



Evolution of public forestry administration in Latin America: Lessons for an enhanced performance

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Note: This article is based on four case-studies on institutional change, conducted in 1993 by FAO's Forestry Policy and Planning Division. The countries and consultants involved were: Argentina, E. Corradini; Brazil, J.C. Carvalho; Honduras, J. Blas Zapata; and Mexico, V. Sosa Cedillo.

A comparative study of the evolution of forestry institutions in Latin America offers both an insight into their poor performance and some meaningful suggestions for programmes to establish and strengthen the managerial capacity that the sector needs to fulfil its responsibilities. This article looks at changes in governmental forestry institutions in Argentina, Brazil, Honduras and Mexico.

[A forest plantation in Brazil, established between 1967 and 1986 when reforestation incentives were offered](#)

Latin American forestry administrations were established during the first half of this century: their objectives and challenges were very different from those of today. Their main "mission", which was clearly framed and guided by the economic development theory of the time, was to "appropriate the capital represented by the timber resource base". Their ultimate goal was to support national industrial development. This mission was driven by an economic philosophy that was accepted by the authorities and the even more influential technocrats in the government: the economic policy planners. Additionally, the economic contribution of forest resources to the implementation of this economic model was clear and tangible. These two factors gave the institutional structures- which are still largely in operation today - the political support and resources they needed to accomplish the mission.

The second major period of institutional evolution lasted from the mid-1970s to about 1985. The initial mission had by then lost its relevance in all these countries in the wake of a new concept of economic development, the advances of democracy, higher levels of education, greater access to information on the part of the general public and the development of ecological and environmental sciences.

During this second period, unlike the situation in the earlier part of the century, forestry's potential contribution and benefits in terms of economic development were far less visible to politicians and economic policy-planners. This uncertainty over the direct contribution of the forestry sector to the new economic model left the forestry institutions without a new official mission and, as a result, there was no overriding need to overhaul them.

This, however, did not prevent new and greater demands being made on these institutions. This lack of a clearly defined mission, coupled with the - outdated institutional structures, inevitably led to the poor delivery typical of the forestry institutions of that time in areas such as forest protection; the conservation of biodiversity; community participation and community-fostered appreciation of the value of trees and forests; the integration of trees in agriculture; and forest functions in the global environment.

The third and still ongoing evolutionary phase began in 1985. The stepping up of economic and social change and the greater understanding of the environmental role of forests have further heightened the demands on forestry institutions. There are two main reasons for this. The first is the adoption of the market economy as an effective means of achieving social well-being, with the attendant implements privatization, deregulation, turning over responsibility to the local level, the globalization of capital flow and opening up of international trade. The second is the general acceptance of the principle of sustainable development and of the special, planetary, ecological role of forest resources. This new perception of the forestry sector and new expectations once again caught the institutional structures off guard.

The present has in fact been marked by administrative restructuring, by a failure on the part of policy-planners and economic decision-makers to grasp the strategic importance of the forestry sector and by a lack of confidence in the ability of forestry institutions to make a meaningful contribution to economic development. As a result, the traditional forestry institutions have been overshadowed in the formulation of sectoral policies and are being relegated to subsidiary or mainly operational functions.

The following sections of this article examine the recent changes in the four case-study countries. Lines of action are then suggested in the concluding section whereby forestry institutions in Latin America could develop managerial effectiveness and secure the political support needed for the promotion of sustainable forest resource use.

The intention is not to judge the validity or success of decisions taken to date, but to concentrate on the lessons that can be learned from institutional change and to institute a process of organizational reform to enable these institutions to perform at a level commensurate with today's imperatives and responsibilities.

The present situation

The present context of forestry institutions is dominated by two broadly accepted economic development and environmental stances. The key economic factor is the influence on public administration of a new economic philosophy referred to generally as "public choice" (Shafritz and Hyde, 1992). This approach questions both the effectiveness of public administration and the incentives for it to adopt economically efficient administrative models. It advocates less central intervention, less regulation? decentralization, public administration management along private sector lines and the devolution of responsibility to provincial (state) and local levels. The assumption is that the ensuing social product will result in economic efficiency and ensure sustained economic growth, thereby raising national income to levels that will, within an acceptable time frame, help to overcome the main problems of under development.

In Latin America this approach found practical expression in the well-known structural adjustment programmes and in the privatization of public enterprises and services. These programmes promote the market economy as the arbiter of resource use, prices and output. The implementation of the related measures calls for a vigorous formulation of macro fiscal, monetary, agricultural and industrial policies.

The predominant environmental factors are the increasing importance now being attached to the conservation and rational use of natural resources for sustainable development and the

enhanced understanding of global environmental issues and their potential impact. The adoption of environmentally sound production methods is being pursued by raising community awareness, forming local non-governmental organizations (NGOs) and coordinating international community action. Governments have responded by setting up environmental institutions such as ministries of the environment and by adding an environmental component to their development plans and programmes.

The concurrent implementation of the new economic approach and sustainable development principles has greatly affected the context in which the forestry institutions operate and, consequently, their structures. This new economic philosophy has undermined the administrative authority and the policy formulation and analysis and budgetary allocation roles of public sector forestry institutions.

With the establishment of ministries of the environment, administrative responsibility has in some countries been shifted from the forestry to the environmental sector.

Honduras

Although structural adjustment was initiated in Honduras in 1982, it only gained momentum in 1986 when the Governing Board of the Honduran Forest Development Corporation (COHDEFOR) approved the privatization of public sector enterprises and of those in which the government had a majority holding (COHDEFOR accounted for 90 percent of the capital stock of the nine largest companies, valued at US\$ 45 million). The process of dismantling the state monopoly over the timber trade was also begun in 1986. A plan to cut public sector staffing was introduced in 1990 to trim government expenditure and reduce the high cost of government intervention. The local currency was devalued and salaries were frozen to level the economic imbalance. There was also uncertainty over the government's ability to meet its immediate statutory commitments to staff dismissed from the public administration. Faced with such a situation, the first to leave voluntarily were the most highly qualified foresters and, by the end of 1992, COHDEFOR had lost its most capable technical experts, with total staff numbers falling from 1359 in 1990 (Honduras National Report for the 17th session of LAFC, Venezuela, 1991) to 572 in 1993 (Estrategia Desarrollo Institucional, document from project FAO/HON/92/ 003). During the same period its annual budget fell from \$12 million to \$4.8 million. A total of 88 conservation sites covering more than 3 million ha were transferred from the Secretariat of Natural Resources to COHDEFOR so as to reduce the costs of managing nature reserves and national parks.

The Honduran Government issued a law on agricultural modernization in 1992. Although aimed at the agricultural sector, this law introduced sweeping changes in the socio-economic context of forestry administration. The more important changes were the restitution of growing stock ownership to the legal landowners; the termination of the government monopoly over sawnwood exports; the obligatory auctioning of public timber concessions; the withdrawal of public concerns from forest harvesting; the liberalization of the internal and external trade in timber and forest products; and the removal of restrictions on foreign investment in the forestry sector. The same law transferred the control and coordination of state forestry administration from COHDEFOR to the Secretariat of Natural Resources. The law also set various objectives for COHDEFOR, emphasizing its obligations to conserve public woodlands and promote industrial activity through the private sector (Decree Law No. 31-92, *Gaceta Oficial*, April 1992).

In August 1993, the National Congress passed a law decentralizing the National Institute of Forest Sciences, turning it into "a decentralized government body with its own juridical status and assets and administrative autonomy". The draft law advocated decentralization as the best means of optimizing forestry training and of providing a better service to the community by privatizing activities that had previously been entrusted to COHDEFOR.

[Private investment in forestry and forest Industry is being actively promoted in Honduras](#)

In June 1993, the government promulgated a framework law on the environment which established the Secretariat of the Environment. The aim was to foster a suitable framework for agricultural, forestry and industrial activities that were compatible with the conservation and rational and sustainable use of natural resources and with environmental protection in general.

Several of the responsibilities vested in the Secretariat of the Environment parallel those of the forestry institutions: land-use planning, environmental information, the planning of rational natural resource use, the administration of protected areas and the compilation of inventories. Their implementation will undoubtedly have major implications for Honduran forestry institutions.

Argentina

Argentina's National Forestry Institute (IFONA) was dissolved in 1991 (Decree No. 534/92) and its functions and staff divided into the two broad operational areas: industrial plantations and natural forests. Corresponding responsibilities were transferred to two different institutions. The Secretariat of Natural Resources and the Human Environment was mandated to implement the policies of conservation, rehabilitation and use of natural or native forest stands, thereby safeguarding their quality and diversity and ensuring sustainable exploitation. The secretariat has a Directorate of Native Forest Resources with a staff of 15 professionals to handle forestry matters, fire control, agroforestry, forest management, inventories, statistics, inspection and regulation and programme and project formulation.

All industrial plantation responsibilities were assigned to the Directorate of Forest Production under the Secretariat of Agriculture, Livestock and Fisheries, which is part of the Ministry of the Economy (Decree No. 438/92). This directorate, with a staff of 42, is responsible for forest promotion and development (still including an operational subsidy programme), economic planning and forestry projects and technology. Subsidies for the promotion of forest plantations were withdrawn in 1992 but subsequently reinstated at lower levels.

Forest research and extension was entrusted to the National Institute of Agricultural Technology (INTA) which also answers to the Secretariat of Agriculture, Livestock and Fisheries. INTA was assigned the 25 IFONA pilot stations which conduct most of the research activities linked to forestry and ecology.

There have been no organizational changes in the National Parks Administration under the Secretariat of Natural Resources and the Human Environment. However, the freeze on public sector recruitment means that there are only 180 rangers to patrol a total area of approximately 2.5 million ha.

Mexico

In Mexico, intense government environmental activity and extensive economic difficulties led to contextual changes as early as the beginning of the 1980s. Administration for wildlife and protected areas was transferred to the Secretariat of State for Urban Development and Ecology (SEDUE) in 1982. The Undersecretariat of Forestry reduced its general directorates from six to four in 1985 before ceasing to be part of the Mexican public administration (August 1985). Forestry activities were then assigned to a single directorate reporting to the Undersecretariat of Agriculture and Forestry. In the same year the National Institute of Forestry Research, which had been under the Undersecretariat of Forestry, became the National Institute of Forestry and Agricultural Research (INIFAF), operating as a decentralized agency of the Secretariat of State for Agriculture and Water Resources (SARH).

[The 1992 agricultural modernization law gave control of forest resources back to landowners](#)

The "state forestry commissions" were disbanded in 1986, thereby ending the advisory functions of the state governments. In the same year, the SARH formally approved mechanisms of agreement with state governments, ejidos, communities and organized groups, involving them in the protection, promotion and production of forest resources.

The Undersecretariat of Forestry was reinstated in 1989, mainly because of the inadequate attention that had been paid to sectoral demands (by foresters, producers and operators).

Competition obliged several large-scale industrial plants to cease operating from 1988. By the end of 1993, four of the country's eight pulp plants and an unspecified number of sawmills had ceased to function. Government plants were generally privatized during this period, with the number of public forestry agencies and enterprises falling from 36 in 1981 to only two government concerns, one company with a majority government holding and three parastatals in 1992. The federal government was thus virtually excluded from direct intervention in timber production.

Forestry legislation was modified twice during this period. In 1986 emphasis was placed on governing forest management and eliminating the concession system, thereby terminating the government's monopoly over concession holders and opening up the sector to greater competitiveness. The amendments of 1993 were introduced to attune forestry legislation to a market economy. Article 27 of the Constitution, governing land-ownership, had previously been modified. With this and the amended forestry legislation, forest land was now available on the property market under the law of supply and demand. Corporate investment in the forestry sector was raised and new forms of association were established between collective forest owners and investors to step up productivity and competitiveness. The Mexican industry initially suffered a drop in production because of its difficulty in competing with Canadian and United States counterparts.

On the environmental level, SEDUE was set up in 1982, with part of its remit being the management of wildlife, including national parks and protected areas. It was then disbanded in June 1993 to make way for the Secretariat of State for Social Development (SEDESOL), entrusted with the social aspects of the structural adjustment programme, and also partly responsible for sustainable management and the environment. SEDESOL regulates the use of renewable natural resources and the assessment of environmental impact.

Brazil

Economic reform programmes and environmental demands have brought about major changes in Brazil's forestry institutional structure. Tax incentives for reforestation were suspended in 1987 and, with them, their economic dominance of Brazilian forestry policy which had led to an investment of some US\$ 3000 million between 1967 and 1986 as well as the planting of some 6 million ha of woodland. The incentive system was withdrawn because it was economically inefficient and because the structural adjustment programmes called for tighter controls on public expenditure.

[The creation of the Brazilian Environment Institute in 1989 led to more attention being focused on non-timber resources, for example rubber tapping](#)

The constitutional reform of 1988 decentralized responsibilities and implementation authority for renewable natural resources, and particularly forest resources. Authority to legislate on forests, hunting, fishing and fauna, conservation of nature, protection of the soil, natural resources and the environment, and the control of pollution was no longer exclusively restricted to the "Union" but was also extended to the states and Federal District (art. 24,

Federal Constitution). State bodies were given greater independence in implementing forestry policy, which changed the structure of state-level forestry administration. In Rio de Janeiro the State Institute of Forests was set up to replace the Department of Renewable Natural Resources; the Institute of Land Resources, Mapping and Forests of Paraná became the Institute of Environment; while the Institute for Environmental Protection and Control of Mato Grosso del Sur was succeeded by the State Environment Foundation. Similar major changes occurred in Minas Gerais, Rio Grande del Sur, Santa Catarina, Goiás and Mato Grosso.

The "Our Nature Programme" was introduced in 1988 (Decree No. 96.944, 12 October 1988) as the government's response to popular pressure and to national, international and NGO demands to do something about deforestation in the Amazon region and the rights of indigenous peoples. The programme's objectives were to check negative human impact on the environment and renewable natural resources; to structure the environmental protection system; to develop environmental education and public awareness of the need to conserve nature; to organize activity in the Amazon basin on the basis of land-use planning; to rehabilitate human-impacted ecosystems, and to protect indigenous communities and populations dependent on non-wood forest products such as latex and Brazil nuts.

The Brazilian Environment Institute (IBAMA) was formed in 1989 after the suppression of several public bodies involved in the administration of natural resources: the Brazilian Institute of Forestry Development, the Special Environment Office, the Fisheries Superintendency and the Rubber Superintendency. The formation of IBAMA met the twin needs for economic streamlining and for more effective promotion of the use of renewable resources along the lines of sustainable development. IBAMA was presented as an option to integrate functions, align state and federal actions in terms of sustainable development and to promote greater involvement of individual states.

The Ministry of the Environment was established in 1992 (Law No. 8.490, 19 November 1992) to plan, coordinate, supervise and control activities related to national environment policy and the protection, conservation and sustainable use of renewable natural resources. The establishment of this new ministry raised the political status of environmental management and consolidated the institutional approach which made forestry a component of environmental administration. All forestry policy-making and regulatory responsibilities were transferred from IBAMA to the Ministry of the Environment, which was also charged with planning and preparing programmes for the sustainable use of forestry resources (with IBAMA acting as technical and executing agency).

On the economic level, industrial concerns with a majority government holding were privatized: for example, ARACRUZ Celulosa, with a daily production capacity of 1400 tonnes of short - fiber pulp, and ACESTA, the largest charcoal-based stainless steel plant in the country.

Conclusions

Challenged by government environmental institutions and NGOs, the forestry institutions have lost ground in policy formulation and decision-making, and have often undergone structural erosion or been eliminated. But this does not on any account consign them to extinction; on the contrary, the inputs and outputs of sustainable development call for the continued existence of forestry institutions that are full-fledged administrative units. Nevertheless, the strategies, organizational structures and operating approaches of public forestry institutions need to be care fully overhauled and adjusted to the new context and demands.

This review of four case-studies confirms the organizational theory that institutional structures need a clearly defined mission and meaningful strategies if they are to be successful (Chandler, 1962, cited in Dessler, 1976). The forestry institutions of the earlier period

described in this article performed far better than those of today in terms of delivery. This is not a value judgement as to whether the objectives and mission were appropriate in economic, social or environmental terms, but rather an important pointer that good results and high performance are feasible only when institutional structures are designed in keeping with a clearly defined mission and in full consideration of the social, political and economic context.

The social and political context is decisive in determining the institutional mission. This was the factor in the 1940s that led to the adoption of the import substitution model and, in the 1970s, to the present export model, with their subsequent impact on the forestry sector. But, however important consideration of the socio-economic context and socioeconomic change may be, this is not the sole factor to take into account. If the public forestry institutions are to perform adequately, governments must give them a well-defined mission and this must, in turn, be a fully integrated part of national development actions. The most appropriate way of showing such political and policy-planner support is to provide sufficient funds and authority to match anticipated results. However, if the exercise is directed by a poorly designed strategy (as in the case of the import substitution model) the paradoxical result will be high institutional performance but low environmental output and unsustainable management.

The fading relevance of the import substitution model and the changing socioeconomic context have left the public forestry institutions without a strategic mandate. Yet, these institutional structures have remained essentially unchanged since they were created in the 1930s and 1940s with, at best, minor amendments and changes in form, adopted in response to the pressures and imperatives of social and economic developments. Most organizational reform has amounted to automating the old ways of operating without making any change in the root causes of poor forestry institution delivery.

The new challenges facing the forestry sector demand a thorough revision of the internal organization of public forestry institutions: adjustment and modernization should be guided above all by results. The processes and assumptions of the current economic model vis-à-vis the forestry sector and preconceptions of its potential role in development will have to be called into question. Existing experiences and means can and must be put to account, although, admittedly, considerable changes have in fact occurred on the levels of information, coordination, decision-making, decentralization and work organization. New technologies should be employed to identify innovatory ways of shaping the multifunctional mission demanded by effective sustainable development. Only thus will it be possible to give public forestry institutions the operational capacity to step up performance and achieve the sectoral objectives and goals.

International technical assistance will have a greater and more positive impact by adopting a programme approach that supports governments at every step of the structural modernization and implementation process. While efforts are made to help governments reshape and define the sectoral mission, policy planners need to be persuaded that the forestry sector can make a very real contribution to national development.

To sum up, the main findings of this review point to four key factors in finding the intervention areas and programme orientations to bring about institutional change and a more sustainable use of forest resources: *i)* the importance of determining the institutional "mission"; *ii)* the absolute need for policy-makers to be convinced of the relevance of this mission and to be fully aware of the role of forestry in development; *iii)* the enhanced institutional potential that results from structures designed with a specific strategy and mission in mind; and *iv)* the urgency of initiating public forestry institution modernization within a medium-term programme and action perspective.

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