

# Natural Resource Management and Federalism in the Philippines: Much Ado About Nothing?

AGUSTIN L. ARCENAS\*  
CIELO D. MAGNO  
RUPERT J.A. BUSTAMANTE IV

## **Abstract**

With interest in plans to federalize the Philippine government system gaining steam because of renewed confidence in the applications and benefits of decentralization, it is important to look at the impact of such a change on regional politics, community development, and the management of natural resources in the country. Issues involving property rights, boundary-setting, and the degradation of the once rich set of natural resources in the country are further complicated by the vague and overlapping functions of national and local governments in addressing environmental issues; with greater, more localized knowledge of the characteristics of these common-pool resources and of the people using them, the decentralization of natural resource management through the devolution of responsibilities to local government units is seen as ideal. Proposals that a federal system of governance is the most effective way of achieving development goals and environmental objectives when the current 1991 Local Government Code of the Philippines already does what they say federalism seeks to do soft-pedal consequences that come with a massive overhaul of the system, such as issues regarding technical capacity, jurisdiction, and the lack of political will. Unless these issues of government inefficiency, the ambiguity of environmental policies, and the unclear roles of the different levels of government in resource management are solved, a move toward a federal regime will result in more of the same: the continuing decline of the state of the Philippine environment and its natural resources.

**Keywords:** natural resource management, federalism, governance

---

\* Corresponding author. Email: [alarcenas@econ.upd.edu.ph](mailto:alarcenas@econ.upd.edu.ph)

## Introduction

One of the main pillars of the Philippines' economic growth and development has been its rich endowment of natural resources. The country is surrounded by approximately 640,000 square miles of ocean, which has been a major source of food and livelihood for its citizens, and has provided trade and production opportunities for the country as a whole. The nation's tropical climate and fertile land have contributed to the creation of much biodiversity—flora and fauna—which in turn have formed the country's agricultural and tourism bases. Although not a major producer of petroleum, the country has a vast stock of metals and minerals, with an estimated potential value of USD 1.4 trillion (Pricewaterhouse Coopers 2016). It is not, therefore, an exaggeration to say that much of the Philippines' economic growth and development is contingent upon the continued availability of its natural resources well into the next generation. The problem is that there are threats to the quality and supply of these natural resources, much of which can be attributed to the weak implementation of policies that protect them. This is alarming, especially given the growing demand for more goods and services due to a rising population and increasingly complex tastes for goods that require the intensive use of natural resources.

Just what would it take to ensure that the Philippines' natural gifts are managed properly to guarantee their sustainable supply? There are two fundamental issues that need to be addressed to respond to this question. First are the characteristics of natural resources, which must be taken into consideration when crafting management strategies. Natural resources have a wide variety of traits that subject them to potential abuse, inefficient and wasteful use, and ultimately, destruction. The managing of such kinds of goods, therefore, requires careful and oftentimes delicate planning and strategy-forming. This leads to the next issue regarding natural resource management: the effectiveness of government—the appointed steward of any country's natural resources on behalf of its citizens—which has the mandate and the responsibility to protect the resources. These two considerations are intertwined and cannot be divorced from each other. While both are important, this paper takes the characteristics of natural resources as a given and, as such, focuses on the issue of governance, and whether the Philippines' type of political governance is adequate to address the needs of natural resource protection in the country. Currently, there is a call to alter the form of government of the country, for a variety of reasons (much of it, if one is to speculate, has little to do with improvement of efficiency of the delivery of government services, and more for personal interest), which begs the question: Is such change necessary and warranted? While there are many facets to the answering of this query, this paper will focus mainly on the issue of natural resource governance and management.

### **The “Nature” of Natural Resources and the Looming “Tragedy of the Commons”**

Managing natural resources has been a continuing challenge not only for the Philippines, but also for the world. This is due to the fact that most natural resources, especially in the Philippines, are what are known as common-pool resources. In simple terms, common-pool resources (or commons) are a type of resource that is defined in the literature as a kind of non-excludable good (Ostrom 1990). This means that the use of this common resource

## Natural Resource Management and Federalism in the Philippines: Much Ado About Nothing?

cannot be limited to or by any one individual; this is substantially different from a typical private good, which can be owned by either one group or a single person, and hence, whose access can be controlled or limited by the said owner.

The fundamental issue that must be addressed regarding common-pool resources is how the behavior of users of these resources can be shaped to induce efficient consumption. A resource manager must keep in mind that a typical resource user (or consumer) is usually only aware of the private costs associated with their use, and often unmindful of the potential negative implications of one user on others. This is formally referred to in economics as the negative externality of use, wherein the generation of benefits from the use or consumption of a good results in a decline in the benefit of other users of the same good. This negative impact varies in magnitude, depending on the number of users and the ability of the resource to provide benefits to each current user and to additional users. Given either a non-existent or low barrier to entry, which is the case for most common goods, a social cost of use is generated when the threshold capacity and quality of a resource is breached as a result of “excessive” use or exploitation. This situation is what is called in the economic literature as *the tragedy of the commons* (Hardin 1968), wherein the continuous use of the resource beyond its capacity to regenerate and provide environmental services results in its destruction—the resource is either depleted and rendered barren, or its quality diminishes to a state in which the resource is virtually unusable (Lloyd 1833).

What complicates the management of most common-pool resources is that they possess *public goods* characteristics—specifically, its non-excludable nature—making it very difficult to prevent any potential user from using or accessing the resource. The destruction of the natural resource results from a very large number of users, leading to the degradation of the resource’s qualities. With a *private good*, an owner can determine the optimal number of users and set limits to how many people can make use of the resource at any given time. An owner can also regulate access by imposing fees on users to cover the unseen social costs of so many interested parties using up that resource all at once. But no such system can be imposed on a common good because no single entity is given property rights, and thus, legal ascendancy to make these kinds of decisions.

This complicated “tragic” situation is further compounded by the diversity of the potential environmental services of these natural resources that attract a large number of users. The characteristics and possible uses of these resources are highly contextual—different societies, each with their own geographical features, and domestic and commercial social structures, value natural resources differently. For instance, a piece of land could be a plantation for one community and a place for waste disposal for another; what could be water for drinking might also be seen as water for washing. Divvying up these inputs toward their various (and sometimes opposing) uses in production and consumption will always pose a challenge—and is often exacerbated by weak property rights definitions and enforcement. This situation clearly shows that the management of natural resources cannot

The fundamental issue that must be addressed regarding common-pool resources is how the behavior of users of these resources can be shaped to induce efficient consumption.

be a "one-size-fits-all" approach, because the characteristics and contexts of the resources themselves, and those of the people using them oftentimes differ sharply across regions and islands. The rules of use and the enforcement of these rules are, as such, crucial in the effective and efficient management of natural resources.

There is no one clear formula for the effective management of natural resources, and often natural resource managers face a complex balancing act to help different sectors and regions of society benefit from these resources. But it is apparent that the success of any resource management design must begin with the accurate identification of the characteristics of the resources prior to the determination of the design and style of management. The common-pool characteristics of most natural resources are a real challenge that often requires flexibility in management design. There is urgency in finding a solution to the natural resource woes of the country because these resources are not infinite, and the Philippines may, one day, find itself in a rather *tragic* situation.

### **The State of Natural Resources in the Philippines**

As mentioned earlier, the country's natural resources are constantly under siege due to growing demand pressures and pollution that threaten supply. The reality in the Philippines is that the country's track record in resource management is not sterling, and there is much room for improvement in this area.

The forest ecosystem in the country, arguably one of the most high profile environmental issues in the Philippines, has been declining steadily even as efforts have been taken to arrest it. Forest land shrank by approximately 3,000 hectares between 2003 and 2008, based on government sources (NSCB 2006-2015; DENR 2014). Similarly, based on the same information sources, forest cover declined by 4.6 percent between 2003 and 2010.

Water, a life-essential resource typically regarded as abundant, is also under threat primarily due to a decline in quality emanating from pollution, unsustainable agricultural practices, aquaculture, and increasing pressure from a growing population (Naz 2013). It has been reported that ground water sources declined in supply by approximately 21 percent between 1993 and 2000 with a contamination rate of 3-4 percent. Surface water supply, despite that fact that it is renewable and could expand in quantity if managed properly, has also been affected by pollution, resulting in approximately 20 percent of degradation.

It is apparent that the success of any resource management design must begin with the accurate identification of the characteristics of the resources prior to the determination of the design and style of management.

The marine resources of the country are likewise threatened. The World Bank reports that 27-31 percent of the Philippines' coral reefs are categorized as poor, with only 4-5 percent considered to be in excellent condition (World Bank Group 2005; World Bank Group 2009). The same report indicates that the coral reef status in the Philippines is the most degraded in the sampled countries, with 98 percent of the current coral reefs in the country at risk from human activities.

## Natural Resource Management and Federalism in the Philippines: Much Ado About Nothing?

For land resources, the National Economic and Development Authority (NEDA) indicated in the 2011-2016 Philippine Development Plan that close to 5.2 million hectares (or 17 percent of the country's total land area) is considered to be "severely eroded" (NEDA 2011). Naz (2013) adds that 8.34 million hectares or 27.3 percent of the total land area in the Philippines is vulnerable to drought, as well as annual exposure to floods and typhoons.

The data presented in this section paints a somber picture of what the future of natural resources in the Philippines is likely to be, given the rate of use and abuse, which have both resulted in deterioration. The increasing pressure on the country's natural resources from a growing population must be met with effective and successful management if sustainable economic growth and development are to be met; there is simply no other way around the issue. Even as many of these resources are renewable in nature, their common-pool nature will inevitably lead to their destruction—the tragedy in the *tragedy of the commons*—unless effective and efficient interventions are put in place. To be fair, the Philippine government has stepped in—perhaps with differing intensities of zeal and levels of determination, depending on the priorities of the sitting head of state—to prevent the destruction of the country's natural resources. Through the efforts of lawmakers and members of the executive branch of government, environmental laws and regulations have been crafted. Implementation, however, has been weak and is likely to remain weak until stronger political will reinforces these laws.

But while the government and stakeholders manage their way through the implementation of the laws and regulations of the land to effect sustainable use of the country's natural resources, the question of changing the design of government in the country—from its current decentralized form to a federal type—has been put forward. There are those who claim that this shift is what will improve the delivery of public services, including a better management of the country's natural resources. This is no light matter, because the change will entail huge costs—both social and financial—for the country. It is imperative that there be informed discourse regarding this matter, and this paper is one step in that direction. This paper thus poses the question: Will the change in government to a federal system effect better and more efficient management of the country's threatened natural resources?

### **The Legal Framework of Natural Resource Ownership, Regulation and Management in the Philippines**

The legal framework of the country defines the property rights and regulatory authority over natural resources. According to the Constitution, "all lands of the public domain, waters, minerals, coal, petroleum, and other mineral oils, all forces of potential energy, fisheries, forests or timber, wildlife, flora and fauna, and other natural resources are owned by the State" (1987 Const. R.P. Art. XII, § 2). The development and utilization of natural resources is under the state's full control and supervision. The government is the body that is mandated to protect the country's natural resources for the exclusive use of Filipinos. The Constitution also allows the government to enter into agreements with foreign-owned corporations in the exploration, development and utilization of natural resources, based on the real contribution of these activities to the economic growth and general welfare of the country.

The United States Supreme Court in the case of *Cariño v. Insular Government*<sup>1</sup> (1909) designated ancestral domains as private lands of the indigenous people, and together with the Indigenous Peoples Rights Act (IPRA), has provided indigenous peoples the rights and authority over resources found in these lands. The right of ownership by indigenous peoples under IPRA, however, does not include natural resources, as enumerated by the 1987 Constitution (1987 Const. R.P. Art. XII, § 2). The natural resources in ancestral domain areas still belong to the State.

At this point, it must be clarified that state's jurisdiction over these resources does not entitle the national government to simply take and distribute them summarily. IPRA requires the state to secure the free prior and informed consent of indigenous communities in order to utilize these resources. The Local Government Code of 1991 also requires the consent of local councils concerned before the national government can proceed with any project (1991 LGC § 2, 26, 27).

The Code also states the formula for the sharing of the proceeds from the utilization of resources between the national and local governments. Local governments are entitled to a 40 percent share from the extraction and use of natural resources in the area. The province is entitled to 20 percent of the share while the city/municipality and the barangays get 45 percent and 35 percent, respectively (1991 LGC § 292).

With respect to regulation, the Administrative Code of 1987 designates the Department of Environment and Natural Resources (DENR) as the regulatory agency responsible for implementing state policies over these resources. The general welfare clause of the Local Government Code mandates local governments to enhance the right of the people to a balanced ecology and to preserve the comfort and convenience of their inhabitants. This general welfare clause allows local governments to adopt and implement stricter environmental policies as long as they are consistent with national policies. One example of these is the anti-mining ordinance of South Cotabato banning open pit mining in the province (Gatmaytan 2014).

The Code also devolved some functions to local governments on the provision of basic services and facilities. These include services and facilities related to hygiene and sanitation, beautification and a solid waste disposal system or environmental management system, extension and on-site research services and facilities related to agriculture and fishery activities, implementation of forestry laws and community-based forestry projects, management of public parks and tourism facilities, a pollution control law, small-scale mining law and other laws on the protection of the environment, and mini-hydroelectric projects for local purposes. Local governments can establish fish and marine sanctuaries through municipal ordinance. As far as natural resource protection is concerned, local chief executives are also required to “adopt adequate measures to safeguard and conserve land, mineral, marine and forest and other resources of the LGUs” (1991 LGC § 444, 455, 465). Local councils are mandated to “protect the environment and impose appropriate penalties for acts that endanger the environment, such as dynamite fishing, illegal logging and smuggling of logs, smuggling of natural resources products and of endangered species of flora and fauna, slash and burn farming, and such other activities which result in pollution, acceleration of eutrophication of rivers and lakes, or of ecological imbalance” (1991 LGC § 447, 458, 468).

## Natural Resource Management and Federalism in the Philippines: Much Ado About Nothing?

In addition to the functions devolved to local government units, local governments are also given fiscal autonomy or the power to create their own sources of revenue, and to levy taxes, fees and charges subject to the provisions of the Code. Under this authority, local governments can impose taxes and fees that can affect the utilization of resources in their areas. Examples of these are ordinances adopted by a number of provinces and municipalities imposing additional taxes and fees to affect the mining operation in their areas.

### **Political Governance and Natural Resource Management – Key Issues**

The country's current legal and institutional arrangements do not prevent the deterioration of Philippine ecosystems and the atrophy of resources and services that these provide. Shrinking forest lands, overfishing, loss of critical habitats, the continuous threats to terrestrial and marine biodiversity, and food and water insecurity indicate severe oversight and mismanagement on the part of all stakeholders, including that of government.

Naz (2013) presents a number of institutional issues that contribute to the inefficiencies that plague the country's environmental management system. Multiple jurisdiction problems complicate the enforcement of environmental laws, while overlapping and conflicting policies, as well the ineffective implementation of regulations and programs, prevent the development of more productive infrastructure. In the case of the Philippines, gaps in formulating a comprehensive financing strategy for environment and climate change programs further complicate the problem.

Participation in governance from the different sectors is also limited. Posa et al. (2013) reiterate the challenges related to the lack of inter-sectoral participation in natural resource management. They identify inadequate funding for conservation efforts, the limited role of the scientific community as reflected by limited research and development, and the absence of private sector and community participation in conservation efforts and resource management. They also highlight the lack of political will from the central government to enforce environmental laws, reconcile conflicting policies and lead a multi-stakeholder approach to natural resource management.

In the case of the Philippines, Manasan (2000) observes that while the LGC has devolved some functions to local governments, the DENR retains supervision and control over projects related to the devolved functions. Local governments have been given the responsibilities but not the complete and clear authority to perform their mandates. However, Manasan also points out that the authorities and powers given to local chief executives and local councils are broader than functions devolved to local governments. This creates duplication and overlap between the functions of the local governments and the DENR, and leads to confusion on jurisdiction and responsibilities in environmental and natural resource management.

Dahal and Capistrano (2006) have similar findings on the policies governing forest management in the Philippines, and found that there are problems related to the devolution of forest management. The authors conclude that the current community-based forest management (CBFM) system has had very limited positive outcomes because of its weaknesses and limitations. Among these are incomplete and inadequate policy articulation

about the devolution of power and functions from the national to local government units; incomplete devolution of forest management activities, as supervision and control is retained by DENR; and the insecurity of community organizations regarding their property rights in CBFM.

For coastal resources, White, Courtney and Salamanca (2002) have examined the policies and laws governing marine protected areas, and conclude that policy articulation—particularly on community participation and collaboration with municipal governments—is crucial for effective natural resource management. Furthermore, they stress the need to clearly identify the roles of different stakeholders and financial mechanisms to create sustainable marine protected areas.

The role of subnational governments (or local government units) is deemed crucial in addressing environmental issues on the ground. Christie et al. (2000) conclude that local players are key in addressing local environmental problems and in providing support to communities affected by environmental problems. Kapoor (2000), on the other hand, stresses the importance of participatory environmental management by linking nature and society, and local communities to global networks to “facilitate information and knowledge exchange, and enable critical analysis and re-negotiation of social relationships.”

In the Philippine context, there is also the issue of confusing and conflicting policies on the environment. This is exacerbated by the conflict between the national and local governments, wherein local governments assert their authority to regulate the environment on behalf of their constituents, while the national government does the same in the name of national interest. This is particularly true in mining, where the adoption of the 1995 Mining Act (which identifies mining as a primary driver of economic growth for the country) prompted around 40 provincial governments to adopt ordinances that ban mining, with the national government insisting that it has jurisdiction over the issue. This tension could be mitigated if territorial and political jurisdiction between the LGUs and the national government were clarified through the local government code—either in terms of strict implementation, or revision of the code to clarify gray areas.

### **Federalizing the Current Decentralized Form of Government in the Philippines**

The reason for the seemingly impending shift of the Philippines from its current form of political governance to federalism is unclear at this point. The debates and discourse, however, have started, even if the signs on the wall indicate that the decision has already been made, and the shift to federalism is effectively a done deal. In this section, the issue as to whether the shift to federalism could potentially improve the efficiency and effectiveness of the government in managing the country’s affairs is tackled directly, using the management of natural resources as a context.

The main contention against federalism seems to be that the cost of changing the form of government promises little benefits compared to the public, social and political costs the shift will generate. This has prompted supporters of federalism to justify the current administration’s desire to change the system of government to ease discontent and perhaps

## Natural Resource Management and Federalism in the Philippines: Much Ado About Nothing?

effect a smooth transition. There are different facets to the discourse—a range of reasons why federalism makes or does not make sense—that are addressed in various forums. In this paper, the discussion is limited to natural resource management, and whether federalism could provide opportunities for resource management that the current decentralized form of government is unable to.

Just what is federalism? The literature defines it essentially as a system of governance that consists of two or more levels of government operating with some form of independence but in conjunction with each other. The term itself is derived from the Latin word *foedus*, which is a treaty voluntarily entered upon by two or more allied states to signify a degree of cooperation and of mutual trust (Dosenrode 2010). The preliminary idea of a federal nation, or rather, a group of states under a single federation, therefore, is that of unity in the exploration of their common good while preserving the autonomy of these individual states. In this sense, federalism has become an “[...] institutional arrangement, taking the form of a sovereign state, and distinguished from other such states solely by the fact that its central government incorporates regional units in its decision procedure on some constitutionally entrenched basis” (King 1982). This feature of decentralization is beneficial because, as Hayek suggests, local governments (as opposed to a single, national government) have better information regarding their constituents and their respective preferences; having a smaller, more specific scope of authority or supervision allows local governments to better know and understand local conditions, and thus make better, more well-informed decisions (Hayek 1945; Qian and Weingast 1997).

The problem of imagining such a system, however, would be less about providing for the needs of those within the state, and more about managing conflict between states inside the same sovereignty. Given two legally co-equal political units, it would be impossible to resolve differences in values, boundaries, and policies without the aid of an authority or central standard. There is the issue of stability when, during some intense political stand-off, states have the ability and incentive to shirk the agreement of unity without repercussions other than damaged relations between states.

Since then, the political theory of federalism has evolved to include a figure of central authority, not with a function to rule over the autonomous states but to facilitate cooperation between, and possibly police the actions of, each individual entity. Wheare summarizes this revised principle of federalism, which has been brought into modernity and is used by many sovereign, federal countries today: “By the federal principle I mean the method of dividing powers so that the general and regional governments are each, within a sphere, co-ordinate and independent” (Wheare 1946, Law 2013). Today, the core value of federalism is the sharing of power between national and subnational governments. The move towards federalism is, in principle, consistent with the growing interest to “preserve the uniqueness and diversity of local communities” (Principles of Federalism). This core value rests in the assumption that governance will be more effective and efficient if individuals are given the power to influence policy-making at the local level. Efficiency is achieved if local governments are made to compete in meeting the needs of the citizens.

Currently, the discourse of federalism is concerned primarily with domestic, fiscal management and the distribution of scarce resources among competing states. There are, arguably, two opposing models for organizing fiscal systems in the context of a federal

government. The first is an approach wherein revenue sharing is treated as a useful tool for “adjusting unequal living conditions” (Seidel and Vesper 1999). Autonomy begins after negotiation and sharing, but the responsibility of revenue generation and subsequent distribution of resources is given to the central government. This is, as Seidel and Vesper note, best exemplified by the German federal system.

The second model limits the possibility of reallocation in order to foster a spirit of competition between autonomous political units. The system creates avenues for individual states to generate adequate funding according to their own fiscal capacities, and development goals and preferences. The federalism of the United States of America, for example, allows some discretionary leeway over the tax policies of individual states, as opposed to coordinated efforts through joint tax policies of the previous model (Seidel and Vesper 1999).

With these principles of federalism, it is not difficult to see that the Philippines, while imperfect, is pursuing greater autonomy for local government units. And this is the core feature of federalism. Yilmaz and Venugopal explain what the 1991 LGC seeks to do: “[it] provides a framework for increased local autonomy with its provisions affecting assignment of functions across different levels of government, revenue sharing between central and local governments, resource generation and utilization by Local Government Units (LGUs), and the participation of civil society in governance processes” (Yilmaz and Venugopal 2013). Capuno adds to this discussion by enumerating the primary themes of both the 1983 and 1991 LGCs as accountability, transparency, and participation (Capuno 2005). Under the feature of participation, the aim of the LGC is to empower LGUs to engage with civil society in the realms of education, health, peace and order, development, and of course resource management, given that these LGUs have more intimate knowledge of the characteristics and capacities of their local communities and respective territories. Under the features of accountability and transparency, the LGC provides opportunities for greater coordination between national and local governments, allowing the national government to oversee activities at a general level and facilitate communication between LGUs, all while allowing space for LGUs to handle their own local fiscal administration (including budgets, expenditures, and disbursements).

The proposal to adopt federalism, therefore, is not the solution to the issues that have been raised on natural resource management. The issues and constraints identified will persist whether the government operates under the status quo or the proposed federal system.

### **Conclusion and Recommendation**

The clamor for change in the way natural resources are managed in the country seems to gloss over issues of the massive structural overhaul required to institute federalism in the Philippines, and of the impact of a federalist system on the possible frontiers of the conditions and uses of common-pool resources. Devolution will require some degree of capacity-building from subnational governments to effectively deliver its mandate; this will depend on incentivizing technicians and experts to working, first, for government in general, and then more challengingly, for LGUs.

## Natural Resource Management and Federalism in the Philippines: Much Ado About Nothing?

Even with greater technical capacity, redundancies in policies and conflicts with property rights impede the development of strong, autonomous subnational governments. An important resource may be jointly-owned or located within the territorial boundaries of two LGUs, and the activities from one subnational government may have spillover effects on another's jurisdiction. It is not hard to discern that the underproduction of public goods and services and the overproduction of public "bads" such as pollution, for example, will exist no matter what the system of governance in place is. Mechanisms to address the problems of externalities and property and usage rights over common-pool resources should be put in place to avoid further disputes; a shift to a federalist system without an improved framework for the scope and limitations of local authorities will have little impact in dealing with such disputes.

The persistence of fiscal and distribution concerns will continue, and may even be aggregated by a switch to federalism. Local governments of regions rich in natural resources and more advanced in terms of development will be more able to provide for its citizens than subnational governments from poorer regions. The common tools for mitigating this—effective intergovernmental fiscal transfers and a well-coordinated joint taxation system—may be unavailable, depending on the type of federalism implemented.

Ultimately, if the end goal of this exercise is to develop a decentralized system geared at addressing specific community concerns and to empower local authorities through greater participation and accountability measures, then an already operational Local Government Code, acting within the principles of and having parallel functions to that of fiscal federalism, could instead be strengthened to serve those objectives. This need for federalism may well be exaggerated because the framework of the Constitution on the ownership and control of resources and the extent of power sharing between national and subnational governments are already reflective of a federalized system of government.

Admittedly, there is a tendency for the national government to work against the delineation of current responsibilities and the delegation of additional powers to local governments. But that does not change the fact that what the country needs are stronger, clearer policy interpretations that favor local autonomy. There is no need to amend the Constitution to address the problems of natural resource management and the current issues of the national and subnational governments on resource management. There is a need, however, to review and clarify duties and authorities in terms of regulating these resources, making clear the functions and jurisdiction of local governments while exploring possible opportunities for collaboration across LGUs, and between local and national government.

Opening up the Constitution to federalism will not guarantee that there will be greater local autonomy—not when local governments in the Philippines currently enjoy greater autonomy than federalized states like Malaysia. And local autonomy does not ensure better resource sharing and environmental regulation and development, as is the case for federalized states like Canada and Nigeria (Moull 1987; Ebegbulem 2011).

Ultimately, the control and ownership of resources depend not on the form of government, but on the Constitutional provisions that define the structure of government on all scales, and the delegation of roles at every level. While it is true that there is a sharing of power in a

decentralized system, a federal regime does not guarantee complete transfer of ownership and control of resources to regions. These same issues that the current decentralized form of government in the Philippines has can therefore arise even in a federalized regime. The true reasons for the push for federalism remain unclear, but whatever they may be, whether for social welfare or otherwise, the improvement of natural resource management cannot be one of them. At least not in the Philippines.

### Notes

1. 212 U.S. 449 (1909). *Cariño* was a land registration case in involving land in Benguet. The applicant Mateo Cariño was an Igorot. His ancestors held the land in question as owners. His grandfather had lived upon it and cultivated and had used parts for pasturing cattle; Mateo had used it for pasture in his turn. They all had been recognized as owners by the Igorots, and he had inherited or received the land from his father in accordance with Igorot custom. But Cariño had no title issued by the Spanish government, although he made prior attempts to have the land registered. The Court of First Instance dismissed his petition for registration and the Philippine Supreme Court affirmed that decision.

### Bibliography

- Arcenas, A., J. Capuno, and A. J. Ferrer. 2011. "Coastal and Marine Resource Management in the Philippines: An Analysis of the Political Economy of Banate Bay." Report submitted to the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), Los Baños, Laguna.
- 1987 Constitution of the Republic of the Philippines. Article XII, Section 2.
- Capuno, J. The quality of local governance and development under decentralization in the Philippines. Discussion paper. School of Economics, University of the Philippines. No. 2005, 06: 1-30. 2005.
- Cariño v. Insular Government*. 212 U.S. 449. 1909.
- Christie, P., A. White, and E. Deguit. Starting point or solution? Community-based marine protected areas in the Philippines. *Journal of Environmental Management* 66 (2002): 441-454.
- Dahal, G. R. and D. Capistrano. Forest governance and institutional structure: An ignored dimension of community based forest management in the Philippines. *International Forestry Review* 8(4) (2006): 377-394.
- Department of Environment and Natural Resources. Compendium of Environment and Natural Resources Statistics. E-Library. DENR. 2008, 2012-2015.
- Dosenrode, S. Theory and Neo-Functionalism: Elements for an analytical framework. *Perspectives on Federalism* 2(3)(2010): E1-28. Centro Studi Sul Federalismo.
- Ebegbeulem, J. Federalism and the Politics of Resource Control in Nigeria: A Critical Analysis of the Niger Delta Crisis. *International Journal of Humanities and Social Science* 1(12)(2011): 218-229.
- Gatmaytan, D. An Autonomy Friendly Court. Bantay-Kita Policy Paper No. 2014-001. 2014.
- Hardin, G. The Tragedy of the Commons. *Science, New Series* 162 (3859) (1968): 1243-1248.
- Hayek, F. The Use of Knowledge in Society. *American Economic Review* 35(1945): 519-30.
- Kapoor, I. Towards participatory environmental management? *Journal of Environmental Management*. 63 (2001): 276.

## Natural Resource Management and Federalism in the Philippines: Much Ado About Nothing?

- King, P. *Federalism and federation*. London: Croom Helm. 1982.
- Law, J. How Can We Define Federalism? *Perspectives on Federalism* 5(3) (2013): E88-112. Centro Studi Sul Federalismo.
- Lloyd, W. F. *Two lectures on the checks to population*. England: Oxford University. 1833.
- Local Government Code of the Philippines. 1991.
- Manasan, R. Devolution of Environmental and Natural Resource Management in the Philippines: Analytical and Policy Issues. *Philippine Journal of Development* 53(XXIX)(1)(2000): 33-54.
- Moull, W. Natural Resources and Canadian Federalism: Reflections on a Turbulent Decade. *Osgoode Hall Law Journal* 25(2)(1987): 412-429.
- National Economic and Development Authority. Philippine Development Plan 2011-2016. NEDA. 2011.
- National Statistical Coordination Board. *Philippine Statistical Yearbook*. NSCB. 2006-2015.
- Naz, A. The State of the Philippine Environment: An Update on Chapter 4 of the 1994 Philippine Human Development Report. Human Development Network. 2013. <[http://hdn.org.ph/wp-content/uploads/DP\\_10\\_Naz.pdf](http://hdn.org.ph/wp-content/uploads/DP_10_Naz.pdf)>
- Ostrom, E. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press. 1990.
- Posa, M., A. Diesmos, N. Sodhi, and T. Brooks. Hope for Threatened Tropical Biodiversity: Lessons from the Philippines. *BioScience* 58(3)(2008).
- PricewaterhouseCoopers. 2016 PwC Report to EITI. Elevating Transparency. Philippine Extractive Industry Transparency Initiative (PH-EITI): 3-20. 2016.
- Principles of Federalism. Draft Prepared by ULC Committee on Federalism and State Law. Uniform Law Commission. <[http://www.uniformlaws.org/shared/docs/federalism%20and%20state%20law/federalism\\_principles.pdf](http://www.uniformlaws.org/shared/docs/federalism%20and%20state%20law/federalism_principles.pdf)>
- Qian, Y. and B. Weingast. Federalism as a Commitment to Preserving Market Incentives. *Journal of Economic Perspectives* 11(4)(1997): 83-92.
- Seidel, B. and D. Vesper. Fiscal federalism – an international comparison. *DIW Discussion Papers* 183 (1999): 3-13. Berlin: German Institute for Economic Research (DIW Berlin).
- Wheare, K. *Federal Government*. London: Oxford University Press. 1946.
- White, A. T., C. A. Courtney, and A. Salamanca. Experience with marine protected area planning and management in the Philippines. *Coastal Management* 30 (1) (2005): 1-26.
- The World Bank Group. Coastal and Marine Resource Management. *Philippines Environment Monitor* 2005.
- World Bank. *Environment Matters at the World Bank, 2009 Annual Review: Banking on Biodiversity*. World Bank. 2010. <<https://openknowledge.worldbank.org/handle/10986/2494>>.
- Yilmaz, S. and V. Venugopal. Local Government Discretion and Accountability in the Philippines. *Journal of International Development* 25 (2013): 227-250.