Devolution of Environmental and Natural Resource Management in the Philippines: Analytical and Policy Issues

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ABSTRACT
This paper is an assessment of the constraints and opportunities for capturing the gains from the devolution of environmental and natural resource (ENR) management and for engendering a more sustainable ENR management system in the Philippines. It provides a brief characterization of fiscal decentralization in the country as a result of the implementation of the Local Government Code.

BACKGROUND
The Philippines has a unitary form of government with a multitiered structure. It is a presidential republic with a bicameral legislature (composed of the Senate with 24 members and the House of Representatives with 240 members).

At the top is the central government operating through some 20 departments/agencies. Administratively, the country is divided into 15 administrative regions and most departments maintain regional offices. In addition, there is one autonomous region, the Autonomous Region of Muslim Mindanao (ARMM). It should be emphasized, however, that the regions (with the exception of the ARMM) are just administrative subdivisions and not regional governments with elected regional officials.

The second tier of government is composed of local government units (LGUs). The local government structure is composed

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of three layers. Provinces comprise the first layer. A province is divided into municipalities and component cities, each of which is further subdivided into barangays, the smallest political unit. At the same time, highly urbanized and independent cities exist at the same level as the provinces, i.e., they share the same functions and authorities. However, these cities are partitioned directly into barangays.

In 2002, there are 80 provinces, 114 cities, 1,496 municipalities, and some 42,000 barangays. Each level of LGU is headed by an elected chief executive (governor, mayor, barangay captain) and has a legislative body or Sanggunian (composed of an elected vice-governor/vice-mayor and council members). All elected officials have a three-year term of office. To a large extent, each level of local government is autonomous although higher level governments (e.g., province) exercise some degree of supervision over lower level governments (e.g., municipalities and component cities) in terms of budgeting and legislation.

The passage in 1991 of the new Local Government Code (LGC or Code) represents a major shift in local governance in the Philippines. It consolidated and amended the Local Government Code of 1983, the Local Tax Code (Presidential Decree 231), and the Real Property Tax Code (Presidential Decree 464). The Code includes far-reaching provisions affecting the assignment of functions across different levels of government, the revenue sharing between the central and the local governments, the resource generation/utilization authorities of LGUs, and the participation of civil society in various aspects of local governance. As a whole, it provides a framework in support of increased local autonomy.

Devolution of Functions

The LGC mandates the devolution to LGUs of many functions previously discharged by central government agencies. Prior
to the implementation of the Code, the functions assigned to LGUs were limited to the levy and collection of local taxes, the issuance and enforcement of regulations governing the operation of business activities in their jurisdictions, and the administration of certain services and facilities like garbage collection, public markets, slaughterhouses and public cemeteries. Then, LGUs played a secondary role in agricultural planning and extension, construction and maintenance of local roads and public buildings, and operation of high schools and hospitals/health services, with the central government carrying the primary responsibility for the delivery of said services. In contrast, the Code transfers from national government agencies to LGUs the principal responsibility for the delivery of basic services and the operation of facilities in the following areas: agricultural extension and research, social forestry, environmental management and pollution control, primary health care, hospital care, social welfare services, water supply, communal irrigation, land use planning, and repair and maintenance of local infrastructure facilities. The devolution is substantial not only in terms of the number of functions that were shifted but more so in terms of the number of personnel transferred (Table 1) and the corresponding reductions implied in the budgets of affected national government agencies (Table 2). The national government agencies that were most heavily affected by devolution were the Department of Agriculture (DA), Department of Health (DoH), and the Department of Social Welfare and Development (DSWD).

The devolution of expenditure responsibilities to LGUs, with a few exceptions, is consistent with the decentralization theorem which states that “public service is provided most efficiently by the jurisdiction having control over the minimum geographical area that would internalize benefits and costs of such provision”.2 For the

2 There is one important exception to the application of the decentralization theorem. Education is primarily provided by the central government although construction and maintenance of school buildings are devolved to LGUs. Thus, teacher salaries and major education inputs are the responsibility of the central government although many LGUs do top up central government allocations for these items.
Table 1. Number of devolved personnel, 1992

<table>
<thead>
<tr>
<th>Department/Agency</th>
<th>Number of Personnel Before Devolution</th>
<th>Number of Devolved Personnel</th>
<th>Ratio of Devolved Personnel to Pre-Devolution Personnel (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Agriculture</td>
<td>29,638</td>
<td>17,673</td>
<td>59.63</td>
</tr>
<tr>
<td>Office of the Secretary</td>
<td>29,234</td>
<td>17,664</td>
<td>60.42</td>
</tr>
<tr>
<td>National Meat Inspection Commission</td>
<td>404</td>
<td>9</td>
<td>2.23</td>
</tr>
<tr>
<td>Department of Budget and Management</td>
<td>3,532</td>
<td>1,650</td>
<td>46.72</td>
</tr>
<tr>
<td>Department of Environment and Natural Resources</td>
<td>21,320</td>
<td>895</td>
<td>4.20</td>
</tr>
<tr>
<td>Department of Health</td>
<td>74,896</td>
<td>45,896</td>
<td>61.28</td>
</tr>
<tr>
<td>Department of Social Welfare and Development</td>
<td>6,932</td>
<td>4,144</td>
<td>59.78</td>
</tr>
<tr>
<td>Other Executive Offices</td>
<td>191</td>
<td>25</td>
<td>13.09</td>
</tr>
<tr>
<td>Philippine Gamefowl Commission</td>
<td>191</td>
<td>25</td>
<td>13.09</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>136,509</strong></td>
<td><strong>70,283</strong></td>
<td><strong>51.49</strong></td>
</tr>
</tbody>
</table>

Source: 1993 National Expenditure Program, Regional Coordination Staff.

Table 2. Agency budgets and devolution, 1992¹ (in thousand pesos)

<table>
<thead>
<tr>
<th>Devolved Agency</th>
<th>Budget Before Devolution</th>
<th>Devolved Budget</th>
<th>Ratio of Devolved Budget to Pre-Devolution Budget (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Agrarian Reform</td>
<td>1,842,374</td>
<td>9,389</td>
<td>0.51</td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td>5,210,028</td>
<td>1,055,620</td>
<td>20.26</td>
</tr>
<tr>
<td>Department of Budget and Management</td>
<td>465,379</td>
<td>172,847</td>
<td>37.14</td>
</tr>
<tr>
<td>Department of Environment and Natural Resources</td>
<td>1,941,782</td>
<td>167,675</td>
<td>8.64</td>
</tr>
<tr>
<td>Department of Health</td>
<td>9,991,392</td>
<td>3,851,079</td>
<td>38.54</td>
</tr>
<tr>
<td>Department of Public Works and Highways</td>
<td>27,109,267</td>
<td>1,096,347</td>
<td>4.04</td>
</tr>
<tr>
<td>Department of Social Welfare and Development</td>
<td>1,320,708</td>
<td>866,420</td>
<td>65.60</td>
</tr>
<tr>
<td>Department of Tourism</td>
<td>207,721</td>
<td>2,753</td>
<td>1.33</td>
</tr>
<tr>
<td>Department of Transportation and Communication</td>
<td>7,563,929</td>
<td>97</td>
<td>0.00</td>
</tr>
<tr>
<td>Philippine Gamefowl Commission</td>
<td>15,208</td>
<td>8,705</td>
<td>57.24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55,667,788</strong></td>
<td><strong>7,230,932</strong></td>
<td><strong>12.99</strong></td>
</tr>
</tbody>
</table>

¹ Based on the 1992 Expenditure Program and incorporates full-year impact of the functions/ projects/ activities devolved. Captures only expenditures of devolving agencies (i.e., Office of the Secretary of Departments except for the Department of Agriculture which also includes the National Meat Inspection Commission).

Source: 1993 National Expenditure Program.
most part, devolved functions are activities that can be provided at low levels of governments. The activities identified have few important spillovers to a broader community to indicate that they should be provided by higher levels of government. The functioning of the decentralization theorem is enhanced by the provision in the Code that permits LGUs to regroup into larger cooperative units when important spillovers occur. Thus, smaller LGUs may form associations that may enable them to carry out their responsibilities jointly when there are economies in doing so and when inter-LGU spillovers are present. Examples exist of contiguous LGUs combining resources to deal, for instance, with solid waste disposal, coastal and local fishing problems.

Expenditure assignments are generally clear and well understood by LGUs. The Code actually provides an explicit and clear delineation of functions across levels of governments, except perhaps in the area of ENR management and public works. However, a continuing source of irritation between the central government and LGUs is the propensity of some central government agencies to exercise undue influence on LGUs on how they should conduct their expenditure responsibilities. For instance, the Department of Interior and Local Government (DILG) have issued a number of circulars that impose restrictions on the way LGUs can spend their local development fund.

**Tax Assignment**

In the Philippines, various types of taxes are assigned exclusively, to a large extent, to different levels of governments. The

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3 For instance, the Code gives municipalities the responsibility over community-based forestry and watershed projects but allows the Department of Environment and Natural Resources (DENR) to retain supervision and control over such projects. Similarly, LGUs are tasked with the primary responsibility for the construction and maintenance of local roads but the DPWH may continue to undertake similar activities if the funding comes from national funds. The problems related to the ambiguities in the devolution of functions in ENR management to LGUs will be discussed in greater detail in the succeeding section.

4 Under the Code, LGUs are mandated to allocate 20 percent of their internal revenue allotment or IRA (otherwise known as the local development fund) for development activities.
income tax (both individual and corporate), the value added tax, customs duties, and excise taxes on alcoholic beverages, tobacco products and petroleum products are reserved for the central government alone. The real property tax and the community tax (poll tax), however, may only be imposed by LGUs.

Outside of real property tax revenues, the major portion of local government tax receipts is derived from the local business tax (basically a turnover tax that is levied on the gross receipts of businesses/traders) although there is a plethora of other taxes that LGUs are authorized to levy. The base of each of these taxes is defined by central government legislation, which also limits (i.e., sets floors and/or ceilings) the tax rates LGUs may impose.

Note that only cities and municipalities (but not provinces) are authorized to levy the local business tax and the community tax. However, in addition to the real property tax, provinces are allowed to levy a tax on the following: transfer of ownership of real property, franchises, business of printing or publication, sand and gravel extraction, professionals, amusement places, and delivery vans. But, in practice, the size of the base of provincial taxes outside of the real property tax is not significant.

The Code also expanded the tax base of LGUs to include products, activities and sectors (like banks and other financial institutions, and printing/publication) that used to be outside the reach of local taxation. It also increased the maximum allowable rates at which most local taxes may be levied. However, the Code effectively reduced the assessment levels (for purposes of real property taxation) of residential land, all types of buildings and all types of machinery.

On the whole, however, the bulk of the productive tax bases rest with the central government. Also, many LGUs have not fully utilized their revenue-raising powers even as the IRA distribution formula has been shown to have a disincentive effect on local tax effort. Thus, over the years, the contribution of LGUs to total tax revenues of the general government (central government and LGUs
combined) has remained low—only 6 percent in 1992-2001 compared with 4 percent prior to the LGC.

**Intergovernmental Transfers**

In the Philippine system of intergovernmental relations, LGUs share in the proceeds of national tax revenues through the internal revenue allotment (IRA). The IRA represents a fixed share of central government internal revenue tax collections. It is transferred as a block grant from the central government to LGUs and as such LGUs exercise full discretion as to its utilization. The IRA is allocated to the different levels of local government and to specific LGUs within each level according to a pre-determined formula that is based on population, land area and equal sharing.

The Code prescribes a higher LGU share in internal revenue taxes collected by the central government. Under the Code, the aggregate IRA of LGUs is set at 40 percent of internal revenue tax collections three years prior to the current year. In comparison, under the pre-Code regime, the share of LGUs in national taxes was equal to 20 percent of internal revenue taxes at the maximum.\(^5\)

Under the Code, the IRA is divided among the different levels of local government—23 percent to provinces, 23 percent to cities, 34 percent to municipalities, and 20 percent to barangays. Prior to the Code, the inter-tier allocation of the IRA was 27 percent to provinces, 22 percent to cities, 41 percent to municipalities, and 10 percent to barangays.

The IRA share of each tier of local government is then apportioned to individual LGUs on the basis of population (50 percent), land area (25 percent), and equal sharing (25 percent). In the pre-Code period, the intra-tier allocation to individual LGUs was determined as follows: 70 percent on the basis of population, 20 percent land area, and 10 percent equal sharing.

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\(^5\)The amount of IRA that was actually appropriated during the pre-Code era was very often less than 20 percent of internal revenue taxes.
In addition to the IRA, the Code mandates that LGUs receive a 40 percent share in the proceeds from the utilization and development of national wealth (i.e., natural resources) within their jurisdiction. There was no equivalent provision in the earlier legislation.

**Fiscal Autonomy**

The Code likewise allows LGUs greater autonomy not only in mobilizing resources from local sources but also in allocating such resources to their various needs. First, it markedly liberalized the scope for LGU credit financing. The Code no longer requires central government approval prior to the issuance of LGU debt even as it allows greater flexibility as to the source and type of credit. Second, the Code also repealed some of the statutory requirements that limited the latitude of LGUs in allocating their budgets. For instance, the mandatory contributions to the Philippine National Police (which used to be set at 18 percent of LGUs' regular income in the general fund) and to hospitals operated by the DoH (which used to be equal to 3-5 percent of their regular income) were abolished.6

**Popular Participation**

Lastly, the Code provides that LGUs shall promote the establishment and operation of people’s and nongovernmental organizations (POs and NGOs) to become active partners in the pursuit of local autonomy. In particular, the Code mandates the participation of POs and NGOs in local special bodies like the local development council, local school board, local health board, and local pre-qualification, bids and awards committee.

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6 However, the Code increased other mandatory expenditures like the statutory reserves for calamities. Also, it increased the number of mandatory positions in the local bureaucracy.
CONSTRAINTS IN THE DEVOLUTION OF ENR MANAGEMENT

Unclear Delineation of Expenditure Assignment

At first blush, the Code is quite categorical in devolving functions related to ENR management to LGUs. For instance, Section 3 (Operative Principles of Decentralization) of the Code provides that “LGUs shall share with the National Government the responsibility in the management and maintenance of ecological balance within their territorial jurisdiction, subject to the provisions of the Code and national policy.” In more specific terms, Section 17 assigns the following functions and responsibilities, among others, to LGUs:

- To cities and municipalities – extension and on-site research services and facilities related to agriculture and fishery activities which include .... interbarangay irrigation system systems, water and soil resource utilization and conservation projects; enforcement of fishery laws in municipal waters including the conservation of mangroves; subject to national policies and subject to supervision, control and review of the DENR, implementation of community-based forestry projects which include integrated social forestry programs and similar projects; management and control of communal forests with an area not exceeding 50 square kilometers; 7 establishment of tree parks, greenbelts, and similar forest development projects); 8 solid waste disposal system or environmental management system, and services or facilities related to general hygiene and sanitation;

- To cities and provinces – pursuant to national policies and subject to the supervision, control and review of the DENR, enforcement of forestry laws limited to community-based

7 Including the management, protection, rehabilitation and maintenance of small watershed areas that are sources of local water supply as identified by the DENR.
8 Except those covered by the Integrated Areas Protection System.
forestry projects, pollution control law, small-scale mining law, and other laws on the protection of the environment; and mini-hydroelectric projects for local purposes (italics supplied).

In addition, the Code mandated local chief executives (municipal/city mayors and provincial governors) to “adopt adequate measures to safeguard and conserve land, mineral, marine and forest and other resources of the LGUs” (Sections 444, 455 and 465). At the same time, it calls on the local Sanggunian to “protect the environment and impose appropriate penalties for acts which 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” (Sections 447, 458 and 468).

Thus, a closer reading of the Code indicates that local autonomy in ENR management is limited, at best, and ambiguous, at worst. This problem comes about because the Code transfers to LGUs the responsibility over community-based forest and watershed projects, for instance, even while it allows the DENR to retain supervision and control over such projects. From this perspective, LGUs are given service responsibility but not the appropriate authority.

On the other hand, the authorities and powers given to local chief executives and local Sanggunians appear to be broader than the basic services and facilities devolved to LGUs and clearly duplicate and overlap with DENR functions. Consequently, these provisions cause confusion on what precisely are the LGUs’ responsibilities with respect to ENR management.

At the same time, Section 17 (c) provides the basis for the continued involvement of central government agencies in functions that are primarily assigned to LGUs by allowing central government agencies to implement “public works and infrastructure projects
and other facilities, programs and services funded by the national
government under the annual General Appropriations Act, other spe-
cial laws, pertinent executive orders, and those wholly or partially funded
from foreign sources.” Also, Executive Order (EO) 53 mandates
national government agencies (NGAs) to retain management con-
trol over all foreign-assisted projects and/or nationally funded
projects even if the same involve devolved activities. On the other
hand, because many of the so-called devolved NGAs are made
accountable for the overall outcome in their respective areas, they
dem it their responsibility to direct LGU behavior in support of
national objective. Thus, most of them tend to make full use of
Section 17 (c) of the Code and EO 53 regarding augmentation.
Hence, the prevailing regulatory framework not only effectively
permits but also encourages the existence of a two-track delivery
system, where both central government agencies and LGUs can
initiate devolved activities (Gonzalez 1996). In turn, such a situa-
tion results in lack of clarity on the accountability of LGUs vis-à-
vis DENR.

While some quarters may view this situation as but a mani-
festation of what they call the policy of distrust that many central
government agencies have put in place after the implementation of
the Local Government Code for the purpose of protecting their turf,
it may be viewed, perhaps more constructively, as a manifestation
of the difficulties in defining expenditure assignments when the
services/functions being devolved involve the spillover of benefits/
costs to other jurisdictions. In a sense, it also reflects the inherent
tension between local autonomy and national objectives.

Recall the decentralization theorem (see previous section) and
the “principle of subsidiarity,” the basic principles suggested by
the literature on fiscal federalism (or fiscal decentralization) to guide

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9 For instance, DoH is accountable for the overall health status of the country in the same
way that the DENR is accountable for overall ENR management results.
10 The ‘principle of subsidiarity’ suggests that spending and regulatory functions should be
exercised by lower levels of government unless a convincing case can be made for assigning
these to higher levels of government.
the assignment of expenditure responsibilities to LGUs. They imply that if the benefits derived from any given public service is local in scope (e.g., fire protection, road maintenance) then said service is appropriately assigned to lower levels of government. On the other hand, if the benefits derived from the public service under consideration is national in scope (e.g., national defense, foreign affairs), then it should be assigned to the central government.

However, in the case of services that have spatial externalities or those that are characterized by economies of scale, the decision on expenditure assignment will have to hinge on the geographical reach of the spillout of benefits or costs. In any case, it may happen that the most efficient jurisdiction may not coincide with a well-defined political jurisdiction. For instance, the watershed or the coastal ecosystem may cover several LGUs. While assigning functions involving externalities to the higher level of government (e.g., province) is an option, it may not be uniformly appropriate. Because of this, special or multipurpose jurisdictions like river basin development authorities are found in other countries.

Hence, a review of the appropriateness of existing expenditure assignment of ENR management functions in the Philippines in the context of possible interjurisdictional spill over of benefits and costs appears to be in order considering the low priority many LGUs, in fact, give to ENR management functions. However, in the conduct of such a review, it is important to keep in mind that the optimal level of environmental quality can differ across localities because of differences in environmental conditions and local tastes (Mendoza 1996). For instance, individuals' willingness to pay to avoid damages associated with waste water discharges depend on preferences and income of the local community, population density, and the assimilative capacity of the environment. Also, delos Angeles and Israel (1993) argues that the role of LGUs in enforcing rules and building resource conservation constituents cannot be understated because of the preference for on-site type of regulations.
Technical Capacity of LGUs in Performing Devolved ENR Management Functions

The lack of technical capability in the area of ENR management at the local level is an oft-repeated complaint. This problem stems primarily from three factors. First, among the devolved agencies, the DENR devolved the least number of personnel—less than 4 percent compared with 50 percent in other agencies. Unlike in other areas where the devolved personnel carried with them their expertise when they were transferred to the LGUs, the implementation of devolved ENR management functions was severely handicapped given the small number of warm bodies that were shifted from the DENR to the LGUs with devolution. Second, the position of the ENR management officer is considered an optional position under the Code. Budget constraints at the local level, intensified by the magnitude of the funding requirement for devolved personnel in other areas (especially health services), have caused many LGUs not to hire an ENR officer much less to deploy adequate staff to their ENR offices. Third, because all line functions are appropriated by the regional and field offices of the DENR while technical functions (and the concomitant specialized knowledge and skill) are lodged in the staff bureaus at the central office, LGUs have little access to the technical resources of the department (Gonzalez 1996).

Financing Issues

As with other devolved services, inadequate funding support hounds the implementation of devolved ENR management functions. On the one hand, the presence of vertical and horizontal imbalances means that many LGUs do not have adequate resources to cover the cost of devolved functions, in general, and devolved ENR functions, in particular. On the other hand, because the benefits of ENR management is oftentimes not confined to the local community, LGUs, especially lower level LGUs, tend to underprovide and consequently, underfund said function.

Vertical balance. As indicated earlier, the implementation of the Code resulted in significant increases in the IRA share of
LGUs, with barangays receiving the biggest proportional rate of increase, followed by cities and municipalities. Despite this, however, there is a widespread perception that a vertical imbalance exists in the sense that the LGUs' prevailing share in national taxes is deficient to cover both the cost of devolved functions and the cost of the so-called unfunded mandates. These unfunded mandates include the salary increases under the Salary Standardization Law and the additional personnel benefits under the Magna Carta for Health Workers. Analysis shows that while these concerns were unfounded in the aggregate in the early years of Code implementation (i.e., 1993, 1994, and 1995), this was not the case in 1996, 1997, and 1998 when the salary adjustments under the Salary Standardization Law were so hefty that the increases in the IRA were not able to keep up with the rising cost of devolved functions and unfunded mandates. However, a comparison of the aggregate IRA levels with LGU expenditure responsibilities (including devolved functions) in 1999 show that the natural increase in the IRA arising from the implementation of the Code is now sufficient to cover the inflation and population growth adjustments in the cost of devolved functions and unfunded mandates (Manasan 2002).

**Horizontal balance.** Provinces absorb 45.6 percent of the total cost of devolved functions, municipalities 47.4 percent, cities 7.0 percent, and barangays 0 percent. Contrast this with the mandated share of LGUs in the IRA: provinces 23 percent, cities 23 percent, municipalities 34 percent, and barangays 20 percent. It is therefore clear that there is a mismatch in the resources transferred and the expenditure responsibilities devolved to the different levels of local government.

In addition to the horizontal imbalance across levels of local government, an imbalance also exists across LGUs within each level. Thus, while the increase in the IRA share of some LGUs is not enough to finance the functions devolved to them, others have received resources beyond their requirements. For instance, in 1993, the per capita net resource transfer was negative in 37 out the 66 provinces
for which data were available.\textsuperscript{11} In 2000, 15 out of 79 provinces, 295 out of 1,525 municipalities, and 3 out of 83 cities suffered negative net resource transfers.

Clearly, there is a need to improve on the IRA distribution formula so that the expenditure needs of the various levels of local government and the different LGUs within each level are adequately taken into account. In this regard, it is important to remember that most estimates of the cost of devolved functions tend to understate the cost of devolved ENR programs and activities because the transfer of ENR functions was typically not associated with the transfer of personnel from the DENR to the LGUs.

At the same time, one must not lose sight of the interconnectedness of natural resources in defining and estimating the expenditure needs of various types of LGUs. Thus, one should be wary of formulae that attempt to shift more resources (in terms of IRA share) from noncoastal LGUs to coastal LGUs in recognition of the greater resources needed by the latter for coastal protection. Note that such an approach would tend to take resources away from upland LGUs (and consequently, management of the uplands), which may in turn result in greater lowland and coastal degradation. For instance, the protection of the watershed in Kiamba, an upland LGU, is as essential to the protection of Sarangani Bay as coastal resource interventions in Glan, a coastal LGU.

\textbf{Augmentation funds and pork barrel.} Congressmen are enamored by Section 17's provision with respect to augmentation funds because it allows them easy access to pork barrel funds by the simple act of inserting a special provision in the General Appropriations Act, which ordains that monies from the augmentation funds can only be released for “projects that are identified by members of Congress.” Consequently, it has come to pass that the budgets of devolved central government agencies grew disproportionately relative to the IRA. To wit, the IRA grew by 15 percent

\textsuperscript{11} Per capita net resource transfer in 1993 is defined as per capita 1993 IRA less per capita 1992 IRA less per capita cost of devolved functions adjusted for inflation.
yearly on the average between 1994 and 1997 while DA budget expanded by 48 percent, that of the DoH by 25 percent, and that of the DSWD by 22 percent. Although this trend was reversed in more recent years, the practice whereby Congressmen identify the type and location of projects financed from augmentation funds continue and is a major source of discord between Congress and LGU officials. Thus, while the augmentation fund provision of the Code presents a logical opening for the operation of a matching grants program for devolved activities with significant externalities and spillover of benefits (as in environmental or basic social programs), it has been used against the interest of local autonomy in practice.

**Fiscal inefficiency.** The IRA is by far the largest source of revenue to most LGUs. Indeed, it more than covers the cost of devolved expenditures for many LGUs. If local revenues come at a considerable cost to LGUs, then it is possible that they would rely upon the IRA for revenue and not exert a vigorous local tax effort including the imposition of user charges for environmental services and use of natural resources. Empirical evidence seems to support this view. Regression analysis shows that while intergovernmental transfers had a neutral effect on local revenue performance in 1985 (prior to the Code), it substituted for local tax revenues in all levels of local governments in 1992 and 1993 (Manasan 1995). This result is validated using data for 1995 and 1997 (Manasan 2000). This finding suggests the need to alter the IRA distribution formula so as to provide incentives for local tax effort.

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12 Interviews with local government officials invariably indicate that they equate increased tax effort with lower chances of winning an election.
OPPORTUNITIES IN THE DEVOLUTION OF ENR MANAGEMENT

Efficiency Gains from Fiscal Decentralization

Efficiency gains from decentralization have three dimensions: production efficiency, allocative efficiency, and fiscal efficiency (Guess et al. 1997). Productive efficiency refers to the cost at which goods and services are produced. Production efficiency is improved if resources are reallocated to get the most output with given resources. Production efficiency results very often because the costs associated with the practice of having decisions made in the center is minimized by the devolution of functions to lower level governments. For instance, there is less need for local officials to travel to the center of government to get some approval/authority signed. Also, with devolution, LGUs are able to economize by substituting inputs that are cheaper locally for other types of inputs. Some of these gains are shared by deconcentration to lower level administrative units, but to a limited extent, as lower level governments tend to be more autonomous.

Gains in allocative efficiency result when public spending is better matched with consumer preferences. One may observe the changes in the mix of publicly provided goods and services with the implementation of fiscal decentralization.

Lastly, fiscal efficiency deals with the ways LGUs finance their operations. First, LGUs should have the ability to establish some correspondence between the services that are provided to local constituents to the taxes they pay. Second, the system of intergovernmental transfers should provide adequate finance without overly distorting local preferences. Third, the system of finance for LGUs should not threaten macroeconomic stability.

An earlier analysis of the implementation of the Local Government Code indicates that production and allocative efficiency have improved with fiscal decentralization although some deficiencies are apparent with respect to the impact of the Code on fiscal efficiency (Loehr and Manasan 1999). Case studies have
shown that LGUs do things cheaper. This is certainly true in the case of the construction of roads, school building, and other local structures. At the same time, the mix of local expenditures has changed since the implementation of the Code, the expenditure pattern shifting in favor of education, housing, and general public services.

**Greater LGU Accountability through NGO/PO Participation**

It is generally accepted that the gains from fiscal decentralization would tend to come about because it fosters a governance structure that enhances the responsiveness of local decisionmaking to the people for whom the services are intended, thereby encouraging fiscal responsibility and accountability. In the Philippines, this tendency is further strengthened by the space that the Local Government Code provides to NGOs and POs in local special bodies. Thus, while devolution does not guarantee that local communities will reap more benefits and be more interested in sustainable ENR management, it does increase the chances that this will happen.

**LGU Share in National Wealth**

As pointed out earlier, the Code provides that LGUs receive a 40 percent share in the gross collection derived by national government from natural resources taxes, fees and charges and from its share in any co-production, joint venture or production-sharing agreement in the utilization and development of national wealth in their jurisdiction. At present, the proceeds from the LGU share in national wealth are used to finance local development and livelihood projects. Prospectively, with appropriate changes in the enabling law, these funds might be used exclusively for ENR conservation and management. However, at present, many LGUs experienced delays in the release of their share from national wealth even as they experience difficulty in verifying the amounts they are supposed to receive. Also, existing rules and regulations are such that only LGUs actually hosting a natural resource development project
(e.g., geothermal plant) are entitled to the share in national wealth. This is true of the 1 centavo/kWH the National Power Corporation (NPC) gives to municipalities hosting power-generating facilities. There is thus no scope for the NPC to make payments to distant jurisdictions in upper watershed areas, even though their actions may be important to the long-term health of a hydroelectric facility. A similar controversy hounds the division of the LGU share in national wealth from the Malampaya natural gas projects. While it is clear that the municipality that hosts the wells will be benefited, it was not quite as clear whether all municipalities that will be traversed by the pipes that will carry the natural gas from the well to the processing plant will likewise be given their share.

**Wider Scope for LGUs to Impose User Charges and Fees**

Abstracting from the disincentive effect of the IRA on the local revenue mobilization, the Code broadened the powers of LGUs to levy user charges and fees. In particular, the Code does not impose ceilings on the rates that LGUs may impose. This provision of the Code not only provides LGUs the handle in using market-based instruments in ENR management by LGUs but also allows them to establish some correspondence between the services they provide their constituents and the taxes/charges they pay, thus, inducing greater accountability. In fact, many LGUs have made use of this provision in the recent past. For instance, many LGUs around Lingayen Gulf have increased their fishery rentals/charges in an attempt to protect the environmental quality of the Gulf.

**Addressing Externalities and Overlapping Jurisdictions**

Given the poor correspondence between political jurisdictions and the optimal size jurisdiction from the point of view of ENR management, structures and mechanisms that will address spatial externalities and the associated underfunding of ENR functions by LGUs have to be supported and strengthened. These include the institutionalization of inter-LGU cooperation and the development of matching grants program in ENR management.
An increasing trend toward the formalization of inter-LGU collaboration in the delivery of area-wide services is evident in the formation of many metropolitan arrangements (e.g., Metro Cebu, Metro Naga, Metro Baguio) in the last decade. However, examples of such arrangements in the ENR area are limited. But where they exist, they have helped clarify the LGUs’ role relative not only to national government agencies but also relative to other LGUs. For instance, the Lingayen Gulf Coastal Area Management Council (LGCAMC) has provided the venue for sorting out the differences not only between the Bureau of Fisheries and Aquatic Resources (BFAR) and the municipalities around the gulf but also among the said LGUs themselves. Thus, the municipal coastal development plans of the various LGUs concerned were harmonized into the Lingayen Gulf Management Plan through an extensive and intensive consultation process. Prospectively, the importance of inter-LGU cooperation in drawing up bay-wide or gulf-wide coastal management systems cannot be underestimated. This can also be said of integrated policies that address watershed management and/or upland development.

Alternatively, a matching grants program for ENR management may be designed to help ensure that LGUs do not underprovide services that have significant spillover effects. Under such a program, the central government will provide LGUs with grants they will match and can use for a specific purpose only.13 This way, the program can provide an avenue for the central government to influence LGU spending without necessarily compromising local autonomy. Matching grants programs have been used with varying degrees of success in the education and health sectors in the last decade but have been conspicuously absent in the ENR sector.

13 In principle, the size of the grant should be consistent with the extent of the spillover of benefits.
REFERENCES


