision-making where environmental impacts could be significant.

Better Integration of Environmental Planning into Land-Use Planning

Both at the Commonwealth level and in those States where EAs are independent of the land-use planning process, there are increasing calls for better integration of EA with land use decision-making. There are two schools of thought, there are those who want to bring the EA process back on par with other considerations and approvals processes, and there are the EA practitioners who call for better SEA rather than integrating EAs as part of land-use planning. This latter view clearly recognizes the central role that land-use planning plays in long-term decision making (for example, provision of infrastructure and zoning of land for special purposes).

Observation

The key constraint for greater SEA of land-use planning instruments is a lack expertise in, and understanding of, the land-use planning process within the assessing agencies, in particular, the Commonwealth. EA agencies need to broaden their skills base beyond environmental management specialization and recruit land-use planners with an environmental leaning so that they are better equipped to carry out SEA. The SEA is a much less technical exercise and requires a strategic approach to assessment that parallels the strategic land-use planning system it is assessing.

Increasing Uncertainty in Predicting Impacts

This is emerging as a significant issue for major resource proposals in Australia, especially in very remote areas where the level of environmental information available is limited, and studies carried out in support of an EA often adds significantly to the amount of information available. Australia, like most nations with large areas of land that are sparsely populated, carries out the majority of environmental studies in areas that are nearest to the major populations centres. This is in part because these areas are highly threatened by human impacts, but also because these areas and the most valued and contested areas, and naturally become the focus of most scientific studies. Figures 2.6 and 2.7 below illustrate the population distribution of Australia and the location of the major natural gas fields in Australia.

A complementary issue that comes with increasing uncertainty is the importance, but also difficulty, of predicting cumulative impacts. Many of these resource proposals are in the same region and have a range of cumulative impacts, for example on migratory species.

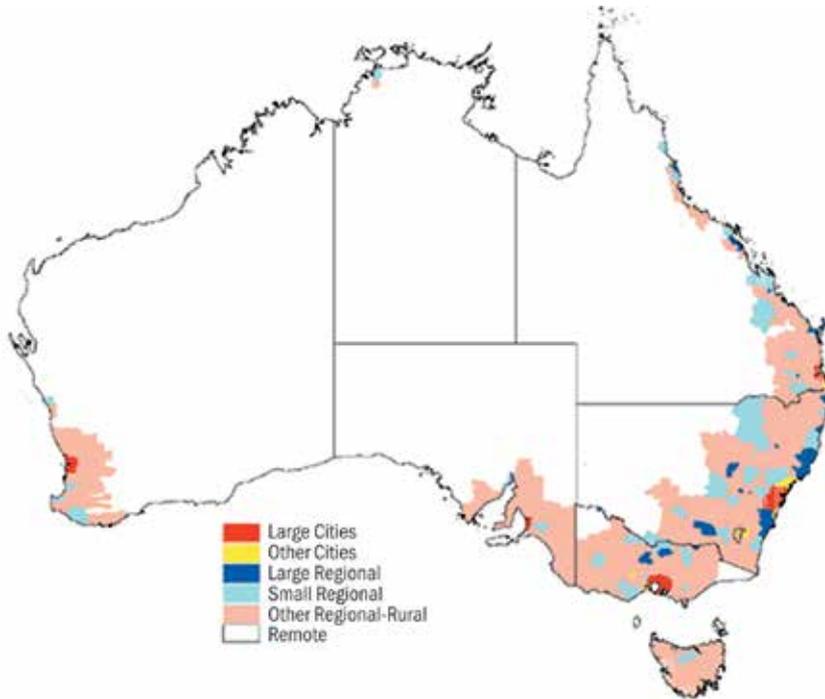


Figure 2.6: Australia's population distribution

Source: <http://www.environment.gov.au/soe/2001/publications/theme-reports/settlements/index.html>



Figure 2.7: Location of the main natural gas fields in Australia

Observation

This lack of base-line data often leads to high levels of uncertainty in predicting impacts during EAs and reliance on modelling to predict impacts. As a result, decisions on acceptability are risk-based and the precautionary principle gets expressed in terms of adaptability of management responses rather than waiting until sufficient information has become available to complete the EA. The key challenges for EA practitioners are to engage in the risk assessment debate and to be able to craft conditions of approval that are adaptable so that management responses can be adjusted when new information becomes available. The key problem is that project EA is not necessarily well suited to an adaptable and flexible approach. Further, it makes the auditing process more important than in EAs not subject to the same levels of uncertainty.

The monitoring of impacts also ties with the determining cumulative impacts. There are many natural gas (LNG) proposals off the Pilbara coast in WA, all likely to have a range of marine impacts. Each of these proposals will need to collect a large amount of data, both during the EA phase but also post-approval. At this time there is no single agency that will collect and review all this data. This is a missed opportunity as not only analysis of this data yield important information on cumulative impacts, it would also help to inform both decision-makers and newer proponents on likely impacts of these fresh proposals.

BRAZIL



Population – 198.70 millions

Land area – 8,459 sq. km

GDP – 2,252.70 (\$ billions)

Capital – Brasilia

States

- Acre
- Alagoas
- Amapá
- Amazonas
- Bahia
- Ceará
- Distrito Federal
- Espírito Santo
- Goiás
- Maranhão
- Mato Grosso
- Mato Grosso do Sul
- Minas Gerais
- Paraná
- Paraíba
- Pará
- Pernambuco
- Piauí
- Rio de Janeiro
- Rio Grande do Norte
- Rio Grande do Sul
- Rondônia
- Roraima
- Santa Catarina
- Sergipe
- São Paulo
- Tocantins

3

Mechanisms to Strengthen Environmental Federalism in Brazil

ROGÉRIO BOUERI MIRANDA*

Introduction to Brazilian Federalism

In general, federations are classified according to their original meaning of “holding together” or “coming together”. One interesting fact about Brazil is that, although it is an example of a “held together” federation, its formation may be partially influenced by the centralizing instinct of its creators.

It was far from certain that Brazil would have maintained its territorial unity after its independence in 1822. It could certainly have taken the path of other Latin American territories and split into several distinct countries. But Dom Pedro I, the promulgator of independence and heir to the Portuguese crown, sought an empire instead of a republic. As is the case with empires, bigger is better, the unity of the country was maintained and power was centralized in the imperial court. In 1931, the Emperor abdicated his throne in order to assume the reign of Portugal, where he was crowned as Dom Pedro IV. He was replaced by his young son, Dom Pedro II, who was only 5 years old at the time.

In order to stabilize the political situation and preserve the monarchy in the absence of a strong leader, it was essential to create a great national coalition supported by the provinces. In exchange, more decision-making power was granted to regional governments. Since that period, Brazil has experienced alternating phases of increased decentralization and concentration of power. Figure 3.1 shows this oscillation between extremes.

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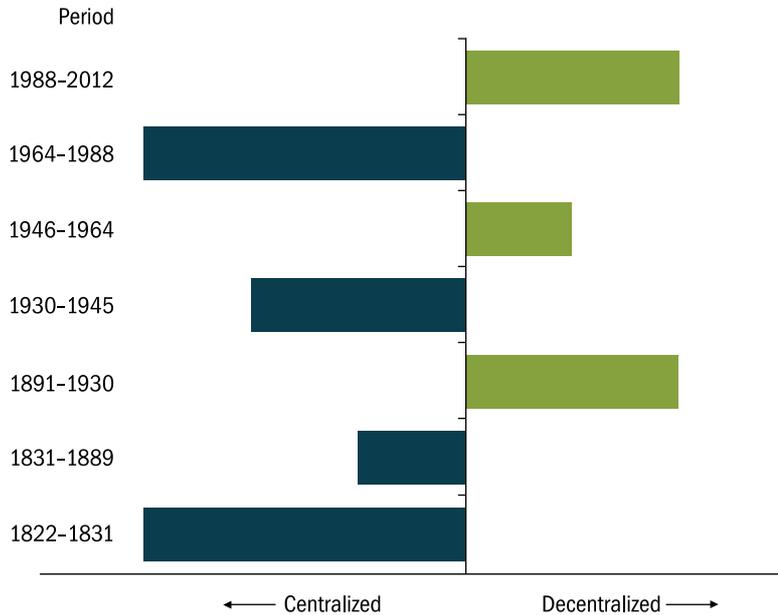


Figure 3.1: Centralization levels of the Brazilian federation

Source: Rabat (2002)

Since the Constitution of 1988, there has been a strong tendency towards decentralization, particularly in relation to popular services and financial transfers.

Social Perspective

Despite recent progress, Brazil is still characterized by strong social inequality. Its 2012 Gini coefficient (also known as the **Gini index** or Gini ratio)* is estimated at 0.519; in comparison, this figure is 0.368 for India and 0.321 for Canada². This inequality is also reflected in Brazilian regions, states, and municipalities. For example, 21.3% of the population of the State of Alagoas lived below the extreme poverty line in 2009. This figure was only 1.69%³ in the State of Santa Catarina.

Health and education services are also unevenly distributed among the states. The State of Rio de Janeiro has 2.24 doctors per thousand inhabitants, whereas there are only 0.31 doctors per thousand inhabitants in the State of Maranhão. While the rate of illiteracy in the State of Piauí (23.5%) is more than six times greater than that in the Federal District (3.73%). These social inequalities result from the economic differences among states and regions and the ineffectiveness of the Brazilian federation in redistributing economic gains among its members.

² Obtained from the CIA Factbook. Reference years are 2004 for India and 2005 for Canada.

³ Source: IPEA/Brazil

* The Gini coefficient is a measure of statistical dispersion intended to represent the income distribution of a nation's residents.

Economic Development

There are deep economic inequalities in the Brazilian federation. The GDP per capita of Piauí, a Northeastern State, is only 23.1% of that of the State of São Paulo. Figure 3.2 shows the distribution of GDP among Brazilian states.

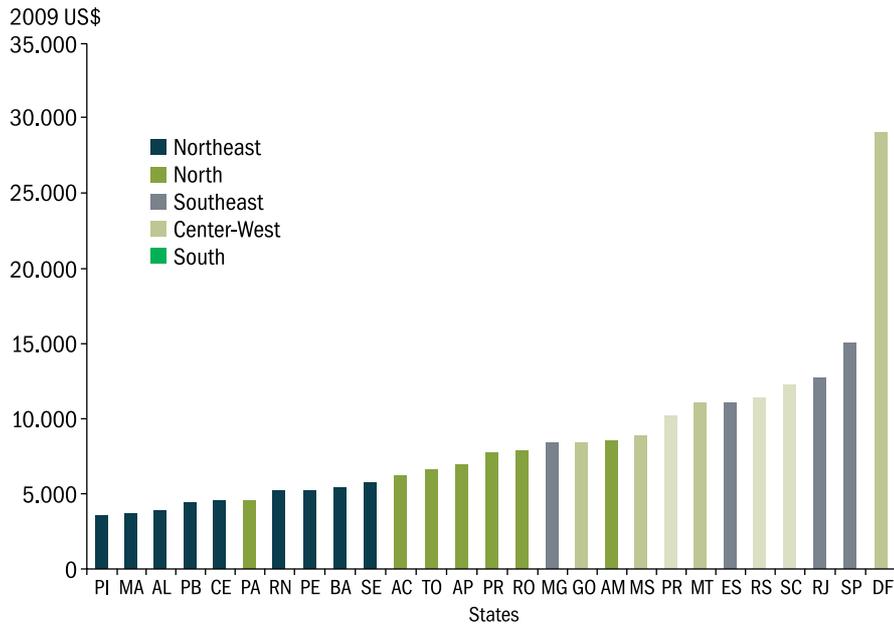


Figure 3.2: State GDP per capita in 2009

Source: IBGE

Most of the Federal civil servant population is concentrated in the richest member of the Brazilian federation the Federal District (DF or Distrito Federal)** which it is considered both a State and a municipality. Thus, it receives funding for both.

It is evident from Figure 3.2 that the Northeastern and Northern states are concentrated on the left side of the graph. Apart from Amazon, all the states belonging to these regions are clustered on the lower end of the GDP distribution. There could not be a clearer illustration of the inequalities among Brazilian regions.

Political Landscape

One remarkable aspect of Brazilian federalism is that it is composed of three independent governmental levels. In addition to the usual Federal and State governments, municipalities are included as Federal units and are not subordinate to other tiers of the government. In fact, municipalities have recently gained more responsibilities and associated funding.

** Mexico City officially known as México, DF, (or simply DF) is the Federal district (Distrito Federal), capital of Mexico and seat of the Federal powers of the Union.

There is a considerable overlap of responsibilities among the three governmental tiers. As seen in Table 3.1, all three governmental levels have significant health-related expenditures. Education and social security represent the main expenditures in the two governmental levels.

Table 3.1: Main expenditures by governmental tier in 2011

Federal		State		Municipal	
Function	% total	Function	% total	Function	% total
Social Security	54.3%	Education	21.7%	Education	26.7%
Health	9.5%	Social Security	17.8%	Health	24.2%
Social Assistance	6.8%	Health	14.8%	Urbanism	11.3%

Source: Brazilian National Treasury

There are high levels of financial transfers and resource sharing in Brazil. The main channels for these transfers to states and municipalities are the Participation Fund of the Municipalities (Fundo de Participação dos Municípios FPM) and the Participation Fund of the States (Fundo de Participação dos Estados or FPE). Together, they accounted for approximately 101 billion Reais⁴ in 2011, which corresponds to 2.5% of the National GDP. The total transfers from the Federal government amounted to 173 billion Reais, or 18.35% of its current expenditures.

Federalism and the Environment in Brazil

In Brazil, the National Environmental Policy defines an articulated and decentralized institutional arrangement between all governmental entities constituting the National Environment System (SISNAMA). This system covers national environmental policy (CONAMA or Conselho Nacional do Meio Ambiente) and inter-institutional policies (IBAMA, that is, Brazilian Institute for the Environment and Natural Resources, State environmental agencies-OEMAs, State and Municipal councils).

The guidelines of Brazilian environmental policies are discussed in the CONAMA framework, where resolutions are enacted to ensure that national standards are met, giving the states the power to issue supplemental regulations. Furthermore, this commission defines the standards and norms for the social utilization of the environment. The State governments also have committees that are able to regulate environmental policy, which are known as COSEMAs. These councils have the power to make regulations established by CONAMA stricter, but they cannot make them more lenient.

Large municipalities may also have environmental councils to address Local environmental concerns. However, following the same hierarchical principle, they cannot impose more lenient regulations than their State or Federal counterparts. Despite its role in defining environmental policy in Brazil, CONAMA suffers from a number of problems.

⁴ Approximately 50 billion dollars.

First, a maze of rules tends to decrease the autonomy of the states. In addition, the committee is limited in its ability to make strategic decisions, forcing it to take on a more reactive role rather than a proactive one. Also, there is lack of coordination among the different levels of government as well as among governmental entities that are part of the same tier. Finally, the great variety of issues that must be addressed by CONAMA tends to weaken the consistency of debates.

Part of the blame for this situation can be placed on the lack of proper regulation that generates many jurisdictional conflicts. These conflicts occur because, although the Federal Constitution of 1988 established the concept of cooperative federalism⁵, the highest law fell short of defining it with precision.

Despite these jurisdictional conflicts, there has been a trend towards centralization. Regarding the division of jurisdiction, judicial decisions and Federal regulations, first consider the magnitude of the environmental impact, neglecting associated jurisdictional rights.

The new Brazilian Forest Code is currently being discussed, which has once again aggravated the disputes among government tiers. The main dispute centers around which level of government will legislate and regulate the Permanent Preservation Areas (APP).

During this controversy, State legislators have managed to introduce a piece of legislation (Amendment 164) that gives states the right to make decisions about a number of aspects of the APPs. This right has been interpreted to entail a general amnesty to farmers who have deforested the forest areas on their lands believing that states would not impose penalties on their agricultural producers.

After a battle in Congress, the amendment was approved, only to be vetoed by the President. However, this veto is still pending because congressional representatives can still overrule it and reenact the measure.

Fiscal Federalism Theory and Environmental Issues

First Generation Theory

The basic theory of fiscal federalism appeared within the context of traditional public finance theory. This “First Generation Fiscal Federalism Theory” (FGT), as described by Oates (2005), is primarily concerned with the assignment of public functions to various governmental levels as well as the welfare implications of these assignments. This normative theory prescribed the ways in which governments should intervene (because of problems in the provision of public goods, externalities, market failures, etc.) and defined which governmental levels would be most suitable.

The FGT comprises several important elements. A key assumption is that Local governments know best. This principle, sometimes known as **subsidiarity**, states that the lower

⁵ In its 23rd article the Brazilian Constitution establishes, “It is common responsibility of the Union, States, Federal District, and Municipalities...: VI—protect the environment and combat pollution in any of its forms; VII—preserve forests, fauna and flora:...”

the governmental level, the better it can manage the provision of public goods whose consumption is limited to Local residents.

The rationale for this proposition is twofold. First, there is a pragmatic consideration given that there are political difficulties associated with the unequal provision of public goods across jurisdictions. Many Federal countries have laws or regulations that prevent such asymmetrical distributions of public outputs. Hence, a basic sense of fairness may preclude such variation in public outputs. Second, a more theoretical justification is related to an information problem. Specifically, the costs incurred by the Central government in acquiring all the information necessary to tailor the provision of public goods to Local population needs are generally greater than those incurred by Local governments. Thus, the subsidiarity principle contributes to economic efficiency by saving this extra informational cost.

The capacity of lower governmental tiers to efficiently distribute public goods must overcome two obstacles, i.e., economies of scale and externalities.

It is expected that some programmes will be less expensive if they are structured on a national scale rather than serving each State, province or city individually; thus, there may be some advantages to centralized provision. This argument does not consider the possibility of forming public consortia to provide certain public services. These consortia could decrease the unit price paid by each of the participating governments by taking advantage of existing economies of scale. A second factor that may favour centralized provision is the presence of externalities. Because the actions of a regional government may affect the residents of other jurisdictions, decisions made on a regional level could underestimate the true social costs (or benefits) of regional programmes. In this case, the Central government could increase overall welfare by internalizing these externalities. Although externalities may considerably impact the provision of public goods, there are mechanisms that can be used to manage them (such as Pigouvian taxes/subsidies).

This trade-off between decentralized fiscal choices versus externalities and economies of scale was first expressed by Oates (1972) in the “Decentralization Theorem”. The theorem lays out a set of sufficient conditions for the Local provision of public goods to yield a higher level of social welfare than a uniformly centrally determined level of output.

Second Generation Theory

More recently, authors have developed a new approach to fiscal federalism. This new line of research, called the “Second Generation Theory of Fiscal Federalism” (SGT), has introduced new ways of thinking about fiscal decentralization.

The main distinction between the two approaches is that, whereas FGT uses the methods and tools of the Traditional Theory of the Firm, such as economies of scale and externalities, SGT aims to utilize recently developed concepts, such as the Theory of Contracts, Principal-Agent problems and agent strategic behaviour.

Oates (2005) notes two characteristics that distinguish SGT from FGT:

- i. Information problems, understood as the cost of acquiring and processing relevant information by various agents of the federation, and

ii. Public choice problems, which are related to Federal political processes.

However, what do these approaches have in common? Which features would justify their combination into a new theoretical structure? The SGT differs from the traditional theory of fiscal federalism in its notions of strategic behaviour and the interaction of participants in a Federal system.

Households, voters, firms, and governmental levels of a federation can act strategically and can be aware that the other agents are also behaving strategically. This general characterization encompasses the “Principal-Agent”, “Incomplete Contracts” and “Strategic Vote” problems.

Fiscal Theories of Federalism and Environmental Issues

When the decentralization theorem is applied to environmental issues, the same dilemma arises. The following example will clarify this concept.

Suppose that a decision is to be made regarding, whether or not to build a hydroelectric dam? On the one hand, the subsidiarity principle must be taken into consideration, since neighbouring communities will suffer the environmental and social impact. On the other hand, the electric power generated at this facility will produce benefits for a much larger area. Because Local energy production is unlikely to be cost-efficient, the economies of scale associated with the generation of hydroelectric power must also be considered in the decision-making process.

Another example involves deciding, how much of a given forest area must be preserved and how much can be allocated to economic activities? Because Local communities will clearly be affected by this decision, they must have a say in the decision-making process. However, this decision also has a strong externality component because it could affect territories that are far from the forest. Moreover, this situation may give rise to opportunistic behaviour. Because the preservation of forests has a strong externality component, the best result for a given community can be achieved when all other communities preserve the environment but this community in particular exploits it. In this case, the choice is between an inefficient centralized normalization and a potentially predatory, sub-optimal Local decision.

As seen in these examples, green federalism may suffer from analogous problems to those faced in traditional fiscal federalism. Thus, the same set of instruments can be applied to analyse each specific situation.

Institutions that could Successfully Implement Green Federalism in Brazil

As mentioned in this article, there is an overlap of functions in the Brazilian Federation that causes unnecessary power disputes amongst different levels of government. Thus, the first step in consolidating green federalism should be to create a clearer definition of shared responsibility among governmental entities.

The idea of commissioning the Federal government to set national standards may be successful if enough flexibility for states and municipalities to make decisions about issues relevant to them is provided. In this way, the Federal government could delegate most legislation to the lower levels of government and focus on its coordination role, which cannot be performed by any other governmental entity.

It is important to note that the expression “tragedy of the commons” was created by an ecologist, Garrett Hardin, to describe how the individual utilization of natural resources could lead to an unfavourable outcome for all in the absence of coordination. The same principle can be applied to the actions of the Federal, State, and Municipal governments: coordination, but not imposition, may be the key to strengthening green federalism in Brazil.

References

- Brazil. 1988. *Constitution of the Federative Republic of Brazil*. Brasilia. Federal Senate.
- Oates WE. 1972. *Fiscal Federalism*. New York: Harcourt Brace Jovanovich Inc.
- Oates WE. 1999. **An Essay on Fiscal Federalism**. *Journal of Economic Literature* 37, 1120-1149.
- Oates WE. 2005. **Towards a Second-generation Theory of Fiscal Federalism**. *International Tax and Public Finance* 12, 349-373.
- Qian Y and Weingast BR. 1997. **Federalism as a Commitment to Preserving Market Incentives**. *Journal of Economic Perspectives* 11, 83-92.
- Rabat MN. 2002. *A federação: centralização e descentralização do poder político no Brasil*. Brasilia, Brazil. Legislative Consulting.

CANADA



Population – 34.8 millions

Land area – 9,094, 000 sq. km

GDP – 1,779.6 (\$ billions)

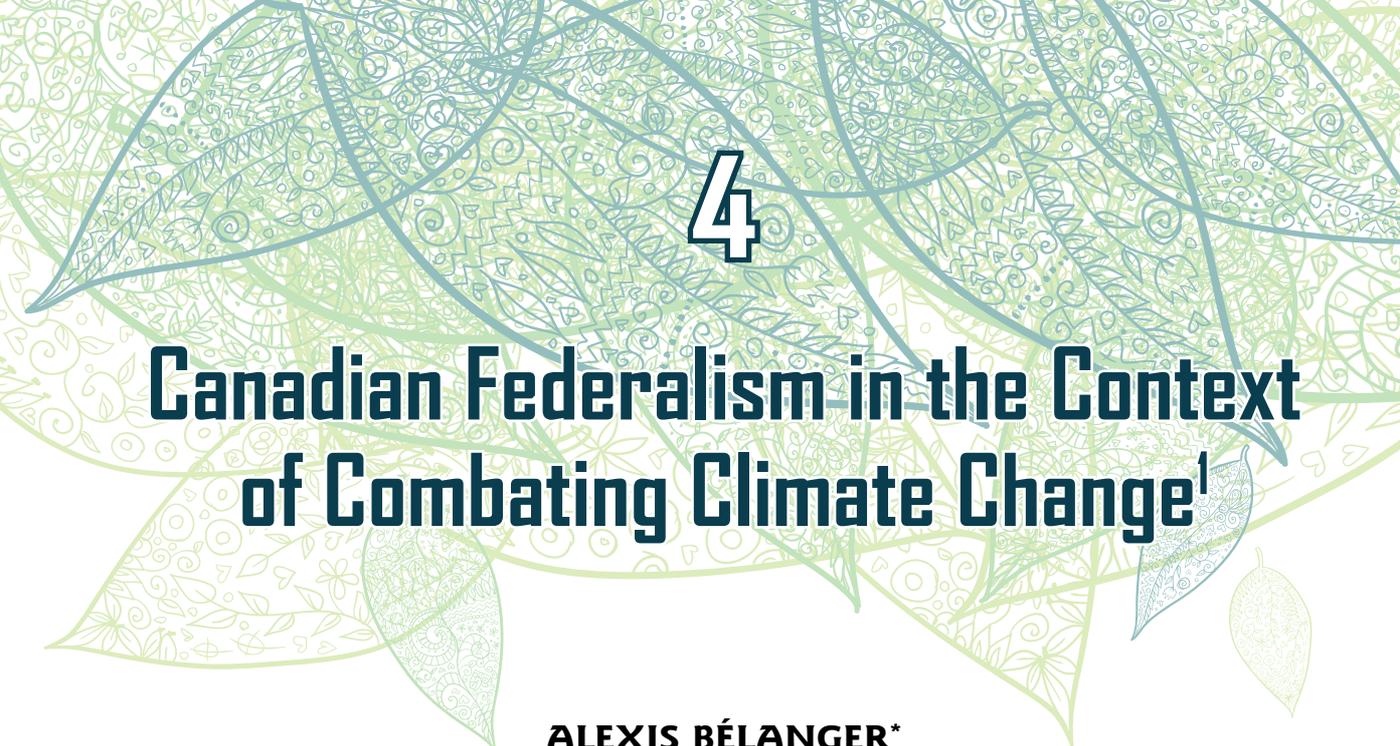
Capital – Ottawa

Provinces

- Ontario
- Quebec
- British Columbia
- Alberta
- Manitoba
- Saskatchewan
- Nova Scotia
- New Brunswick
- Newfoundland and Labrador
- Prince Edward Island

Territories

- Northwest Territories
- Yukon
- Nunavut



4

Canadian Federalism in the Context of Combating Climate Change¹

ALEXIS BÉLANGER*

Many people today describe Canada's policy on the environment as fragmented. Thus, for a number of years, there have been more and more calls for Federal leadership in environmental matters. However, in the Canadian context, pondering the development of innovative public policy without also asking which level of government has the power to adopt and implement it is equivalent to circumventing the reality of Canadian federalism. Conversely, raising this question at times appears akin to introducing an irritant — the division of powers in the context of contemporary issues such as climate change can easily be perceived by some as a constitutional relic, an obstacle to overcome in the process of choosing the means to implement truly national, modern, and effective public policies.

Centralization appears, in the eyes of many, to be an obvious solution in the climate change dossier: provincial policies are viewed as a fragmented patchwork, a source of failure to act; the Federal and Provincial governments are caught in the trap of joint decision-making; and the current system is packed with useless and costly structural duplications that undermine the efficiency and effectiveness of the policies. After many decades of a Federal *modus operandi* that has led to generalized involvement in provincial fields of jurisdiction, for some, Canadian federalism is becoming a simple institutional idiosyncrasy to be accommodated to avoid conflict.

But in the past, by wanting to act hastily and with no thought to the division of legislative power, Canada has committed a certain number of errors — mistakes it would be better not

¹ This paper is published here courtesy Constitutional Forum/ Forum Constitutionnel

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to repeat in an issue as fundamental as that of climate change. The national energy policy was one such example. In reality, numerous aspects indicate that true federalism could actually constitute an asset in responding to the challenges of climate change. After defining the concepts of environment and federalism, this chapter attempts to place the evolution of, and the relationship between these concepts in recent political history and in the Canadian legal framework. This overview then demonstrates why, in the current context of combating climate change, and going beyond constitutional arguments, a single imposed policy on the entire Canadian federation is ill advised and detrimental to all other potential policies.

Environmental and Federalism: The Principles

The word “Environment” primarily makes us think of all the surrounding conditions and influences that affect the development of a living organism.² A concept that is multi-faceted and both wide-ranging and Local, the environment has become the focus of public policy when the preservation of natural resources required for economic development has become imperative. Urbanization, the rapid industrialization of our societies, and the massive use of fossil fuel energy are the causes of another phenomenon central to the concept of the environment, i.e., pollution. In a few decades, pollution and the overexploitation of natural resources have generated a number of complex problems, such as declines in marine biomass, forests, and biodiversity; climate change; and an overabundance of harmful chemical products in the environment. Problems that call for urgent action at all levels to protect the environment.

In June 1992, at the Rio de Janeiro Earth Summit, the international community conceptualized the environment as a “common good” or a “public good”.³ Awareness emerged on an international political scale, that environmental problems cannot be separated from social and economic problems, leading to the concept of sustainable development, which encompasses all of these aspects.

Whereas the environment is a holistic concept, for its part federalism is based on the very concept of segmentation.⁴ Hence, within the Canadian framework, an added difficulty in legislating issues surrounding the environment, and more specifically climate change, arises from our perception of the environment, which is unitary and global, versus the nature of our Federal structure, which advocates decentralization and the division of power. The fact that Canada is a federation has significant consequences on the manner in which we address environmental issues.⁵ The particular challenges posed by managing the environment within Federal or quasi-Federal structures have led to extensive scientific documentation on environmental federalism, chiefly dealing with European and American cases.⁶

² *Gage Canadian Dictionary, 1998, sub verbo “environment”.*

³ Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 1992 (UNA/CONF 151/26 (vol I), online: <<http://www.un.org/documents/ga/conf151/aconf15126-lannexl.htm>>.

⁴ Leclair, “J. 1995. L’étendue du pouvoir constitutionnel des provinces et de l’État central canadiens en matière d’évaluation des incidences environnementales” in Hélène Trudeau & Ejaan Mackay, *L’environnement: À quel prix?* (Éditions Thémis: Montreal, 1995) at 345.

⁵ Douglas Brown, D. 2009. “The Environmental Union” in Herman Bakvis, Gerald Baier & Douglas Brown, *Contested Federalism*. (Ontario: Oxford University Press, 2009) at 207.

⁶ David Vogel et al. “Environmental Federalism in the European Union and the United States” (Paper delivered at the Conference on Globalization and National Environmental Policy, 22–24 September 2003) online: Tilburg University <<http://www.tilburguniversity.edu/>>.

Federalism does not take the form of a single model. According to Henri Brun et al., this institutional system basically proposes a partial amalgamation to accomplish certain common tasks without sacrificing the autonomy of the components in other matters.⁷ For constitutionalist Peter Hogg, the genesis of the Federal system in Canada arose from a political compromise among those in favour of a political Union and those in favour of diversity.⁸ But the choice of a Federal system for Canada was not a second-best solution as “the Federal form of government has some distinctive advantages.” Thus, according to Hogg, one of the main advantages of federalism remains its ability to take into account the different interests and preferences throughout the federation. Another significant advantage of Canadian federalism is the provinces’ innovative capacities. “Provinces [...] being more homogenous than the nation as a whole, will occasionally adopt policies that are too innovative or radical to be acceptable to the nation as a whole. If a new programme does not work out, the nation as a whole has not been placed at risk. If the programme works well, it might be copied by other Provinces or States, and perhaps (if the Constitution permits) by the Federal government.”⁹

The Division of Jurisdiction in Environmental Matters

Protecting the environment was not a major concern in the nineteenth century, therefore, it is easy to understand that this topic was not expressly mentioned as a specific aspect in the *Constitution Act, 1867*. Today, in case law, the environment is considered a domain that is not exclusively under the jurisdiction of one or the other level of government. In the *Friends of the Oldman River*¹⁰ judgment, the Supreme Court of Canada determined that each level of government can legislate in environmental matters when it is acting from the basis of one of its constitutional powers.

The constitutional foundation for the role of the provinces on environmental issues is based, in particular, on provincial ownership of natural resources and the jurisdiction that ensues. This confers important power pertaining to the environment on the provinces over anything affecting the sustainable development of these resources, for example. The provinces also have jurisdiction over crown land, property and civil rights, Municipal institutions, and, more generally, matters of a Local or private nature. These important constitutional foundations enable the provinces to intervene with respect to certain environmental issues using global approaches. The only real limit to environmental action by the provinces, apart from the specific areas under Federal jurisdiction, is the relative difficulty in addressing the cross-border aspect of pollution. However, even in this regard, several precedents illustrate how, in certain situations, the provinces and US states are better able to resolve transboundary problems than Federal authorities, in particular through the practice of inter-provincialism and the implementation of the ensuing multiple agreements.

⁷ Henri Brun, Guy Tremblay & Eugénie Brouillet, *Droit constitutionnel*, 5th ed (Cowansville, Que: Yvon Blais, 2008) at 404.

⁸ Hogg P., 2007. *Constitutional Law of Canada*. (Canada: Carswell., 2007) at 5–14.

⁹ *Ibid.*

¹⁰ *Friends of the Oldman River Society v Canada (Minister of Transport)*, [1992] 1 SCR 3. See also André Prévost, “L’environnement est-il un domaine de compétence provinciale?” in *Développements récents en droit de l’environnement* (Cowansville, Que: Yvon Blais, 1996).

For example, the Provinces and States along the shores of the Great Lakes recently concluded the *Great Lakes – St Lawrence River Basin Sustainable Water Resources Agreement*.¹¹

Under this agreement, individual action by two Canadian provinces and eight US states resulted in the harmonization of regulations on the management of Great Lake resources, and today it is helping maintain sustainable management of their waters.

For its part, Federal jurisdiction is characterized by greater ambiguity. Although the Canadian Parliament has the power to legislate with regard to Federal properties and works, its legislative authority in environmental matters remains largely indirect and limited. Consequently, a number of Federal environmental policies are based on powers in specific areas, such as the fisheries and navigation. Furthermore, in case law, some Federal interventions in environmental matters have been grounded on the “national dimensions” doctrine and the Federal jurisdiction over criminal law.

In 1988, in the case of *R v Crown Zellerbach*, the Supreme Court recognized the validity of the Federal provision prohibiting the dumping of waste into the sea. To do so, the majority based their decision on the matter falling within the national concern doctrine of the “peace, order, and good government” clause. The Court concluded that no specifically enumerated Federal jurisdiction enabled validation of the provision, but that control over ocean pollution met the test of this general doctrine. In examining this test, the Court considered among other issues that the failure of a province to deal effectively with the control of transboundary aspects of marine pollution would have a harmful impact.

In 1997, in the case of *R v Hydro-Québec*, the Supreme Court, on the basis of Federal jurisdiction under criminal law, considered the contested provisions of the *Canadian Environmental Protection Act* (CEPA) valid. This divided decision, enabling the development of regulatory schemes through jurisdiction over criminal law, has given rise to many questions in terms of its negative impact on the balance of powers within the federation.¹² Since the Hydro-Québec decision, the Supreme Court has recognized that too broad a definition of criminal law presents risks. Furthermore, it is interesting to note a certain reticence by the Supreme Court in the Hydro-Québec decision concerning the national dimensions doctrine, given its even greater impact on the balance of powers within Canadian federalism. For the Court, this latter doctrine cannot allow the Canadian Parliament to claim general power over protection of the environment.

Relationships between Ottawa and the Provinces Regarding the Environment (in practice)

In response to the emerging concerns of citizens about the initial visible impact of economic growth on the quality of the environment, the two levels of government mobilized at the

¹¹ Great Lakes–St Lawrence River Basin Sustainable Water Resources Agreement, online: Gouvernement du Québec <<http://www.mddep.gouv.qc.ca/eau/grandslacs-en/2005/index.htm>>.

¹² Louis-Raphaël N Lescop, “R c Hydro-Québec: la dénaturation du droit criminel au bénéfice de l’environnement” (1999) 33:2 RJT 421, online: Editions Themis <www.themis.umontreal.ca/pdf/rjtvol33num2/lescop.pdf>.

end of the 1960s to implement the first real public policies on the subject. Also, in this context, in the name of the environment, the Federal government first manifested the political desire to intervene in fields of jurisdiction that had been held exclusively by the provinces.¹³ However, the Federal government's action remained relatively limited, and the strong resistance of the most populated provinces to these encroachments made it quickly retreat, preferring to support a more cooperative approach.¹⁴

This first period of tension was then followed by a period of relative decentralization in the mid-1970s. In this era, the *Fisheries Act* (Section 33) constituted the principal justification for Federal regulations pertaining to the environment. The Federal Department of the Environment left the responsibility for applying and enforcing Federal standards to the provinces.¹⁵ The Federal government, however, maintained its role of developing those "national" standards.

In the early 1980s, several events helped accelerate a collective awareness of modern-day environmental issues (Bhopal — 1984; the discovery of a hole in the ozone layer — 1985; Chernobyl — 1986; a fire in a PCB storage facility in Saint-Basile le Grand — 1988.) At the time, the development of a "green" plan with a \$3 billion budget by Brian Mulroney's Federal government was an indication of the growing importance of the environment in Canadian public policy. The adoption of the *Canadian Environmental Protection Act* in 1988 and the *Canadian Environmental Assessment Act* in 1992 marked a significant change in the balance of Federal-Provincial relations regarding the environment, and the beginning of a new era of tension. With the *Canadian Environmental Protection Act*, Parliament considerably strengthened its own regulatory powers, particularly in the regulation of toxic substances, taking the "from cradle to grave" approach.¹⁶

In the same time period, the late 1980s saw the establishment of the first formal intergovernmental cooperation forum in environmental matters, the Canadian Council of Ministers of the Environment. Originally identifying itself as an alternative to Federal unilateralism, this body soon became a co-optation platform of Canada-wide standards, which led to the negotiation of Canada-wide standards in 1996 and their subsequent adoption by all provinces except Quebec. This agreement provided a concrete structure for the division of tasks between Ottawa and the provinces, a model that is reflected in a number of other fields, in which the Federal level reserves for itself the role of thinker, designer, and architect, and in which the provinces have the responsibility of implementing these Federal policies while respecting a number of conditions ensuring consistency in the policies. This type of approach, although often drawing on provincial innovation, nonetheless curbs provincial capacity to innovate further by weakening policy flexibility and ignoring regional differences. This problem was recently demonstrated in the context of intergovernmental discussions towards the development of Federal regulatory control over air pollutants and the

¹³ Duncan Maclellan, "Shifting From the Traditional to the New Political Agenda: The Changing Nature of Federal-Provincial Environmental Relations", 1995, 25:2-3 *American Review of Canadian Studies* 323.

¹⁴ Luc Juillet, "Le fédéralisme et l'environnement" in Manon Tremblay, *Les politiques publiques canadiennes* (Presses de l'université Laval, 1998) at 191 [Juillet].

¹⁵ Kathryn A Harrison, *Passing the Buck: Federalism and Canadian Environmental Policy* (Vancouver: University of British Columbia Press, 1996) at 81.

¹⁶ Juillet, *supra* note 14.

adoption of a Federal regulation that would impose on the provinces specific limits on the discharge of wastewater.

Over the course of the past decade, climate change has dominated a major part of the Canadian political debate on environmental matters, in particular the intergovernmental conflict surrounding adherence to the Kyoto Protocol and the terms of its implementation. The will of the Federal government to centralize and lead climate change control has given rise to an important power brokerage game, despite the principle of federalism and distribution of powers. As a provincial senior public service official, cited by author Barry G Rabe, has said: “The feds are going to every province and asking, “What will it take to make this work?” For Saskatchewan, it’s subsidies for clean coal research. For Manitoba, it’s the promise of an electricity transmission line to Toronto. The assumption is that every province has its price and that you can buy them off.”¹⁷ Also, according to this author, a significant part of the energy and resources of the provinces that are opposed to the ratification of Kyoto has been devoted to upping the bids and, at the end of the line, derailing the process of implementing Kyoto.

However, this conflict and the ensuing political impasse provided the provinces with the opportunity to take charge of combating climate change. They have consequently expanded and enhanced innovative measures to reduce greenhouse gas emissions, in particular. In this regard, the provinces benefitted from a notable change in approach by Ottawa under the governance of Paul Martin, who in 2005 made a commitment to support the various efforts of the provinces, a commitment that was partially fulfilled by Stephen Harper in February 2007.¹⁸ Under its eco-trust programme, Ottawa has allocated \$1.5 billion to provincial environmental initiatives.

This decision to promote relative decentralization has already shown results — announcements of ambitious provincial plans have been increasing since 2007 and often exceed Federal proposals to combat climate change and adapt to the impact of these new initiatives. As one example among many,¹⁹ Quebec established royal ties on the carbon content of gasoline and fossil fuels — a North American first. Shortly after, British Columbia adopted a carbon tax. Furthermore, Quebec was the first Canadian province to adopt greenhouse gas emission standards for motor vehicles aligned with those of California. What is more, with its partners from the Western Climate Initiative, Quebec is in the process of developing and implementing a common cap-and-trade system for emission allowances that would become the foundation for a future common carbon market in North America.²⁰ Ontario, British Columbia, and Manitoba are also involved in the Western Climate Initiative,

¹⁷ Barry G Rabe, “Climate Change Policy and Regulatory Federalism: The Divergent Paths of Canadian Provinces and American States in Greenhouse Gas Reduction” (Speech delivered at the Annual Meeting of the American Political Science Association, Washington, DC, 1-5 September 2005) at 15, online: All Academic <www.allacademic.com/meta/p_mla_apa_research_citation/0/4/1/0/5/p41058_index.html>.

¹⁸ See Prime Minister of Canada, News Release, “Prime Minister Harper announces new ecoTrust Canada” (12 February 2007) online: Prime Minister of Canada <<http://www.pm.gc.ca/ENG/media.asp?id=1533>>.

¹⁹ See especially Dale Marshall, *Provincial Power Play: Breaking Away from Federal Inaction on Climate Change* (Vancouver: David Suzuki Foundation, 2008), online: David Suzuki <<http://www.davidsuzuki.org/publications/reports/2008/provincial-power-play-breaking-away-from-federal-inaction-on-climate-change/index.php>>.

²⁰ See online: Western Climate Initiative <<http://www.westernclimateinitiative.org>>

and are implementing comprehensive action plans that target most activities and the most important sectors. New Brunswick's objective is to bring emissions back to their 1990 level by 2012 and then to reduce them by an additional 10% of their 1990 level by 2020.

The leadership shown to date by the provinces on the climate change front illustrates their ability to lead the way in combating climate change, based on powers attributed to them by the Constitution.

The Federal government, itself, already has a broad scope of action within its given constitutional jurisdictions. Phenomenal environmental challenges must be addressed, especially in the area of sustainable management of the fisheries; public, military, and other supplies; Federal works and undertakings; and interprovincial transportation.²¹ To cite one example, it appears somewhat paradoxical that the Federal government is seeking to expand its control capacity to domains that are not under its jurisdiction while interprovincial railways, which are essentially its responsibility (para 92 (10) (a) of the *Constitution Act, 1867*), suffer from chronic technological underdevelopment and a minimal service offer. Greater use of this form of transportation for moving both people and merchandise could significantly contribute to the reduction of greenhouse gases in Canada. The procrastination surrounding the construction of a high-speed rail line in the Quebec-Windsor corridor illustrates the extent to which certain sectors of Federal jurisdiction, which require attention from an environmental point of view, could greatly benefit from more sustained political activity.²² Federal environmental policy could also take on a more structuring nature by setting the example rather than trying to control.

Patchwork or Tapestry?

In its Climate Change Plan, published in 2007 along with the *Kyoto Protocol Implementation Act*, the Federal government stated that "Provinces, territories and municipalities control many of the important levers for making significant reductions in greenhouse gas emissions from particular sectors. [...] Over 85% of Canada's total greenhouse gas emissions is emitted in areas under sole or partial provincial/territorial responsibility."²³ It is precisely in this context that most of the provinces and territories have expanded measures to reduce greenhouse gases.

Nonetheless, a little less than two years later, the National Round Table on the Environment and the Economy (NRTEE), a Federal government advisory body whose mission is "to play the role of catalyst in identifying, explaining and promoting, in all sectors of Canadian society and in all regions of Canada, principles and practices of sustainable development"²⁴

²¹ See example online: Clean Technica <http://cleantechnica.com/2009/08/01/army-going-solar-with-500-mw-of-solar-power-in-mojave-desert/> (the U.S. army recently launched the most far-reaching solar energy project in the United States).

²² See example online: Canadian Political Science Association <<http://www.cpsa-acsp.ca/papers-2009/Bird.pdf>>. (in which a Canadian researcher holds that VIA Rail is a rail service provider that is not offering quality service to travellers. This decline in services is not due to the quality of the company's management, but is rather the result of constraints created by the Federal government and Canadian National).
²³ government of Canada, "A Climate Change Plan for the Purposes of the Kyoto Protocol Implementation Act - 2007" (6 September 2007), online: Environment Canada <http://www.ec.gc.ca/doc/ed-es/p_123/s5_eng.htm>.

²⁴ National Round Table on the Environment and the Economy (February 7, 2011), online: nrtee-trnee <<http://www.nrtee-trnee.com/fra/a-notre-sujet/qui-nous-sommes.php>>.

published a report on a possible Canadian carbon tax. In the initial pages the report states “Our collective challenge now is to transition the emerging fragmentation of current carbon pricing policies to a unified policy framework across all emissions nationally. The negative consequence of not doing this, and maintaining this fragmentation of differentiated carbon prices across emissions and across jurisdictions, will be significantly higher economic costs, intensified environmental impacts, entrenched barriers that will make it harder to act in the future, and the real risk of not being able to meet Canadian emission reduction targets.”²⁵

Should it be concluded from these two statements that the provinces are responsible for the vast majority of carbon emissions but are not the best placed to develop policies targeting the reduction of these emissions, despite the fact that they control “many of the important levers” enabling such reductions? If the past is any indication of the future, “to transition the emerging fragmentation of current carbon pricing policies to a unified policy framework” could stifle the innovation and drive at work within Canadian provinces by imposing a single solution on a country-wide scale, obtained at the cost of expensive efforts and numerous compromises, which would very likely be accompanied by delay tactics. This has been the experience with the current Federal plan on air quality and climate change: *Turning the Corner*,²⁶ which is still not implemented more than four years after its announcement.

Canada has a relatively decentralized Federal structure, which allows the diversity of its population and geography to be taken into consideration through the existence of autonomous governments that are much closer to citizens and their concerns. The Canadian experience, similar to that of other federations, should dissipate the fears expressed by the NRTEE and show to the contrary that federalism is an asset in combating pollution and protecting the environment. Rather than visualizing a patchwork, which gives the impression of a fragmented, heterogeneous arrangement, let us apply the metaphor of a tapestry in which various patterns are skillfully combined to produce a unit whose quality exceeds the sum of its parts. In this regard, Bob Page, chair of the NRTEE, stated when speaking of a plan to establish carbon pricing: “[F]lexibility is a key to our success because we are unlikely to get it right the first time.”²⁷

The Position of Environmental Groups

Historically, many Canadian environmentalists, surprisingly, have perceived the provinces as environmental ignoramuses and have demonstrated greater confidence in the Federal

²⁵ National Round Table on the Environment and the Economy, *Achieving 2050: A Carbon Pricing Policy for Canada*, online: <http://www.nrtee-trnee.com/eng/publications/carbon-pricing/carbon-pricing-advisory-note/carbon-pricing-advisory-note-eng.pdf>.

²⁶ government of Canada, *Turning the Corner: An Action Plan for Reducing Greenhouse Gases and Air Pollution* (April 26, 2007), online: Environment Canada <<http://www.ec.gc.ca/default.asp?lang=En&n=4891B242-1>> (the approach targeted by this action plan leaves a lot of room for stalling tactics and accommodations, which reduce both scope and efficiency. Readers may recall that beginning the day after the unveiling of this framework, the Opposition and environmentalist groups — who were joined by Al Gore — unanimously denounced the ineffectiveness and timidity of the measures put forward in this document).

²⁷ Bob Page, “Climate Change, Carbon Pricing, and Environmental Federalism” (Paper delivered at the Carbon Pricing and Environmental Federalism Conference, Institute of Intergovernmental Relations, Queen’s University, Ontario, October 17, 2008), online: Queens University <<http://www.queensu.ca/iigr/conf/EnviroConference2008/Materials/PagePaper.pdf>>.

government.²⁸ This point of view appears to be based on the assumption that the Canadian Federal government is synonymous with progressive public policy. As seen above, when the environmental balance sheet of recent years is examined, this assumption falls short of the facts. Not only that, such an assumption is inconsistent with the concept of the citizen movement and Local action, on which the environmental movement calls. Strengthening Local powers, for which the provinces are constitutionally responsible, appears in this regard to be a much more promising avenue, much more in line with these objectives.

It appears paradoxical that both industrial lobbies and environmental groups argue in favour of greater centralization of environmental power and the policies that ensue in Ottawa. This position is more consistent with some of the interests defended by major industrial groups.

Adaptability and Proximity to Citizens

Provincial leadership in combating climate change appears desirable in principle, to the extent that reaching political compromise is generally less complex at the provincial level than at the Federal, as evidenced in the thorny Kyoto Protocol file. It is also precisely for this reason that the most ambitious Canadian social policies have been developed at the provincial level (in particular, universal health insurance and the subsidized daycare programme).²⁹

Geographical and environmental characteristics vary immensely in Canada, from one region to another and from one province to another. Canada occupies one of the largest land masses in the world. Climate change could cause an increase in the frequency or intensity of certain meteorological phenomena as vastly different as heat waves, downpours, droughts, floods, the melting of glaciers, and the thawing of permafrost. However, Canada has a Federal structure capable of managing a vast territory characterized by diversity in its geographical environments. The diversity of ecosystems calls for diversity in environmental responses. Environmental standards must be adapted to the numerous Local contexts in order to have their full effect. This is also why one-size-fits-all policies can often prove to be costly and inefficient. They are rarely optimal in a country as diversified as ours, particularly in environmental matters. Reaching a consensus is often based on determining the smallest common denominator, to the detriment of more relevant, progressive, and stringent policies. Furthermore, in terms of climate change, the deepening and current economic imbalance among the provinces fed by energy prices, an issue that is itself related to the control of carbon emission makes any Canada-wide compromise very difficult at best, if not impossible.

It might be preferable to see a majority of the provinces adopt diverse but bold measures such as carbon taxes or participating in regional carbon credit trading systems and let those implacably opposed to this type of measure develop their own solutions rather than mobilize all resources to decide on a single weak and ineffective Canada-wide policy, likely doomed for failure. As the publication *Hot Air: Meeting Canada's Climate Change Challenge* illustrates,

²⁸ Kathryn A Harrison, "Passing the Environmental Buck" in François Rocher & Miriam Catherine Smith, *New Trends in Canadian Federalism* (Ontario: Broadview Press, 2003) at 323.

²⁹ See P Manna, *School's In: Federalism and the National Education Agenda* (Washington, DC: Georgetown University Press, 2006) (which provides an example of this same dynamic in US federalism)

all of the Federal plans to combat climate change have not only failed but also futilely engaged numerous resources in their preparation and production.³⁰ The implementation of the environmental policies emanating from these plans requires significant organizational resources, especially for analysis, evaluation, and inspection. This thus diverts the attention of the experts towards an often illusory quest for a Canadian consensus in a context in which defending the interests of each prevails, paralyzing action, rather than encouraging a pro-fusion of innovative solutions. And, despite all of these efforts, the Federal government's principal achievements in the area of combating climate change to date are limited to the often low-profile preparation and posting of costly reports. Thus, despite statements of conviction by Federal politicians and successive green plans in Ottawa, greenhouse gas emissions have not stopped increasing. In 2008, they exceeded the level of Canada's commitments with respect to the Kyoto Protocol by more than 30%.³¹

On the whole, when developing measures to protect the environment, difficult decisions ensuring the fragile balance between social factors and economic development are more easily taken at the Local level.³² Consideration of this factor is vital when introducing unpopular policies (for example, a new tax). Beyond the merit of the various measures, political *capacity* to implement policies that lack public support could prove to be a fundamental determinant of success in combating climate change.

Innovation/Testing

The release of excessive amounts of greenhouse gases into the atmosphere causes our societies to face a wide variety of complex and completely new challenges, for which the most effective solutions, for the most part, still remain to be developed. Hence, our ability to control climate change could be determined in large part by our ability to innovate, in terms of both technology and public policy.

A study of the factors conducive to innovation in a knowledge-based society has shown the fundamental importance of Local knowledge as the determinant of a government's ability to innovate. As *Globe and Mail* journalist David Mitchell recently wrote: "Where all think alike, no one thinks very much. [...] Canada is a federation — the most creative public policy is found at the provincial level of the government, not the Federal."³³ To attain a certain maturity in the development of our policies, it appears to be essential to support Local innovation across the country, which federalism encourages. In this regard, universities and research play an essential role, especially when they are well-rooted in the territories involved; this can constitute a priceless asset for sustainable development and the development of environmental policy adapted to realities in the field.

³⁰ Mark Jaccard et al. *Hot Air: Meeting Canada's Climate Change Challenge* (Toronto: Douglas Gibson Books, 2007).

³¹ Scott Vaughan, "March 2009 Status Report of the Commissioner of the Environment and Sustainable Development" (April 21, 2009), online: Office of the Auditor General of Canada <http://www.oag-bvg.gc.ca/internet/English/osh_20090421_e_32489.html>.

³² Pierre Brun, "La pollution du partage des compétences par le droit de l'environnement" (1993) 24 RGD at 191.

³³ David Mitchell, "Vive la différence! Our spending mosaic makes us stronger", *The Globe and Mail* (April 27, 2009).

The environment, and especially efforts to combat climate change, requires public interventions that affect every aspect of society. The environment not only encompasses physical, economic, and social dimensions but also transcends global and Local issues. In many ways, the development of innovative environmental policies has just begun. It is critical that, in this context and with our Federal framework, the Central government not consider the provinces as simple agents for implementing national policies but rather as veritable laboratories for the development of solutions adapted to Local realities.

Carbon Tax

The concept of a carbon tax effectively illustrates how federalism can contribute to the development and implementation of innovative policy. Many people believe that such a tax remains the most inexpensive way to collectively attain our goals in reducing greenhouse gases.³⁴ In Canada, Provincial governments introduced (British Columbia and Quebec) this ambitious policy.³⁵

Yet, today, numerous voices are demanding strong Federal leadership that will put some “order” in this “patchwork” of emerging policies across Canada. Stéphane Dion’s proposal for a Federal carbon tax presented during the 2008 electoral campaign came in part from this desire to see the Federal government play a greater role in an area the provinces have begun to cover. The aforementioned NRTEE report also falls within this shift and thereby seeks to give a leading role in this policy issue to the Federal government. The innovative role of the provinces to combat climate change appears once again about to be eclipsed by the perpetual search for *the* best solution with a view to setting a Canada-wide policy.

Arguments are already being advanced to lay the groundwork for the Federal government eventually taking control of this new source of revenue. As an example, some suggest that constitutional jurisdiction over carbon tax can be based on criminal law, Federal jurisdiction over trade and commerce, or a centralist reinterpretation of Federal power to conclude and implement treaties.³⁶ However, justifying the regulation of carbon based on these heads of power would be a real constitutional Trojan horse. Carbon is essentially omnipresent; every human and animal activity is a source of carbon emission. There is no single dimension of our societies that is not affected directly or indirectly by carbon emission. Direct intervention in the environment by the Federal government, under the guise of general jurisdiction over climate change or air quality, would contribute to the excessive centralization of legislative powers in Canada. In this policy area, certain provinces, such as Quebec have already adopted standards on greenhouse gas emissions that affirm provincial legislative power in the

³⁴ See example the “Pigou Manifesto” (a document on the economic efficiency of carbon taxation, signed by economists from all ideological outlooks: Gregory Mankiw, Paul Krugman, Gary Becker, Alan Greenspan, Anthony Lake, Thomas Friedman, Lawrence Summers, Paul Volcker, Jeffrey Sachs, William Nordhaus and many others), online: Pigou Club <<http://www.pigouclub.com/>>.

³⁵ See “Taxe carbone: les exemples à l’étranger” (8 March 2009), online: Le Monde <http://www.lemonde.fr/planete/article_interactif/2009/08/03/taxe-carbone-les-exemples-a-l-etranger_1223975_3244_6.html>.

³⁶ For a summary of these arguments, see Stewart Elgie, “Kyoto, The Constitution, and Carbon Trading: Waking a Sleeping BNA Bear (or Two)” (2008) 13:1 Rev Const Stud 67. See also Shi-Ling Hsu & Robin Elliot, “Regulating Greenhouse Gases in Canada: Constitutional and Policy Dimension” (2009) 54 McGill LJ at 463.

field.³⁷ In addition, the establishment of an ambitious Federal policy on carbon taxation would very likely give rise to intensive bargaining. Given the current geopolitical and economic context, certain industries would be extremely likely to be exempted and all of the provinces would undoubtedly claim equivalent exemptions in the name of intergovernmental equity, thereby greatly reducing the effectiveness of the tax.³⁸ The main cause contributing to the reduced effectiveness of the system of carbon taxation levied in Norway, one of the pioneers in this arena, was the numerous exceptions granted to various industries.³⁹ The recent constitutional invalidation of the carbon tax in France was also justified by the excessive number of industries exempted from its application, which would have prevented the desired goal from being attained i.e., to reduce greenhouse gas emissions.

The groups that support the implementation of direct carbon taxation as the simplest and least expensive way to control climate change should logically support its handling by provincial powers, because the desire to see this policy gain Canada-wide support that would enable centralized handling in Ottawa strongly risks clashing with political reality.

Global Lessons for Local Empowerment

During a visit to the Chinese city of Xi'an on July 25, 2009, the Secretary General of the United Nations, Ban Ki-moon, declared that: "National governments can have their national policies, but after all it is Provincial governments who have to implement these policies and even from this kind of bottom-up support, policies will be much more effective than top-down policies."⁴⁰ For several years, some observers have been proposing the establishment of a world federalism of policies on climate, which is seen as preferable to the centralized Kyoto approach.⁴¹ Noting this reality, the international community is organizing itself, and initiatives, such as the *Local government Climate Roadmap* are enabling a group of territories and Federal States to emphasize their key role in the negotiation of a new planetary agreement on greenhouse gas reduction in 2012, the deadline foreseen in the Kyoto Protocol. This new approach favouring decentralization may prevail in the wake of the failure of the Copenhagen Summit. Furthermore, continental institutions, such as the North American Free Trade Agreement (NAFTA), the European Union (EU), and the Asia-Pacific Economic Cooperation (APEC), are considered to be more capable of responding to adaptation issues that will take on increasing importance in the future.⁴²

³⁷ See the Regulation respecting greenhouse gas emissions from motor vehicles, R.S.Q. c. Q-2, r. 6.001.

³⁸ See example, "Les gaz à effet de serre au menu", Radio-Canada (9 September 2009), online: Radio-Canada <<http://www.radio-canada.ca/regions/Ontario/2009/09/09/006-bourse-carbone-qc-on.shtml>> (describes the joint statement by premiers McGuinty and Charest following the joint Ontario-Quebec ministers' council, with greenhouse gases on the agenda).

³⁹ Aneegrete Bruvoll & Bodil Merethe Larsen, "Greenhouse Gas Emissions in Norway—Do Carbon Taxes Work?" (2002) 337 *Statistics Norway Discussion Papers*.

⁴⁰ "UN Secretary-General requests closer co-operation between Local and National governments", *Local government Climate Roadmap* (July 25, 2009), online: *Climate Roadmap* <<http://www.iclei.org/index.php?id=10228>>.

⁴¹ David G Victor, "Climate Accession Deals: New Strategies for Taming Growth of Greenhouse Gases in Developing Countries" in Joe Aldy & Rob Stavins, eds, *Post-Kyoto International Climate Policy: Implementing Architectures for Agreement* (Cambridge University Press, 2010).

⁴² Philippe Le Prestre, "Géopolitique régionale du climat et coopération internationale" (2009) 1:6 *Les Cahiers de l'institut EDS*.

In 2008, the United Nations Development Programme (UNDP) established a cooperative programme targeting climate change titled, “Towards Carbon Neutral and Climate Change Resilient Territories”. For the UNDP, the capacity for action among federated states in combating climate change is undeniable, and this is why it is seeking the cooperation of developed federated entities to help developing federated entities and regional governments with their climate change mitigation and adaptation strategies. Moreover, the UNDP solicited the participation of Quebec in this innovative partnership, precisely because of the particular expertise the province has developed.

Conclusion

Diversity should not be viewed as synonymous with chaos — far from it. Such a reaction reflects the old habit of viewing environmental policies from the perspective of centralization whereas regional approaches are gaining increasing importance and notice. The most common criticism leveled at decentralized initiatives is that they do not guarantee the attainment of global objectives. However, as Canadian Federal policies for combating climate change and, on a larger scale, the worldwide Kyoto effort has demonstrated, the centralized alternative has not been characterized by success. Although the decentralized approach must not be viewed as capable of meeting all the challenges posed by climate change, it should be of greater appeal to the political and academic elite who have examined and analysed a univocal approach that may have reached its limits. In brief, on an international scale, as on the Canadian scale, one reality stands out: environmental challenges call for new forms of governance. Exercising federalism can facilitate this transition. Above all, it enables the advantages emanating from centralization and decentralization to be balanced.

Much is to be gained from taking advantage of the diversity of political solutions developed across Canada, rather than impose a national policy, which would inevitably produce friction given the vast number of divergent interests within the federation. Until now, the intergovernmental conflict surrounding adherence to the Kyoto Protocol and the conditions for its implementation have dominated too much of the Canadian political debate on climate change. It is preferable to use all of the resources available to develop and test various formulas in seeking the best possible combination of public policies based on different Local and regional realities. Instead of a centralized approach, the Federal government should work in partnership with the provinces to undertake activities to complement provincial initiatives, thereby maximizing the impact of environmental action.

New strategies must be adopted to face new challenges. To address increasingly urgent environmental problems, the Federal government and its supporters must set aside their centralist reflexes and encourage the provinces to continue experimenting. Ottawa must, at the same time, fulfill its environmental responsibilities in its own fields of jurisdiction, for the greatest benefit of both federalism and the environment.

INDIA



Population – 1,236.70 millions

Land area – 2,973 sq. km

GDP – 1,858.70 (\$ billions)

Capital – New Delhi

States

- Andhra Pradesh
- Arunachal Pradesh
- Assam
- Bihar
- Chhattisgarh
- Delhi
- Goa
- Gujarat
- Haryana
- Himachal Pradesh
- Jammu and Kashmir
- Jharkhand
- Karnataka
- Kerala
- Madhya Pradesh
- Maharashtra

- Manipur
- Meghalaya
- Mizoram
- Nagaland
- Odisha
- Punjab
- Rajasthan
- Sikkim
- Tamil Nadu
- Telangana
- Tripura
- Uttarakhand
- Uttar Pradesh
- West Bengal

Union Territories

- Andaman and Nicobar Island
- Chandigarh
- Dadra and Nagar Haveli
- Daman and Diu
- Lakshadweep
- Puducherry

5

Federalism and Environmental Policy in India

P G DHAR CHAKRABARTI*

Constitutional Arrangements

The basic legal and institutional framework of governance and public policy in India is provided in the Constitution of India. The Constitution was drafted by the Constituent Assembly over a period of 2 years and 11 months from December 1946 to November 1949 and finally adopted on November 26, 1949. It is the largest written Constitution of any sovereign country in the world¹ with 22 Parts (6 Parts further sub-divided into 22 Chapters), 395 Articles, and 12 Schedules. But this comprehensive “supreme law of India”, as it was originally adopted, nowhere uses the term “environment” nor does it provide any direction or guidance to the State, its institutions, or citizens for dealing with matters related to the environment, forests, wildlife, or management of natural resources. Even Part-IV of the Constitution which enumerates the Directive Principles of State Policy refrains from laying down any general or specific principles or directives on any matter related to the environment.

The Constitution of India, also known as the largest “Federal” Constitution of the world, similarly refrains from using the term “Federal”,² and instead describes India as a “Union of States”,³ which implies that India would not be a Federal country in the conventional sense, in which the term is used by the constitutional experts.⁴ It would be a country where

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¹ M V Pylee, *India's Constitution*. S Chand, 1997, p. 3.

² The classic definition of the Federal State is a State which has a “division of powers between general and regional authorities, each of which in its own sphere is coordinated with the others and independent of them”, K C Wheare, *Federal government*. Oxford University Press, 1971.

³ Article 1, Constitution of India.

the constituent units would be “the States” but “the Union” would be playing a dominant role. Under the present scheme of things, the Constitution provided a basic structure of governance which is essentially Federal in nature. First, it provided separate governments at the Union and the States with separate legislative, executive, and judicial wings of governance. Second, it demarcated the jurisdictions, powers, and functions of the Union and the State governments. Third, it spelt out in detail the legislative, administrative, and financial relations between the Union and the States. In these Constitutional arrangements, the Union government has been given overriding powers and responsibilities to ensure that the unity and integrity of the country is maintained and that the country is able to follow a well-planned and coordinated strategy for all-round social and economic development of all sections and communities of the country.

Although the Constitution was environmentally blind and politically sensitive to the explicit adoption of a “Federal” form of governance, it respected the Federal principle by assigning all the natural resources — land, water, forests, and mineral resources to the States⁵ and limiting the role of the Union government to only two matters related to natural resources management, viz., regulation of mines and mineral development⁶, and regulation and development of interstate rivers and river valleys.⁷ “Air” was not specifically mentioned in the Union, State, or Concurrent list, implying that the Union government could exercise jurisdiction over “air” under its residuary powers. Similarly, “environment” in general becomes a residuary subject on which Union government alone has jurisdiction over the entire country.

Paradigm Shift: Driving Forces

This scheme of Constitutional arrangement, as originally provided, has undergone a complete paradigm shift since the mid-1970s. Not only has the Constitution been amended to provide important space to environmental issues in governance and public policy, it has carved out a central role for the Union government in formulating policies, plans, and programmes on environment and coordinating their implementation throughout the country. There were at least four driving forces that made this change possible.

The first was the global environmental movement which started in the 1960s and 1970s and culminated in the United Nations Conference on the Human Environment in Stockholm in 1972. This movement for the first time brought world leaders together to discuss global issues of the environment. Reports of three independent global commissions in the 1980s — the

⁴ Unlike the United States, Switzerland, Canada, or Australia, the Indian federation is not a “coming together federalism” where the constituting states agree to join a federation. It is a “holding together federation” by which the Union government holds the states together by reorganizing them and maintaining their unity and integrity, hence playing a dominant role. The Indian federation has therefore been variously described as “Quasi-federation” or “Union government with Federal features”. Dr B R Ambedkar, Chairman of the Drafting Committee of the Constitution of India, said, “The political system adopted in the Constitution could be both unitary as well as Federal according to the requirement of time and circumstances.” Proceedings of Constituent Assembly of India.

⁵ The Seventh Schedule of the Constitution allocated to the states the subjects of land (entry 18), water (entry 17), forests (entry 19), wild animals and birds (entry 20), and mines (entry 23).

⁶ Entry 54 of the Union List.

⁷ Entry 56 of the Union List.

Brandt, the Palme, and the Brundtland Commission (also known as the World Commission on Environment)⁸ shaped the global agenda on environment. The Rio Earth Summit in 1992 gave concrete shape to the agenda by the Declaration on Environment and Development as well as the Agenda 21: Blueprint on Action on Sustainable Development.

Second, the global agenda of action influenced national plans of action in many countries. President Nixon signed the National Environmental Policy Act in 1970 and a number of further legislations followed – The Clean Water Act, the Clean Air Act, the Endangered Species Act, and the National Environmental Policy Act. These created the foundations for modern environmental standards. In the European Union, the Environmental Action Programme was adopted in 1973 and since then a dense network of legislation has developed, extending to all areas of environmental protection. India could hardly remain immune to these developments.

Third, political leadership of India remained deeply committed to the cause of the environment and played a leading role in connecting the environment with issues of sustainable development. Former Prime Minister Indira Gandhi attended the Stockholm Summit and made an impassionate plea to link the issue of poverty with environment in her famous speech “Poverty is the biggest polluter.” Fifteen years later, her son Rajiv Gandhi, Former Prime Minister of India, wrote the Foreword to the Brundtland Commission report titled *Our Common Future*.

In the name of growing more food and providing more comforts, we have denuded our forests. In the name of industrial growth, we have polluted the rivers and seas, heated up the globe through the accumulation of carbon dioxide....We in India know this too well. Our heroic efforts to provide our vast and growing population with the minimum needs can be sustained in the long term only if we protect our ecology from further attacks. India has taken concrete action to do so by creating the necessary awareness, legislation, institutions, and agencies.⁹

Fourth, the reckless use of natural resources, the deterioration of environment, and its impact on life and livelihood of the millions engaged the serious attention of the scientists, environmentalists, policy-makers, and the social activists. Strong public opinions developed for creating regulatory framework for the conservation of nature and protection of environment. The turning point was the Bhopal Gas Tragedy of 1984 which propelled the Union government to enact the Environment Protection Act in 1986.

Complementary Processes for Change

The paradigm shift in approach towards the environment has taken place through four different but complementary processes. The first was the Constitutional Amendments by

⁸ The Brandt Commission Report titled *Our Global Neighbourhood* (1980), the Palme Commission Report titled *Common Security: Blueprint for Survival* (1982), and the Brundtland Commission Report titled *Our Common Future* (1987).

⁹ Foreword: “Our Common Future”, *The World Commission on Environment and Development* (1987).

which significant changes were brought about not only to incorporate the issues related to “environment” in the Constitution, but also to redefine the powers and responsibilities of the Union and State governments on environmental matters. The most important was the Constitution (Forty Second Amendment) Act 1976, ironically passed during the proclamation of a State of Emergency in the country. This amendment *inter alia* introduced the following three changes in the Constitutional arrangements:

- i. “Forests” and “protection of wild animals and birds” were deleted from the State List and included in the Concurrent List,¹⁰ which implied that both the Union and the State governments could enact laws on the subject. In case of a conflict between the State laws and the Central laws, the later will prevail.¹¹
- ii. Article 48A was inserted in Part IV of the Constitution on Directive Principles of State Policy, which reads as:

Protection and improvement of environment and safeguarding of forests and wild life — The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.

- iii. Article 51A on Fundamental Duties was inserted in Part IVA of the Constitution. Article 51A(f) states that it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures.

These amendments are significant, as for the first time ever, “environment” received constitutional recognition. The express provisions in the Constitution enjoined both the State and the citizens to protect and improve the environment. The Union government was authorized to legislate on forests and wildlife. This opened a flood gate of legislations on the environment, mostly on the initiative of the Union government.

The 73rd and 74th Constitution Amendment Acts of 1992 added a new dimension to the Federal character of the Indian polity by giving constitutional recognition to the rural and urban self-governing institutions of the country. The twin amendments added Parts IX and IXA of the Constitution on panchayats and municipalities, respectively, and provided for the devolution of powers to rural and urban Local bodies. The 11th Schedule of the Constitution provided that panchayats shall have jurisdiction over land improvement and soil conservation, water management and watershed development, social and farm forestry, minor forest produce, drinking water, and fuel and fodder, while the 12th Schedule entrusted a number of environment-related functions to the municipalities, such as water supply for domestic, industrial and commercial purposes, public health, sanitation and solid waste management, urban forestry, protection of environment, and promotion of ecological aspects. The constitutional recognition of the panchayats and the municipalities as the third tier of government and assigning these bodies with functions related to environment is a significant development which heralded a new era of decentralization, participation, and inclusiveness in promoting the issues of environment in public policy.

¹⁰ Entry 17A and 17B of the Concurrent List.

¹¹ Article 241 of Constitution of India.

The second process by which environmental legislations came to occupy the statute book was through the international treaties, conventions, and protocols which India signed and ratified over the years.¹² These created obligations for developing appropriate domestic, legal, and institutional framework for implementing these treaties and conventions. For example, the Stockholm Declaration on Development on Human Environment 1972 was categorical in saying, “Local and National governments will bear the greatest burden for large-scale environmental policy and action within their jurisdictions”.¹³ The Rio Declaration on Environment and Development 1992 enjoined the states to “enact effective environmental legislation, environmental standards, and management”¹⁴ and “develop [a] national law regarding liability and compensation for the victims of pollution and other environmental damage”.¹⁵ Almost every other international convention, treaty, or protocol that India signed and ratified created binding obligations on its part to implement them by way of enacting laws, developing plans and programmes, allocating resources, monitoring implementation, and submitting its progress report to the world bodies.

Article 253 of the Constitution of India was the enabling provision that empowered the Union government “to make any law for the whole or any part of the country, to implement any treaty agreement or convention with any other country or countries or any decision made of any international conference”, irrespective of the entries in the Seventh Schedule of the Constitution. A number of environmental legislations in India, such as the Environment Protection Act 1986, were enacted through this route.

The third process by which the environment became a part of the Indian legal system was through environmental jurisprudence by which the Supreme Court of India and many State High Courts liberally interpreted the Fundamental Rights of citizens to include the right to live in decent environment. In *R L & E Kendra v. State of UP* the Supreme Court held:

Slow poisoning by the polluted atmosphere caused by the environmental pollution and spoliation should also be regarded as amounting to violation of Right to Life under Article 21 of the Constitution.¹⁶

In *Olga Tellis v. Bombay Municipal Corporation*, the Supreme Court interpreted right to protection of life and right to personal liberty to include conservation of natural resources which provide livelihood to the people. In the Dehradun Quarrying case, it “constructed” the *right to wholesome environment* to nullify government sanction for mining “arbitrarily” without adequate consideration of environmental impacts. The Supreme Court and the High

¹² India signed as many as 28 international conventions, treaties, and protocols related to environment, such as the Stockholm Declaration on Human Environment 1972, Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973, International Tropical Timber Agreement and The International Tropical Timber Organization 1983, Montreal Protocol on Substances that deplete the Ozone Layer 1987, Intergovernmental Panel on Climate Change 1988, Basel Convention on the Control of Transboundary Movements of Hazardous Wastes 1989, Rio Declaration on Environment and Development 1992, Agenda 21-Blueprint on Action on Sustainable Development, Convention on Biological Diversity 1992, UN Convention to Combat Desertification 1994, Kyoto Protocol to the United Nations Framework Convention on Climate Change 1998, Cartagena Protocol on Biodiversity 2003, and others.

¹³ Para 7 of the Declaration of the United Nations Conference on the Human Environment (1972).

¹⁴ Principle II of the Rio Declaration (1992).

¹⁵ Principle 13 of the Rio Declaration (1992).

¹⁶ *RL&E Kendra v. State of UP*, AIR (1985), SC 652.

Courts also accepted various Public Interest Litigations (PILs) on environment and laid down a number of doctrines based on the declaration of the international conventions and policy statements of the governments in different forums and on the newly inserted Article 48A in the Directive Principle of State Policy. Some of these doctrines and principles guided the process of further legislative and executive actions by the government. These include the following:

- i. *Public Trust Principle*: The State and its instrumentalities as trustees have a duty to protect and preserve natural resources¹⁷
- ii. *Precautionary Principle*: Pollution of underground water caused by tanneries in Tamil Nadu should be checked before permitting them to function¹⁸
- iii. *Polluter Pays Principle*: The polluter is liable to pay for the compensation to the victims and also for the cost of restoring of environmental degradation¹⁹
- iv. *Absolute Liability Principle*: Compensate victims of pollution caused by inherently dangerous industries²⁰
- v. *Sustainable Development Principle*: The Supreme Court invalidated forest-based industry, recognizing the principle of inter-generational equity and sustainable development²¹

The final process of the changes in the legal system was done by the law-making body, the Parliament of India, which enacted as many as 13 major legislations on environment since the 1970s. Before the 1970s, India had only two major laws on environment – The Forest Act, 1927, which was passed to serve the British colonial interests, and the Factories Act 1948, which was passed by the British Parliament to safeguard the health of the labourers²². Post 1970s laws include the Water (Prevention and Control of Pollution) Act 1974, Water (Prevention and Control of Pollution) Cess Act 1977, Air (Prevention and Control of Pollution) Act 1981 and its Amendment in 1987, Atomic Energy Act 1982, Environment Protection Act 1986, Motor Vehicles Act 1988, Wildlife (Protection) Act 1972 and its Amendment 1991, Forest (Conservation) Act 1980, Environment (Protection) Act 1986, National Environment Appellate Authority Act 1997, Coal Mines (Conservation and Development) Act 1974, Public Liability Insurance Act 1991, National Environment Tribunal Act 1995, etc. These are all Central laws enacted by the Union government which extends to the whole of the country. The implementation of these Acts is the responsibility of the states as well as to the Union and other stakeholders, as specifically provided in the Acts. These Acts have created uniform legal and institutional framework throughout the country for the conservation of natural resources and protection of environment and is accepted by the State governments without any reservation.

¹⁷ *M C Mehta v. Kamal Nath*, (1996) 1 SCC 38.

¹⁸ *Vellore Citizens Welfare Forum v. UOI*, AIR (1996), SC 2718.

¹⁹ *Vellore Citizens Welfare Forum v. UOI*.

²⁰ *M C Mehta v. UOI*, AIR (1987), SC 1086 (Oleum Gas Leak Case).

²¹ *State of Himachal Pradesh v. Ganesh Wood Products*, AIR (1996), SC 149.

²² The environmental laws passed during the British rule included Shore Nuisance (Bombay and Colaba) Act 1853, Fisheries Act 1897, Bengal Smoke Nuisance Act 1905, Bombay 1912, Elephant Preservation Act 1879, Wild Birds and Animals Protection Act 1912.

National Policies, Plans, and Programmes

India formulated its first National Forest Policy in 1952, which was subsequently revised in 1988. But, India did not have a national environment policy until 1992. A statement on environment and development was issued in 1992 and a National Policy on Environment was finally released in 2006. None of these policies significantly raised the issue of the role of the State vis-à-vis the Union government in the implementation of the policies. The only reference that the National Forest Policy of 1988 makes on the issue is the following:

No forest should be permitted to be worked without the government having approved the management plan, which should be in a prescribed format and in keeping with the National Forest Policy. The Central government should issue necessary guidelines to the State governments in this regard and monitor compliance.²³

The National Environment Policy 2006 skirted the issue by making the following generic statement which places the states almost in the same footings as the Local authorities:

Action plans would need to be prepared on identified themes by the concerned agencies at all levels of government including Central, State/ UT, and Local. In particular, the State and Local governments would be encouraged to formulate their own strategies or action plans consistent with the National Environment Policy. Empowerment of panchayats and the Urban Local Bodies, particularly in terms of functions, functionaries, funds, and corresponding capacities, will require greater attention for operationalizing some of the major provisions of this policy.²⁴

The policy however made significant statements on some of the core issues of decentralization:

In order to realize greater decentralization, State-level agencies may be given greater responsibility for environmental regulation and management. Such empowerment must be premised on increased transparency, accountability, scientific and managerial capacity, and independence in regulatory decision making and enforcement action. Accordingly, States would be encouraged to set up Environment Protection Authorities on this basis.²⁵

The environmental issues were explicitly recognized for the first time in 4th Five-Year Plan (1968–73) which mentioned the “interdependence of living things and their relationship with land, air, and water” and the need for harmonious development. The 6th Plan (1980–85) for the first time devoted a full chapter on environment and recognized the “imperative need to carefully husband our renewable resources of soil, water, plant, and animal life to sustain our economic development”. It expressed concern over depletion of natural resources and the deterioration it has caused in the quality of life of the people and called for a “bold

²³ *National Forest Policy 1988*, Ministry of Environment and Forests, Government of India, Para 4.3.2.

²⁴ *National Environment Policy 2006*, Ministry of Environment and Forests, Government of India.

²⁵

new approach to development”.²⁶ The successive Five-Year Plans repeated the same concern and funded a number of central and centrally sponsored schemes to support the States in the implementation of various policies on the environment. However, considering the wide range of responsibilities that were reposed on the States by Central laws and international agreements on different aspects of management of environment, such support was considered far too inadequate. This was pointed out several times by the State chief ministers in the meetings of the National Development Council.²⁷ At the end of the 11th Five-Year Plan (2007–12), the Ministry of Environment and Forests was supporting eight centrally sponsored schemes (Table 5.1) on forests, wildlife, and environment with an annual allocation of only INR 1403.93 crore,²⁸ but for the states to access this fund they had to contribute almost an equal amount as their matching shares.²⁹

Table 5.1: Allocations on Centrally Sponsored Schemes on Environment

	Name of Centrally Sponsored Schemes	2011-12 (INR in Crores)
1.	National River Conservation Plan	701.71
2.	National Afforestation Programme	303.00
3.	Conservation of Natural Resources and Ecosystems	80.00
4.	Project Tiger	162.71
5.	Integrated Development of Wildlife Habitats	70.00
6.	Intensification of Forest Management	65.00
7.	Project Elephant	21.50
8.	Environmental Management in Heritage, Pilgrimage, and Tourist Centres including Taj Protection	0.01
	Total	1,403.93

The Union government expects State governments to develop action plans on various issues of environment and implement them without indicating how the resources for the same shall be mobilized by the states concerned. For example, the National Action Plan on Climate Change announced by the Prime Minister in June 2008 provides eight different missions which together would cost INR 1.44 lakh crore – a bulk of which is expected to be spent at the State level – but as of yet there are no indications on how such colossal resources shall be arranged. The states were advised to develop their action plans on climate change. Sixteen states have already done so without knowing how the resources shall be mobilized by them.

²⁶ “6th Five-Year Plan 1980–85: A Framework”, Planning Commission, Government of India, pp. 29–30.

²⁷ Annexure-II: “Chief Minister’s comments on Centrally Sponsored Schemes in various meetings of National Development Council”, *Report of the Committee on Restructuring of Centrally Sponsored Schemes*, Planning Commission, Government of India (2011).

²⁸ *Report of the Committee on Restructuring of Centrally Sponsored Schemes*.

²⁹ Most of these schemes are funded on a 50:50 sharing basis by the Central and the State governments, while in few schemes the Central share is limited to 25% of the costs.

Contentious Domains of Environmental Federalism

The Central legislations and the national policies, plans, and programmes on the environment have exposed the states and the Local authorities to huge responsibilities in the management of various aspects related to environment; these however are not matched by corresponding resources, both fiscal and human. As a result, it has added to the challenges being faced by the State authorities in discharging their responsibilities. While some of the more advanced and resourceful states have managed to cope with these challenges, others are lagging behind, resulting in huge gaps between legislations and enforcement of policies and plans, and their implementation on the ground. The 13th Finance Commission, for the first time ever, was asked to look at the issues of financing the management of “ecology, environment, and climate change consistent with sustainable development” and the Commission, fully convinced of the fiscal gaps for environmental management in the states, recommended ad hoc grants for the management of environment – forests, water, and renewable energy. The Commission earmarked INR 5,000 crore over a period of five years as a “green bonus” to states with forest covers larger than the national average.

- i. The National Environment Policy highlighted the need to have a continued focus on capacity building at all levels and prescribed the following measures: Review the present institutional capacities in respect of enforcement of environmental laws and regulations, and prepare and implement suitable programmes for enhancement of the capacities
- ii. Incorporate in all environmental programmes a capacity development component with sufficient earmarked funds
- iii. Ensure continuous upgradation of knowledge and skills of the scientific and technical personnel involved in environmental management in public institutions at all levels – Central, State, and Local, through dedicated capacity-building programmes

The existing gaps may widen further as new challenges that were not anticipated even half a decade ago, such as management of climate change at the State and Local levels, have cropped up now.

Probably, the most contentious issue of “green federalism” in India today is the management of the natural resources of the country. While the Constitution of India has assigned all the natural resources – land, water, forests,³⁰ and minerals to the States, the regulation and control of most of these resources lies in the domain of the Union government. Owing to this, the states cannot use these resources in a manner they feel best for their interest. The Forest Conservation Act, for example, does not permit the states to use the forest areas for non-forest purposes without the permission of the Union government. Such permissions are extremely difficult to obtain due to stringent restrictions imposed by the Supreme Court of India, notwithstanding the constitutional protection of the rights of the tribal communities on such resources in Schedule V and VI areas. The tribal communities living in such areas are increasingly vociferous in their demands for restoring their traditional rights over such resources which, despite the passage of the Scheduled Tribes and Other Traditional Forest

³⁰ “Forest” was transferred from the State List to the Concurrent List by the 42nd Constitutional (Amendment) Act, 1975.

Dwellers (Recognition of Forest Rights) Act 2006, still eludes them. The states with large forest areas are also pitching their voice for compensating them for the losses they have to undergo for not being able to use the forest areas for development purposes for the larger national interests of conservation. The issue remains largely unresolved.

Likewise, the States have the ownership over the mineral resources, but the control of regulation and development of mines and minerals is vested with the Union government. The twin Central legislations – the Mines and Minerals (Regulation and Development) Act and Oil (Development and Regulation) Act authorizes the Union government to control the allocation, licensing, operations, royalties, and dead rents for mining and for de-mining of the areas. The role of the states is limited to sharing the royalties and the dead rent, which are sizeable in some of the states, but never adequate enough to deal with larger socio-economic, cultural, and environmental costs associated with mining before, during, and after the mining operations. The mineral-rich States are demanding adequate compensation for meeting these costs which remain “uncared and unattended”, leading to aggravation of the fall outs on environment and sustainable development in the States. Ironically, most of the forest- and mineral-rich States of the country are lagging behind in many indicators of social and economic development. There are strong grounds for developing a framework by which these states feel motivated to rehabilitate, protect, and conserve the forest and mining areas as natural resources for national development. No serious national debate on the issue has been initiated yet.³¹

Water remains another contentious issue of Indian federalism. The Constitution has assigned the water resources – both surface and sub-surface – to the States and tasked the Union government to enact legislation “to provide for the adjudication of any dispute or complaint with respect to the use, distribution, or control of the waters of, or in, any inter-state river or river valley”.³² The Union government enacted the Inter State River Disputes Act, 1956 which provides for setting up tribunals for settlement of inter-state river disputes; but, none of the existing disputes have been resolved through this process. On the contrary, new disputes have been raised which seriously question the efficacy of this mechanism. Experts feel that concurrent jurisdiction of the Union government on water and an umbrella legislation or code on water which would lay down general principles which would guide water policies, planning, and management at various levels is urgently required for dealing with disputes regarding share and use of water as important natural resource of the country.³³

The Union government had constituted two commissions on Centre–State relations to recommend measures for resolving various contentious issues in their relations. The first Commission under the chairmanship of Justice R S Sarkaria did not significantly look into

³¹ The Inter State Council Secretariat had sponsored a study on compensation to resource-bearing states. The two volume study reports prepared by TERI highlighted important issues of “resource federalism” which remained neglected in the discourses on federalism in the country. The main findings of the study are presented in a special article titled “Resource Federalism in India: The Case of Minerals” by Ligia Noronha, Nidhi Srivastava, and Divya Datt in *The Economic and Political Weekly*, Vol. XLIV, No. 8 (February 2011).

³² Article 262 of the Constitution of India.

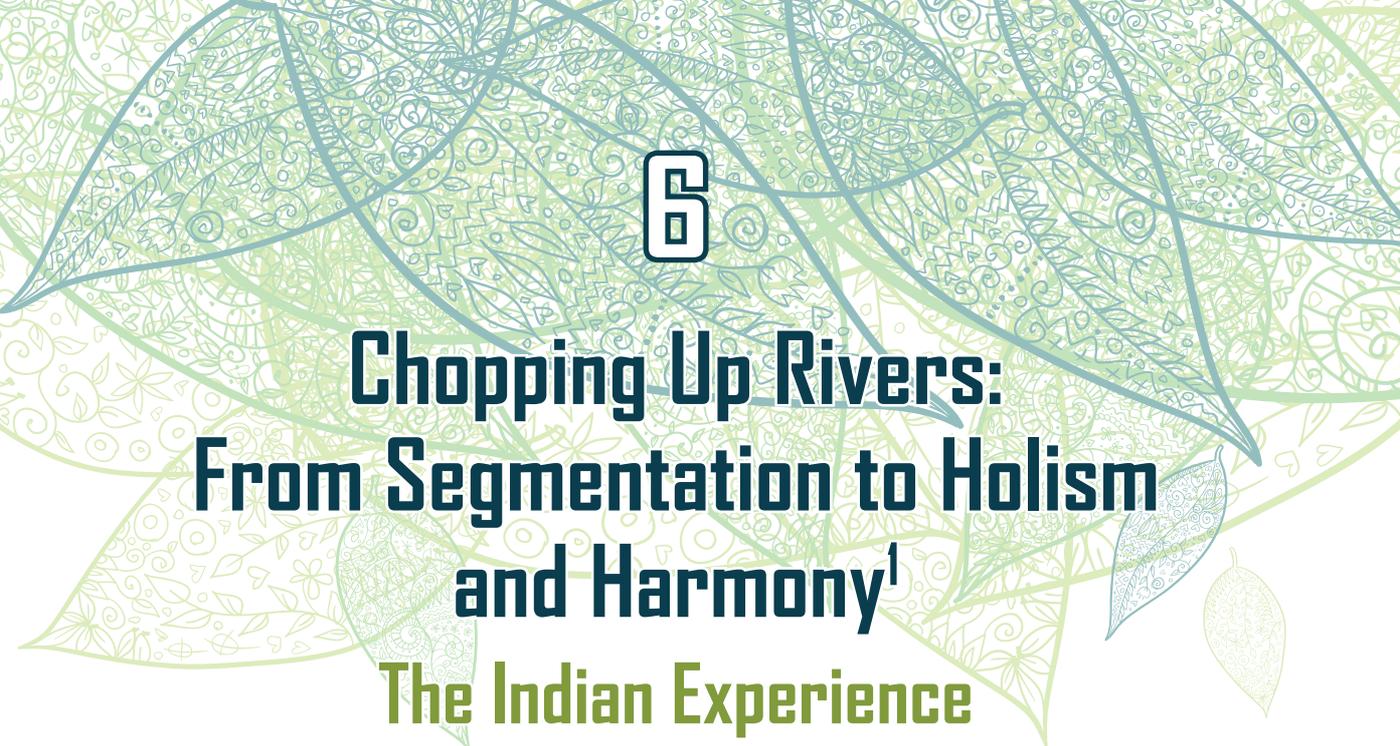
³³ *Report of the Task Force on Natural Resources, Environment, Water, Land and Agriculture constituted by the Commission on Centre–State Relations*. Inter State Council Secretariat (2010).

the environmental issues of federalism.³⁴ The second commission, under the chairmanship of Justice M M Punchi devoted a complete chapter on the issues of “environment, natural resources, and infrastructure”³⁵ and made important recommendations which have generally been welcome by both the Union and State governments.³⁶ The recommendations are likely to be discussed in the forthcoming meetings of the Inter-State Council before they are considered for implementation by the Government. This may usher in a new era of “green federalism” in India.

³⁴ *Report of the Commission on Centre-State Relations*, Ministry of Home Affairs, Government of India (1988).

³⁵ *Report of the Commission on Centre-State Relations*, Vol. 6, Ministry of Home Affairs, Government of India (2010).

³⁶ The Inter-State Council Secretariat is processing the recommendations of the Commission on Centre-State Relations in consultation with State governments and various ministries and departments of the Union government.



6

Chopping Up Rivers: From Segmentation to Holism and Harmony¹ The Indian Experience

RAMASWAMY R IYER*

A river is not just a conduit carrying water from the catchment to the sea. It includes the river bed; the banks, the natural flood-plains; the air above; the vegetation on either side; the catchment; and so on. A river provides drinking water to human beings, livestock and wildlife, as well as water for agricultural, industrial, commercial and other economic uses; sustains aquatic life; supports the livelihoods of people; serves as a medium for transportation; recharges aquifers and receives base flows from them; influences the micro-climate; copes with pollutants (to a certain extent) and purifies itself; transports nutrients and sediment; and creates the delta, sustains the estuary, exchanges nutrients with the sea, and controls the incursion of salinity. A river basin as a whole is both a hydrological and ecological system in itself and a part of a larger ecological system, which it sustains and by which it is sustained. A river is also an integral part of the lives, history, politics, society, religion and culture of a people.

In the past, though a full consciousness of all these aspects, dimensions and complexities was perhaps never present, people on the whole lived in a reasonably healthy and harmonious relationship with rivers. They did not consciously use the word 'ecology' – that word came into use much later – but ecology in fact implicitly governed their lives. Human beings had not yet developed the capacity to subject their habitats or water sources to stress. Unfortunately, during the last century and a half, that unconsciously holistic view of rivers gave way to a limited instrumental view brought about by two reductionisms: an engineering reductionism and an economic reductionism.

¹ This paper was circulated by the author at the International Conference on Strengthening Green Federalism: Sharing International Practices held on 29th and 30th October 2012 at India Habitat Centre, New Delhi.

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II

The engineer thinks of a river as a drain. That is of course a technically correct description because a river drains its catchment. However, this implies that a river is merely a conduit taking the run-off from precipitation to the sea. That is a reductionist view. A river is many other things. An ecologist or a sociologist or cultural historian is unlikely to think of a river primarily as a drain. This is not just a semantic point. If you think of a river merely as a conduit, i.e., as no more than a pipeline carrying water, then you feel free to cut, turn and weld it or otherwise manipulate it. You want to dam it, divert it, join it to another river, and so on. An American water engineer is reported to have remarked “I love pushing rivers around”. That remark, quoted by Prof. Ken Conca in his book *Governing Water*, is a revealing one. Many in our own Water Establishment tend to think along similar lines. The apotheosis of this reductionist approach was reached in the Interlinking of Rivers Project announced by the Government of India in 2002, which was a massive project envisaging 30 river links. (That project, which was in the doldrums, has been unexpectedly and unfortunately revived by the Supreme Court in its Order of 27 February 2012.)

The economic perspective is as reductionist as the engineering perspective. In 1992 the Dublin Statement said some good things in Principles 1, 2 and 3, but its Fourth Principle (“Water has an economic value in all its competing uses and should be recognized as an economic good”) was the beginning of the commoditization of water that has gained strength over the years and is now the dominant philosophy underlying the lending programme of the World Bank and the ADB for ‘water sector reform’. That philosophy regards water as a commodity like any other and equally subject to market forces; the dogma is that all water-related problems can be solved by letting market forces prevail and getting the water price right. The slogan is: “Define property rights in water and make them tradable”. This reductionism ignores a whole host of issues, but without entering into them it may be noted that while water may be an economic good or commodity in some uses such as commercial agriculture or industry, it is many other things besides.

III

Those reductionisms determine the kind of thinking that is brought to bear on river-sharing across boundaries. The implicit assumption is that a river is just water flowing across borders and that water is what needs to be shared; that a certain quantum of water has to be distributed or parcelled out among the co-riparians. In this view there is no room for thinking of the river as a whole, much less for thinking of all the aspects and dimensions mentioned earlier. This involves two inter-related errors or limitations: segmentation and the absence of an ecological perspective.

Political boundaries cut across rivers, necessitating inter-State agreements or adjudication. A common feature of such agreements or adjudicatory awards is an *allocation* of waters, i.e., *a segmentation of an integrated system*. While any agreement is better than discord, such segmentation is clearly a non-ideal way of dealing with systems that are integral unities, hydrologically speaking. The waters of the Narmada, Godavari, Krishna, Cauvery, etc. are ‘allocated’ by the respective Tribunal awards to the various States concerned, leaving each State to do what it likes with its allocated share. As a second best solution this may be

acceptable, but it involves a limited view of a river as no more than the water that flows. It is that limited perspective that enables us to chop up a river into bits and distribute the bits. This could do violence to basin hydrology.

Further, and this is the second point, it is not merely a question of hydrology but one of ecology. In an approach of fragmentation or segmentation there is no room for thinking of the river as an ecological system in itself and part of a larger ecological system, much less for thinking of that larger system as part of Planet earth. Segmentation is also oblivious of the role played by the river in the social, historical, cultural and religious lives of the people.

Segmentation happens because political boundaries divide an integral hydrological or ecological whole into a number of separate parts. It is of course possible for the separate parts – countries or States or provinces – to come together for the holistic management of the total system, but that rarely happens.

IV

Segmentation apart, three other factors relating to inter-State river-water disputes make the adoption of a holistic ecological perspective extremely difficult, and also render the disputes intractable and resistant to resolution.

First, most water-related conflicts arise from a major intervention in a river. So long as a river is flowing naturally with no significant human intervention in those natural flows, major conflicts do not arise between the upper riparian and the lower riparian. That situation changes dramatically as soon as a dam or a barrage is built on a river for storing or diverting its waters. Heavy extraction of groundwater through tubewells and borewells in the river basin can also affect river flows, but a big dam has a more dramatic and visible impact on those flows. Dams or barrages become the foci of conflicts because they change hydrology, geography, ecology and power relations.

The second factor is the projection of an ever-increasing future water demand. The combined 'demands' of all the disputing States or countries on the waters of the river in question often exceed the flows of the river. Competitive unsustainable demand for water is at the heart of such disputes. The unquestioning valorisation of demand is part of the overall idea of 'development' as currently conceived.

The third factor is politics of a deplorable kind. Given the importance of water and the emotional attachment to the river, inter-State river water disputes inevitably have a political dimension. That by itself is not a bad thing, but when the dispute becomes an issue in electoral party politics, resolution becomes very difficult indeed. Further, depending on the configuration of party positions in the two disputing States and at the Centre in a federal system, various complexities may arise. This kind of wrong politicisation renders rationality virtually impossible.

These three factors are simply irreconcilable with a holistic ecological approach.

Some suggestions have been made for reforming the adjudication of inter-State river water disputes in India, but they relate to institutional arrangements, styles of functioning,

procedures, etc. We need not go into them here because they will take us far away from the main theme of this Conference.

V

Segmentation or what I have referred to as chopping up a river as a mode of water-sharing can occur not only in a federal system but also between provinces in a unitary system. Inter-provincial disputes over river waters – riparian disputes - were familiar even in pre-Partition India. We must therefore consider both riparianism and federalism as factors often running counter to a holistic or ecological perspective.

Let us consider riparianism first. A riparian perspective must have been implicitly present in a rudimentary fashion even in pre-colonial times, but riparianism as a legal principle is no doubt of British common law origin. Under this perspective, proximity to a river brings with it a right to use the waters of that river, but with an obligation not to cause harm or injury to a lower riparian. That is a greatly over-simplified statement of a very complex matter: complex because of a vast body of case law. With the growth of technology and the possibility of transporting water over long distances, proximity to a river has lost some of its old importance. At the level of households, farms and villages, the riparian perspective is perhaps not as significant as it once was, but the doctrine of riparian rights cannot be dismissed as obsolete. Inter-State and even inter-country river water disputes are often riparian disputes, and riparian doctrine plays a part in their resolution by tribunals within the country or by treaties between countries.

Riparianism in the inter-State and inter-country contexts is a legal doctrine regarding the respective rights of upper and lower riparians. There have been various doctrines regarding those rights such as territorial sovereignty over the waters that flow through the territory of a State or country, also known as the Harmon doctrine, prescriptive rights or rights of prior appropriation, and so on, but none of these have found wide acceptance. The principle that came to prevail was that of 'equitable apportionment for beneficial uses'. This is accompanied by the principle of no 'substantial harm' (in the Helsinki Rules language) or 'significant injury' (in the UN convention language) to the lower riparian, the obligation to inform and consult co-riparians, and so on. In brief, riparianism is essentially a doctrine of rights: the rights of the upper riparian and the rights of the lower riparian.

Let us turn now to the aspect of federalism. In a federal or quasi-federal structure, there are questions of Centre-State relations and inter-State relations. Within the national boundaries, there are political boundaries between States. Each State has a certain identity. In India, those identities are linked to linguistic identities. Each State has thus a certain sub-national identity. The relations between two States have elements of similarity with the relations between two countries. These are complex legal and political matters that I do not dare venture into. My short point is that when Tribunals or Courts deal with inter-State river water disputes the principles they invoke are the same as or similar to the principles that apply to inter-country disputes over river waters in international law.

Essentially, then, we are talking about rights: either riparian rights or State rights in a federal system, or a combination of the two. The crucial question is whether, and if so how, the

idea of riparian rights or State rights can be harmonised with a holistic view of a river system or with environmental and ecological concerns that transcend political boundaries and are national or even global. The dilemma here is the following. On the one hand, a river basin is an integral whole that transcends inter-State or inter-country boundaries, and a chopping up of a river to fit in with those boundaries is *ipso facto* inconsistent with the concept of a river basin, not to mention larger wholes such as an ecological region. On the other hand, national or global concerns result in national-level legislation on a wide range of subjects; and such national laws, the bureaucracies created to administer them, and the penal provisions incorporated in them, have an inherent centralising tendency that often comes into conflict with the spirit of federalism and of decentralisation.

This is not an insurmountable dilemma. We must find ways of reconciling ecological and related common national concerns with the spirit of federalism and democratic decentralisation. In terms of the theme of this Conference, let me put it this way: we need to make the federal system green in orientation, and the green concerns federal in spirit.

The first half of that statement is clear enough. In a federal system, the Centre and the States have their respective domains, and federalist issues are issues of Centre-State and inter-State relations, with each constituent unit carefully safeguarding its own legislative and executive domain. Cutting across this are certain common concerns, such as internal and external security. Environmental concerns ought to be another such commonality, but that is not fully the case. The State perspective, particularly the economic or industrial or commercial or mining perspective, often tends to over-ride national environmental concerns, just as, in the international arena, national interests often over-ride global concerns and imperatives. Therefore, greening the federal system is necessary, meaning that environmental concerns should become a strong commonality in a federal system.

What the second part of that statement means is that in emphasising green concerns and enacting national legislation we have to steer clear of the danger of slipping into undue centralisation and facilitating Central intrusion into the domain of the State. National laws on forest conservation, protection of the environment, wildlife and bio-diversity, and so on, are indeed very necessary, and each such law will have its administrative machinery at the Centre. Inevitably, there is a danger of Central over-reach and abridgement of State rights. A careful balancing act is necessary for avoiding this.

VI

This difficulty arises in the case of forests, land, mineral deposits, etc, but as this session is about trans-boundary rivers, let me illustrate my point with reference to water. Under the Indian Constitution water is primarily a State subject, with a provision enabling Central legislation and executive action in the case of inter-State rivers, if Parliament considers this expedient in the public interest. This division of legislative powers makes the enactment of a national water law very difficult. However, there is a strong case for a national water law embodying a national consensus on certain basics, such as:

- the complexity and multi-dimensionality of water;
- the fundamental right to water as life-support;

- general water-sharing principles across States and across sectors and uses;
- water as an integral part of the ecological system and Planet Earth;
- protection of water systems and sources from pollution and contamination, and the protection of rivers from abuses such as excessive interference with natural flows, encroachments into the flood-plain, the mining of sand from the river bed, reduction of a river to a sewer, etc;
- priorities among water-uses, and social justice and equity in access to and availability of water for various uses;
- the question of ownership of water, and the respective roles of the state, the community and the citizen in relation to water;
- principles to govern the pricing of water in different uses;
- the commoditisation of water, tradable rights in water, water markets, the question of privatisation of water services, etc;
- and so on.

One is not arguing for complete uniformity across the States on all these matters; there is indeed a case for differences among the States on some of these matters; but there is need for a national consensus on at least certain basic questions.

In the European Union, there is a European Water Framework directive which imposes on the sovereign Member States the obligation to achieve 'good water status' by a certain date, and to bring their national laws and institutions to conformity with the river basin principle. In India, it may not be politically feasible for a national law to impose such mandatory obligations on the States, but it is at least necessary to embody a national consensus on basic principles in a national framework law.

I have been arguing for the last decade and more for such a national water framework law. I may claim to have been the first person in India to argue for a national law on water, and to use the term 'framework law'. Last year, as the Chairman of a sub-group set up by the Planning Commission, I submitted a complete, finished draft of such a framework law, embodying all the essential principles but refraining carefully from a centralising tendency or altering Centre-State relations in any way. The Ministry of Water Resources evidently had some reservations on that draft, and set up a Committee to attempt a fresh draft. I have not seen the draft prepared by the Committee, but possibly it tried to strengthen the hands of the Centre in some ways. In any case, at a recent Conference of the Water Resource Ministers of the States convened by the Centre, it appears from newspaper reports that several of the State Governments strongly opposed the very idea of a national law on water. Speaking subject to correction, it seems to me probable that the Ministry, by trying to put some teeth into the draft law and to strengthen the Centre's hands in some ways, departed from the concept of a *framework* law towards a more conventional operational law, and ran into opposition from the States, thus jeopardising the very idea of a national water framework law.

VII

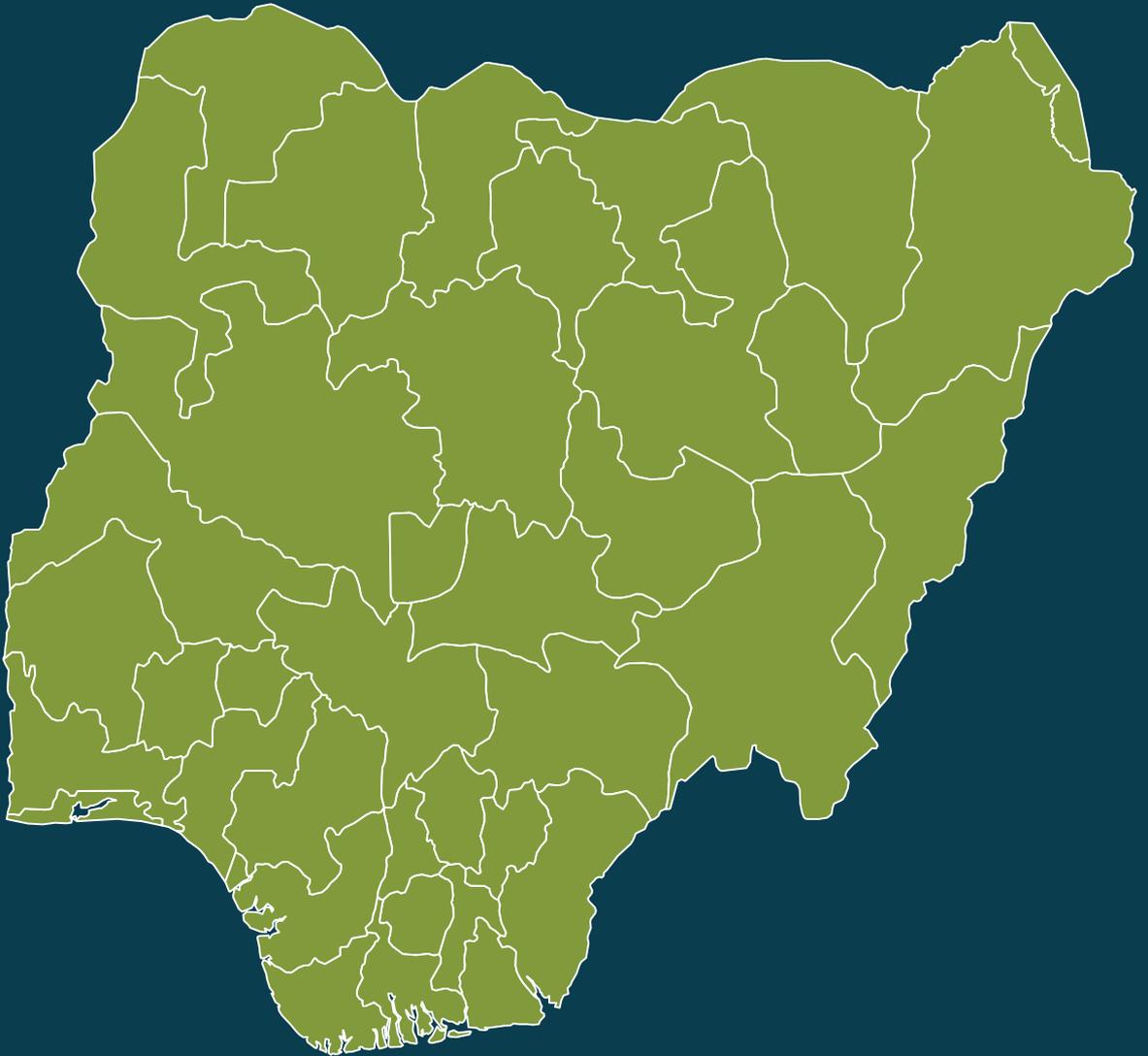
Federalism should not be merely a sharing of power by Central and State bureaucracies: we need a federalism that includes the people. There is general agreement that governance at every level should be fully 'participatory', i.e., that it should involve the full participation of the people, but this principle is not formally a part of federalism. There is much talk about 'civil society', but that is not a constitutionally or statutorily recognised entity. It is not easy to define the term 'civil society'; an easier term is citizenry. Most people will probably agree that the full engagement of citizens ought to be part of true federalism. I am not sure this can be wholly formalised, but it can be made an essential though informal part of what we call 'governance'. I am mentioning this point here because such engagement of the citizenry or civil society is of vital importance in the context of environmental concerns.

We have also to bring in the idea of justice. In the USA, social justice movements and environmental movements were initially separate, but over the years they tended to converge and led to the concept of 'environmental justice'. This has not happened to the same extent in India. The opposition to certain projects, for instance, the Narmada project and the Tehri project, is predominantly from the point of view of the displacement of people and their resettlement and rehabilitation. Environmental issues do figure in the debate, but the prime concern, quite understandably, is about the impact of the project on people's lives and rights. The fact that environmental impacts in turn impinge on people, particularly poor people, and that environmental remedial measures such as Compensatory Afforestation or Catchment Area Treatment may sometimes cause secondary displacement, is not fully understood.

VIII

We have been talking about a green orientation to federalism and a federal perspective to green concerns. There might be some difficulties in reconciling federalism and green concerns, but the real difficulty lies elsewhere. It is the spirit of unsustainable competitive demand that I referred to earlier – 'greed' in terms of Gandhiji's distinction between 'need' and 'greed' - that lies at the heart of the matter. It is greed that drives 'development' as currently understood, and it is that driving force that causes tensions in a federal structure (Centre-state and inter-State) as well as opposition to environmental concerns. It is necessary to move from greed to restraint, i.e., to limits on humanity's draft on nature and on the damage that humanity inflicts on nature, and from a combative assertion of rights to the acceptance of obligations or moral responsibilities. Our ideas of development and growth have to be brought within the ambit of an overarching framework of ecology and social justice (including inter-group, inter-area, inter-species and inter-generational justice). In this context, it is useful to remind ourselves of the traditional Indian concept of *dharma*. Without such a transformation, there can be no harmony between different groups within a state, between States in a federal structure, between countries, or between humanity and nature as a whole. Limits, justice, harmony: I had adopted that triad as the subtitle of my book *Towards Water Wisdom*. It is that triad that can harmonise federalism and environmental concerns and many other things besides.

NIGERIA



Population – 168.80 millions

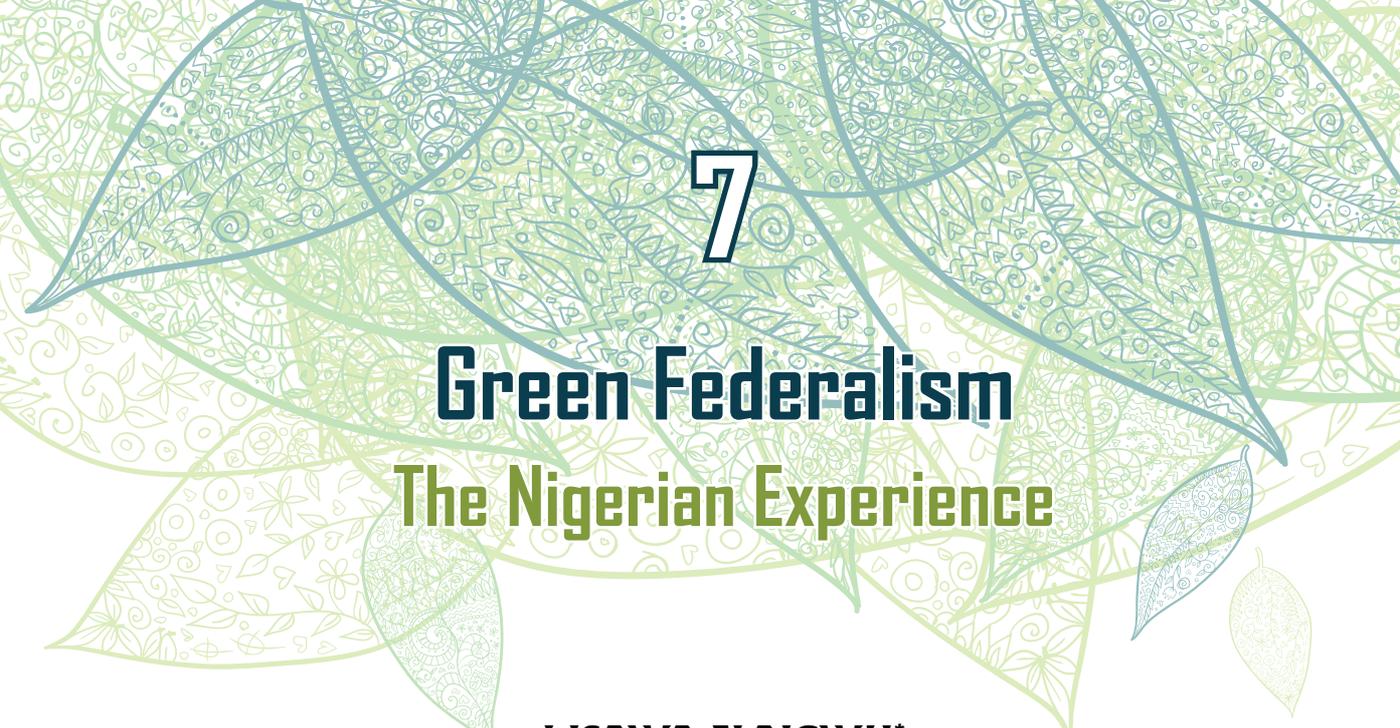
Land area – 911 sq. km

GDP – 459.6 (\$ billions)

Capital – Abuja

States

- Kano State
- Lagos State
- Kaduna State
- Katsina State
- Oyo State
- Rivers State
- Bauchi State
- Jigawa State
- Benue State
- Anambra State
- Borno State
- Delta State
- Niger State
- Imo State
- Akwa Ibom State
- Ogun State
- Sokoto State
- Ondo State
- Osun State
- Kogi State
- Zamfara State
- Enugu State
- Kebbi State
- Edo State
- Plateau State
- Adamawa State
- Cross River State
- Abia State
- Ekiti State
- Kwara State
- Gombe State
- Yobe State
- Taraba State
- Ebonyi State
- Nasarawa State
- Bayelsa State
- Abuja Federal Capital Territory



7

Green Federalism The Nigerian Experience

J ISAWA ELAIGWU*
ALI A GARBA**

Environments are not just containers, but are processes that change the content totally.

Marshall McLuhan

Introduction

Nigeria is located approximately between latitudes 4° and 14° north of the equator and between longitudes 2°2' and 14°30' east of the Greenwich Meridian. The country's landmass of about 923,768km² is bordered by the Atlantic Ocean to the south, Republic of Cameroon to the east, Benin Republic to the west, and Niger and Chad Republics to the north. By virtue of its location in the tropics, the country has a warm climate with seasonal rainfall and high temperatures. Climatic variability is high, with mean annual rainfall and mean maximum temperature ranging from 3,500mm and 32°C in the south to 600mm and 41°C in the north, respectively.

The vegetation in Nigeria also varies from the south to the north. The vegetation types include the mangrove and freshwater swamp and rainforest in the south to Savannah in the middle-belt and Sahel in the northern fringes. There are three major drainage systems in the country. These are the River Niger, Lake Chad, and coastal drainage systems. Beneath the

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ground, Nigeria is well endowed. The country has proven reserves of over 37 billion barrels of crude oil and 187 trillion cubic feet of natural gas. There are also solid minerals including bitumen, topaz, lignite, coal, tin, columbite, iron ore, gypsum, barite, and talc.¹

With a population of over 167 million, Nigeria is the most populous country in Africa. The population is growing at an annual rate of 3.2%. The diversity of the Nigerian population is enormous. There are over 400 lingo-cultural groups with three major ethnic groups and numerous minority groups. Christianity, Islam, and African tradition religions are the three major religious groups, with each having numerous sects or denominations. The culture and identity of the Nigerian people is defined by these ethnic and religious factors as well as regional divide between the south and north.

The Nigerian economy depends largely on the exploitation of the country's natural resources. The size of the economy in terms of nominal GDP and income per capita is US\$242.40 billion and US\$1,474.56 in 2011, respectively. The performance of the economy has been relatively impressive in the last decade, recording 7.36% growth rate in 2011, which was characterized by uncertain global recovery. While crude oil accounts for more than 88% of the country's income in 2011, economic growth is driven predominantly by the non-oil sector especially by crop production and telecommunications sub-sectors. As a "low human development" country, the economy is characterized by high rates of poverty, unemployment, and inequality. Its Human Development Index (HDI) ranking was 156 in 2011. The rate of unemployment was 23.9% in 2011 while the poverty rate (dollar-per-day) and income inequality (Gini-coefficient) were 61.2% and 0.429 in 2010, respectively.²

It is clear that Nigeria faces a number of challenges in development. These challenges include i) improving the quality of life of its citizens; ii) fostering sustainable rapid economic growth; and iii) integrating domestic economy into the global economy. Given the requirements for sustainable development through green economy, to what extent has federalism been a favourable framework for achieving this goal? In what ways do Federal, State, and Local governments design and discuss solutions to their common environmental problems? How sensitive are State governments to issues of green environment? What about Local government, which are the nearest to the people? How autonomous are these Local governments and do they have any financial and other forms of challenges to handle environmental challenges? How can the capacity of State and Local governments be enhanced to deal with environmental challenges for the purposes of sustainable development in Nigeria?

To this end, we suggest that

- i. The government of the Federation be conscious of the importance of **Green Economy** for sustainable development
- ii. Efforts in **Green Federalism** have been fluid and *ad hoc*; and inter-governmental relations in this area is weak

¹ Federal government of Nigeria (2009). *Report of the Vision 2020 Stakeholder Development Committee for National Poverty Eradication Programme (NAPEP)*. Also see, *Federal government of Nigeria, Nigeria's Path to Sustainable Development Economy: Country Report to the RIO + 20 Summit*, June, 2012

² National Planning Commission (2012). *2011 Performance of Report of the Nigeria Economy*. Abuja: NPC.

- iii. While there are funds for intervention in the problems of ecology from the federation's account, States and Local governments complain that these funds are not “appropriately” and “equitably” distributed among component units of the federation
- iv. However, the Federal government complains that many States and Local governments use the Ecological Fund for other purposes
- v. For green federalism to operate effectively, there is a need:
 - a. For restructuring the pattern of intergovernmental relations over environmental issues;
 - b. For establishing intergovernmental institutions (i.e., agencies) which will monitor and evaluate the use of intervention funds in the area of **Green Economy**; and
 - c. To find new ways of enhancing the capacity of State and Local governments for participating in the **Green Economy**, for purposes of sustainable development.

Evolution and Dynamics of Nigerian Federalism

Foundations of Nigerian Federalism

The current Nigerian State as an entity is a product of the amalgamation of the colony of Lagos, and the Northern and Southern Protectorates of Nigeria in 1914. There was no concerted effort by the British colonial authority to integrate these formerly separate colonial territories until the Richards Constitution of 1946. Under this Constitution, the amalgamated territories were given recognition as regions – the Northern, Western, and Eastern regions and the colony of Lagos. Nigerian nationalists were dissatisfied with the level of Local participation in government, which led to a number of constitutional reforms between 1951 and 1957. These reforms resulted in the gradual federalization of Nigeria's unitary colonial State. As the prospects of independence became clearer, mutual fears and suspicions of domination among ethnic and geo-ethnic groups generated intense pressures on the colonial administration for a Federal Nigeria.

By 1956, the Eastern and Western regions had attained a self-governing status, while the Northern region's self-government had to wait till 1959. By 1957, a *political dyarchy* had been established which saw Alhaji Abubakar Tafawa Balewa as the Prime Minister. Nigeria attained her independence on October 1, 1960, after the 1959 Federal elections. The first Nigerian Constitution provided for a federation, operating in the context of a parliamentary democracy. The federation was significantly decentralized with stronger regional governments, giving room for aggressive competition among regions. By December 1965, politics became dangerous as violence accompanied political disagreements. This prepared the ground for military incursion into the political arena. The military staged a coup in January 1966, which was followed by counter coup in July 1966. During the brief period of five months, Nigeria lost its Federal status through a military decree, which abolished the regions, established “groups of provinces” and introduced a unitary form of government into Nigeria's political arena. The decree number 56 of 1966, promulgated after the counter coup, returned Nigeria to “federalism” under military rule. As per the decree number 8 of March 1967, the Central

government was virtually left at the mercy of regional governments. For all practical intents and purposes, Nigeria became a confederal system. The first phase of military rule ended on October 1, 1966. During this period, the Federal structure was altered with the creation of 12 states from the four former regions, thus addressing one of the basic problems of structural imbalances in Nigeria's federalism. By October 1979, when the military handed over power to the civilians additional states had been created, increasing the number from 12 to 19 states. There was also a change from the parliamentary system of government to a presidential system (like the United States model). The transition to civilian rule did not last long. The military took over power in December 31, 1983 and ruled until May 29, 1999. The federation was further fragmented to 36 states and 774 Local government councils.³

Contemporary Issues in Nigerian Federalism

By May 1999, there were many complaints that the Nigerian federation had become excessively centralized. If there had been clamours in the 1960s for a Federal system with a strong centre, there were now demands for a Federal system with a weaker centre by some Nigerian groups. It is our suggestion that the high unitary streaks in the Nigerian federation were the result of a number of factors. These were: i) military rule, ii) the civil war, iii) the creation of States, iv) the increase in petro-naira; v) demands for federally desirable harmonization, and vi) international trade and globalization.

What we had in Nigeria, by May 29, 1999, therefore, was a highly centralized federation in which the Federal Centre had enormous political and economic powers, with an apparently suffocating hold on the sub-national entities. There have been agitations for a more decentralized structure; dissatisfaction with the distribution of available resources; communal conflicts, and demands by some sub-national groups for greater self-determination. These necessitated calls for review of the Constitution to enable devolution of powers and restructuring of the federation by convening *Sovereign National Conference (SNC)*; *National Conference* or a *Conference of Ethnic Nationalities*, and others.

Broadly, the Nigerian federation faces a number of challenges. Among these are: i) issues of centralization and decentralization in the relations among the three tiers of government; ii) resource distribution and/or management; and iii) the politics of federalism and aggressive subnationalism.

The military had left behind a highly centralized federation. Some Nigerian observers have argued that if the Centre gets decentralized in its functions and accompanying powers, there would be less to fight among politicians for the centre, and there would be greater political stability in the system. This is not really as simple as it seems. It does appear that the Federal government will continue to attract politicians who feel that their political stature and ambitions transcend the State level. In the relations among Federal, State, and Local governments, there are signs of *residual militarism* in the actions of political executives. The ghost of politics of control played by the military has had difficulty leaving the scene. In similar ways, the State governors patronizingly related to Local government chairmen.

³ J Isawa Elaigwu (2005). *The Politics of Federalism in Nigeria*. Jos: Aha Publishing House.

The democratic pressures in the Nigerian federation is however likely to respond to the current centrifugal swing in the Federal pendulum. It seems unlikely that Nigeria will eventually have a federation with a weak centre in the next decade, unless something dramatic happens. In addition, as political leaders imbibe greater democratic values; as democratic institutions get grafted and embellished by the Federal grid; and as new cultures of tolerance and cooperation in intergovernmental relations are imbibed, Nigeria may witness a gradual adjustment in its vertical Federal structure in favour of more appropriate power-sharing formulae among the levels of government. For now, centrifugal forces are likely to continue to push for a drastic reduction in the strength of the Central government, beginning with the revenue sharing formula in the federation.

Resource distribution includes both statuses and material resources. In fact, it includes the distribution of all scarce but allotted resources. The location of government projects as well as the pattern of recruitment into political offices and the public services is also a yardstick for measuring the fairness of leaders in the distribution process in Nigeria.

In order to ensure relative fairness in the appointment of people from various groups into the Federal Public Service, government established the *Federal Character Commission* to monitor the pattern of appointment into all the public services of Federal, State, and Local governments, in order to give the people, a sense of belonging to the nation. Cries of discrimination and marginalization by groups have not been abated since the establishment of this commission. But, at least, there is an office to which complaints can now be addressed. The 1999 Constitution provides in Section 162 (2) that the *Revenue Mobilization, Allocation, and Fiscal Commission* (RMAFC) has the function of tabling before the National Assembly a draft revenue allocation formula.

On the horizontal level, there have been cries of “marginalization” by all groups. The oil producing states of Niger-Delta are angry that the dividends of oil produced in their area go to other parts of the country. Basically while oil accounts for over 80% of the country’s annual revenue, it has not changed the lives of the Niger-Delta people. While the Constitution provides for 13% revenue (on the principle of derivation) to the natural resources producing areas, the governors of these States argue that the Federal government only agreed to pay these funds to the oil-producing states from January 2000, and the governors of the South-South Zone decided to demand for 100% control of its resources.⁴

Since the current quarrels are over the nature of distribution and not over the recognition of claims by contending parties, compromises will continue. While the Federal government went to court to seek the definition of the on-shore and off-shore minerals (or oil) in the context of resource distribution, there were pressures for a political, rather than a legal solution of the matter. This was done when a law was passed merging off-shore and on-shore. Currently, all mineral resources belong to the federation, and 13% of the proceeds return to the State of origin of such minerals (including petroleum). Given the centrifugal pulls in the federation, the percentage of the derivation principle may go up gradually in the decade. One disturbing trait in the politics of leadership and resource distribution is the extent to which actions of leaders (military and/or civilian) can be easily ethnicized. It is very easy for a leader’s mandate

⁴ J Isawa Elaigwu, J. I (2005) *ibid*.

to be ethnicized or geoethnicized by his people, by the way they lay claim to him. It is also easy for a leader to ethnicize his mandate by his policies and actions. Usually, a leader's mandate being ethnicized by his people becomes more dangerous if the leader also ethnicizes his mandate through his official actions in government. The qualities of *fairness* and *justice* in a leader cannot be overemphasized in the process of nation building in a Federal context.

Environmental Challenges

The country's vast ecosystem is under threat. Nigeria is experiencing a number of climate-induced environmental problems, which are exacerbated by the high population pressure and bad practices in the extraction of natural resources. This is largely responsible for the low ranking of the country, in terms of environmental performance. In 2012, Nigeria was ranked 119 out of 132 countries using the Environmental Performance Index (EPI). The EPI assessed the policy performance of countries in 10 key areas. These areas are environmental burden of disease, water (effects on human health), air pollution (effects on human health), air pollution (ecosystem effects), water resources (ecosystem effects), biodiversity and habitat, forestry, fisheries, agriculture, and climate change.

Deforestation and Desertification

Nigeria's forest resources are fast depleting. It is estimated that 50 to 55 million cubic metres of wood is consumed in Nigeria annually. In the northern part of the country, where there is Savannah the annual rate of deforestation of the woodlands averaged 3.5% while the rainforest in the south is depleting at an estimated annual rate of 3.5%, making Nigeria possess the highest rate of deforestation in Africa. It is also slowly losing primary forest in the world. Over 25,000 ha of the gazetted forest are being lost to dereservation annually. It is feared that the forest vegetation in Nigeria may disappear by 2020 if the current trend is not arrested. Similarly, desertification is affecting the driest part of Nigeria, particularly in the region north of latitude 10°N. Currently, desertification is advancing southwards at the rate of about 0.6km per year. Over 351,000 hectares green vegetation is lost to desertification annually.⁵

These environmental challenges are inhibiting the socio-economic development of Nigeria. They are distorting population dynamics, forcing migration, and precipitating natural resources-based conflicts. While the floral base of the vegetation is lost, the fauna becomes more vulnerable.

Erosion

Different parts of the country are affected by various kinds of erosion. The southern part with high rainfall has serious problem of gully erosion. There are many active gullies in the area reducing land for agriculture, disrupting micro topography and affecting infrastructure development. Over 2,000 gullies were estimated to be active by 1997. Wind and sheath erosions also affect other parts of the country. Wind erosion is more common in the

⁵ National Planning Commission (2009). Nigeria: Vision 20: 2020-Economic Transformation Blueprint. Abuja: NPC.

drier parts of the country while active sheet have been discovered across various types of vegetations.⁶ A country with large percentage of the population engaged in agriculture, erosion of various types affects livelihoods and sustainable socio-economic development.

Oil Spillage and Gas Flaring

Oil spillage has devastating effects on human activities in Nigeria. It has been a source of concern for people in the Niger-Delta region, where all the Nigerian crude oil is explored. During oil exploration, a considerable quantity of oil is spilled on the land and water. As an illustration, in August 1994, no fewer than six communities in Akwa Ibom, namely, Obianka, Iwofe, Okpedi, Amadung, Ukpon and Efe experienced oil spillage which went on unabated for four months and which incurably destroyed fish ponds, economic trees, and vast hectares of farmlands. Similarly, in Delta, five communities were rendered environmentally “bankrupt” on account of severe oil spillage at Bikong village in Burutu. It was estimated that no fewer than 5,000 farmers and fishermen lost their means of livelihood at Uzanu in Edo as a result of a blow out of NNPC oil pipelines. In addition, oil industry operations in the Delta involve a large number of activities with negative environmental consequences.

Similarly, oil spillage is caused by acts of vandalism. It is generally believed that aggrieved people in some oil-bearing communities in the Niger Delta often disrupt the activities of oil multinational corporations to express their dissatisfaction with the way and manner this environmental resource is exploited without commensurate compensation to the communities and recourse to the sustainability of the ecosystem. It was reported that between 1987 and 1997 Shell Company suffered 180 disruptions of oil production of these disruptions. The Ijaw were reported to be responsible for 133 incidents, Isoko 16, Itsekiri 11, Urohobo 10, Benin, 9 and Ibo 1. The cumulative effect of such disruptions threatens the future of the oil development processes.⁷

Oil activity infrastructural development in the Delta appears to cause more severe and extensive environmental impact than oil pollution. Pipelines, flow lines and, to a lesser extent, seismic lines cause forest degradation with severe consequences on the environment. The dumping of hazardous waste in a nearby dry oil well at Erovie in Ozoro community in Delta State by Shell Petroleum Development Company Limited (SPDC) was reported to have threatened human lives. The farmlands were ravaged by the chemical components of the dumped toxic waste.⁸ Additionally, pipeline exposure is hardly a rare incident due to neglect of oil companies in this area as most pipelines are old or substandard compared to modern pipes. In July 2000, 500 people died in petroleum pipeline explosions in Delta.⁹

Similarly, gas flaring also happens leading to atmospheric pollution, thereby, endangering both human and animal lives. Use of explosives during seismic surveys has disturbed the equilibrium of the ecosystem making it highly vulnerable to soil denuding forces. Consequently, cultivable agricultural lands have been rendered impoverished; aquatic species

⁶ Ibid.;

⁷ Newswatch, (Lagos) May 17, 1999.

⁸ Newswatch, (Lagos) January 8, 2001.

⁹ Newswatch, (Lagos) July 31, 2000.

are endangered; widespread deforestation leading to rapid depletion of biodiversity; water pollution; deforestation leading to rapid depletion of biodiversity, etc.

A recent UNEP study on environmental assessment of Ogoniland, one of the communities devastated by oil exploration-related environmental hazards, identified the major effects of oil exploration to include contamination of soil and groundwater, denudation of vegetation, degradation and disintegration of wetlands, polluting air with hydrocarbons, and threat to public health. The report discovered that the drinking water from wells in a particular community in Ogoniland had more than 900 times of Benzene, as per stipulated World Health Organization standards. The report concluded that the restoration of the damages done to the environment in Ogoniland may take upto 30 years.¹⁰

Effects of Solid Minerals Mining

Mining activities are associated with a number of environmental problems in Nigeria. Common problems include land degradation which tampers the micro ecosystem, distorting topology, and poisoning. Tin and columbite mining in Plateau created pits and ponds. Over 4,000 were reported to be the legacy of mining activities mostly in colonial era. Similarly, mining activities have been associated with poisoning and pollution. The mining relics in Plateau have been found to possess radioactive materials. Exposure to these radioactive materials has been reported to result in deaths and abnormal births by both humans and animals in the affected area. Traces of radioactive materials were also reported in Nasarawa.¹¹ Recently lead mining in Zamfara resulted in several deaths and deformities. An estimated 400 children were reported to have died from the inhalation of lead poison in six communities in Zamfara as of September 2012.¹²

Population Pressure and Urbanization

Nigeria is one of the few countries in the world which is predicted to experience high population increase in the next 40 years. It presently has an estimated population of over 167 million with an annual growth rate of 3.2%. According to the UN Department of Economic and Social Affairs (UNDESA) demographic data, at the time of independence in 1960, the total population was 45.92 million. By 2000, it increased to 123.68 million and it is expected to double to 389.61 million by 2050. Similarly, Nigeria's urban population has increased exponentially over the years from 16.61% of the total population in 1960 to 42.35% in 2000. By 2050, Nigeria will be among the top five countries with largest urban population increases, i.e., the urban population reaching 71.33% of the total population.¹³

The UN/DESA report concluded on a cautious optimistic note. The report noted that the pressures of migration, globalization, economic development, social inequality, environmental pollution and climate change are most directly felt in the urban centres. The impact of this

¹⁰ UNEP (2012). Environmental Assessment of Ogoniland. Nairobi: UNEP.

¹¹ *Weekly Trust*, (Abuja) 11 December 2010.

¹² *Daily Times*, September 6, 2012.

¹³ United Nations, Department for Economic and Social Affairs. Available at <http://esa.un.org/unpd/wup/unup/p2k0data.asp> and <http://esa.un.org/wpp/unpp/p2k0data.asp>

growth trends on the environment is therefore, a source of concern for governments and other stakeholders at Local, national, and international levels.

Table 7.1: Nigeria's Population Projections (1950-2050)

Year	Total Population	Urban Population	Urban Population as % of Total Population (%)
1950	37,860	3,867	10.21
1960	45,926	7,422	16.16
1970	57,357	13,024	22.71
1980	75,543	21,592	28.58
1990	97,552	34,418	35.28
2000	123,689	52,383	42.35
2010	158,423	77,629	49.00
2020	203,869	112,159	55.02
2030	257,815	156,697	60.78
2040	320,341	212,249	66.26
2050	389,615	277,916	71.33

Source: United Nations, Department of Economic and Social Affairs

Green Federalism in Nigeria

Constitutional Basis for Environmental Federalism

The 1999 Constitution of Nigeria provides the basis for environmental federalism. Article 20 of the Constitution specifically provides that “the State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria”. Furthermore, in the Chapter on Fundamental Objectives and Directive Principle of State Policy, the Constitution reinforces the policy and legal basis of sustainable development based social justice. Section 16 provides that State policies are to be directed to “harness the resources of the nation and promote national prosperity and an efficient, a dynamic and self-reliant economy”; and “control the national economy in such manner as to secure the maximum welfare, freedom, and happiness of every citizen on the basis of social justice and equality of status and opportunity”. Section 17 assigns the responsibility of preventing “the exploitation of human or natural resources in any form whatsoever” for reasons other than the “good of the community”.¹⁴

The Constitution shares powers and responsibilities for sustainable management of the environment among the three tiers of government i.e., the Federal government, 36 States,

¹⁴ Federal Republic of Nigeria (1999). *The Constitution of The Federal Republic of Nigeria*. Lagos: Federal government Press.

and 774 Local governments. Each level of government has constitutionally guaranteed autonomy in the areas of its operation. The “Legislative Lists” in the Constitution provide for the distribution of powers — “Exclusive Legislative List” assigned to the Federal government, the “Concurrent List” defining areas in which both the Federal and State governments can legislate, and an area of unspecified residual jurisdictions assigned to the states.

The Exclusive Legislative List has 68 items. These items include mines and minerals, including oil fields, oil mining, geological surveys and natural gas; nuclear energy; quarantine; fishing and fisheries other than fishing and fisheries in rivers, lakes, waterways, ponds, and other inland waters within Nigeria; water from sources declared by the National Assembly to affect more than one State; and national parks designated by the National Assembly. The Constitution provides that any matter with respect to which the National Assembly has power to make laws and also any matter incidental or supplementary to anything mentioned elsewhere in the Exclusive List.

The Concurrent Legislative List consists of 12 items. These include allocation of revenue, antiquities and monuments, archives, collection of taxes and agricultural development, including fishery. In case of controversies, any law enacted by the House of Assembly of a State is inconsistent with the law validly made by the National Assembly; hence the Constitution provides that the law made by the National Assembly shall prevail. The Local Government Councils also have their functions clearly stated in the Fourth Schedule. These include construction and maintenance of parks and gardens; provision of public conveniences, sewage and refuse disposal; development of agriculture, other than exploitation of minerals; and any other functions conferred on the Councils by the State House of Assembly.

The fiscal and monetary powers of each tier of government have also been delineated, especially by decree number 21, 1998 which has since become an Act of the National Assembly. The Federal government’s tax powers include profit tax on petroleum, import and export duties; companies’ income tax; withholding tax on companies, residents of FCT Abuja and non-resident individuals; and value added tax shared with other tiers of government. State taxing powers cover personal income taxes (pay-as-you-earn or direct taxation or assessment); withholding tax (individuals only); capital gains tax (individuals only); stamp duties as instruments executed by individuals; entertainment tax (pools, betting and lotteries, gaming and casino taxes), property tax, market taxes and levies (where State finances are involved) and naming of street registration fees at State capitals.

Local government councils are expected by the Constitution to generate their revenues, in part, from—entertainment tax, motor park duties, property tax, trading and marketing licenses; radio and television licenses and rates; shop and kiosk rates, tenement rates; on-and-off liquor licenses; slaughter slab fees; marriages, birth and death registration fees; cattle tax payable by cattle owners only; signboard and advertisement permit fees and customary burial ground permit fees.

It is generally argued that the distribution of powers and responsibilities in the Nigerian federation is skewed in favour of the Centre. It is politically and financially dominated by the Federal government. Essentially, the logic of distribution of powers and responsibilities in the Nigerian federation has been strengthening the Federal government sufficiently to provide

an overarching umbrella under which all groups can be accommodated. Like all federations, Nigeria has had to make adjustments. Many issues relating to the concentration of power at the Centre are raised in the ongoing Constitution amendment process. It is hoped that the process will lead to the swinging of the Federal pendulum in favour of the sub-national units.

Funding Environmental Management

The Constitution provides that all revenues of the federation shall go into the federation account, except for salaries of the personnel of the armed forces of the federation, i.e., the Nigeria Police Force, staff of the Ministry of Foreign Affairs, and the FCT Abuja. The Revenue Mobilization, Allocation and Fiscal Commission (RMAFC) is tasked with the development of a sharing formula for distribution of resources in the Federation Account among the various tiers of government. The principles considered in the distribution of the revenues include population, equality of State, internal revenue generation, land mass, terrain as well as population density.

The current revenue-sharing formula of the Federation Account allocates 48.5% to the Federal government; 24% to the 36 States; and 20% to the 774 Local governments. The Constitution also makes provision for Special Funds, which account for the remaining 7.5%. The Special Funds include the Federal Capital Territory Fund, the Ecology Fund, the Statutory Stabilization Fund, Derivation Fund, and the Mineral-producing Areas Fund. Also, one of the provisions of the Constitution prescribes that 1.6% of the Federation Account should be dedicated to the development of natural resources to promote economic diversification for sustainable national development.

Specifically, the Nigerian Constitution provides for the Ecological Fund. The Fund was established in 1981 under the Federation Account Act (1981). The Act was subsequently amended under the military through decrees 36 of 1984 and 106 of 1992. The civilian administration further modified the Act through Allocation of Revenue/Federation Account, etc., (Modification) Order of July 8, 2002.

The Ecological Fund is an intervention fund established to address the diverse ecological problems in the federation. It is a first line charge that originally accounted for 1% of the revenues in the Federation Account. It was reviewed to 2% of the revenues in 1992. In view of the enormity of challenges of environmental emergencies, however, the Federal government reviewed the Ecological Derivation Fund upward to 3% of the Federation Account in 2002. It was argued that the accrual to the Ecological Fund is not sufficient for the three tiers of government to tackle the myriad of ecological problems in the country.¹⁵ The enabling statutes place the Fund under the control of the Head of the Federal government; to be disbursed and managed in accordance with such directives as may be issued from time to time.

The Ecological Fund is ideally the major source of funds for addressing environmental problems. The Fund is utilized to tackle problems such as soil erosion, flood, drought, desertification, oil spillage, pollution, storms, tornadoes, bush fires, crop pests, landslides, earthquakes, and others. Data on the utilization of the Fund by the three tiers of government is generally very scarce. However, 135 projects in 2011 were considered by the Ecological

¹⁵ Ecological Fund Office, 2011 Annual Report, 2011a (Abuja: EFO 2011a); and EFO, Report of 2nd Nigeria, Eco Fair. (Abuja: EFO 2011b).

Fund Office for recommendation to the President for approval. Out of the total projects, 134 soil erosion and flood control projects were approved. The National Afforestation Programme was allocated about NGN4.5 billion in 2011. The Programme includes development of tree nurseries in the 36 States of the Federation and the FCT, development of teak and erosion species in six states, construction of Integrated Model Villages in 11 drought frontline states.¹⁶ Recently, the Federal government responded to flood disaster that affected most of the States in the country. The Federal government allocated NGN17.6 billion to address the effects of the flood disaster that ravaged many communities. The allocation was to some Federal government Ministries and Agencies as well as to affected states. The affected states were categorized based on the level of devastation caused by the floods.¹⁷

The fact that the Federal government does not have territorial control under its administrative jurisdiction necessitates collaboration between the Federal government and the lower tiers of government. In other words, the land affected by environmental problems is directly controlled by the State and Local governments. The Fund, which is the share of Federal government, is accessible to all governments at the lower tiers, communities, research institutions, and non-governmental organizations upon submission of proposal to the Ecological Fund Office. This often requires contribution of lower tiers of government in the implementation of projects. As an illustration, implementation of the Federal government's multi-purpose plastic recycling plants in 26 cities requires the Memorandum of Understanding (MoU) between the Federal and benefitting State governments.¹⁸ The collaboration among the governments is argued to be insufficient. Federal government interventions in the States are argued to be disconnected from the Local governments.¹⁹

The allocation of the Federal government component of the Ecological Fund to States and Local governments takes the form of grants, which are tied to projects related to the sustainability of the environment. Prospective beneficiaries, including State and Local governments, should submit proposals to the Ecological Fund Office to access the Fund. The Federal government assesses the proposals and takes appropriate decisions on allocation. The States currently complain of being short-changed by the Federal government with regard to ecological fund allocation.

The Natural Resources Development Fund is also used in funding projects and programmes related to sustainability of the environment. The Fund is 1.6% of the Federal Account, set aside for the development of natural resources. The Great Green Wall programme of the Federal Ministry of Environment is expected to be partly funded by this Fund.

The Policy and Regulatory Frameworks for Sustainable Management of the Environment

Nigeria recognizes the need for sustainable development through green economy. Its long-term development plan recognizes the need to pursue balanced and sustainable development through effective integration of socio-economic and physical growth plans to secure spatial,

¹⁶ EFO (2011a). *op. cit.*

¹⁷ Leadership.(Abuja) October 12, 2012.

¹⁸ EFO (2011a). *op. cit.*

¹⁹ EFO (2011b). *op. cit.*

environmental quality, and diversity. The country's Vision 20:2020 underscored the potential limitation that climate change poses to Nigeria's growth prospects and in particular, its potentially damaging and irrecoverable effects on infrastructure, food production and water supplies, in addition to precipitating natural resource conflicts. To mitigate these effects, the Vision 20:2020 makes a case for mainstreaming policies, programmes, and projects to respond to the threats of climate change by adopting environment-friendly practices, while benefitting from opportunities for competitive advantages that could potentially arise, as sustainability issues exert greater influence on international trade regulations.²⁰

In addition to universal principles enshrined in the Constitution, Nigeria is a signatory of more than ten International Conventions and Protocols related to sustainable management of the environment. These Conventions and Protocols include Convention on Biological Diversity, Convention to Combat Desertification, Convention for the Protection of the Ozone Layer, Convention on International Trade on Endangered Species, Convention on Conservation of Migratory Species of Wild Animals, the Ramsar and Basel Conventions, the Protocol on Biosafety to the Biological Diversity Convention (the Cartagena Protocol); the Kyoto Protocol, the Protocol on Substances that Deplete the Ozone Layer and the Framework Convention on Climate Change.²¹

These Conventions and Protocols shape Nigeria's policies on environmental sustainability. The National Environmental Policy is the key policy that guides governments at all levels. The policy was developed in 1989 and revised in 1999. The overarching goal is to achieve sustainable development. More specifically, the policy seeks to secure for all Nigerians a quality environment adequate for their health and well-being; conserve and use the environment and natural resources for the benefit of present and future generations; restore, maintain, and enhance ecosystems and ecological processes essential for the functioning of the biosphere and for the preservation of biological diversity; and to adopt the principle of optimum sustainable yield in the use of living natural resources and ecosystems.

In addition to the National Environmental Policy, there are other specific policies, guidelines, and action plans that have been developed to address different facets of the environmental challenges in the country. These policies include the National Policy on Drought and Desertification; National Forest Policy; the National Policy on Erosion, Flood Control and Coastal Zone Management; and the National Environmental Sanitation Policy. Others are the National Environmental Sanitation Action Plan; Drought Preparedness Plan; the National Biodiversity Strategy and Action Plan; the National Healthcare Waste Management Policy/Action Plan and Guidelines; and the National Policy Guidelines on (i) Solid Waste Management, (ii) Market and Abattoir Sanitation, (iii) Excreta and Sewage Management, (iv) Sanitary Inspection Premises and (v) Pests and Vector Control.²²

Institutional Arrangements for Sustainable Management of the Environment

The institutional arrangement for the management of the environment in Nigeria reflects the Federal system. It consists of Ministries, Departments, and Agencies (MDAs) of governments

²⁰ National Planning Commission (2009). *op. cit.*

²¹ Rio +20 Country report, *op.cit.*

²² *Ibid.*:

at different levels. At the Federal level, there is a Ministry of Environment. This was created in 1999 to provide an overall policy direction and coordinate activities of governments, in conformity with constitutional and policy provisions. The Ministry provides an administrative interface for relations with international governmental and non-governmental agencies working in the area of sustainable environmental management. The Ministry of Niger Delta Affairs was also created in 2009 to address some of the challenges of environmentally-susceptible region.

In addition to the Federal Ministry of Environment, there are specialized agencies created to tackle specific environmental challenges. These agencies include the National Environmental Standards and Regulations Enforcement Agency (NESREA), the National Oil Spill Detection and Response Agency (NOSDRA), Forestry Research Institute of Nigeria (FRIN), and National Park Service (NPS). The Ecological Fund Office is also a Federal government agency established to manage the utilization of its fund. The National Emergency Management Agency is also a Federal government agency responsible for provision of relief and humanitarian needs, in case of emergencies. The National Park Service is an agency saddled with the responsibility of conserving wildlife throughout Nigeria so that the abundance and diversity of their species are maintained at the optimum level; protecting endangered species of wild plants, animals and their habitats; and protecting and maintaining crucial wetlands and water catchment areas, among others. In the legislature, there are committees in the National Assembly performing legislative and oversight functions related to the sustainable management of the environment.

These institutional arrangements at the Federal level are to some extent replicated at the lower levels of government. There are Ministries of Environment in 35 out of the 36 states performing functions similar to those of the Federal Ministry of Environment. There are also some specialized agencies, such as the Environmental Protection Agencies and Waste Management Agencies. Some states also have State Emergency Management Agencies performing functions similar to the Federal agency, and wildlife parks and games reserve serving purposes similar to the National Park Services. These specialized agencies are usually established by laws enacted by the states. There are no departments or specialized agencies dedicated to the management of the environment in most of the Local government Councils. Except in a few Urban Local Councils, even the Local government function of waste management is performed by the State government agencies.

Inter-ministerial Committees are set up to facilitate effective coordination and collaboration at the Federal level. The National Council on Environment also provides an informal platform for stakeholders at Federal and sub-national levels as well as non-governmental actors to deliberate on contemporary policy and programmatic issues. The Council also serves as an instrument for coordinating activities of different tiers of the government related to sustainable development. Issues requiring urgent attention of governments at different levels can also be brought to the Joint Planning Board and National Council for Development Planning. These are informal avenues for addressing issues of national development. The National Economic Council, chaired by the Vice-President with State Governors as members, serves as ground for enhancing intergovernmental relations.

Green Federalism in the Politics of Nigerian Federalism

Concerns about the environment are reflected in Nigeria's politics of federalism and often result in conflict between communities and governments. Crude oil accounts for most of Nigeria's foreign exchange. Oil bearing communities have been demanding adequate compensation from the relevant multinational corporations and the Nigerian government for the havoc wrecked on their environment depriving a number of the people of their means of sustenance. This has pitched communities severely at odds with the oil companies and the Federal government affecting the nation's quest for socio-economic security, forging of a national identity, and the building of a virile and enduring democratic order. This resulted in emergence of armed groups engaged in violent confrontation with the Government. The most organized and effective group is the Ogoni people in Rivers State. The *Movement for the Survival of Ogoni People* (MOSOP) under Ken Saro Wiwa was responsible for the mobilization and sensitization of not only its members but the entire people of the Niger-Delta.

In response to the complaints of neglect in the Niger-Delta, a new body the *Niger-Delta Development Commission* (NDDC) has been established, to replace the old *Oil Minerals Producing and Development Commission* (OMPADEC). The NDDC is designed to alleviate poverty in the Delta area and embark on development projects aimed at improving the standard of living. Similarly, states with solid minerals also complain that in spite of environmental degradation as a result of mining activities in their areas, they have not been adequately compensated. They are therefore, calling for establishment of the *Solid Minerals Producing Area Development Commission* (SOMPADEC). Interestingly, all the states from which hydroelectric power is generated have also called for the establishment of *Hydro Power Producing Areas Development Commission* (HYPPADEC) to compensate them for the consequences of any environmental damages caused by such activities.

There is an expressed dissatisfaction with application of the derivation principle in the allocation of revenues accruing from the exploration of solid minerals. Nasarawa State is at the forefront of this agitation. In response, there is an effort to accommodate the concerns of the affected states. The RMFAC reported that the Accountant-General of the Federation (AGF) has opened an account with the Central Bank of Nigeria (CBN) for revenue from natural resources. This implies that states where solid minerals are mined will benefit from the special 13% provided in the Constitution for exploration of natural resources²³. Similarly, the Plateau State Governor has been agitating for compensation from the Federal government for land devastation and outbreak caused by mining activities in the State. The Governor argues that revenues generated from the mining of tin and columbite were used for oil exploration in the Niger-Delta leaving generations in the State to pay the price in form of cancer, death, and deformities from radioactive materials.²⁴

There have been disagreements in the way and manner the Ecological Fund is utilized. This has recently been observed by the National Assembly. Some State Governors accused the Federal government of mismanaging the Fund. The Governor of Anambra States, faced with problem of gully erosions, accused the Federal government of awarding contracts under the

²³ Daily Independent,(Lagos) September 15, 2012.

²⁴ Leadership,(Abuja) April 6, 2012.

Ecological Fund without informing states or requesting states to make inputs into projects that were either non-existent or outside their priority areas. Similarly, the Governor of Yobe State, one of the frontline states facing desertification, accused the Federal government of not involving State governments and undertaking “projects which are at cross-purposes with and even detrimental to the overall objectives of combating desertification and eradication of poverty.”²⁵

The Ecological Fund Office of the Federal government considers the agitation and complaints by State governments as unfair. It points to the fact the Office is managing only the Federal government component of the Ecological Fund. The 2011 Report of the Ecological Fund Office noted that there is a challenge of “dealing with the unsparing criticism of the Federal government by many State Governors for not doing enough to address their respective ecological problems”. The Report raised the question of “what the states were actually doing with their share of the Ecological Fund”.²⁶

While the Fund remains a subject of discord between the Federal and State governments, it is interesting to note that some states have approached the RMFAC to assist in addressing their grievances, regarding the utilization of the Ecological Fund. As an illustration, the Nasarawa State Governor lodged his complaint at the RMAFC over the non-release of funds approved for his State. He appealed to the RMFAC to assist the State to access the NGN30 billion, which was approved for ecological fund intervention as the State faces adverse effects of solid mineral mining.²⁷

The various dimensions of the politics behind environment related issues suggest a number of developments in Nigerian federalism. The complaints, claims, and counterclaims are clear manifestation of the dynamics of Nigerian federalism. They are also indications of increasing awareness of the constitutionally enshrined principles of distributions of power, responsibilities, and resources among various tiers of government as well separation of powers that facilitate effective utilization of resources meant for addressing environmental challenges and resolution of disputes.

Role of Sub-national Entities in Sustainable Development of Nigeria

The Nigerian Constitution distributes powers and responsibilities of management of the environment among the three tiers of government. The roles of each of the three tiers are defined by its assigned powers and responsibilities as shown above. The powers and responsibilities of sub-national governments are broadly limited in terms of extraction of environmental resources such as crude oil, gas, mines, and minerals. The powers and responsibilities of the State and Local governments are restricted to development of agriculture including fishery and forestry. By this power distribution, the responsibilities of policy making and regulation as well as enforcement lies only with the Federal government in areas it has exclusive jurisdiction. Thus, for instance, while minerals are extracted by a particular Local government in a State only the Federal government sets the rules and regulations.

²⁵ Vanguard, (Lagos) July 21, 2011.

²⁶ EFO (2011b), op. cit.

²⁷ Leadership, (Lagos) April 6, 2012.

Unlike some Constitutions, the Nigerian Constitution does not have a separate State list or a residual list. This implies that all matters not identified in the exclusive, concurrent, and the Local government lists come under the jurisdiction of the States. These implied or residual powers are extensive. These include health services, rural development, and social welfare. Specifically, the Constitution did not expressly assign the power and responsibility of ensuring environmental sustainability to any tier of the government. This means that the responsibility of ensuring environmental sustainability is an area of jurisdiction for all tiers of government, except on matters the Federal government has exclusive regulatory powers. This explains why in practice both Federal and State governments have Ministries of Environment discharging a common responsibility, and why State and Local governments are replicating the institutional arrangements for emergency management as well as environmental protection at the Federal level. In addition to the ministries, some states have Environmental Protection Agencies. In particular, waste management and urban development agencies are specialized agencies that are established at the sub-national level to provide environment related services for which the Federal government is not directly responsible. The Local governments share the responsibility of environmental management with the higher tiers of government. They are particularly assigned the responsibility of waste management.

The Great Green Wall (GGW) programme epitomizes dynamics of green federalism in Nigeria. The GGW Sahara initiative was an initiative of the Nigerian President in 2005 which led to the *African Union the Declaration of the Great Green Wall for Sahara Initiative* by the Assembly in 2007. The GGW initiative is a regional effort aimed at combating desertification through an integrated approach to enhance food security, ecosystem goods, and services for achieving development, particularly alleviating poverty. In 2010, the Pan-African Agency of the Great Green Wall (PAGGW) created to coordinate implementation of the initiative in 11 countries namely, Mauritania, Senegal, Mali, Burkina Faso, Niger, Nigeria, Chad, Sudan, Ethiopia, Eritrea, and Djibouti. The Agency is supported by three institutions namely the Conference of Heads of State and government, the Council of Ministers and the Technical Committee of Experts. The initiative aims to create strips of greenery of over 7,100 km long and 15 km wide that traverses the 11 countries.²⁸

The regional initiative was adopted into First National Implementation Plan (2010–13) of the Vision 20:2020. It therefore, became a priority national programme. The programme will cut across 11 states namely Sokoto, Zamfara, Kano, Jigawa, Bauchi, Gombe, Yobe, Borno, Adamawa, Kebbi, and Katsina. Its implementation requires the active participation of different stakeholders including, Federal ministries, State, and Local governments and donor agencies. Consequently, the Federal Ministry of Environment coordinates the activities of these stakeholders. An inter-ministerial Technical Committee was set by the Ministry to provide technical guidance to stakeholders.²⁹

The State and Local governments involved in the GGW programme are expected to provide financial support and set institutional mechanisms to facilitate the implementation of the programme. The 11 states have expressed the readiness to actively participate in

²⁸ Rio + 20 Country Report, op.cit

²⁹ Vanguard.(Lagos) July 21, 2012.

the programme. As an illustration, Katsina State set up three committees to oversee the implementation at the State and Local government levels. The committees include State Shelterbelt and Afforestation Steering Committee (SSASC), State Shelterbelt and Afforestation Technical Committee (SSTC) and the Local government Shelterbelt and Afforestation Committee (LGSAC).³⁰ The approach adopted in designing the GGW programme is a departure from the former *ad hoc* approach, whereby the intervention generally ends with “tree planting campaigns” organized at Federal, State, and Local government levels. This GGW programme approach is based on institutionalized intergovernmental relations, which will enhance the sustainability of the intervention.

From the above, by virtue of the implied power and responsibility of State and Local governments in environmental management, the role of the sub-national governments is not restricted. This role is however, constrained only by the extent of control they have on the extractive activities. Furthermore, in practice, the role of the sub-national governments is reduced due to a number of challenges.

Challenges of Green Federalism in Nigeria

Inadequate Sub-national Complementary Policies

It can be argued that Nigeria has a very good supportive policy framework for promoting sustainable management of the environment. This is evident in the number of International Conventions and Protocols signed and adopted by the Nigerian Government. The National Environmental Policy and numerous specific policies as well as the institutions established also demonstrate Nigeria’s direction and resolve to ensure sustainable management of the environment. The number of programmatic initiatives is practical examples of government commitment to sustainable development. These developments seem not to percolate down to the sub-national levels. There are fewer complementary policies developed by states and weaker institutional framework at the sub-national levels.

Lack of will, supportive policies, and weak institutional frameworks inhibit intergovernmental coordination. Ensuring sustainability of the environment requires the adoption of good practices as well as compliance with rules and guidelines. A situation in which policies are not adequately domesticated at the State and Local government levels, and institutions for implementation of policies and programmes are not established, makes enforcement and compliance difficult. Intergovernmental interventions will remain largely on *ad hoc* and unsustainable level.

Underutilization/Misuse of Funds for Promoting Sustainable Development

While environmental challenges in Nigeria are enormous, the utilization of dedicated funds for managing these challenges has been controversial. The National Assembly has recently intensified its focus on the utilization of the Ecological Fund. On one hand, the lower tiers of government claim that the Federal government is not utilizing the Ecological Fund in the best interest of all the stakeholders. On the other hand, the Federal government puts the blame

³⁰ Daily Trust, (Abuja) October 18, 2012.

on the States. It is evident that the Federal government is demonstrating its commitment to utilization of its component by establishing the Ecological Fund Office at the Federal level and also through some of the publicized projects and programmes. The GGW programme and the “Multi-Purpose Plastic Recycling Plants” initiatives are good examples of the efficient utilization of the Fund by the Federal government. Such efforts cannot be seen at the State and Local government level. However, the fact that the Federal government’s share of the Ecological Fund is almost the same with combined share of the 36 States and 774 Local government when it has only direct control of the FCT, leaves the sub-national government with fewer resources to address environmental challenges. This further emphasizes the argument for review of the revenue sharing formula.

Another controversy associated with the utilization of the fund is the allegation of its misuse by the Federal government. As an illustration, the Senate Committee on Public Accounts reportedly discovered that NGN928 billion was spent in 2002 on projects not related to ecology; NGN1.9 billion was allocated to Ministry of Aviation in 2003; N16 billion was spent as grants to Yobe and Ogun States for road constructions in 2006; N24 billion for the rehabilitation of the Shagamu Expressway in 2007; N34.6 billion for treasury management of the Federal government in 2010; N22 billion shared with some State and Local governments in 2011; and N2.078 billion for the Onitsha Bridge project in 2012.³¹

The ongoing investigation by the National Assembly is a positive development in terms of promoting accountability of governments. Unfortunately, nothing is heard about the share of the State and Local governments. This suggests a relatively low level of responsiveness to environmental issues and weak accountability in the lower tiers of government. It is hoped that in the near future the State Houses of Assembly, civil society organization, and citizens will demand explanations on how the funds by the lower tiers of government are utilized.

Weak Capacity and Accountability of Sub-national Governments

The Local governments in Nigeria have systemic problem of weak capacity in governance. The Nigerian Constitution recognizes the Local governments as “constitutionally guaranteed tier of government”. However, in Section 7, the Constitution empowers the states to “ensure their existence under a law which provides for the establishment, structure, composition, finance, and functions of such councils”.³² The State House of Assembly is empowered make laws for the coordination of economic planning and allocation of public revenue to Local governments. Furthermore, the Constitution provides for a State Local government Joint Account (SLGJA) as an avenue for fiscal regulation of Local governments. In most States, while the Ministries/Bureaus for Local governments controlled by the State governments oversees the policy making process of Local governments, the Local government Service Commissions established by the State government is responsible for recruitment, deployment, promotion and discipline of middle and senior level staff of Local governments.

These constitutional provisions and operational practices have eroded the autonomy of the Local governments. They are left to be politically, administratively, and financially controlled

³¹ The Punch, (Lagos) October 8, 2012

³² Federal Republic of Nigeria (1999). Constitution. op.cit

by the State Governments. This has also reduced the Local governments as glorified appendages of the State governments, unable to perform the basic function of a government. Being closest to the people and communities, the Local governments do not possess the capacity to protect the environment.

The capacity of the Local governments to formulate policies, initiate programmes, and manage its implementation is severely weakened by the erosion of their powers. Similarly, with poor financial resource base, the Local governments cannot establish necessary institutions required to implement, monitor, and evaluate policies and programmes. The situation is so bad that Local governments cannot even perform the function of managing domestic waste. In most of the states, this function is taken over by the State governments.

Conclusion

In sum, this paper argues that the Nigerian Government recognizes the need to effectively tackle the challenges of its environment for achieving sustainable development. However, while the Federal system provides a conducive atmosphere for dealing with the problems of green economy and sustainable development, there are structural and procedural issues which must be tackled. This will require restructuring the pattern of intergovernmental relations over environmental issues in order to generate appropriate commitment and actions from each tier of government.

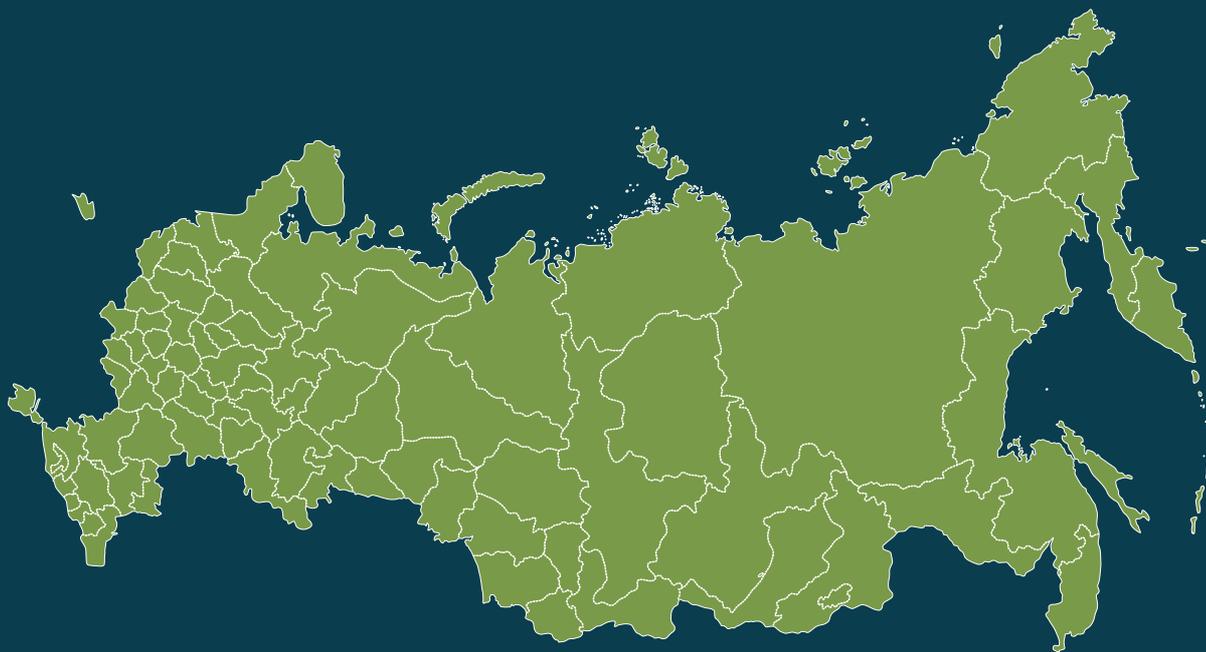
Given the proximity of State and Local governments to the communities affected by environmental problems, there is a need to find new ways of enhancing the capacity of State and Local governments to participate more effectively in the process of the green economy and sustainable development. The sharing formula for the Ecological Fund should also be reviewed. Revenue needs to be generated internally by each tier of the government for addressing environmental challenges. Incentivizing policy and programmatic initiatives of sub-national governments is capable of stimulating and motivating the lower levels of government to be proactively responsive. However, while there are environmental agencies, there should be an intergovernmental agency for monitoring and evaluating the use of intervention funds, at each level of the governmental structure.

Given the role of Local governments in good governance, in general, and management of the environment, in particular, an essential balance should be achieved between constitutionally granted autonomy of the Local governments and the disposition of State governments to control Local governments politically, administratively, and financially. This balance is necessary to enhance governance capacity and efficiency of Local governments. In this regard, the SLGJA should be abolished to enable resources to flow to the Local level. In addition, serious and well coordinated effort should be initiated and sustained to develop the capacity of sub-national governments in the area of environmental management.

As Dave Foreman pointed out:

Our environmental problems originate in the hubris of imaging ourselves as the Central nervous system or the brain of nature. We are not the brain, we are the cancer on nature.

RUSSIA



Population – 143.50 millions

Land area – 16,377 sq. km

GDP – 2,014.80 (\$ billions)

Capital – Moscow

Republics

- Adygeya
- Altai
- Bashkortostan
- Buryatia
- Daghestan
- Ingushetia
- Kabardino-Balkarian Republic
- Kalmykia
- Karachayev-Circassian
- Karelia
- Komi
- Mari El
- Mordovia
- Sakha (Yakutia)
- Ossetia – Alania
- Tatarstan
- Tuva
- Udmurtian
- Khakassia
- Chechen
- Chuvash

Territories

- Altai
- Trans-Baikal
- Kamchatka
- Krasnodar
- Krasnoyarsk
- Perm
- Primorye
- Stavropol
- Khabarovsk

Regions

- Amur
- Arkhangelsk
- Astrakhan
- Belgorod
- Bryansk
- Chelyabinsk
- Ivanovo
- Irkutsk
- Kaliningrad
- Kaluga
- Kemerovo
- Kirov
- Kostroma
- Kurgan
- Kursk
- Leningrad
- Lipetsk

- Magadan
- Moscow
- Murmansk
- Nizhny Novgorod
- Novgorod
- Novosibirsk
- Omsk
- Orenburg
- Orel
- Penza
- Pskov
- Rostov
- Ryazan
- Samara
- Saratov
- Sakhalin
- Sverdlovsk
- Smolensk
- Tambov
- Tomsk
- Tver
- Tula
- Tyumen
- Ulyanovsk
- Vladimir
- Volgograd
- Vologda
- Voronezh
- Yaroslavl

8

Environmental Protection in the Russian Federation

Assignment of Powers

GALINA KURLYANDSKAYA*
NATALIA GOLOVANOVA**

Russia's Environmental Context and Challenges

Economic growth in Russia in the 2000 was primarily driven by natural resource extraction. However, the exhaustion of natural resources hindered this growth. The predominance of resource extraction and resource-intensive industries in the Russian economy are the main factors responsible for environmental degradation.

But poor control on the part of the government over the use of natural resources and management of environmental protection has caused even more harm. Another negative factor, that cannot be ignored, is a high share of shadow economy in the natural resources sector.

A considerable part of Russia is covered by forests that are a major object of environmental protection. In areas with less population, these forests need to be protected from natural disasters; while in densely populated areas these need to be protected from over exploitation by humans. Depletion of forests due to atmospheric pollution, pests, and fires threatens the ecology.

Other challenges are depletion of the water table, pollution, and deterioration of drinking water quality. For example, the world-famous Lake Baykal has been polluted by industry and tourism. Depletion of forests threatens biodiversity and a wide range of animal and plant species. Short-sighted geo-political decisions endangered biodiversity in coastal areas and water pollution menaced life in lakes and rivers.

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Like in other countries, the high level of air pollution in cities is a huge problem for the population. The main sources of air pollution in urban areas are factories located within city borders, transportation, and thermal power plants. As a result (as estimated by the Russian Federation (RF) Ministry for Natural Resources and Environment in the RF Program for Environmental Protection in 2012–20), 30% of the Russian population is being exposed to high ecological hazards.¹ A low level of environmental awareness completes the picture.

Assignment of Environmental Powers

Russia does not have a uniform law to establish the assignment of powers between the tiers of government in the environmental sector. According to the Constitution of the Russian Federation, land, subsoil, water, and other natural resources are under joint jurisdiction of the federation and its constituent units (or regions). The Constitution is supplemented by the Federal law “On General Principles of Organization of Legislative (Representative) and Executive Bodies of State Power of the Subjects of the Russian Federation” that specifies responsibilities of the regions in the environmental area as follows:

- i. The organization and implementation of regional and inter-municipal programmes and projects in the field of environmental protection and ecological safety
- ii. The establishment and maintenance of regional protected areas
- iii. Maintaining the regional *Red Book*
- iv. Protection and use of specially protected natural territories

Besides, legal norms concerning the assignment of various environmental powers are included in the Land Code, Forest Code, Water Code, Federal laws “On Environmental Protection”, “On Subsoil”, and “On Ecological Expertise”.

Box 1. The Governmental Structure of the Russian Federation

Russia has 83 constituent units (subjects of the federation, or regions), 520 city municipalities, 1,815 rural district (raions)* municipalities, and over 20,000 rural and urban settlements.

65% of revenue is assigned to the federation, followed by 28% to the regions and 7% to the municipalities. The revenue per capita diverse across regions before fiscal equalization transfers may be as great as 50-fold.

Russia is a unique Federal state where even after equalization transfers the difference between richest and poorest regions remains 12-fold. In case of municipalities, the difference after equalization is 14-fold.

The average share of transfers in regional and Municipal revenues is high and there are regions and municipalities where the share of transfers constitutes 80% of all government revenues. Regions with above average per capita fiscal revenues (in 2014, there were 12 such regions) are not eligible for equalization transfers. But they continue to be recipients of earmarked transfers.

Because transfers do not fully equalize per capita regional and Municipal revenues and the total expenditures differ from region to region in per capita terms, the quality of public goods in different regions of Russia also differs a lot.

* A **raion** (also **rayon**) is an administrative unit in rural areas typical for several post-Soviet countries.

¹ <http://www.mnre.gov.ru/regulatory/detail.php?ID=134258>

On the Federal level, there is a Ministry for Natural Resources and Environment and five agencies (see Table 8.1 below) that deal with main environmental issues. The Ministry prepares legislation and issues regulations while the agencies implement them.

Table 8.1: Government Agencies and Responsibilities of Authorities in the Field of Environmental Protection

government Body	Functions	Objects
Federal government		
Ministry of Natural Resources and Environment	<ul style="list-style-type: none"> • Drafting legislation • Issuing regulations 	<ul style="list-style-type: none"> • Subsoil • Water reservoirs • Forestry • Fauna and habitat
Federal Agency for Supervision in Natural Resources Treatment (7 macro-regional, 83 regional territorial branches)	<ul style="list-style-type: none"> • Control and supervision over compliance with regulations • Wildlife protection • Control over hunting 	<ul style="list-style-type: none"> • Subsoil • Water reservoirs • Forestry • Fauna and habitat
Federal Agency for Water Resources (15 river basins, 83 regional territorial branches)	<ul style="list-style-type: none"> • Water-resources protection • Protection • Elimination of negative impact 	<ul style="list-style-type: none"> • Water reservoirs
Federal Agency for Forestry (7 macro-regional branches)	<ul style="list-style-type: none"> • Fire control and monitoring • Implementation of fire safety measures • Fighting fires 	<ul style="list-style-type: none"> • Forestry
Federal Agency for Hydrometeorology and Environmental Monitoring (7 macro-regional, 6 inter-regional territorial branches)	<ul style="list-style-type: none"> • Condition monitoring 	<ul style="list-style-type: none"> • Open air • Water reservoirs • Continental shelf
Federal Agency for Nuclear Supervision	<ul style="list-style-type: none"> • Security assurance 	<ul style="list-style-type: none"> • Nuclear and radiation safety
Subjects of the Russian Federation		
Divisions of Regional Governments	Own <ul style="list-style-type: none"> • Participation in Federal environmental policymaking in the region • Participation in Federal environmental policy implementation in the region • Participation in Federal environmental monitoring • Ecological inspection in areas not covered by the Federal government 	<ul style="list-style-type: none"> • Subsoil • Water reservoirs • Forestry • Fauna and habitat

government Body	Functions	Objects
	<ul style="list-style-type: none"> • Environmental education • Keeping the <i>Red Book</i> of the region • Establishment and maintenance of regional wild life reserves • Informing the public about the State of environment in the region 	
	<p>Delegated</p> <ul style="list-style-type: none"> • Fire control and monitoring • Implementation of fire safety measures • Fighting fires • Protection • Elimination of negative impact • Wildlife protection • Control over hunting 	<ul style="list-style-type: none"> • Forestry • Water reservoirs • Fauna and habitat
Local governments		
Divisions of Municipal Governments	<ul style="list-style-type: none"> • Environmental protection activities in the municipality (in addition to Federal and regional activities) • Informing the public about the State of the environment in the municipality • Establishment and maintenance of Municipal wildlife reserves • Security, protection and reproduction of Municipal forests • Conservation and protection of Municipal water reservoirs 	<ul style="list-style-type: none"> • Fauna and habitat • Forestry • Water reservoirs
	<ul style="list-style-type: none"> • Collection, disposal, recovery, and recycling 	<ul style="list-style-type: none"> • Domestic and industrial waste

Source: Compiled by the authors from legal database

Regional governments, as a rule, co-finance and participate in implementation of Federal ecological programmes. In addition, they have responsibilities over water reservoirs, forests, and wildlife that are outlined in accordance with Federal, Regional, and Local ownership rights.

Besides their own responsibilities, the regional governments are mandated to execute powers delegated by the Federal government. These are responsibilities of the Federal government transferred to regional governments followed by earmarked funds. The regions use these funds to protect and eliminate the negative impact on water reservoirs, forests, etc. On the Local level, municipalities also take care of water reservoirs, forests, etc., that fall in their area of jurisdiction. They are also responsible for collection, recovery, and recycling of waste.

Government Spending on Environmental Protection

government expenditures on environmental protection in Russia are rather small; they account for 0.6% of consolidated RF budget spending. In totality, this constitutes 0.2% of the Russian GDP. In terms of per capita on the yearly basis, the Federal government spends 16 USD and sub-national governments spend USD18, including USD9 provided by the Federal government in the form of inter-governmental transfers.

Table 8.2: Government Spending on Environmental Protection (2013)

	\$ bln	% of total spending	% of total RF (before transfer)	% of total RF (after transfer)	% of GDP
Federal budget (incl. transfer)	3.5	0.8%	56%	46%	
Inter-governmental transfers	1.3				
Sub-national budgets	2.6	0.9%	44%	54%	
Consolidated RF budget	4.9	0.6%			0.2%

Source: Compiled by the authors from RF treasury reports.

Assignment of Revenues

In Russia, tax revenues are not related to particular expenditures. All revenues go to the budget and then are spent on different government functions according to the Budget Law.

Federal government retains 97% of environmental taxes, fees, charges and duties and only 3% goes to sub-national governments. The total environmental tax and other duties amount to 21.6% of the Federal budget, about 90% of which comes from Mineral Extraction Tax on Hydrocarbon.

Table 8.3: Government Revenues Linked to Environmental Damage by Levels of government (2013)

Revenue	% retained by Federal government	% retained by s/n governments	% in the Federal budget	% in s/n budgets
Total tax and non-tax revenue:	72.9	27.1	100.0	100.0
Total environmental taxes, fees, charges and duties	97.3	2.7	21.6	1.2
Total environmental taxes, fees, charges and duties w/o met on hydrocarbons	78.7	21.3	2.2	1.2
Mineral extraction tax on hydrocarbons	100	0	19.4	0
Mineral extraction tax on natural diamonds	0	100	0	0.1
Mineral extraction tax on common minerals	0	100	0	0.1
Mineral extraction tax on coal	40	60	0.0	0.1

Revenue	% retained by Federal government	% retained by s/n governments	% in the Federal budget	% in s/n budgets
Other Mineral Extraction Taxes	40	60	0.1	0.3
Royalties	95	5	0.1	0.01
Water Tax	100	0	0.02	0.0
Fee for the Use of Aquatic Biological Resources	20	80	0.003	0.2
Fee for the Use of Fauna	0	100	0	0.003
State duties (depending on the type)	100-0	0-100	0.003	0.0
Subsoil Rentals (depending on the type)	100-0	0-100	1.2	0.1
Forest Rentals (depending on the type)	100-0	0-100	0.1	0.1
Water Reservoirs Rentals (depending on the type)	100-0	0-100	0.1	0.00001
Charges for a Negative Impact on the Environment	20	40 (+ 40 to municipalities)	0.05	0.4

Source: Compiled by the authors from legal database and RF treasury reports

Inter-Governmental Transfers and the Environment

Transfers constitute a large portion of environmental spending: their share in the sub-national spending on environment amounts to nearly 35%. These transfers are strictly earmarked, accounted for and rigorously controlled by the Federal government. These are mostly spent on forest protection. Forests are the major object of the environmental spending. Because the forests are not inhabited, the population density indicator for the regions where forests occupy the vast territory is low. And particularly these regions spend more on environmental issues in per capita terms.

Box 2. Inter-Governmental Transfers for Financing Environmental Issues in Russia

Equalization transfers: Their formula does not take into account the need for environmental protection

Matching conditional grants: This type of grants is not used for environmental purpose

Regular earmarked transfers for delegated responsibilities: The main type of inter-governmental transfers for financing environmental issues. They account for 36% of Federal spending on environmental protection. Implementation of delegated responsibilities amounts to 35% of the total sub-national spending on environmental protection. These transfers are allocated on the formula basis and their spending is followed by close Federal control.

Emergency transfers: Are used to mitigate the consequences of natural disasters; emergency transfers are allocated from the Federal emergency fund on *ad hoc* basis.

Though the amount of federally-induced spending accounts for 35% of the sub-national spending on environmental protection, there is no significant correlation between the amount

of Federal transfers and the total spending of regions on environmental issues. But the correlation between the total region's revenues and own spending on ecology is about 75%. So the richer is the region, the more it spends on ecology.

There are regions that care about environment protection more than others; they spend whatever is considered necessary irrespective of Federal transfers. In other words, there is real federalism in this field because the regions are rather independent in their environmental spending. Still, the total amount of money spent on environmental issues is rather low.

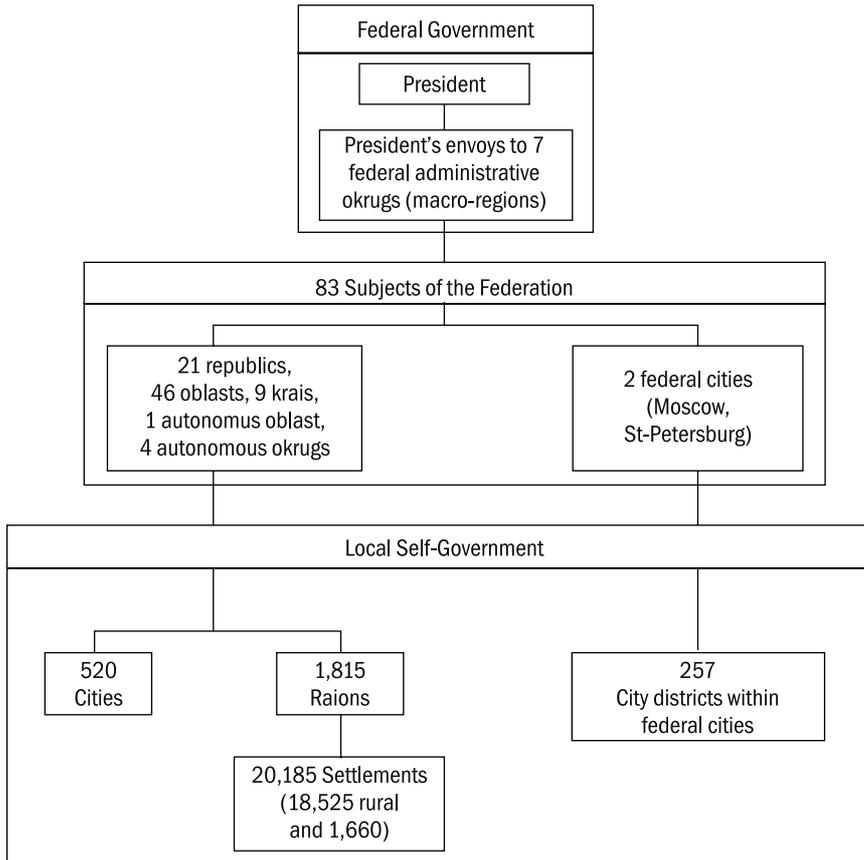
Conclusion

The main problems of Federal relations in Russia regarding the environment are vague delineation of powers, responsibilities and accountability scattered in different laws, and sometimes unreasonable assignment of powers (for example, Municipal governments are deprived of power to exercise environmental control).

Russia is now in the process of changing its budgetary system and introducing program budgeting. A change in the budget preparation process is in the offing: budget funding is going to be aimed at government programmes rather than for particular expenditure items. These programmes must articulate goals and tasks that to reach and include indicators or benchmarks. The Ministry for Natural Resources and Environment has developed the Program for Environmental Protection for the period of 2012–20. This programme sets goals, tasks, and suggests indicators to monitor results. The Federal government itself will not be able to reach the benchmarked indicators that it wants without the support from the sub-national governments. The Federal government should introduce not just these special-purposes and strictly earmarked transfers for the delegated responsibilities, but also provide grants for regions to have incentives.

Recently Russian Government has started to draw more attention to ecological issues. As a result Russia's EPI (Environmental Performance Index) rating grew significantly in 2014 (73 out of 132) compared to 2012 (106 out of 178). The EPI indicators provide a gauge at a National government scale of how close countries are to established environmental policy goals. The sense of unlimited natural resources used to unconsciously drive the government policy in Russia for centuries; it will take time to change people's frame of mind. We hope this attitude has started to change and the depletion of natural resources in Russia has chances to be restored.

ANNEX I



Source: Federal State Statistical Service as of January 1, 2014

SOUTH AFRICA



Population – 52.30 millions

Land area – 1,213 sq. km

GDP – 384.30 (\$ billions)

Capital – Pretoria (executive)
Bloemfontein (judicial)
Cape Town (legislative)

Provinces

- Eastern Cape
- Free State
- Gauteng
- KwaZulu-Natal
- Limpopo
- Mpumalanga
- North West
- Northern Cape
- Western Cape

Addressing Climate Change through Provincial Planning in South Africa

A Case Study of the Western Cape¹

JAAP DE VISSER*

Introduction

The Western Cape Province is a province in southwest South Africa. Within the Province there are 30 municipalities, including the metropolis of Cape Town which is the country's second largest city and the provincial capital. It is bordered on the west and south by the Atlantic Ocean and Indian Ocean, respectively. The Atlantic coast stretches for about 400 kilometres to the north and the Indian Ocean coast stretches about 500 kilometres to the east. The Province comprises a land mass of 129,462 square kilometres, about 10.6% of the country's total area. It is roughly the size of England.²

Rich in environmental resources, the Western Cape Province is renowned for its biodiversity and is home to one of the world's seven floral kingdoms, the Cape Floral Kingdom. The financial, business, and real estate sectors are the Western Cape economy's biggest sector but agriculture is also the fastest growing sector, growing at 10.6% in 2011. Tourism is a major contributor to the province's GDP.³

¹ Research for this paper was made possible by the Charles Stewart Mott Foundation, the Ford Foundation, and South Africa's National Research Foundation.

* Director, Community Law Centre, University of the Western Cape, Senior Research Fellow, Multilevel government Initiative.

² "Western Cape," Wikipedia. Available at http://en.wikipedia.org/wiki/Western_Cape (last accessed on October 18, 2012).

³ "Western Cape," Wikipedia.

The Western Cape is especially vulnerable to the consequences of climate change. In the latest Western Cape Climate Change Strategy, the Provincial government projects increased mean annual temperatures, increased frequency and magnitude of extreme rainfall events with associated stronger winds and storm surges. It furthermore projects increased intensity of winds, extended dry periods between rainfall events, shifts in seasonality, and sea-level rise. These climatic changes will have an impact on water and food security, tourism, and marine life. Loss of biodiversity, flooding and storm damage, transport challenges, increased run-off and slope instability are but a few examples of the impacts that are expected.⁴

Climate Change and Land-use Planning

Land-use planning and management are the key instruments for the Provincial government in dealing with climate change. For example, one of the Provincial government's flagship programmes in its draft Climate Change Plan is:

Dealing with existing developments in high risk areas and [having] regulations in place to prevent such future developments which would increase the climate risk profile of the province.⁵

The implementation of this strategy, thus, requires Provincial government's involvement in land-use planning and management. If the Provincial government wants to encourage appropriate development and discourage inappropriate development, it needs to do that through, amongst other things, its involvement in the control of land use.

The subject of this paper is the provinces' involvement in land-use planning and its constitutional scope. It is examined against the backdrop of the rapidly changing constitutional division of powers among national, provincial, and Local governments. The changes are particularly important for provinces such as the Western Cape because they require the Provincial government to radically reposition itself. The implementation of the constitutional division of powers is forcing the province to cede substantial power over land-use planning to the National government as well as to Local governments.

The central question arises that how does the Provincial government of the Western Cape, high in biodiversity, rich in agricultural potential and particularly vulnerable to climate change, pursue provincial land-use planning in a multilevel government context where Local government and National government are eating away at its powers?

Terminology and Background

Before proceeding with an analysis of the question raised, it is useful to clarify some of the terminology that will be used in this paper. The term "land-use planning" can be broken down into forward planning, development management, and special approvals.

⁴ Western Cape government, *Draft Western Cape Climate Change Strategy* (draft of 14 September). Cape Town: Western Cape government, (2012), p. 5.

⁵ Western Cape government, *Draft Western Cape Climate Change Strategy*.

- 🌿 *Forward planning* refers to the adoption of a policy that articulates a spatial vision for a particular area. In the South African context, these policies are referred to as “spatial development frameworks”, which may be adopted at Local, regional, provincial, or national scales. These spatial developments represent crucial opportunities for governments to address both climate change adaptation and climate change mitigation. For example, they may point out coastal setback areas — i.e., coastal zones where development activity is prohibited — and thus assist in adaptation to sea-level rise as a result of climate change. They may also include density guidelines, which would aim to improve transport efficiency and reduce motorcar dependency.
- 🌿 *Development management* refers to the control of land use through the granting of land-use rights to individuals or legal entities that seek to develop land.⁶ The main difference between forward planning and development management decision is that the latter grants actual land-use rights, while the former does not.
- 🌿 *Special approvals* are those authorizations for particular activities on land units that require a permit in terms of specific sectorial legislation, dealing with matters such as mining, environment, agriculture, heritage, etc.

Using these instruments in the context of addressing climate change can be aimed at avoiding inappropriate development through, for instance, insisting on coastal setbacks or countering the conversion of land designated for agricultural use into land that can be used for residential or industrial use. It can also be aimed at encouraging appropriate development, for example by encouraging densification and public transport corridors. This paper examines at what level of government these three instruments are exercised and what the role of Provincial government is. However, before this can be properly addressed it is necessary to provide a brief background to the multilevel government system in South Africa as well as some of the key debates on the future of multilevel government in South Africa.

Multilevel Government in South Africa

The complexities surrounding the role of provinces, such as the Western Cape, in land-use planning can only be understood against the backdrop of the general debate about multilevel government and provinces in South Africa.

South Africa’s Constitution, and particularly its quasi-Federal structure, is a product of the negotiations towards a democratic South Africa, conducted between the liberation movements led by the African National Congress (ANC) and the National Party, which controlled the apartheid government.⁷ These took place against the backdrop of extreme violence in the province of KwaZulu-Natal between the supporters of the Inkatha Freedom Party (IFP) and supporters of the African National Congress. The IFP supported a strong

⁶ In the South African context, the granting of land-use rights can be done by allocating a zoning to a specific land unit and subdividing land units and thereby enabling a more intensive development, consolidating land units, amending titular restrictions to land use, etc.

⁷ Nico Steytler and Johann Mettler, “Federal Arrangements as a Peace-making Device during South Africa’s Transition to Democracy”, *Publius* Vol. 31 (2001), pp. 93–106.

Federal State envisaging a semi-autonomous “Kingdom of KwaZulu”. The National Party, whilst not enjoying a strong tradition of Federal theory, also supported federalism to check on the imminent majority rule of the ANC. The compromise provided for a unitary State with Federal features.⁸

South Africa has nine provinces with constitutionally protected powers. The Constitution includes a list of concurrent powers that may be exercised by both the national and the Provincial government.⁹ Disputes over concurrency are decided by the Constitutional Court.¹⁰ The Constitution also includes a list of exclusive powers that may be exercised by provinces only¹¹ (except in specific or restricted circumstances when National government may intervene into the exclusive provincial powers). Residual powers, i.e., powers over matters not listed in either of those lists belong to the National government.¹²

The constitutional division of powers bears testimony to the South African “hourglass” model of federalism. The Central government is strong and Local government is also firmly entrenched but in between is an emasculated Provincial government.¹³ The residual powers of the National government are substantial and include justice and security as well as mining-related powers. The list of concurrent powers includes “big ticket” issues, such as education, health care, social development, environment, urban and rural development, regional planning and development, and housing.¹⁴ In most of these areas of concurrent competency, the National government has passed comprehensive legislation with provincial governments concerning themselves mostly with implementing the national law. The list of exclusive provincial powers contains “smaller” competencies, such as abattoirs, provincial cultural matters, and provincial sport.¹⁵ The only exception to the rather “anorexic” nature of the list of exclusive provincial powers is the “provincial planning” competency, i.e., at the heart of this chapter. Provincial governments have no constitutionally guaranteed powers to raise their own revenue and are almost entirely dependent on national funding.¹⁶

The Constitution recognizes Local government as the third order of government.¹⁷ Its powers are guaranteed in the Constitution and include Municipal planning, electricity reticulation, and water- and sanitation-related powers.¹⁸ Unlike provincial governments, municipalities do enjoy constitutionally recognized revenue-raising powers. Municipalities are largely self-

⁸ Christina Murray and Richard Simeon, “Multi-sphere Governance in South Africa: An Interim Assessment”, *Publius* Vol. 13, no. 4 (2001), p. 68; see also, Tony Leon, “Ten Thoughts on Provinces”, *Politicsweb* (2013). Available at www.politicsweb.co.za (last accessed February 20, 2014).

⁹ Sections 44(1)(a)(ii) and 104(1)(b)(i) Constitution.

¹⁰ Section 146 Constitution.

¹¹ Sections 44(1)(a)(ii) and 104(1)(b)(ii) Constitution.

¹² Section 44(1)(a)(ii) Constitution.

¹³ Nico Steytler (ed.), “Introduction”, in *The Place and Role of Local government in Federal Systems*. Johannesburg: Konrad Adenauer Stiftung, (2005), p. 4.

¹⁴ Schedule 4 Constitution.

¹⁵ Schedule 5 Constitution.

¹⁶ During the financial year 2006–07, provinces raised 3.5% of their funding. See, National Treasury, *Budget Review 2006*. Pretoria: National Treasury, 2006.

¹⁷ Section 40(1) Constitution.

¹⁸ Section 156, read with Schedules 4B and 5B Constitution.

financing even though the capacity to raise revenue varies considerably from one municipality to another.¹⁹

The African National Congress, which controls the National government and eight out of the nine provinces, has always been ambivalent about the existence of provinces, which it had to accept as part of the negotiations to end apartheid. At its 2012 Policy Conference, it adopted a resolution to “reform, reduce, and strengthen” provinces.²⁰

At the time of writing (2013) the Western Cape Province was the only province controlled by the Democratic Alliance (DA), the official national opposition party. Moreover, the City of Cape Town, capital of the Western Cape, was the only metropolitan municipality²¹ that was not controlled by the ANC but by the DA. Combined with the fact that the Premier of the Western Cape was also the leader of the opposition party nationally, this contributes to the Western Cape being perceived as a platform for opposition to the ANC and as a champion of the Federal features of the Constitution.

Land-use Planning in the Western Cape

The Western Cape government has always played a very strong role in land-use planning. The broad strokes of the legal regime for the control and regulation of land use in the province remained unchanged for a very long time after the fall of apartheid. This was despite numerous attempts of the National government to design a national planning framework and passing of a provincial planning law in 1999.²² The principal law used throughout the province is the Land Use Planning Ordinance 15 of 1985, a remnant of the pre-apartheid era. A key feature of the Ordinance relevant in the context of this paper is that it administers a very strong provincial role in land-use planning. For example, zoning schemes and zoning scheme regulations, which are the primary instruments for municipalities to grant rights to develop land, must be approved by the Provincial government. In addition, the Provincial government has the authority to overturn Municipal decisions on appeal. Lastly, the Ordinance permits the Provincial government to control the delegation of land use control powers to municipalities. This strong provincial role in land-use planning is changing rapidly. The National government has adopted a Spatial Planning and Land Use Management Act,²³ which devolves significant powers to Local authorities. In addition, the Provincial government is preparing a provincial law²⁴ which adds further detail to the devolution of planning functions to Local government.

¹⁹ Section 229(1), Constitution. National Treasury, *Local government Budget and Expenditure Review 2003/04–2009/10*. Pretoria: National Treasury, 2008, p. 22.

²⁰ African National Congress, *53rd National Conference Resolutions*. African National Congress: Johannesburg, (2012), p. 27.

²¹ There are eight metropolitan municipalities in the country, viz., City of Johannesburg, Ekurhuleni (East Rand), Tshwane (Pretoria), eThekweni (Durban), Nelson Mandela Bay (Port Elizabeth), City of Cape Town, Mangaung (Bloemfontein), and Buffalo City (East London).

²² The Provincial government passed the Western Cape Planning and Development Act 7 of 1999, but it was never put into operation mainly due to difficulties in the division of roles between municipalities and the Provincial government.

²³ Spatial Planning and Land Use Management Act, (2013).

²⁴ Western Cape Land Use Planning Bill [B1-2014] *Provincial Gazette Extraordinary* 7225, Tuesday, 4 February 2014.

National and Local Push and Pull Factors

Before the changes to the role of provinces are introduced, it is necessary to introduce some “push and pull factors” that are brought to bear by the other two spheres of government, viz., National government and Local government. This may assist in appreciating the intergovernmental pressure points related to the role of provinces in land-use planning.

The National government, anxious about a lagging national development trajectory and dedicated to ambitious and large infrastructural development plans to stimulate growth,²⁵ is becoming increasingly impatient with intergovernmental squabbles over different roles in spatial planning. It wants red tape cut and is looking for ways to streamline and simplify approval procedures.

Municipalities operate in a framework that expects them to raise their own revenue from reticulating services and taxing property.²⁶ They are also at the coalface of community demands for infrastructural development.²⁷ Therefore, most municipalities are generally predisposed to encourage development to meet those demands and expand their tax base. On the other hand, they experience the impact of increasing demands on their ageing bulk infrastructure²⁸, aggravated by hasty development. Dedicated capacity around environmental matters is generally lacking in municipalities except in the large cities.

The Changing Constitutional Framework

As pointed out earlier, the Western Cape Provincial government has historically played a very dominant role in land-use planning. This was the natural result of the subservient role allocated to Local government under the previous dispensation. While the role and status of Local government has increased significantly, the Provincial government’s interest in using its land use powers to protect the province’s environmental and agricultural resources and to implement strategies to mitigate and adapt to climate change has also increased. These two developments therefore pull in opposite directions and require a careful balancing act.

For example, the Provincial government uses its control over the delegation of land use control powers to municipalities in such a way that it relinquishes land use control power over built-up areas more easily than land use control powers in more rural areas. As indicated above, the current statutory framework for the provincial role in planning empowers it to play an intrusive role in land-use planning by municipalities. However, as a result of the sweeping reforms in the planning sector, prompted by the Constitution, this is coming to an end.

²⁵ In the 2012 State of the Nation Address, President Zuma announced a “massive infrastructure development drive”, comprising railway lines, port upgrades, infrastructure connected to mining and mineral beneficiation, logistics and industrial corridors, etc. See “State of the Nation Address 9 February 2012,” South African government Information. Available at www.gcis.gov.za (last accessed on October 18, 2008).

²⁶ Steytler, “Local government in South Africa: Entrenching Decentralized government”, in *The Place and Role of Local government in Federal Systems*, p. 200.

²⁷ Between February 2007 and September 2012, a total of 819 protests were registered in the media. Many of these protests were related to demands for land and housing. See Jaap de Visser and Derek Powell, *Service Delivery Protest Barometer*. Cape Town: Community Law Centre, 2012. Available at <http://www.mlgi.org.za> (last accessed on November 1, 2013).

²⁸ National Treasury, *Local government Budget and Expenditure Review*, p. 1.

Constitutional Framework

The Constitution envisages a division of powers and functions with regard to land-use planning, i.e., very different from the current configuration in which the Western Cape government exercises considerable control.

By referring to at least five relevant competencies in the lists of National, Provincial, and Local powers, the Constitution establishes a very complicated division of powers with regard to land-use planning.

It lists “Municipal planning” as an area of original Municipal competency.²⁹ This means that municipalities have constitutional authority to make laws and administer “Municipal planning”.³⁰ National and provincial governments may regulate “Municipal planning”, but in doing so, they may not go beyond the setting of a framework and may not administer Municipal planning — this is reserved for municipalities.³¹ The Constitution lists “provincial planning” as an exclusive provincial competency.³² This means that Provincial governments may legislate and administer provincial planning and National government must refrain from interfering with the provincial planning.³³ Two competencies, namely “urban and rural development” and “regional planning and development” are listed as concurrent powers of National and Provincial governments.³⁴ This means that both spheres of government may legislate and administer these matters with possible conflicts left to the courts to resolve.³⁵ Lastly, the Constitution lists “environment” as a concurrent competency of National and Provincial governments.³⁶

The key challenge in implementing this constitutional framework is to give content to these constitutional terms. What does “Municipal planning” mean and how is it distinct from “provincial planning”? What is “urban and rural development” and how does it differ from “regional planning and development”? The failure of both national and provincial governments to reform apartheid planning laws has been attributed to this problem.³⁷ The actual contours of the division set forth by the Constitution has remained unclear for almost fifteen years while government contemplated reform and none of the courts were called upon to pronounce on the issue. However, it is clear that the current scenario with the Provincial government holding most of the relevant land-use planning powers does not accord with this constitutional framework. The Constitution envisages original land-use planning powers for National and Local governments. There is one area where the division of roles has emerged very clearly. The constitutional allocation of the “environment” competency to National and Provincial governments concurrently prompted the National government

²⁹ Schedule 5, Part B Constitution.

³⁰ Section 156 Constitution.

³¹ Sections 155(7) and 155(B)(a) Constitution.

³² Schedule 5, Part A Constitution.

³³ See Sections 104 and 44(2) Constitution.

³⁴ Schedule 4, Part A Constitution.

³⁵ Sections 44, 104(1) and 146 of the Constitution

³⁶ Schedule 4, Part A Constitution.

³⁷ See, for example, S Berrisford, “Unravelling Apartheid Spatial Planning Legislation in South Africa: A Case Study”, *Urban Forum* Vol. 22 (2011), pp. 247–63.

to establish an impressive legal framework with regard to the protection of environmental resources. This framework revolves around the National Environmental Management Act (NEMA).³⁸ This framework is a national framework administered by Provincial governments. National government has occupied virtually all the regulatory space with regard to environmental issues with provinces playing an implementation role. Most relevant to the topic of this paper, NEMA requires an environmental authorization to be granted by the Provincial government for activities that have been identified by the Minister requiring an authorization.³⁹ This environmental function, combined with the wide scope of issues that trigger the need for such an environmental authorization, locate the Provincial governments at the centre of the land use control debate. The question is whether it provides the Provincial government with the instruments to strategically plan for the impact of climate change and whether it equips the Provincial government with the instruments to discourage development, i.e., “inappropriate” from a climate change mitigation point of view. The central theme in the environmental authorization is the impact that the proposed development will have on the surrounding environment which limits the scope of the consideration. The central theme in land-use planning is the overall desirability of development in a particular area which allows the planning authority to bring in considerations of a more strategic nature. Thus, the Western Cape Provincial government remains interested in land-use planning to pursue climate change related objectives.

Gauteng Development Tribunal (GDT) Judgement

The role of municipalities in land-use planning was brought into focus in 2010 when the Constitutional Court delivered judgement in *City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal*.⁴⁰ Essentially, the case revolved around the question whether provincial tribunals were constitutionally permitted to rezone land and decide on the establishment of townships/subdivision of land. The City of Johannesburg had taken the issue with provincial tribunals granting land use rights in its jurisdiction. It argued that the constitutional competency “Municipal planning” gave it power to authorize land rezoning and establish townships, and that provinces should not do the same. The Constitutional Court agreed with the City of Johannesburg and struck down the legislation that established and empowered the provincial tribunals to rezone land and to decide on the establishment of townships/subdivision of land units.

The judgement was celebrated as a victory for Municipal autonomy. It also started to cast doubt over the strong role hitherto played by provinces, particularly related to land-use applications. Though, the judgement gave content to the “Municipal planning” power, it was silent on the meaning of “provincial planning”. **Many, provinces saw their powers to discourage inappropriate development and encourage appropriate development diminishing. This is an issue of particular relevance to the Western Cape and the topic of the paper.** How was the Western Cape going to protect its environmental

³⁸ Act 107, National Environmental Management Act (NEMA), (1998).

³⁹ Section 24 NEMA.

⁴⁰ *City of Johannesburg Metropolitan Municipality v Gauteng Development Tribunal* (2010) ZACC 11 (GDT).

resources and pursue province-wide climate change strategies when municipalities control the built environment?

National Legislation

The GDT judgement forced the National government to make haste with the enactment of a national planning law. This law, in the form of the Spatial Planning and Land Use Management Act (SPLUMA), 2013, was signed into law by the President in August 2013. In taking its lead from the Constitution and the GDT judgement, it positions municipalities as the primary decision makers on land-use planning. However, it also brings National government into the land-use planning framework much more prominently than before. The National government's role will now be twofold. Firstly, SPLUMA envisages the adoption of a National Spatial Development Framework. It thus regulates the National government's responsibility to determine a national strategic spatial planning vision that will guide the country's development. Secondly, it envisages that land-use applications that affect the national interest will not be decided exclusively by municipalities, but also by the National government. Leaving aside the difficulties of defining which applications in fact affect the national interest and who makes that decision, it appears that the National government intends to make use of this power to deliver large infrastructural developments from the need to obtain multiple approvals from various levels of government. This effectively ends the provincial (and Municipal) reign over land-use applications. National government enters the arena as a decision-making authority over certain land-use applications.

Western Cape Land Use Planning Bill

SPLUMA requires provincial legislation to give further content to the land-use planning framework. SPLUMA provides a national framework, establishes important national principles, and carves out the National government's decision-making authority mentioned previously. However, many areas are deliberately left incomplete as provincial legislation is envisaged to fill in the details of the land-use planning regime for that specific province only.⁴¹ The Western Cape government is set out to draft a Western Cape Land Use Planning Bill.⁴² Given the Western Cape's particular vulnerability to the effects of climate change, the Provincial government's concerns surrounding climate change have influenced the process and the content. These concerns lead to two important questions. First, can the Provincial government impose green dimensions on municipalities through forward planning? Second, can the Provincial government reserve for itself the right to decide on applications that trigger its interest in — amongst other things — addressing climate change?

⁴¹ In South Africa's history of multilevel governance, characterized by a reluctance to embrace the quasi-Federal features of the Constitution, the passing of a national law that can only be implemented through further provincial legislation, is rather unique. This is particularly true, given the fact that the national framework leaves considerable room for provincial discretion.

⁴² Western Cape Land Use Planning Bill [B1-2014] *Provincial Gazette Extraordinary* 7225, Tuesday, February 4, 2014.

Imposing “Green” Dimensions on Municipalities through Binding Spatial Plans?

The Western Cape Land Use Planning Bill contains provisions for regulating the adoption of a Provincial Spatial Development Framework (PSDF) which, in the case of the Western Cape, will emphasize the protection of environmental resources and will address climate change.

For example, the Bill stipulates that the PSDF must contain provisions for the “adaptation to climate change, mitigation of the impact of climate change, renewable energy production, and energy conservation”.⁴³

In the early stages of the development of the Bill, the Provincial government intended to position this PSDF as a document to bind municipalities in their decision making. In other words, if the municipalities would receive an application for development in an area, designated by the PSDF as environmentally sensitive and therefore unsuitable for development, it would be compelled to refuse the application. Similarly, if the PSDF would contain certain minimum standards with regard to the required density in a specific area, this would bind municipalities. This would have given the Provincial government the power to pre-empt development that runs counter to its policy on climate change adaptation and climate change mitigation. It would also have given the Provincial government the power to compel municipalities to achieve greater transport efficiency through densification.

This proposal was met with opposition from the municipalities in the Western Cape as they found the Bill a hindrance to their constitutional authority. Thus, the Provincial government withdrew this proposal and instead conceptualized a provincial and regional forward planning that would guide, and not bind municipalities. Consequently, the Provincial government will have to rely on the quality of its plans and the power of persuasion of its politicians and officials instead of legal power to guide municipalities into green land-use management.

Vetoing Inappropriate Development?

With its forward planning instruments devoid of a legally binding effect, a further question that arises is whether the Provincial government can reserve the right to veto developments that it deems inappropriate. This is important as this negatively affects the Provincial government’s efforts to deal effectively with climate change. The Western Cape government saw a particular merit in having the power to veto developments that could compromise provincial interests, such as its interests in preserving vulnerable environmental resources, pursuing climate change policies, and protecting agricultural and tourism resources. In the initial versions of the Bill, land-use applications affecting any of these provincial interests would have to be referred to the Provincial government for a decision. The Provincial government argued that its constitutional power over “provincial planning” should permit such a scheme. The fact that this is a live and real issue comes out clearly in the court case involving the Lagoon Bay Lifestyle Estate.⁴⁴ In this case, George Municipality, a Local authority on the Western Cape’s east coast, approved a large and ambitious development

⁴³ Section 5, Western Cape Land Use Planning Bill.

⁴⁴ *Lagoon Bay Lifestyle Estate (Pty) Ltd vs The Minister for Local government, Environmental Affairs and Development Planning of the Western Cape and Others* (320/12) [2013] ZASCA 13 (March 15, 2013).

project. The development project spanned 655 hectares, two 18-hole golf courses, more than 1,000 residential units, commercial activities, roads, a hotel and clubhouse precinct, private parks, and open spaces.⁴⁵ All of this was to take place in an environmentally sensitive area and would arguably result in a considerable loss of agricultural potential. Such large-scale, commercial “resort-type” developments, though attractive from a tourism and retirement industry perspective, are often frowned upon for their high water and electricity consumption, motorcar dependency, and disruptive effect on sensitive coastal areas. While the municipality had agreed to the development owing to the numerous economic opportunities associated with the development, the Provincial government opposed it. The municipality argued that it had full authority to take the decision and the Provincial government argued that this development was too large and controversial to be decided at the Municipal level. In court, the provincial view initially prevailed and the Court held that this decision was to be made by the Provincial government. However, on appeal, the judgement was overturned and the constitutional authority of the municipality to take such land-use decisions was asserted. The outcome of the case complicated the province’s stance that it should have authority to decide upon developments that affect the provincial interest in addressing climate change.

The role of the municipality remains unclear when it receives an application for a development that triggers provincial issues. Would there be no Municipal involvement in the matter and would it have to stand by and watch the Provincial government take a decision on development matters within its jurisdiction? This debate was brought into sharp focus in the Constitutional Court’s judgement in *Maacsands*.⁴⁶ In this judgement, the question was whether the issuing of a mining permit by the National government obviated the need to obtain a Municipal land-use approval. The argument of the mining company (and of the National Department of Minerals and Energy) was that mining is an exclusive national function. Once the national mining permit had been obtained, there was no need to approach the municipality for a land-use approval and mining could commence. A parallel with the interplay between provincial and Municipal planning decision making can be made here — once a provincial planning permit is obtained, there is no need to approach the municipality for a land-use approval and building may commence. However, the Constitutional Court did not agree with this argument. It held that the National Mining Law and the Municipal Planning Law served different purposes and an overlap that resulted from this was not a constitutional problem. The Court remarked, “...sometimes the exercise of powers by two spheres may result in an overlap. When this happens, neither sphere is intruding into the functional area of another. Each sphere would be exercising power within its own competence”.⁴⁷

From Sole Arbiter to Additional Arbiter

The *Maacsands* judgement had a number of important implications for the manner in which the multilevel government of South Africa should address land-use planning. Firstly, the approach towards the Western Cape land-use planning legislation needed to change. It could

⁴⁵ Lagoon Bay, para 2.

⁴⁶ *Maacsand (Pty) Ltd v City of Cape Town and Others* 2012 (4) SA 181 (CC).

⁴⁷ *Maacsand (Pty) Ltd v City of Cape Town and Others* 2012 (4) SA 181 (CC) para 47.

no longer insist on being the *sole arbiter* of actions that trigger the provincial interest in protecting environmental resources, agricultural potential, addressing climate change, etc. It could only insist on being an *additional arbiter* when those interests were triggered. In other words, when a development such as *Lagoon Bay* is pursued, approval from both municipality and the Provincial government would be required.

Secondly, the insistence on more than one planning approval for a single development challenges the government's efforts to reduce red tape. Developers will be bewildered by the prospect of obtaining land-use approvals for one particular development from two or possibly three spheres of government. However, it appears that the Constitutional Court has laid down clear rules in this respect. This problem must be resolved by a concerted effort made by various spheres of the government to collaborate around these types of large-scale or sensitive developments. This can be achieved through integrating administrative processes, joint advertising and processing, or even through the establishment of special purpose vehicles that combine national, provincial, and Municipal authority around specific projects or functions. It is argued that the clarity provided in the approach of the Constitutional Court is not only constitutionally sound, but also offers greater potential for collaboration. In the post-*Maccsands* era, it is clear that each sphere of government exercises its own powers and that the delineation of those powers is difficult but not impossible. It is possible to build effective collaborative schemes on the basis of clearly delineated realms of authority. Each sphere of government has a mandate, that is, clear to all the collaborators. However, it is not possible to build collaborative schemes where the delineation of powers remains unclear and the negotiating partners are uncertain of what their respective mandates are.

Environmental Control

There is no doubt that despite the fact that the Provincial government is forced to cede authority to National and to Local government, it retains considerable constitutional authority as a result of the provincial power to deal with "environment". As alluded above, any development activity that triggers the need for an environmental authorization must be approved by the Provincial government in terms of NEMA.⁴⁸ This provides the Provincial government considerable authority to discourage inappropriate developments. However, two difficulties have emerged with respect to the interplay between NEMA and planning. Firstly, the developers and municipalities complain about the difficulties they face in distinguishing between land-use approvals and environmental authorizations. Provincial governments are accused of using their environmental authority to conduct land-use planning. Secondly, there is widespread concern about the proliferation of land-use approvals needed for one development and the delays in approvals caused by it.

Conclusion

South Africa's Constitution is forcing the Western Cape Provincial government to reconsider its role in land-use planning. It stands to lose much of its direct control over land use

⁴⁸ Section 24 NEMA.

and is forced to cede authority for decision making to municipalities and to the National government.

Provinces such as the Western Cape which is rich in natural resources and is exposed to climatic changes as a result of its long coastline, presents a specific challenge for the Provincial government. These reforms, once they have come to fruition, will reduce the provincial leverage to pursue climate change objectives. The Provincial government will perform a regulatory, supporting, and monitoring role, coupled with a narrowly formulated function to approve of a small category of developments affecting provincial interests, such as the interest in addressing climate change at a provincial level. On the other hand, the Western Cape Province remains firmly in charge of the administration of national environmental legislation including the authority to decide on environmental authorizations. It may use these powers to discourage inappropriate development.

The relevance for other jurisdictions is that it can be a daunting task to address climate change issues and environmental protection in a context that combines constitutionally entrenched multilevel government with serious developmental challenges.

The pursuit of climate change related goals requires strategies, formulated at a level higher than the Local or the regional. In addition, the interests pursued by Local governments, concerned about protecting and growing their property rates base and promoting infrastructural development may not always coincide with the interests of Regional governments, tasked with an environmental mandate. The constitutional entrenchment of Municipal land-use planning powers is presenting South Africa with tremendous opportunities for Local democracy and for the optimization of Local decision making. However, in a context of specific vulnerability to climate change and crippling capability shortages at Municipal level, it also presents the country with a profound challenge. This challenge needs to be met through working towards a division of roles, which is reasonably possible. It includes developing effective intergovernmental relations and strong capacity-building efforts that are aimed at appreciating the environmental dimensions to land-use planning.

SWITZERLAND



Population – 8 millions

Land area – 40 sq. km

GDP – 631.2 (\$ billions)

Capital – Bern

Cantons

- Zürich
- Bern
- Luzern
- Uri
- Schwyz
- Obwalden
- Nidwalden
- Glarus
- Zug
- Fribourg
- Solothurn
- Basel-Stadt
- Basel-Landschaft
- Schaffhausen
- Appenzell Ausserrhoden
- Appenzell Innerrhoden
- St. Gallen
- Graubünden
- Aargau
- Thurgau
- Ticino
- Vaud
- Valais
- Neuchâtel
- Geneva
- Jura



10

Federal and Democratic Participation in Environmental Policy in Switzerland

A Short Survey

THOMAS PFISTERER*

Summary

Federalist systems vary from country to country.

The paper from Switzerland begins with the background: firstly, general remarks on the country and its institutions (Federal State, democracy, and the allocation of powers) and secondly, the foundations of environmental policy: the protection of the environment and the preservation of natural resources and sustainable development in general. Then it is possible to sketch the general criteria for optimal participation in determining environment policy. In Switzerland, not only Central government but also the cantonal and Municipal governments (federalism) and most importantly ordinary citizens (democracy) have a say in environmental policy. This participation is based on an optimal combination of the principles of consent, competence, and efficiency for the participants and the decision-makers. Consideration is given to the forms of participation, both formal and informal, and the culture of participation. Participation has two dimensions: Federal participation in environmental policy involves the participation of the cantons in shaping the legal framework (Constitution and statutes) at Federal level and the significant role of the cantonal participation with implementation of the Federal law and with cooperation among the cantons and with the federation for a better environment. Democratic participation in environmental policy concerns the participation of

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the people at Federal level (referendum, popular initiative, and the consensus democracy) and the participation of the people at cantonal level. Consensus democracy is a consequence of the referendum, the popular initiative and the political culture of participation. The threat of a proposal being put to a referendum has a profound influence on the lawmaking process. So its key is to prepare the proposal so that it is shaped according to the will of the People, and that a popular vote or at least a defeat in a vote can be avoided. In preparing the drafts those concerned in the process strive not only to win a majority. The debate should result in a broad common understanding or even a consensus. The goal is to satisfy all the important political forces which have “referendum power” and therefore negotiating power, even if they are a minority.

Switzerland and its Direct Democratic Federal State

General Features

Switzerland is a small densely populated country in centre-west Europe (0.15% of the world's surface), surrounded by large nationstates. It is characterized by a variety of topographies – mountains, regions – and living conditions, and a diversity of cultures (including four languages and various religions) and political, regional, and even social affiliation to groups and communities. Switzerland has a small-scale political structure with 26 cantons and nearly 3,000 municipalities. It is a country of minorities. These aspects have resulted in a specific political culture in the country.¹

The Swiss Federal State: Direct Democracy and Political Culture

The Swiss federation (normally referred to, for historical reasons, as the Swiss “Confederation”)² has a history of over 700 years. Since 1848 it has been a “compound republic”,³ a modern Federal state⁴ under the rule of law, committed to its common welfare, to unity and diversity. “Federal” and “federation” are used to refer the government at national level in Switzerland, similar to the Union in India. Switzerland's constituent units are known as cantons, which elsewhere might be called territories or states, such as in India, Australia, and the USA.⁵

The central features of the Swiss political system are direct democracy, partnership, and consociational power-sharing, as opposed to parliamentary and majoritarian democracy,

¹ Leonhard Neidhart, *Die politische Schweiz*. Zürich: Fundamente und Institutionen, (2002), 37 ff.

² The official name of the Swiss federation is the “Swiss Confederation”. This harks back to the historical origin of the federation as an alliance of states, but it does not change the fact that Switzerland is a Federal State.

³ In the famous terminology of James Madison, “The Federalist No. 51”. The early Swiss literature already follows the American sources; for instance, Johann Caspar Bluntschli, *Geschichte des schweizerischen Bundesrechts von den ersten ewigen Bünden bis auf die Gegenwart*, 2. Auflage, Stuttgart 1875/Nachdruck 1977, Vaduz, 563; Ders., *Lehre vom modernen Staat*, 3. Teil, Politik als Wissenschaft, Stuttgart 1876, 402.

⁴ Ronald L Watts, *Comparing Federal Systems*, 3rd edition, Montreal and Kingston/London/Ithaca: McGill-Queens's University Press, 2008, pp. 71; Thomas D Hueglin and Alan Fenna, *Comparative Federalism: A Systematic Inquiry*, Peterborough, Ontario: Boardview Press, 2006, pp. 31.

⁵ The paper follows Arnold Koller, Daniel Thürer, Bernard Dafflon, Bernhard Ehrenzeller, Thomas Pfisterer, and Bernhard Waldmann, *Principles of Federalism: Guidelines for Good Federal Practices – A Swiss Contribution*, St. Gall, Zurich, (2012), p. 15. Compare Art. 1 Federal Constitution of India, in PMBakschi, *The Constitution of India*, 9th ed., New Delhi, (2009), p. 5.

hierarchy and control by the federation.⁶ The core institutions are “the People” – the electorate, i.e., Swiss citizens with the right to vote – and the cantons. People’s majority and the cantons’ double majority are required to change the Federal Constitution, with the popular vote in a canton representing the vote of that canton. The same People have the right to legitimize the activities of the federation and the cantons. Direct democracy moulds the relationship between the federation and the cantons, their autonomy, and the way in which they interrelate. The political culture of direct democracy and the mutual respect of the partners in the Federal state permeates the entire Swiss political system and to a large extent its society as well. Direct democracy has a profound effect on shaping the Federal State, the cantons and the municipalities, their forms of government, the functioning of the Parliament, administration, various decision-making processes, and so on.

The highest political authority is the Federal Parliament, also known as the Federal Assembly, which comprises the National Council (200 members) elected by a system of proportional representation, and the Council of States (a “Senate” of 46 members, two from each canton) elected by the People of the cantons. The two chambers have equal powers and have to reach an agreement in order to make a binding decision. The Federal Council which is the supreme executive body heads the Federal administration and at the same time acts as the Head of State. The Federal Council plays a key role primarily by drawing up legislation. The members of the Federal Council are elected individually by the Federal Assembly to serve a four-year term. Each year, one member serves as titular president, i.e., without any political power. It is a multiparty body of seven members of equal standing acting as a collegiate body, and without any personal responsibility to the Parliament. The main institution of the judiciary is the Federal Supreme Court.⁷ The systems of government in the cantons and municipalities are similar to that of the federation.⁸

Allocation of Powers to Make and Implement Law: Competition, Cooperation, and Fiscal Equalization

The Federal Constitution sets out the legislative powers of the federation. The cantons have retained a significant degree of autonomy in organizing their own legal systems, institutions, and finances, and in participating in Federal matters. The law is mainly implemented and administered by the cantons, which have considerable discretion. The country is too small to establish a big central administration beside the unavoidable administrations of the cantons and the municipalities. The cantons raise their own taxes such that more than two-thirds of

⁶ For general information on the Swiss political and legal system, see Hanspeter Kriesi and Alexander H Trechsel, *The Politics of Switzerland: Continuity and Change in a Consensus Democracy*. Cambridge University Press, reprinted (2010); Walter Haller, *The Swiss Constitution in a Comparative Context*. St. Gall, Zurich, (2009); Neidhart, *Die politische Schweiz*; Wolf Linder, *Schweizerische Demokratie. Institutionen – Prozesse – Perspektiven*, Bern/Stuttgart/Wien: Auflage, (2012). p. 3.

⁷ Haller, *The Swiss Constitution in a Comparative Context*, 245 ff; Watts, *Comparing Federal Systems*, p. 158. For laws of the Federal Supreme Court on federalist issues, see Heinz Aemisegger and André Jomini, *Der Föderalismus in der Rechtsprechung des Bundesgericht*, in: I. Nationale Föderalismuskonferenz, *der kooperative Föderalismus vor neuen Herausforderungen*, Basel, (2005), 173 ff.

⁸ Kriesi and Trechsel, *The Politics of Switzerland*, p. 71; Haller, *The Swiss Constitution in a Comparative Context*, p. 43; Adrian Vatter, *Kantonale Demokratien im Vergleich*. Dpladen: Entstehungsgründe, Interaktionen und Wirkungen politischer Institutionen in den Schweizer Kantonen, (2002). Especially 31 ff., 219 ff., and 391 ff.

public revenues and expenditures are cantonal or Municipal.⁹ The federation depends to a large extent on the cantons and their democracy.¹⁰ It has few means of hierarchical control.

In the last 20 years, substantial reforms have been carried out,¹¹ including a complete revision of the Federal Constitution and the introduction of a new system of allocating public tasks and fiscal equalization. The challenge is no longer limited to the question of “centralization or decentralization”. In reality, the tasks of governments at the Federal and cantonal levels overlap. This issue has been countered by reforming the allocation of powers and reorganizing the Federal State at both levels of the government.¹² To some extent the federation has acquired a more strategic role at the highest level of the government. It does not fund individual projects, rather it allocates resources “globally”, i.e., by setting a budget limit for a general field so that the cantons can fund specific projects. Thus, the cantons have been given more self-determination in operational matters, but at the same time they now have increased responsibilities to contribute to the Federal state. Their increased autonomy goes hand-in-hand with more competition with each other and at the same time an opportunity to increase cooperation with each other. The new system of fiscal equalization supports the cantons, especially those with weaker economies in exercising their autonomy. This new system aimed to make the cantons use their autonomy to deliver efficiency, quality, innovation, and to achieve the best outcomes for their inhabitants and their economy.

Overlapping Environmental Policy in Small but Diverse Country

The country is very small and diverse, has a rich variety of political structures, and is strongly rooted in its history of independence, as well as many overlapping tasks and problems.¹³ Environmental effects often spill over from one jurisdiction to another. To solve such problems there is a need to reorganize, cooperate, and strengthen participation. The environmental policy of the country is rooted in its specific political culture, which is a culture of participation.

Environmental Policy of Switzerland

Specific Protection of the Environment

Federal Framework and Mainly Cantonal Implementation

The federation has a (specific) duty to protect the environment (Art. 74 Federal Confederation [FC]): “[It] shall legislate on the protection of the population and its natural environment against damage or nuisance” (para. 1). “The cantons shall be responsible

⁹ <http://www.efv.admin.ch/d/dokumentation/finanzstatistik/berichterstattung.php>

¹⁰ Kriesi and Trechsel, *The Politics of Switzerland*, p. 38.

¹¹ Dieter Freiburghaus and Felix Buchli, “Die Entwicklung des Föderalismus und der Föderalismusdiskussion in der Schweiz von 1874 bis 1964”, in *Swiss Political Science Review* Vol. 9, no. 1 (2003), 29 ff.

¹² Message of the Federal Council to the Federal Assembly 2001: Botschaft zur Neugestaltung des Finanzausgleichs und der Aufgaben zwischen Bund und Kantonen (NFA) vom 14. November, 2305 f., 2329 f., 2332 ff.; Kriesi and Trechsel, *The Politics of Switzerland*, p. 36, p. 41; in general and including Switzerland; Watts, *Comparing Federal Systems*, p. 122; Bernard Dafflon, in: Koller et al. (fn 5), p. 36.

¹³ Neidhart, *The Politics of Switzerland*, 56 ff.

* Federal Constitution of the Swiss Federation of April 18, 1999

for the implementation of the relevant Federal regulations, except where statute reserves this duty for the federation” (para.3). By law, implementation is largely a task for the cantons (Art. 74FC para.3, Art. 46 FC, Art. 36 FC, and 4I EPA). “Statute” is a legislative act made by the Parliament and subject to the referendum (Art. 141 para. 1, Art. 164 FC). The importance of the cantons’ role in the implementation of environmental policy can be measured by the number of related jobs in cantonal administrations (less than 10% of environmental employees work at the Federal level)¹⁴ and levels of expenditure (in 2003, 15% of environmental expenditure was made at Federal level and 85% in the cantons and municipalities).¹⁵

Pattern of Regulation

The Environmental Protection Act (EPA)^{16*} allocates tasks in various fields of the environment policy. In certain fields, such as in air pollution control, the federation has to set national standards; it has a strategic role. Standards enforcement is carried out at the lower operational level of the cantons. Issues, such as waste disposal, are subjected to a bare minimum of Federal regulation. The procedures, planning, administration, and to some extent financing are the responsibility of the cantons. Some environmental issues are simply “big” and have to be dealt at the national or even at an international level; others are relatively minor and belong at the cantonal or Municipal level.

The EPA limits itself to establishing general rules, such as the rule that polluters should pay for the damage they cause, or the rule that every possible effort should be made to prevent damage to the environment. It also provides a legal framework for important procedures such as the environmental impact assessment of plans for construction projects. It also regulates legal remedies and provides access to courts, especially the rights of public interest groups to use legal remedies against administrative orders.

The EPA – a relatively short document – delegates the Federal Council a broad range of tasks that go beyond the normal executive matters (for example, administrative organization). Thus, a variety of lengthy executive ordinances are required.¹⁷ They generally contain most of the regulatory substance; they describe the issues that they regulate, outline the regulatory programme, and how it is administered and evaluated. They impose general rules and limits for emissions, make provision for action plans, inventories, and consultations by expert commissions, lay down special rules for specific regions, procedures for obtaining administrative rulings and permits, and detail procedural charges and fines for unlawful activities, and so on.

¹⁴ Peter Knoepfel, Stéphane Nahrath, Jérôme Savary, and Frédéric Varone, “Analyse des politiques suisses de l’environnement”, *Dekologie and Gesellschaft* Band 22(2010), p. 44.

¹⁵ Kriesi and Trechsel, *The Politics of Switzerland*, p. 41.

¹⁶ Heribert Rausch, Arnold Marti, and Alain Griffel, *Umweltrecht. Ein Lehrbuch*. Zürich/Basel/Genf, (2004). For the pattern of regulation, see Knoepfel et al. “Analyse des politiques suisses de l’environnement”, p. 85, p. 107, p. 177.

* Federal Act of 7 October 1983 on the Protection of the Environment (Environmental Protection Act)

Preservation of Natural Resources and Sustainable Development

The Many Federal Tasks of Environmental Relevance

A large body of constitutional law of environmental relevance has developed over the past 140 years. The process began in the 19th century (danger of flooding, protection of forests, and so on), but most of the legislation was enforced since World War II (waters protection in 1955, nature and landscape in 1966, environment in general in 1983, spatial planning in 1980, and sustainable development in 1999). Some of the constitutional powers introduced are broad, such as those related to the forests. The others are limited to (abstract) principles of national importance such as those for spatial planning. This guarantees the cantons' power to decide on land use in specific locations. The federation has powers over matters related to environmental aspects, such as alpine transit traffic, energy policy, nuclear energy, and agriculture policy. The relevant Federal statutes often contain more substance and involve less delegation of power than the EPA.

Coordination and Balancing of Interests

Due to the way in which Swiss environmental law has developed, today there is a wide variety of highly fragmented legal sources and administrative structures. This has resulted in conflicts among areas with environmental relevance, such as forest policy and land planning, or between environmental protection and transport policy. Likewise, there is little coordination between general environmental policy and specific policies, or among activities carried out at the various levels of government. But, the fact remains that there is only one environment and it should not be treated differently from aspect to aspect, or from level to level.

The solution to these conflicts is not confrontation, but coordination to ensure better overall protection and use of the environment.¹⁸ Sometimes the Constitution or environmental law sets specific priorities (as in Art. 4f., EPA). Most of the time however decisions are made on a case-by-case basis by balancing the interests involved. According to the Federal Supreme Court:

[...] all aspects of land planning have to be considered, including the protection of the environment, the protection of nature and of landscapes, all interests concerning the natural fundamentals and resources such as air, soil, water, forest, landscape. Also the protection of the lakes, rivers, underground waters and so on should be taken into account. They all belong to the natural environment. Their protection is a task for the Federal government. The various tasks have to be fulfilled in the same area, in the same space as a meaningful entity.¹⁹

Coordination requires a process of balancing interests. The challenge is to ensure that various interests are considered in the proper way (procedure) and given the proper weight (content). There are two approaches: firstly, environmental interests may be brought directly into a single process of balancing interests; and secondly, there may be several separate planning

¹⁷ Florian Wild, "Entwicklungen und Erfahrungen mit der Gesetzesdelegation in der Umweltgesetzgebung", in URP (2011), 871 ff., 876 ff.

¹⁸ Knoepfel et al., "Analyse des politiques suisses de l'environnement", p. 511.

¹⁹ Translation by the author from the decision of the Swiss Supreme Court, citations from the German version BGE 134 (volume = year 2008) II (administrative law) 97 (beginning page), E. (section) 3.1, 100 (page); also BGE 128 II I, E. 3d, 10 f.; BGE 117 Ib 35, E. 3e, 39 ff.

processes, one for each domain – their results have to be integrated in one overarching interest-balancing process. The Federal government is formally responsible for deciding these conflicts. To find a solution, it balances Federal and the cantonal interests fairly so as to respect both sides as far as possible, without hindering the fulfilment of the Federal tasks.

Optimal Participation: Consent, Competence, and Efficiency

Architecture of Participation

Optimal Participation for Participants and Decision-Makers

Everyone everywhere should participate in the preservation of the environment. Thus, it is logical to involve all parties in the making of the environmental policy. Participation is the right and an opportunity to influence public decision-making and decisions, i.e., the procedure for making a decision and the content of that decision. Who should participate, in what decision, how and to what extent, is an important question that needs to be raised. Participation is a two-way process. It must be adapted to the needs of the participants and the decision-makers, usually the Parliament or a government. Participation is not a tool that the authorities use to impose discipline or to force participants to support and applaud their activities. Rather, the participants may influence the decision-maker according to their wishes, not vice-versa. Thus, the decision-maker should be open to such influences and must try to gain from the contributions made by the participants. Participants act mainly in a representative role for the cantons (government, Parliament) or for the People (the electorate). In doing so, they are exposed to all the advantages and the disadvantages of representation.

In Switzerland, the various forms of participation have developed in response to practical problems and needs. Some, such as referendums, are almost entirely regulated by law (mainly constitutions and statute). Other tools have been developed by administrative authorities in planning processes or in other administrative procedures; or they are used on a case-by-case basis.

Practical experience has taught us that the best system of participation is not to insist on the agreement of all the cantons, or all the citizens involved in all decisions at all times. Participants must choose to accept a decision made on their behalf. Such consent is highly valuable to any political community. If a decision is accepted, in most cases it improves the outcome. Participants are involved in the decision-making process and are motivated to assist in solving the problem and implementing the solution. Through this process, they are also more likely to be satisfied by the result and be convinced of the fairness of the procedure. To require consent by all is usually not the best solution. Decisions that are necessarily accepted by all can ignore expertise or cost too much time and effort. The best system of participation is the maximum conceivable attainment of this ideal, without ignoring too much other virtues. Participation is optimal if it is governed by a reasonable balance of consent, competence – i.e., expertise in the matter concerned – and efficiency.²⁰

²⁰ In general, see Robert A Dahl, *After the Revolution: Authority in a Good Society*, Yale University, 1970, p. 8, p. 48, and p. 56. Compare Giovanni Sartori, *Democrazia e definizione*, Firenze, 1957, *The Theory of Democracy* revisited, Chatham House 1987, newest edition in German translation: *Demokratietheorie*. Aus dem Englischen. Übersetzt von Hermann Vetter, Darmstadt 1997, 94ff., 127ff., 133ff. (Konsens, Wissen und Unregierbarkeit).

Even if a participant would have the power of veto, it is reasonable for him to accept that his wishes will sometimes be rejected. He knows that he is not only a self-determining individual, but a social and a political being as well. There are other citizens with equal rights. If he wants to live in the social and political community, he is responsible to the Federal State as a whole and to other partners. Thus, he will from time to time have to accept decisions that he does not agree with for the sake of certain overriding considerations. A general approval to the State and the community must be enough.²¹

The first of these overriding considerations is the respect for the competence of fellow participants or decision-makers, in the sense of knowledge and experience of a particular matter. A person seriously injured in a traffic accident usually expects the doctors to save his life immediately and not to wait for his questions, objections or consent to any aspect of treatment. A Federal decision-maker is not per se more competent than the cantonal participant. The Federal position may be based on a national overview of the situation or experience gained from a large number of cases in the whole country, but the cantons and their democracies may be based on more regional and Local knowledge of persons and facts. The federation and the cantons fulfil different functions, both with the same legitimacy and necessity of living together in the (same) “compound republic”.

The second consideration is efficiency. The participation process is costly and takes time. The costs are reasonable if the results are clearly better than those that would be achieved by decisionmaking without participation. Cooperation among cantons may reduce costs and increase the level of expertise contributed to the process. A Federal decision-maker will be more readily influenced if the participant presents his interests well and adapts to the features of the Federal political process.

Thus, what is needed are customized solutions. For example, if regional and Local knowledge, experience, and preferences are important, more influence should be given to the cantons or even cantonal voters. This applies in the case of spatial planning projects. If a national railway system has to be built, canvassing cantonal views which are known to be contradictory may make little sense and can only be inefficient. Where specialized scientific expertise is required and cannot be provided by the cantons, or if there is nationwide opposition to a project, such as against a site for storing nuclear waste, the cantons and their electorates should have a limited influence; instead, the Federal decision-maker should decide, i.e., in a democratic vote at Federal level or under Federal democratic control.

Which of these criteria – consent, competence or efficiency – override the others and depend on the form of participation that is best in the circumstances? For environmental policy, the Federal position often prevails if it is a matter of the nationwide strategy, or the cantonal position if the issue is of regional concern.

Forms of Participation

In Switzerland, environment policy like all other government policies is subject to the rules of Switzerland’s federalist and democratic system. There are thus two distinct forms of

²¹ Sartori, *Democrazia e definizione*, 94ff., 128 (“Konsens”).

participation: (i) the cantons that may participate through federalist procedures and institutions and (ii) the citizens who have the right to participate through democratic processes.

There are many, often complex forms of participation. It makes sense to facilitate their selection by arranging them in a sequence. It is natural to do so according to the level of the influence; there are other criteria too.²² Participants have least say if they are only given information and more if they can express their preferences, if they enjoy decent two-way communication, if they take part in a consultation process (oral or written or in an advisory committee), if they can cooperate or negotiate, if they reach an acceptable compromise with the decision-maker, if they go through conciliation or mediation to reach a consensus decision, if the participants have (together with others) a power of veto (referendum), or if a unanimous decision has to be reached. Ultimately the participant's strongest position comes in a popular initiative, i.e., the right to initiate a change or amendment (to the constitution or a law) and to bring it to a popular vote against the will of the decision-maker.

Formal and Informal Participation: The Political Culture

Sometimes the forms of participation provided by the Constitution or other laws are inadequate or ineffective, and fail to provide a suitable solution. This occurs, for example, where regulations on roads or pipelines are limited to technical matters and neglect environmental issues. In such cases, informal tools can be used where the law permits the discretion to supplement the formal instruments. This happens also where the law is no longer up-to-date. The formal right to call for referendum or a consultation process is used as a door opener to an informal process. Informally, Federal planning processes, for instance, can integrate cantons, municipalities, neighbours, interest groups, the economy, and other citizens at an early stage in the procedure, ahead of formal authorization. The involvement of these parties makes it possible to have more detailed contributions from the participants and negotiations, and sometimes even consensus in preparing the decision. This can be persuasive in preventing a negative popular vote. This process can improve competence by improving the quality of the content and enhancing efficiency by reducing costs and time taken to achieve a final result.

These informal tools have a considerable significance in practice. Ultimately, they are founded in the specific political culture of federalism and direct democracy in Switzerland. Their common goal is to hold the Federal state together and keep it functioning by applying the formal law. In some countries, this is part of the concept of intergovernmental relations, though this notion is rarely used in Switzerland.²³

²² Various systems of classifications of the forms of participation have been discussed; for instance, see Sherry Arnstein, "A Ladder of Citizen Participation", *Journal of the American Institute of Planners* (1969), p. 246; Archon Fung, Varieties of Participation in Complex Governance, *Public Administration Review*, 66, no. Supplement 1 (2006), p. 66. Democracy in general: Giovanni Sartori, *The Theory of Democracy Revisited*, Chatham House 1987, now in German translation: *Demokratietheorie. Aus dem Englischen. Übersetzt von Hermann Vetter*, Darmstadt 1997.

²³ An exception can be found at Wolf Linder and Isabelle Steffen, "Swiss Federation", in *A Global Dialogue on Federalism*, Vol. 3(2006), p. 289, p. 307; generally, see Thomas Pfisterer, in: Koller et al. (fn 5), p. 54.

Federal Participation in Environmental Policy

Cantonal Participation at the Federal Level

Significance of Cantonal Participation

At the Federal level, the battle for a better environment is often a battle for a change in the Constitution or a specific statute. This may be the case even where the problem is one of mere implementation. The federation has only a limited power to implement the law. But it can change the constitution and the statutes. Not surprisingly this means that changes in the constitution and statute are frequent. The Federal Constitution has been amended 20 times since 1999, and five of these amendments have concerned articles of environmental relevance; for example, reorganization of the main national rail projects. The Environmental Protection Act has also been amended around 20 times since 1985, and the Spatial Planning Act around 10 times since 1980.

The cantons have to implement the Federal law. Obviously, the cantons are interested in participating in these Federal law-making processes. They concern the cantonal implementation of environmental policy. The cantons may participate in three ways: (i) Through their People. The citizens in each canton elect the members of the Federal Parliament and vote in referendums on changes to the Federal Constitution and new Federal statutes. (ii) Through their members of the National Council and Council of States (Senate) in the Federal Assembly (who vote without instructions from their cantonal governments or anybody else); and (iii) Through the cantonal governments or occasionally the cantonal parliaments which participate in the consultations, negotiations, and in other stages for the preparation of legislation and other Federal decisions. Also, the cantons have additional rights. Eight cantons may request a referendum on a statute or a treaty²⁴ or each canton may apply petition for new Federal laws.

In recent decades, the weight of cantonal influence has changed. The cantons have lost power to solve problems themselves. But, instead they have gained more influence over the preparation of constitutional and legislative changes. This gain should compensate to some extent for the growing tendencies towards centralization.

Federalism and the Culture of Mutual Respect

Federalism is more than participation in Federal decision making and the allocation of powers. These instruments require a background of mutual respect between the federation and the cantons and among the cantons themselves, which must also have a sense of common responsibility for the Federal State as a whole. The federation and the cantons are partners.²⁵ The relation between the federation and the cantons are not only based on hierarchy, instead amicable communications and negotiations in an almost diplomatic style predominate.

²⁴ Eight cantons have this option since 1874. They have only made use of it on one occasion in 2003. The vote related to a package of tax reforms that would have substantially reduced tax revenues for the cantons. The Bill was rejected by the People (vote of 16 May 2004, Bundesblatt (Federal Gazette), 2004 3943, <http://www.admin.ch/ch/d/ff/2004/3943.pdf>)

²⁵ Thomas Pfisterer, "Neue Partnerschaft zwischen Bund und Kantonen", *ZB/96* (1995), 258 ff.

All the partners know that they rely on each other and that they have to fulfil a common function. The machinery of the federalist system needs mutual respect and cooperation beyond the formal rules. This is the “drop of oil” that smoothenes the operation of the Federal state.²⁶

Implementation by the Cantons and Exceptionally the Federation: The Private Sector, Court Action, and Public Interest Groups

Autonomy and having the responsibility for implementing Federal environmental policy at the cantonal level are better than simply having a right to participate in Federal policy. A part of environmental policy is not regulated by the federation. Unless the Federal law provides otherwise, the cantons have the autonomy and the residual power to adapt the environmental policy to their situation and to enact primary regulations for environmental purposes; for example, for the protection of nature and cultural heritage. In relation to the Environmental Protection Act, the main role of the cantons is to apply the Federal framework to their own specific circumstances and combine the implementation of Federal law with their own activities. Implementation represents a special form of cooperation between the federation and the cantons. In this field, the federation carries out only a small number of implementation activities (covered mainly by Art. 36 under Art. 41 EPA). The federation has broader implementing powers in other areas of environmental relevance, especially concerning the railways, national roads, or certain aspects of the energy policy. A crucial part of this implementation process is coordination at all levels of government; the federation has the specific task of coordinating the implementation of its law by the cantons and the Federal institutions.

Implementation is a burdensome task, but at the same time it brings greater influence in shaping environmental policy. On one hand, being responsible for implementation binds the cantons to the Federal government, and places demands on their political, legislative, administrative, judicial, and financial capacities. On the other, the federation must allow “all possible discretion” to the cantons and take cantonal “particularities” into account (Art.46 para. 3 FC). The cantons apply the Federal and cantonal law to specific cases. They adapt their methods of implementation to the persons concerned, to the specifics of the canton (for example, to the additional needs of mountain regions or their economic strengths and weaknesses) and to changing conditions. The dominant factor is not the hierarchically superior Federal law. In the real world, applying environmental law²⁷ often involves choosing between several alternatives, all of which comply with the Federal standards. The cantons combine Federal policies with cantonal perspectives. The goal is an optimal combination of Federal standards with cantonal interests. This offers the cantons an opportunity to further their own interests and to compete with other cantons to offer a better environment. This role brings a need to develop initiatives and to mobilize resources for the environment. Within the framework provided by Federal law, the cantons devise secondary rules and create

²⁶ This picture is used by Walther Burckhardt, *Kommentar der schweizerischen Bundesverfassung vom 29 Mai 1874* [Comment of the Swiss Federal Constitution of May 29, 1874], p. 3. Auflage, Bern 1931, Art. 3 BV, 17.

²⁷ Knoepfel et al., “Analyse des politiques suisses de l’environnement”, p. 95.

a range of processes, such as those for the elimination of waste or for cantonal and Local land planning.

The federation and the cantons also have to collaborate with the private sector. Before they enact regulations, they consider the option of voluntary measures. Where it is possible and necessary, they adopt in their regulations the agreements reached by the specific business sectors of the specific branches.

The federation and in some cases the cantons may take court action to fight for environmental issues or to participate in actions brought by citizens. Public interest groups also have the right to go to court to contest certain administrative rulings.

Cooperation for a Better Environment

Agreements Among Cantons and the Governments' Conferences

To fulfil their role in implementing the Federal law on environmental policy, the cantons frequently cooperate among themselves and sometimes with the federation. Switzerland has a long tradition of agreements among the cantons.²⁸ The cantons have broad powers to enter into agreements, to enact common legislation, and to create common institutions (Art. 44, Art. 48, and Art. 56 FC).²⁹ Sometimes, the cantons are even legally bound to enter into agreements, such as those on waste management, waste water treatment, or urban public transport (Art. 48a para. 1 lit. e – g FC).

The cantons improve their cooperation and participation through a variety of intergovernmental forums, but primarily in “conferences” of cantonal governments. Today there are 14 conferences of sectoral ministers, in fields including environment, spatial planning, and public transport. The most important is the Conference of the Cantonal Governments (CCG).³⁰ The work of the CCG concentrates on problems at a higher, non-sectoral level (concerning the governments as a whole). Occasionally, the cantons establish (through the CCG) special (advisory) organizations; for example, on cooperation with the European Union.³¹ These conferences have no legal power to make decisions that are binding on the cantons. Any canton may take individual action at any time in parallel to or even in conflict with them.

Cooperation through conferences increases the potential for participating in Federal policy. One of the main tasks is to assist in building consensus among the cantons and hopefully between the cantons and the federation. They further increase competence and efficiency – quality of expertise, experience, and so on – of cantonal participation. They seek to

²⁸ Institut des hautes études en administration publique (IDHEAP) counted for 1848 to 2003 over 700 treaties. This number is probably too small. See, www.badac.ch/news/communiqué

²⁹ Haller, *The Swiss Constitution in a Comparative Context*, p. 80; Ulrich Häfelin, Walter Haller, and Helen Keller, *Schweizerisches Bundesstaatsrecht*. Zürich/Basel/Genf: Auflage(2012), 398 ff.

³⁰ *Konferenz der Kantonsregierungen* (in 4 languages), 20 Jahre KdK, Les 20 ans de la CdC, 20 anni della CdC, 20 onns CdC, in Peter Hänni, Eva Maria Belser Bernhard Waldmann (Hrsg), Bern: Publikationen des Instituts für Föderalismus Universität Freiburg Schweiz, (2013).

³¹ www.kdk.ch/etc/medialib/myfiles/D.Par.0001.File.tmp/List-Europakommissionpol-4410; Föderalismusbericht, “Erhaltung des Föderalismus bei den verschiedenen europapolitischen Optionen”, *Bundesblatt* vom 15 (June) 2007, p. 5939–5948. Available at www.admin.ch/ch/d/ff/2007/5907.pdf

coordinate the cantonal points of view and to devise joint approaches by preparing drafts for consulting procedures or meetings with the Federal authorities. They provide specialist knowledge primarily recruited from the cantons or from outside experts. The federation benefits from the cooperation within the conferences. Joint cantonal advice has enabled the federation to draw up constitutional and legislative bills in partnership with the cantons, such as the proposals on the reform of the allocation of tasks and fiscal equalization.

Dispute Resolution by Negotiation and Mediation

Cooperation is also encouraged in the event of disputes among cantons and/or with the federation.

Following the Swiss tradition of mutual respect and consensus, cooperation is now an express requirement in the Constitution. Disputes between cantons or with the federation are settled, if possible by means of negotiations and mediation (Art.44 para. 3 FC),³² disputes related to administrative orders may be settled by agreement or mediation (Art.33b Administrative Procedure Act³³).

Nonetheless, the Federal government has the final say, but Federal interests do not have general priority. The federation has to protect each individual canton, both politically and legally. The federation must take account of each concern expressed by each canton and give it due consideration. The Federal government must follow the law; ultimately, it has to balance Federal and cantonal interests. For example, both the national motorways and the cantonal roads must fulfil their function at the same time and solutions must respect both interests.

Assessment

The cantons may adapt environmental policy according to their situation unless the Federal law does not allow it. The federalism and its assessment is never a finished job of work.³⁴ After a long process, major reforms have recently been made in modernizing Swiss federalism; in part, they concern the participation of the cantons. Whether the reforms to date have been successful is not yet clear. There is still a need for a constant evaluation of federalism, of the risks and benefits. More reforms will be necessary.

In relation to the environment, the participation of the cantons can create risks. It reduces the influence of the National government at lower levels. The measures implemented by the cantons may not meet the Federal standards and may violate the principle of equality, while the cantons and municipalities may abuse their power in order to block the application of Federal law. The public activities of the Swiss Federal State tend to be slow and inefficient. Participation at all levels means that procedures are complex, processes protracted, and results occasionally dubious. This can cause unnecessary duplication. The spectacular proof

³² Blaise Knapp and Rainer J. Schweizer, *St. Galler Kommentar zu Art. 44 BV*, Rz. 9.

³³ Thomas Pfisterer, *Einigung, Mediation und Schlichtung – Einführung in Art. 33b*, in: *Aktuelle Juristische Praxis (AJP)* 12/2010, 1550 ff.

³⁴ Kriesi and Trechsel, *The Politics of Switzerland*, pp. 42–46; Neidhart, *Die politische Schweiz*, 276 ff; Linder, *Schweizerische Demokratie*, pp. 171–178; in general, see Hueglin and Fenna, *Comparative Federalism*, p. 11, and Watts, *Comparing Federal Systems*, p. 179.

of this can be seen in Switzerland's project to build two, in place of one, very expensive and technically challenging railway systems through the Alps. Federalism encourages the use of veto powers against innovation and opposition to nation-wide standards and the implementation of the legal requirements. It may encourage cantons competing for industrial investment to relax environmental standards unnecessarily. Participation may further cause inequalities in influence; the resources that each canton has available to devote to the participation process are not equal.

On the other hand, participation by the cantons tends to strengthen Federal environmental policy. It breaks the centralist trend of national democracy. Participation by the cantons increases the number of forums in which influence can be exerted and the number of sources of legitimacy; there are more levels of consent. The contribution of the cantons tends to improve the Federal framework for cantonal implementation. It controls the Federal government, and avoids an oversized Federal administration and budget; federalism is a means to enhanced budgetary discipline.³⁵ Participation mobilizes problem-solving capacities within the Federal state that lead to a better environment. It facilitates adaptation to the different levels suitable solution for the specific environmental problems. Revenue decentralization increases the chance of sub-national infrastructure³⁶ and therefore, sub-national development, still in accordance with regional and Local requirements of environmental policy. It pools efforts and expertise. It opens the door to regional and Local interests, knowledge and experience. Participation protects diversity and minorities and integrates a variety of political and social dimensions. It illustrates the challenge and the potential for competition, for cooperation, compromise, and consent. Participation encourages the cantons to cooperate. As a result, their motivation to contribute to the Federal state as a whole, and their responsibility for it grows.

Democratic Participation in Environmental Policy

Participation of the People at Federal level

Direct Democracy and Federalism and the Culture of Participation

In a system of direct democracy, the people legitimize the environmental policy through a low degree of representation by authorities. A Federal state exposes policy to the risks of multilevel democracy. But federalism offers Federal, cantonal, and Municipal forums for direct democracy. Although the Federal framework of environmental policy is shaped by the Federal democracy, implementation is reliant on democratic support at cantonal and Municipal level.

³⁵ Markus Freitag and Adrian Vatter, "Decentralization and Fiscal Discipline in Sub-national Governments: Evidence from the Swiss Federal System", *Publius* Vol. 38, no.2, p. 272; Christoph A Schaltegger and Lars P Feld, "Die Zentralisierung der Staatstätigkeit in einer Referendumsdemokratie: Evidenz aus der Schweiz", *Politische Vierteljahresschrift* Vol. 44, no.3, 370 ff.

³⁶ Andreas Kappeler, Albert Solé-Ollé, Andreas Stephan, and Timo Väilä, "Does fiscal decentralisation foster regional investment in productive infrastructure?" Discussion Papers, German Institute for Economic Research, DIW Berlin, No. 1204, Discussion Papers, German Institute for Economic Research, DIW Berlin, No. 1204. Available at <https://www.econstor.eu/dspace/bitstream/10419/61424/1/722234228.pdf>

Swiss direct democracy has roots in an old tradition.³⁷ Its current form was shaped during the 20th century. It is constantly under discussion and sometimes subject to reforms. Direct democracy is more and more in discussion; its instruments are being developed and introduced in many other countries too.³⁸ But, they are sometimes very different from their Swiss counterpart.

Direct democracy involves more than simply voting on referendums and popular initiatives. A Swiss peculiarity is the political culture of direct democracy and the mutual understanding that this brings, a political culture with a high level of political participation and consensus, based on a strong belief that the People should ultimately be able to dictate specific policy to the government. This has a profound effect on the whole political system, and influences the way in which the administration operates and environmental policy is implemented.

Referendum, Popular Initiatives, and the Consensus Democracy: The Advice of Parliament

The right to vote in a referendum³⁹ is the right of the citizens to accept or veto a proposal at the end of a decision-making process. At the Federal level, a referendum is mandatory where an amendment is proposed to the Federal Constitution. For statutes, international treaties, and some other cases, such as permission for a nuclear power station, it is optional; a vote takes place if it is requested by 50,000 citizens or eight cantons.

The practical impact of the referendum and direct democracy in Switzerland is a system of consensus democracy.⁴⁰ This kind of system seems to be of interest to other countries as well.⁴¹ In contrast to the (British) model of the majoritarian democracy, the (Swiss) consensus democracy is characterized by an influence exerted by participants who do not necessarily hold the majority view; rather, they exert influence even if they are a minority in the specific decision-making situation. From case to case, every group tends to be a minority in Switzerland. The participants gain this power through a system of powersharing, proportionality, far reaching popular rights (referendum, initiative), coalition governments, and other tools of widespread participation.

The Parliament decides by majority. Afterwards, there has to be or may be a referendum. The core of the referendum is uncertainty and political freedom and the referendum opens the political process — all authorities are forced to act according to the (possible) will of the People. But, it is hard to know this will and to predict what the outcome of a popular vote

³⁷ Yvan Rielle and Christian Bolliger, "Die Entwicklung der Volksrechte im schweizerischen Bundesstaat", in Wolf Linder, Christian Bolliger, and Yvan Rielle, *Handbuch der eidgenössischen Volksabstimmungen 1848 bis 2007*, Bern/Stuttgart/Wien 2010, 675 ff.; Vatter, *Kantonale Demokratien im Vergleich*, 228 ff, especially vorab 11ff., 94ff., 253ff.

³⁸ Centre for Democracy Aarau, www.zdaarau.ch, data basis <http://www.c2d.ch/votes.php?table=votes>; Uwe Serdült uweserdult.wordpress.com; in general Paul Nolte, *Was ist Demokratie? Geschichte und Gegenwart*, München 2012, 400ff.

³⁹ Haller, *The Swiss Constitution in a Comparative Context*, p. 28; Kriesi and Trechsel, *The Politics of Switzerland*, p. 56; Linder, *Schweizerische Demokratie*, 269 ff.

⁴⁰ Kriesi and Trechsel, *The Politics of Switzerland*, p. 61, p. 115; Leonhard Neidhart, *Plebizit und pluralitäre Demokratie. Eine Analyse der Funktion des schweizerischen Gesetzesreferendums*, Bern 1970, 313 ff.; Ders. (fn 1), 360 ff.; Linder, *Schweizerische Demokratie*, 278 ff., 296 ff., 327 ff; For the general background, see Arend Lijphart, *The Politics of Accommodation: Pluralism and Democracy in the Netherlands*, University of California Press, 1968, p. 103, p. 122; Arend Lijphart, *Thinking about Democracy: Power Sharing and Majority Rule in Theory and Practice*, London, 2007, p. 21, p. 50; and Karl W Deutsch, *Die Schweiz als paradigmatischer Fall politischer Integration*, Bern, 1976, 21 ff.

⁴¹ Linder, *Schweizerische Demokratie*, p. 396, p. 405.

will be. Thus, even a social or political minority can win the vote. The threat of a proposal being put to a referendum has a profound influence on the law-making process. So, its key is to prepare the proposal so that it is shaped according to the will of the People, and that a popular vote or at least a defeat can be avoided. Especially in the case of an optional referendum on a new statute (formal or informal), consultations are held. These are open to all and are used mainly by the cantons, the political parties, and the interest groups. These partners may participate by submitting opinions, proposals or drafts, or by negotiating solutions. In preparing the drafts, those concerned in the process strive not only to win a majority. The debate should result in a broad common understanding or even a consensus. The goal is to satisfy all the important political forces which have “referendum power” and therefore negotiating power, even if they are a minority. This is usually possible if no one gets everything that he wants, but everyone gets something and has some influence. In the case of the optional referendum, anyone who appears likely to gather the 50,000 signatures and/or to win the popular vote, can pose a credible referendum threat; they have “referendum power”.

The popular initiative⁴² at Federal level is the right of 100,000 citizens to propose a change to the Federal Constitution. It marks the beginning of a political process. At the end, there has to be a popular vote, unless the initiators withdraw their proposal. They may do this after negotiations. There have been fewer than five popular votes on constitutional change on environmental policy. Popular initiatives have also been used to change implementation procedures, such as the ban on nuclear power stations, or recently, on passive smoking.

The Federal Assembly has no power to decide case-by-case whether there is a referendum or not. This is governed by the Constitution and the law. But, the Federal Assembly gives advice to the People before any popular vote. The wide range of direct democracy needs a combination with the advice of Parliament.⁴³ The citizens must be informed about the opinion of the majority in both Chambers on the proposal being put to referendum. No decision is taken by the People on a popular initiative without prior debates and without the recommendation of Parliament on whether to approve or to reject the initiative. Parliament may submit its own direct counter-proposal to the People and the cantons (this has happened so far in response to 14% of initiatives). More often (in 39% of cases to date) Parliament reacts indirectly by proposing an amendment to the existing law or new legislation. Overall some 50% of all popular initiatives result in a change of law, one way or another. To control the procedure, the law lays down time limits.⁴⁴ These however restrict opportunities for negotiations with the initiators.

Participation of the People at Cantonal level

Environmental policy is even more open to democratic participation in the cantons than at Federal level. The cantons tend to have the same democratic procedures as the federation.

⁴² Kriesi and Trechsel, *The Politics of Switzerland*, p. 59; Linder, *Schweizerische Demokratie*, 287 ff.

⁴³ Max Imboden, *Die politischen Systeme*, Basel: Stuttgart 1962, 34: “konsuläre Demokratie”; Sartori (fn 19), 135f.

⁴⁴ Gabriela Rohner, *Die Wirksamkeit von Volksinitiativen im Bund 1848–2010*, Zürich/Basel/Genf: Zentrum für Demokratie Aarau, 2012, 19 ff., 51 ff., 57 ff., 101 ff., 249 ff.

Many cantons have made use of their power to introduce additional political rights. They have a referendum; for example, a vote on public expenditure or taxes, and initiatives for new statutes, rather than simply constitutional reform. In some cantons, political processes favour competition between the cantonal government and the voters, while others encourage the voters to reach consensus with the government level. The number of direct democratic debates is increasing.⁴⁵

The cantons have some discretion on how and sometimes when they implement Federal law. They may choose to implement the law so as to favour cantonal interests. Thus, the cantons can simultaneously satisfy their own citizens and the federation. This optimal combination of Federal framework and cantonal interests is the key to proper implementation.

The administrative processes of implementation are also governed by the culture of participation. The processes have to be organized so that they are open to a wide range of interested parties. As far as the law allows it, administrative decisions are reached on the basis of how everyday life is lived by normal citizens, in the tradition of a State which is based on the “participation of all in public life” and on an administrative action “in close touch with [everyday] life”.⁴⁶ Thus an attempt is made if possible to find an agreement or at least a common understanding.

Cooperation versus Participation: The Cantonal Parliaments

Intercantonal agreements show a trend towards executive federalism at the expense of participation. It goes without saying that democratic rights such as the referendum, the influence of the Parliament, and public debate suffer in the procedures that lead to intercantonal agreements. They tend to be negotiated behind closed doors by administrations and governments, leading to long-term commitments without the possibility of unilateral democratic change. Also, these negotiations are seldom accessible to cantonal regional or interest groups.

There should thus be more discussion on how to adapt democracy to the age of cooperation and intercantonal agreements. First, a consideration should be given to introduce new democratic rights. Second, the position of the Parliament should be strengthened. The cantonal parliaments join in the procedure only at the end by approving or rejecting the agreement as a whole; they risk having to assume the role of the spoilsport. The cantonal parliament’s role of mediator between the government, the People, and the municipalities is in danger. This discussion about the role of the parliaments has begun.⁴⁷ Some cantons have attempted to set up joint parliamentary committees; this move has caused new problems

⁴⁵ Vatter, *Kantonale Demokratien im Vergleich*, 392 ff., 421 f., 437, 441, 443 ff., 457 ff.

⁴⁶ In der Tradition des Volksstaates mit der „Teilnahme aller am öffentlichen Leben“ und der Verwaltung „in enger Berührung mit dem Leben“, nicht (von oben herab) wie im Beamtenstaat, so Fritz Fleiner, *Beamtenstaat und Volksstaat*, in: Fritz Fleiner (Hrsg.), *Ausgewählte Schriften und Reden*, Zürich 1941, 138 ff., 149 f.

⁴⁷ Martin Gehrer, *Mitwirkung der Kantone an der internationalen, nationalen und interkantonalen Zusammenarbeit: Die Rolle der Staatskanzlei am Beispiel des Kantons St.Gallen*, in: Schweizerische Staatsschreiberkonferenz/Staatskanzlei Kanton Aargau (Hrsg.), *Perspektive Staat - Herausforderungen für staatliche Führungskräfte*, Zürich 2008, 10 ff.; Jean-Luc Gassmann, *De l'implication des Parlements cantonaux à l'élaboration des concordats intercantonaux*, in: *Parlament, Mitteilungsblatt der Schweizerischen Gesellschaft für Parlamentsfragen*, 9/2 (2006), 4 ff.

(legitimacy or efficiency).⁴⁸ A better way would be to solve the problem of legitimacy canton by canton.⁴⁹

Assessment

Popular votes are frequent in Switzerland; they are held several times each year. Between 1848 and 2009, there were 191 mandatory referendums about changes to the Constitution; about three quarters of the proposals were accepted. Between 1874 and 2009, a total of 2,444 proposals mainly on Federal statutes were subject to the optional referendum. Only 165 or 7% came to a popular vote, 4% were approved, and 3% rejected.⁵⁰ Thus, the outcome of an optional referendum is fairly uncertain.

With democratic participation there is always the risk that public interest or voter turnout can be low. From 2003 to 2007, turnouts in Switzerland were between 27% and 57%, respectively; the effects seem not to be negative.⁵¹ And there are many other forms of political participation (debates, petitions, popular initiatives, and so on).⁵² But the democratic process is slow and can make innovation more difficult. Whether the citizens are competent enough to decide has been debated since time immemorial. The results in Switzerland suggest that they are. Such competence depends on the level of a voter's education, the complexity of the bill being voted on, individual factors such as personal interest, the persuasiveness of campaigning, and so on.⁵³ Swiss voters are relatively well-informed on political matters. They tend to compare their interests with the interests of others and largely follow a political culture based on some mutual respect. A consensus democracy is said to be more likely to recognize the needs of different groups (cantons, regions, industries) than other systems. Proportional representation favours negotiation processes, mutual understanding, and peaceful co-existence.⁵⁴ There are reports on direct democracy in other countries suggesting that this form of government tends to increase the responsibility of the Parliaments towards the People.⁵⁵

⁴⁸ For instance, a treaty among the cantons in Northwestern Switzerland: Vertrag zwischen den Kantonen Aargau, Basel-Landschaft, Basel-Stadt und Solothurn über die Fachhochschule Nordwestschweiz (FHNW) vom 27. Oktober/9. November 2004 (<http://www.lexfind.ch/dtah/20301/2/649.22.pdf>); Convention du 5 mars 2010 relative à la participation des Parlements cantonaux dans le cadre de l'élaboration, de la ratification, de l'exécution et de la modification des conventions intercantionales et des traités des cantons avec l'étranger (Convention sur la participation des parlements, CoParl http://cgso.ch/home/gestion/fichiers/CoParl_10.03.05_fin.signature.Pdf)

⁴⁹ Kanton Freiburg, Botschaft Nr. 140 II. Mai 2009 der parlamentarischen Kommission an den Grossen Rat zum Gesetzesentwurf über die interkantonalen Verträge (VertragsG), http://admin.fr.ch/shared/data/pdf/publ/2007-II_140_message.pdf; z. B. Art. 69 Abs. 2 Verfassung des Kantons Zürich vom 27. Februar 2005, (<http://www.zhlex.zh.ch/Erlass.html?Open&Ordnr=101>), with an express right to be consulted § 39b Gesetz über die Organisation des Grossen Rates und über den Verkehr zwischen dem Grossen Rat, dem Regierungsrat und dem Obergericht (Geschäftsverkehrsgesetz [GVG]) vom 19. Juni 1990, SAR 152.200

⁵⁰ Linder, *Schweizerische Demokratie*, 271 f. (For background see *Année Politique Suisse*, available at www.swissvotes.ch. Datensatz der eidgenössischen Volksabstimmungen ab 1848. Bern: Institut für Politikwissenschaft, konsultiert letztmals am vom 17. Oktober 2012, www.swissvotes.ch)

⁵¹ Kriesi and Trechsel, *The Politics of Switzerland*, p. 62; explications: Neidhart (fn 1), 397 ff., 400 f.

⁵² Linder, *Schweizerische Demokratie*, 72 ff., p. 75

⁵³ Kriesi and Trechsel, *The Politics of Switzerland*, p. 63.

⁵⁴ Linder, *Schweizerische Demokratie*, 402 ff.

⁵⁵ Linder, *Schweizerische Demokratie*, 361 ff.

Benchmarking and Sustainable Development

The Case of Switzerland

FELIX KNEUPLING*

Summary

This paper presents a comparative project of the Forum of Federations on how benchmarking or performance monitoring systems are employed in Federal countries, and what are the challenges and lessons learnt. It mainly focuses on the Swiss experience in benchmarking sustainable development and the environment. The paper briefly describes the Forum's project and gives a brief outlook on benchmarking, and how it is being employed in Switzerland, in the area of sustainable development.

Introduction

A number of federations are experimenting with new ways to manage relations between the Central government and constituent units, with less emphasis on command and control, and more on outputs. This is designed to encourage creativity and to provide more autonomy or at least flexibility in managing major programmes. One aspect of this is experimenting with benchmarking, which has been tried in various ways in developed as well as in developing federations.

All federations face the issue of balancing the interests of the Federal government in key areas of public policy with the desire of constituent units to have autonomy or at least flexibility in

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terms of how they manage major programmes. In many federations, the Federal governments use legal instruments or detain the constituent units with very detailed restrictions regarding spending power, programme inputs and management. This is often manifestly inefficient and led to a backlash.

Thus, in many federations there has been a trend towards a different kind of relationship between the Federal and constituent unit governments, in areas of joint interest. Conditions imposed on constituent units are becoming less restrictive now. Many federations are showing a strong interest in benchmarking in order to determine “good” or “best practices”. Accordingly, another key objective of benchmarking operations in Federal systems is to learn from one another.

So far, there has been no systematic comparison drawing out lessons or best practices in introducing benchmarking or performance monitoring in Federal countries. Thus, the Forum of Federations initiated a multi-year research and knowledge exchange programme on the experiences of Federal systems in introducing benchmarking methods in policies executed by constituent units. The programme has an explicit focus on the implications of using benchmarking as an alternative to controls tied to fiscal transfers, and also on the politics of benchmarking – how to place it and make it work. This programme is designed both for the academic world as well as for those involved in shaping or executing policies, lawmakers, and civil servants. It intends to present and identify comparative experiences that could inform and stimulate ongoing debates on benchmarking in other Federal countries.

This programme examines current practices and identifiable trends in a variety of developed Federal or Federal type systems viz., Australia, Canada, Germany, the United Kingdom, the United States, Switzerland, and the European Union (EU) and also looks at benchmarking regimes in the following policy fields:

- 🌿 Australia: Education, Justice, Emergency Management, Health, Community Services, Housing
- 🌿 Canada: Health
- 🌿 European Union: Social policy
- 🌿 Germany: Education and Local Government Services
- 🌿 Switzerland: Sustainable Development
- 🌿 United Kingdom: Local Government Services
- 🌿 United States: Education

This list of countries contains five classic Federal countries, one unitary State (UK) and a quasi-Federal international organization (EU). In the case of the UK, the focus is primarily on national–Local relationships, while in the case of EU it is on relations between the European Commission and the EU member states.

During the course of the project, the Forum of Federations published a larger edited volume of the comparative report in cooperation with the Productivity Commission of the Commonwealth government of Australia covering the countries mentioned above.

Benchmarking: From Private to Public Sector

Benchmarking can be broadly defined as a practical tool or instrument for improving performance by learning from best practices and the processes by which they are achieved. In simple words, benchmarking means “making improvements by learning from others”.

More specifically, it refers to a comparative analysis based on established reference values. It involves an objective comparison of costs, performance, outcomes, processes, technologies, or structures with those of other organizations according to defined indices or standards. Comparisons can be made on an internal, horizontal, inter-sectoral, vertical, or international level. Benchmarking concepts are applied in different areas using different methods and according to different goals.

The concept of benchmarking, as it is known today, was originally developed by companies operating in an industrial environment. In recent years, many public or semi-public organizations including national and sub-national governments are keen on using this tool. Undoubtedly, the phenomenon of cross-national benchmarking has experienced a veritable boom in recent years. In public administration, benchmarks have mostly been introduced in the areas of tax administration, consumer protection, and social policies such as education and health. It is often seen as a useful strategy for policy-makers acting in an increasingly uncertain environment. The extensive international flow of information and the availability of comparable data have also facilitated benchmarking exercises.

Both in the private and public sector, it is customary to distinguish between a cooperative and a competitive form of benchmarking. The cooperative form focuses more on imitation and adaptation. A quasi-competitive situation can be created if the results of benchmarking exercises are made public.

Proponents of benchmarking argue that it may be a useful instrument to foster policy learning:

- 🌱 Learning from abroad may reveal examples of “good” or “best” practice or at least enhance the knowledge about potentially effective policy responses.
- 🌱 It may bring forward new facts and arguments that stimulate and inform debates about adequate responses to political challenges. It may also help to invalidate or to weaken the arguments made by the proponents of the status quo.
- 🌱 To a certain extent it may force representatives of various interest groups to acknowledge unpleasant facts. The use of quantitative benchmarks may exert considerable “moral pressure” on governments. It may even lead to a process of “naming and shaming” in which domestic actors blame their own governments for the poor performance of their country/constituent unit in comparison to others.

However, recent benchmarking exercises have also led to a debate about the limitations of the tool.

- 🌱 The value of benchmarking, as a learning instrument crucially depends on the way international comparisons are contextualized and to what degree they are able to capture different Local, cultural, and historical conditions that are to be compared. Policy-makers

as well as academicians often debate (and question) the comparability of different case studies and data in the social and political sphere.

- 🌱 It may lead policy-makers to focus on specific micro-innovations, thereby ignoring other factors of good performance and success. It might also serve as a primarily political or ideological pressure, if it is employed in a purely strategic manner.
- 🌱 The instrument may appear to be very technical, but in the end it is also a political exercise. In the political arena, there might be no common understanding of what a definition of “success” and “best practices” might be based on.
- 🌱 It may lead to harmonization of policies, thus, reducing the two most important sources of learning – diversity and heterogeneity.

Benchmarking Sustainable Development: The Swiss Case Study

Over the past decade, Switzerland has developed a collaborative system of intergovernmental benchmarking named *Cercleindicateurs* (Indicator Circle) to promote sustainable development across the country. It is a voluntary arrangement, wherein participating cantons (states) and municipalities report on an agreed range of performance indicators and the full results are made public. In this system, an agency of the Federal government – the Federal Office for Spatial Development plays a facilitative and coordinating, but not directing role.

Switzerland is a decentralized federation. The constitutional concept of distribution of powers reflects a bottom-up construction of the federation depending on the residual power of the former sovereign cantons. Many cantons are built on the residual powers of their municipalities. As a logical consequence, the Swiss Constitution does not distribute the powers between the confederation and the cantons in a final list and it does not provide powers of the cantons. It exclusively determines the powers delegated to the confederation. Also, when it delegates new powers to the Central government, it always formulates the new central power very carefully so that even within a delegated power the cantons still can retain some part of their sovereignty. That cantons dispose of the residual power is explicitly formulated in Article 3 of the Constitution, which declares cantons “sovereign insofar as their sovereignty is not limited by the Federal Constitution”.

With a strong sense of identity and a strong tax base, the cantons continue to be major players in the federation, insisting on their independence and rejecting direction from the Federal government. Municipal government also has a well-established place in the Swiss political system, and, like the cantons, is largely self-financing.

The imposition of programmes by the Federal government on the cantons or municipalities is not a characteristic part of Swiss federalism, but it is a typical feature in Australia or the United States. In the case of sustainability policy, coordinated action reflects constitutional requirements. Article 2 of the Constitution states that sustainable development is a national objective, and Article 73 on “Sustainability” makes environmental protection a mandatory criterion of policy. The confederation and the cantons shall endeavour to achieve a balanced and sustainable relationship between nature, its capacity to renew itself, and the demands placed on it by the population. Though many of the substantive matters relevant to

sustainability fall within the jurisdiction of the cantons, this constitutional task falls in the jurisdiction of both cantons and the confederation. It is executed by both of them and is thus a concurrent responsibility.

The Swiss approach to sustainable development seeks to address major environmental, economic, and social challenges. The “environmental footprint” of modern industrial society is unsustainable globally over the long term, for example, the per capita level of such footprints in Switzerland is 200% higher than what can be maintained globally. This calls for long-term and fundamental structural change and commitment to meet the economic and social needs of the world’s population.

Sustainable development is often illustrated using three circles or pillars representing the key areas of environment, economy, and society. This shows the link between economic, social, and ecological processes. It also exhibits that the negotiations among public as well as private stakeholders should not occur in an isolated and one-dimensional manner, but rather they take into account the interplay between the three key areas and its impact.

It is therefore, not surprising that the *Cerleindicateurs* programme is clearly aimed at monitoring sustainable development. The indicators were not designed to control policy, i.e., they are not about performance management, nor do they directly serve policy assessment goals. Instead they lay a foundation for raising issues (the “can opener” role). The participating cantons and cities are free to decide on how the indicators are applied. Some of them are moving entirely in the direction of applying them to policy control.

In addition, *Cerleindicateurs* is part of a broader sustainable development arrangement between the confederation, the cantons, and the municipalities called as the “Forum for Sustainable Development”. It is a vertical coordination and exchange platform focusing on policy issues related to sustainable development with regular plenary meetings and a number of ancillary activities, such as *Cerleindicateurs*. A peer review approach is practised in the Forum, for example, a canton reviews its sustainable development strategy and invites representatives of other cantons to comment and give advice.

The indicator sets consist of approximately 30 indicators that cover the areas of environment, economy, and society – the three key areas of sustainable development introduced earlier. Some of these are taken from the official statistics of Switzerland (the so-called centralized indicators) and some are to be collected by the participants themselves (decentralized indicators) (Table 11.1).

Table 11.1: Overview of the target areas and core indicators (Federal Office for Regional Development)

Target area	Cantonal core indicator	Municipal core indicator
Key area: Environment		
ENV1: Biodiversity	Cantonal breeding bird Index (place holder)	Municipal breeding bird Index
ENV2: Nature and landscape	Surface area of valuable natural spaces	Surface area of valuable natural spaces
ENV3: Energy quality	Renewable energy, including waste heat (place holder)	Renewable energy, including waste heat (place holder)

ENV4: Energy consumption	Total energy consumption (place holder)	Electrical consumption
ENV5: Climate	CO ₂ emissions (place holder)	CO ₂ emissions (place holder)
ENV6: Raw material use	Amount of waste per inhabitant	Amount of waste per inhabitant
ENV6: Raw material use	Sorted collection rate	Sorted collection rate
ENV7: Water balance	Water discharge via waste water purification facility	Water discharge via waste water purification facility
ENV8: Water quality	Nitrates in the ground water	Transport of effluent from the waste water purification facility
ENV9: Land use	Built-up areas	Built-up areas
ENV10: Land quality	Heavy metal contamination of land (place holder)	No indicator
ENV11: Air quality	Long-term pollution Index	PM10 emissions (place holder)
Key Area: Economy		
ECON1: Income	Cantonal aggregate income	Taxable income of individuals
ECON2: Cost of living	Rental price level	Rental price level
ECON3: Labour market	Rate of unemployment	Rate of unemployment
ECON4: Investments	Renovation and maintenance costs	Renovation and maintenance costs
ECON5: True costs	No indicator	Application of the polluter pays principle
ECON6: Resource efficiency	No indicator	No indicator
ECON7: Innovation	Employees in innovative fields	Employees in innovative fields
ECON8: Economic structure	Employees in high value-added industries	Employees in high value-added industries
ECON9: Know-how	Qualification level	Qualification level
ECON10: Budget	Health of cantonal finances	Health of Municipal finances
ECON11: Taxes	Tax burden index	Tax burden of individuals
Key Area: Society		
SOC1: Noise/quality of housing	Impact of traffic noise	Traffic calming zones
SOC2: Mobility	Access to public transit	Access to public transit
SOC3: Health	Potential lost years of life	Potential lost years of life
SOC4: Security	Road traffic accidents with personal injury	Road traffic accidents with personal injury
SOC4: Security	Violent offences	Criminal charges
SOC5: Income/wealth distribution	Low-income taxpayers	Gini coefficient for income distribution

SOC6: Participation	Voting and polling	Voting and polling
SOC7: Culture and recreation	Cultural and recreational expenses	Cultural and recreational expenses
SOC8: Education	Youth education	Broken educational thread
SOC9: Social assistance	Access to social assistance services	Access to social assistance services
SOC10: Integration	Naturalization of immigrants	Naturalization of immigrants
SOC11: Equal opportunity	Women in management positions	Number of day-care spaces

The products of the *Cerleindicateurs* benchmarking system consists of the data (values in the specific unit of measurement), yearly reports in the form of a profile of strengths and weaknesses, a graphic representation of the deviation from the mean, as well as a comparative study with other cantons and cities, respectively, for each indicator (in original values). These products along with the metadata (indicator definitions and other background information) are published on the website of the Federal Statistical Office.

Impact

Till now, the *Cerleindicateurs* has had the following impacts:

- 🌱 *Increased number of participants:* In this voluntary benchmarking system, the number of participants rose from eight cantons and 14 cities in 2005 to 19 cantons and 16 cities in 2011 and can be interpreted in such a way that the cantons and the cities see this as a valuable system they can reasonably use for one of the following applications.
- 🌱 *Use of data as a basis for analysis:* The indicators have many applications as the starting point for deeper analyses of individual problem areas and as the basis for formulating proposals for political negotiations.
- 🌱 *Reporting on sustainability:* By 2011, eight cantons (Aargau, Basel-City, Bern, Geneva, Schaffhausen, St.Gallen, Vaud, and Zurich) and two cities (Baden and Zurich) prepared reports on the development of their jurisdiction and installed regular sustainability reporting on the basis of the indicators of the *Cerleindicateurs*.
- 🌱 *Use of the data for government/legislative programmes:* Several cantons and cities use the reports on sustainability as the basis for the medium and long-term planning of responsibilities within the framework of government or legislative planning. They implement the indicators as the guiding principle at a political and strategic level together with the New Public Management.
- 🌱 *Basis for, and adoption of, a sustainability strategy:* Many cantons and cities use *Cerleindicateurs* or, more precisely, the analytical fundamentals that arise, to adopt a broader sustainability political action programme (Local Agenda 21 or similar). Provided they are already committed in this regard, they use *Cerleindicateurs* to monitor progress.

Factors affecting *Cerleindicateurs* are hard to determine in a system that is limited to monitoring objectives, is not part of a policy management mechanism and is established at an overall political–sectoral meta-level. Effects only occur over longer causal chains in which

the *Cerleindicateurs* assists by initiating or supporting cantonal or Municipal sustainability programmes, or by contributing to a more coherent and stronger goal-oriented policy by influencing the New Public Management approach. This also goes along with a long-term delay until the effect of the outcomes becomes evident. We can see from the fact that the voluntary group of participants steadily grew and the cantons and cities involved in the *Cerleindicateurs* see the value of those longer-term contributory effects.

Outlook

The *Cerleindicateurs* is a bottom-up benchmarking regime where a Federal agency – the Federal Office of Spatial Development plays a facilitative and cooperative, but not a directing role. This is a reflection of the decentralized nature of Switzerland’s federalism. Over time, the system has proven successful in attracting participation from more and more cantons and municipalities and in having its findings incorporated into policy making processes. A good part of its success can be attributed to the highly collaborative and consensual way in which it has developed. This is an outcome that reflects the realities of Swiss federalism and concurrent nature of responsibility in this area. The collaborative and participative nature of the project is integral to its success.

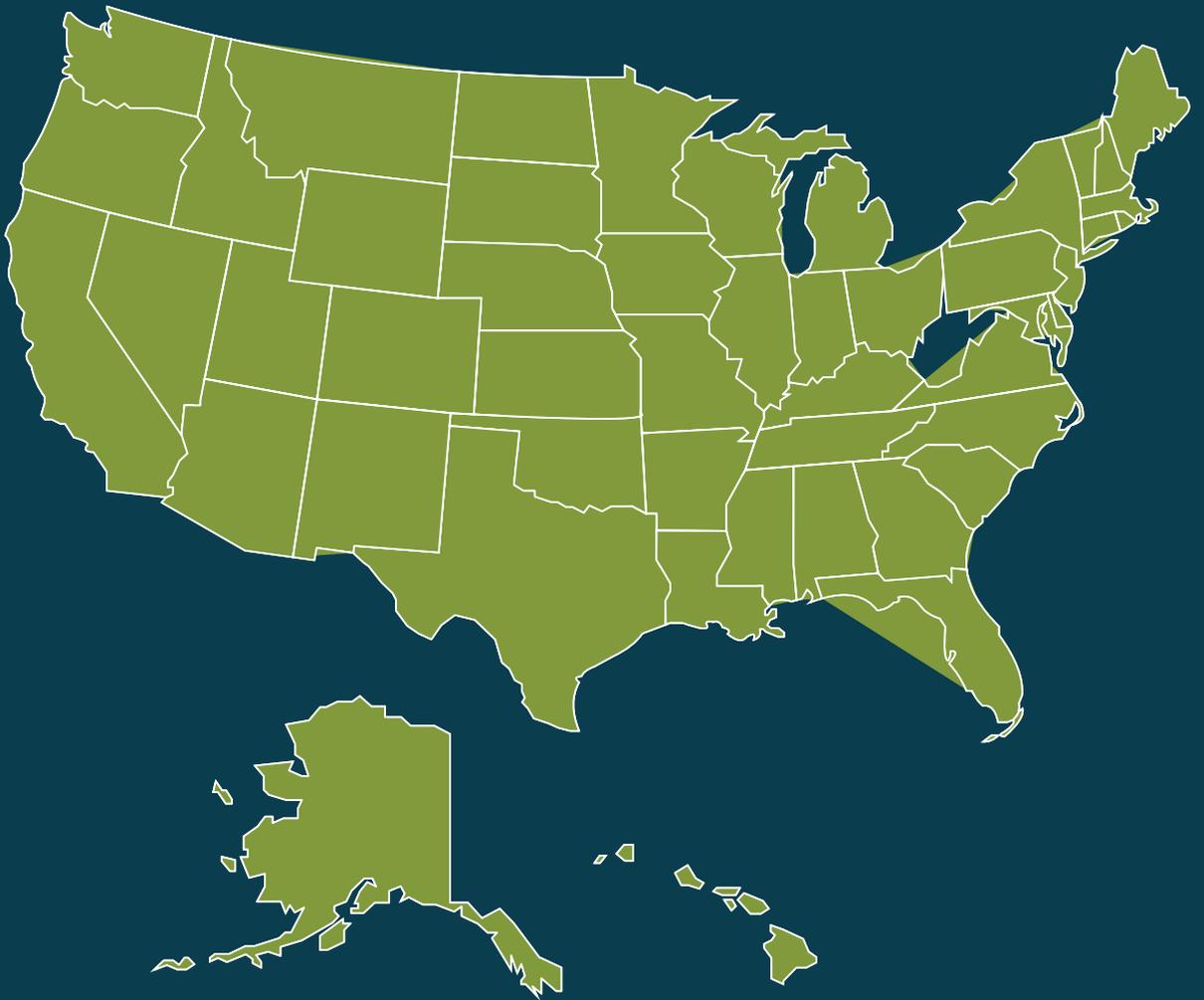
Participating entities do not have to fear punishment because of their inferior performance compared to others, as the regime has been able to expand in the numbers of participants. The collaborative nature is emblematic that this benchmarking regime is more about learning and sharing best practices in a specific policy area than about exerting some sort of control by the Federal government over the use of financial transfers. Thus, it can be considered as a “soft” benchmarking regime, since there is no “hard” legislation involved.

It is difficult to say that to what extent this experience is applicable to other federations, such as in India, with its diverse structure of states and Local governments, bringing with it a range of institutional complexities for effectively managing levels of government in the Central–State–Local government framework. However, it shows that learning among constituent units through a benchmarking system is possible. It has to be kept in mind that establishing a benchmarking system needs a political will/leadership and an effort (not least financially) set-up a reliable data tracking system.

The Forum of Federation’s comparative programme on “Benchmarking in Federal Systems” also shows that most benchmarking regimes can be found in policy fields that have a strong spending or “service delivery” component, rather than a regulatory one, like the environment. Also, more research on the impact of politics in general, and the broader institutional context (including fiscal arrangements) on benchmarking regimes are needed.

Benchmarking can be viewed as an instrument of governance, but how to set up the governance of benchmarking regimes is a key issue that emerged from our research and knowledge exchange. This requires further investigation. One preliminary conclusion is that the models of a collegial nature like the *Cerleindicateurs* – that are not based on hierarchy, targets, and effects the reputation (naming and shaming), and encourages the greatest willingness of constituent units to participate. However, the jury stands out whether it is those arrangements that lead to performance improvement.

USA



Population – 313.90 millions

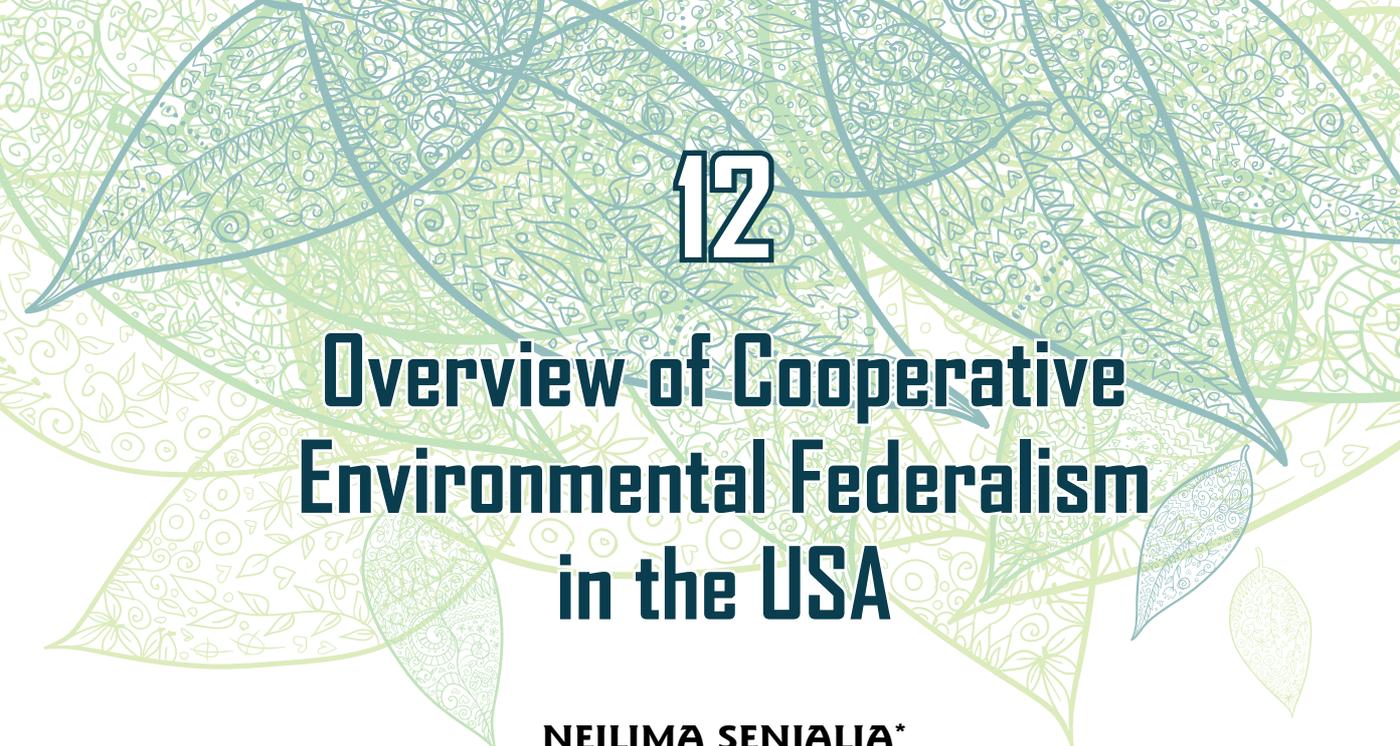
Land area – 9,147 sq. km

GDP – 16,244.60 (\$ billions)

Capital – Washington, D.C

States

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming



12

Overview of Cooperative Environmental Federalism in the USA

NEILIMA SENJALIA*

Introduction

Environmental protection in the United States (US) depends on all levels of governments. The Federal, State, and Local governments are all involved in successfully administering their unique and shared responsibilities. The history of the US environmental protection shows that both the Federal and State governments have played essential roles.

Strong Federal Role

In US, the Constitution has established the legal framework for the division and sharing of responsibilities between the Federal and State governments. Since pollution does not stop at State borders, the Constitution provides the National government with the authority to regulate inter-state commerce, including regulating pollution. Federal statutes that regulate pollution (such as Clean Air Act, Clean Water Act) establish the national policies and standards for environmental protection, but allow states to implement and enforce these laws if the states meet certain qualifications.

Cooperative federalism in US environmental law includes several elements. First, the Federal government financially supports a portion of the State programmes. Second, the Federal

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standards create a floor of stringency. The State programmes may be more stringent, but never less stringent than the Federal programmes. Third, US environmental statutes mandate oversight of State implementation of environmental programmes.

Other reasons for a strong Federal role include strong technical capacity at the national level, the unique ability of the National government to address inter-state pollution problems, and the greater independence of National government agencies from Local economic interests.

Shared Responsibility

Both the National government and the 50 States play important roles in implementing the environmental law. The US Environmental Protection Agency (EPA) has primary responsibility for the implementation of environmental laws, but may also delegate the authority to operate many of the Federal environmental programmes to the states who meet the qualifications. Delegation usually includes the authority for permitting, inspections, monitoring, and enforcement.

States are also often called upon to translate national environmental standards into specific pollution limits – such as limits on emissions to air or discharges to water – for individual facilities. Generally, EPA authorizes States to implement Federal programmes under these laws if the State can demonstrate it has passed legislation as stringent as Federal law, and has adequate staff and funds to implement the programme to meet national standards. A primary benefit of this important State role is that the Federal government relies on State governments' technical and administrative resources to achieve environmental goals, while maintaining an oversight role to ensure adequate performance. The States may also adopt their own laws and policies to protect public health and the environment, particularly to address unique Local natural resources or conditions in their State.

Local governments consisting of cities, municipalities, counties, and towns also play an important role in environmental protection. They provide important environmental services, such as drinking water treatment and delivery, wastewater treatment, recycling, and waste disposal. Many also operate programmes, such as those to regulate stormwater runoff or test vehicle emissions. Thus, many Local governments, especially larger ones, are both regulators and regulated entities.

Accountability

One of the critical components of the cooperative system is the accountability of State environmental agencies under national environmental laws. Oversight of implementing State programmes is important in ensuring that national standards and policies are followed consistently across the country. This helps to maintain a level playing field across the country for industry and provides equal protection to all citizens regardless of location. Based on this oversight, the Federal government can provide benefits to high-performing States (for example, increase grant monies, provide additional training, minimize Federal compliance and enforcement activities within a State) or sanction low-performing States (for example,

withhold grant monies, increase the Federal compliance presence, object to implementation plans or permits, require offsets, and, although rarely used, withdraw authorization for a State programme that was previously authorized). This “carrot and stick” method of holding States accountable for implementing and enforcing environmental regulations is critical to the success of US environmental regulatory programmes.

Conclusion

This cooperative system of shared responsibility, with the roles generally divided to strike a balance between National-level and State-level implementation, create a dynamic system in which each level relies on and can influence the other. Looking forward, it will be critical for all levels of government to continue to work together to ensure that the environmental goals are met.

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GREEN FEDERALISM

EXPERIENCES AND PRACTICES

Sustainable development needs to percolate down to all the levels of governments and communities. Different components of the environment including — air, water, land, and the interrelationships amongst these fall under the ambit of Central government, State governments, or both. Designing and implementing policies for a better environment requires coordination between the national, sub-national and local levels and strengthening of cooperative federalism. In a federal context, the impact of environmental degradation, technical and fiscal capacity to respond to it, authority to take action and a clear understanding of the issue at hand does not always rest with the same level of government. The real challenge lies in framing policies that appreciate these differences, yet not restrained by them. These challenges are present in varying forms and degrees across all federal systems.

There are merits in involvement of both national and state governments for environmental protection as both have their own distinct advantages. A strong role for Central government can be argued—economies of scale, standardization and consistency, addressing environmental problems that transcend state boundaries. State government's role is supported on the premise of subsidiarity, and a better access and exposure to information and local conditions, and scope for innovative localized solutions. Neither the Central nor State government is equipped to address the environmental challenges alone. Thus, 'Green Federalism' is about striking a balance between subsidiarity and centralist principles.

This volume brings together the experience of different federal systems in managing environment and natural resources. It provides an overview of issues, both theoretical and practical, on environmental federalism, and presents case studies on how each federal country has tried to resolve issues of coordination and cooperation among different levels of government in its own unique way. It comprises papers from federal countries across continents and includes perspectives from Australia, Brazil, Canada, India, Nigeria, Russia, South Africa, Switzerland, and the United States of America.



The Energy and Resources Institute

