# Science, Use Rights and Exclusion: A History of Forestry In Francophone West Africa

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## TABLE OF CONTENTS

ACKNOWLEDGEMENTS	I
INTRODUCTION  FROM 1900 TO INDEPENDENCE  FROM INDEPENDENCE TO TODAY  SCIENCE DOES NOT SUPPORT EXCLUSION  CONCLUSION  REFERENCES	1 2 6 8 9

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#### INTRODUCTION

In francophone West Africa, the forest services asserted their control over forests by claiming superior knowledge which gave them exclusive competence to manage forest resources according to 'scientific principles'. This paper shows that even today, despite the challenge to such scientific principles by more recent research findings, the legacy of the past approach continues to dominate community based forest management and control.

Fears of deforestation and forest degradation provided the basis for regulation of forestry production and marketing throughout the 20<sup>th</sup> century. In the French Colonial West African Sahel, an explicit distinction between urban-dwelling 'citizens' and rural 'subjects' was encoded in law and affected all sectors (Mamdani 1996). 'Citizens' could vote, had civil rights and access to civil courts. Citizens were also given licences and production quotas to engage in the commercial exploitation of, and trade in forestry resources. 'Subjects' by contrast were managed by appointed administrators and lived under administrative laws. In the case of forestry, citizens were given lucrative commercial rights while subjects were restricted to subsistence use of woodland products.

'Participatory' and 'community based' forestry efforts of the last decade have not been able to dismantle a long tradition of forest management which separates rights and users into two distinct categories – commercial and subsistence. Under this separation, forest services and the elite typically gain the rights to harvest, transport and market commercially valuable forest products. Poor rural dwellers at best can access forest products with little or no commercial value under a system of usufruct rights. Forest policies allocate rights and structure contractual arrangements in ways that protect this dual system of control and management. Social contracts and networks linking state agents and the commercial elite still help maintain these separate spheres of profit and use.

The claims of 'scientific' forestry management have served to consolidate control by the state over commercially valuable natural resources and the profits that flow from them, and to exclude the majority of rural dwellers and resource users from such lucrative sources of income. Recent moves to pursue 'participatory' or 'community-based' management of forests have done little to challenge this separation.

Current forest management programs aim to slow deforestation by protecting forests from firewood and charcoal producers. These latter activities, however, have not been shown to cause permanent deforestation since natural regeneration in the Sahel tends to be robust (Fairhead and Leach 1996; Ribot 1999). The principles of exclusion on which current forest management practices are founded stem from a colonial past, and continue to allocate subsistence rights alone to rural communities while urban-based merchants and elites can capture commercial uses, rights and profits.

#### FROM 1900 TO INDEPENDENCE

In July 1900, the Colonial Service of Agriculture and Forests enacted French West Africa's first forestry legislation. The code created permits, concessions, protected species and areas, and usufructuary rights. It placed forests directly under colonial state control, with the Governor-General and his delegates controlling allocation of permits and concessions. Commercial exploitation rights were handled by the executive branch of government – not the forest service. Forest clearing, and cutting of "high value" species could only be conducted with permission of the Commandant of each Cercle. The code also established use rights for local populations: "In the woods and forests of the Domaine [of the French West African colonies] not under concessions to individuals, the natives will continue to exercise the rights of usage (gardening, communal woodcutting, grazing, hunting, etc.) that they currently enjoy. If their behaviours of the abuse of the above-announced rights compromise the forest riches of the forest Domain, the Governor-General will take by decree all necessary prohibitive and protective measures." (GGAOF 1916, art. 23).

Thus this first West African forestry code placed commercial rights under state control while relegating rural populations to forest products considered to have no commercial value. Indigenous populations were given, in effect, the right to harvest only those products in which the forest service did not have an interest (Ribot 1999). But, these use rights could vanish at any time if foresters and administrators allocated such woodlands to commercial users. They were decidedly second class rights, dependent on the paramount rights of commercial users. The goal of such a policy was to protect commercially valuable species from exhaustion by commercial and indigenous users, via the allocation of permits and

concessions and collection of forest taxes by government agents. In the colonial period, these permits and concessions were usually allocated to European and urban merchants.

Over the last hundred years, there have been only slight variations in this approach (GGAOF 1916:3-7; RDS 1965; RDS 1994; RDM 1973; RDM 1986a; RDM 1994b; BKF 1991; RDN 1974; RDN 1993a). A February 1908 law established a tax on firewood and charcoal and required permits for their transport (in addition to the already existing production permits). The law required taxes to be delivered to the closest *Commandant de Cercle* who would, in exchange, deliver a receipt which served as a transport permit and proof that taxes had been paid.

In response to concerns voiced by the commercial lobbying group, *Union Colonial Française*, working in the dry Sahelian Zone, the Governor-General established two gum arabic (*Acacia nilotica*) reserves on the Senegal River in 1913 (Freudenberger 1992: 195). He also signed an order in February 1913 placing Gonakie (*Acacia nilotica tormentosa*) forests along the Senegal River under protection for conservation purposes (GGAOF 1913: art.1). In this manner indigenous use rights were further limited in forest reserves, beyond the existing restrictions of the forest code that applied to all forests within the colony.

Meanwhile, colonial administrators in the tropical hardwood forests of the West African coast focused their attention on cornering the lucrative timber markets for the benefit of their European clients. The colonial historian R.L. Buell reported that "Before 1924, natives held [forest] concessions and sold wood upon the same basis as Europeans. But the competition became so keen and native cutting so difficult to control that in an *arrêté* [administrative order] of 1924, the government declared that a native could not cut and sell wood except for his own use without making a deposit with the government of twenty-five hundred francs – a prohibitive sum." The same system of concessions was used in the French Congo, resulting in "...the locking up of the resources of the territory in the hands of a dozen large companies..." (Buell 1928: II256). In 1930, one such company, the *Compagnie Forestière Equatoriale*, held 100,000 hectares of lease concessions (Hailey 1938:1005)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Class separation of commercial users from rural dwellers was also reinforced through economic means. Within the colonies, no commercial exploitation permits were free (GGAOF 1935:art.79). Concession licenses (called temporary permits – lasting 25 years, but in special cases up to 50 years) could be allocated after the sale of the plots by public auction announced one month in advance in the *Journal Officiel de la Colonie*. A minimum sale price would be fixed by the Lieutenant-Governor and

A New French West Africa forestry code (covering Mauritania. Senegal, Guinea, Sudan, Niger, Upper Volta and Dahomey) was ratified on 4 July 1935 and stands to this day as the model for forestry law in all of Francophone West Africa (GGAOF 1935)<sup>2</sup>. This code was much more elaborate than that of 1900. The new code reaffirmed state ownership and control of the territory's forest and all forest products. The code outlined limited non-commercial usufructuary rights for indigenous populations. with these rights "...strictly limited to the satisfaction of personal and collective needs of users" (GGAOF 1935: art.12)<sup>34</sup>. The 1935 code required permits for all commercial forest exploitation, introduced various use restrictions, and specified penalties for infractions. These permits were not allocated by the Forestry Service, but rather by the Governor-General, the Lieutenant Governors and the Minister of Colonies<sup>5</sup>. Allocation of permits was a commercial matter to be handled by an administrative branch of government, rather than a forestry oriented technical service. Most other provisions of the old code were also carried over into this new one. The notion of classified (or reserved) forests was introduced with this code. Further, as before, lands not under cultivation – including forests – could be alienated without compensation<sup>6</sup>. These policies left indigenous rights within the forest domain, even usufructuary claims or rights, legally tenuous, at best.

the sale would go to the highest bidder. Lieutenant-Governors and the Minister of the Colonies held the power to allocate the permits, and to set the fees for the exploitation rights.

<sup>2</sup> The code was further elaborated in a subsequent decree, Gouvernement General de l'Afrique Occidentale Française, 1935c.

<sup>&</sup>lt;sup>3</sup> Trees cut for canoes required permits (art.12). In classified forests, use rights are limited to collecting dead wood, fruits, edible plants, medicines, and any other products explicitly recognised in the statute of classification (art.13). In protected forests indigenous collectives may continue their commercial exploitation of fruits and gums of palms, karites, gum trees, rotins and kapoks. But in classified forests such exploitation will require a 'free permit'.

<sup>&</sup>lt;sup>4</sup> Under the 1912 Ivorian code "natives continue to exercise in all of the forest, under concession or not always with the exception of reserves, use rights that they enjoyed before. These rights exclude all exploitation of industrial or commercial character. They are always forbidden to destroy species of value on a list produced by decree of the Head of the Colony".

<sup>&</sup>lt;sup>5</sup> Exploitation permits were under the direct control of the Lieutenant-Governors for lots less than 2,500 hectares, and for 2,501 to 10,000 hectare lots the Governor was responsible, while for areas larger than 10,000 hectares, the Minister of the Colonies took control. GGAOF 1935:art.27.

<sup>&</sup>lt;sup>6</sup> Hailey 1938:786. The requirement of compensation for agricultural lands was officially introduced in a 1935 reform.

The use rights section of the 1937 application decree specified the rights of 'natives' to make canoes and then enumerated the many tree species protected from their use. These protected species could only be cut when a permit had been obtained for the clearing of agricultural lands. Tapping of gum palmurine was the only use allowed for commercial purposes (GGAOF 1937: art.11-18). These orders placed control, even over use rights, largely with colonial administrators.

The Lieutenant Governors were charged with setting out procedures by which concessions would be allocated in both the classified and protected forests (GGAOF 1935: art.10. -Sept.). Lieutenant Governors or their delegates also allocated "Individual" exploitation permits outside concession areas. This law required that all permit holders be of French nationality (GGAOF 1935: art.11. -Sept.). Since by law the only Senegalese granted French citizenship were those living in the urban centres (the *communes*) and fluent in French, this decree concentrated commercial control in the hands of urban merchants. In 1941, the Forest Service introduced *merchant licenses*. These licenses were only for "French citizens". In short, commercial rights were only for Europeans and other urban elites. Although distinctions between citizens and subjects (rural populations) were officially abolished in 1946 (Gellar 1982:17), the effects of privileging urban dwellers in control over the trade in forest products has lasted ever since (Ribot 1998).

Within the management system created in the first half of the century, the Forest Service set little policy, acting primarily as foot soldiers of the Governors, enforcing forestry laws and policing the forests. Through the 1950s permits and concession allocation remained in the hands of the Governor and his delegate in the *Cercle*<sup>7</sup>. In the Second Inter-African Forestry Conference held at Pointe-Noire in July 1958, one of the main recommendations was that non-reserved forests should be put under the direct management of the forest service. The conference also recommended the introduction of regional forestry planning. This involved the drawing up of regional management plans in each country, plans that were viewed as technical tools requiring expert Forest Service advice (Catinot 1958:26-7).

Although colonial foresters like Delevoy (1923), Lavauden (1930;1927), and Meniaud (1931), believed commercial forestry caused forest decline, they did little to control its consequences. Instead, they set up regulations to control the *revenues* it generated. For commercial forestry, the few

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<sup>&</sup>lt;sup>7</sup> République Française 1941:443, art.4.

controls concerned *who* could do it, rather than *whether* or *how* cutting should take place. An elaborate system of forestry regulations served to enrich a small, mostly urban elite while relegating rural people to those uses that did not interfere with trade.

This is the system that the countries of the Sahel inherited at Independence. Each Sahelian country has retained the laws of the 1935 code, revised again and again, but with little substantive change.

#### FROM INDEPENDENCE TO TODAY

After independence, the 1935 code remained in force in most francophone West African countries until the 1980s. From the late 80s onwards, many Sahelian countries rewrote their forestry laws, re-labelling their approach as 'participatory' and 'community-based', but barely changing the separation of commercial from use rights. To this day, production and marketing permits are still under Forest Service control, which are still allocated to powerful, usually urban-based, merchants. Rural populations continue only to have access to subsistence forest uses. In the projects where they have been integrated into commercial activities, it has been as labourers (Ribot 1995; 1996; 1998; 1999) rather than as citizens with access to lucrative forestry markets.

While participatory projects aim to increase rural benefits, no project has dared to question the exclusion of villagers from forestry markets, by policy which seems to benefit traders (see Ribot 1995;1998). In Burkina Faso, the villagers 'participating' in the United Nations Development Program and FAO participatory forestry project in Nazinon begged project and government personnel to help them gain access to urban markets (Delnooz 1999)<sup>8</sup>. Neither government nor donors supported their desire to engage in trade beyond local sales. In Senegal, the new laws allow rural populations to engage in production, but still give transport permits and licenses to urban-based merchants alone (Ribot 1999c-WD; Delnooz 1999). In Burkina Faso and in Niger only merchants licensed by the forest services are permitted to transport wood, and they must paint their trucks green to signal they are wood carriers. This arrangement has created a situation where peasant producers wishing to carry wood to cities for sale are forced to sell to the limited number of state-designated wood merchants.

<sup>&</sup>lt;sup>8</sup> In Senegal too, forest villagers begged for access to commercial production rights, but these rights were denied (Ribot 2000)

In Mali, the restrictions on marketing are fewer<sup>9</sup>. There are transport permits, but no license is needed to enter the wood trade. However, it is very difficult to break into urban markets. The system is one in which wood merchants distribute wood to a series of sellers from whom they collect sales revenue each day. In this manner they are paid for the wood they have brought to the city over a period of time. But small producers who do not live in town cannot wait a week or two for their wood to sell. Furthermore, they have no recourse if the seller refuses to pay them, which means it is too risky for small producers to enter the urban wood trade. The Forest Service also requires a tax to be paid before transport permits are given, which makes it difficult for small producers to transport wood, since they cannot afford to pay taxes in advance of selling their product. They must also pay for transport, leaving them dependent on loans from truckers and moneylenders if they are to succeed. There are, nevertheless, a few small producers in Mali who do manage to sell small loads of wood in the city and reap benefits from doing so. While the Malian transport and tax system does create barriers to market entry, it does not completely exclude small producers and some manage to benefit (Ribot 1995).

In addition to maintaining this separation between commercial and use rights, today's decentralised 'participatory' forestry projects ensure that rural populations are hedged about by a system of administrative rules that give them little choice over how to manage the forest resources on which they depend. Rural populations are relegated to 'participating' within environmental management plans drawn up by technical agents of the forestry administration. Their opportunities and obligations under current laws are entirely circumscribed by rules written by administrative bodies. They are given no new rights, but rather are given the opportunity to participate in a project which is not of their own design.

Except for the case of Mali, local input into forest management plans is only through *advisory* bodies that have no decision-making powers

<sup>&</sup>lt;sup>9</sup> Nonetheless, other kinds of controls are maintained. "The main concern proposed in local conventions is the banning of charcoal production because it is considered to exhaust fuel wood resources and because local people do not use charcoal, since it is not cost efficient when wood is adequately available. Most current charcoal production after 1991 is by 'free riding' individual villagers who saw an opportunity of earning some money. They were profiting from the vacuum created after the decline of the Forest Service. The main market for charcoal is Bamako and many villagers are not happy with this situation, because they see it as free exportation of trees from the area" (Benjaminsen 1997:137).

(Ribot 1999c). Control over decisions has not been devolved to local elected bodies. Mali is a notable exception since local councils will have the power to decide whether or not forests within the commune's territory will be cut. In other Sahelian countries, 'participatory committees' that do not represent the community or local authorities speak on behalf of the local population (see Agrawal and Ribot 1999). Like the privy councils of the colonial period, these bodies are not necessarily representative and further, their role is just to inform a planning process over which they have no determining control.

In short, with the exception of Mali, the current movement in favour of decentralisation and participation in West Africa has done little to establish new rights over forest resources for the vast majority of rural people. Participatory projects and laws create *privileges* to be allocated mostly by forestry agents and elected councillors rather than *rights* for communities and individuals. Such projects and laws permit rural people to engage in local exchange, but exclude them from the lucrative long-distance trade.

#### SCIENCE DOES NOT SUPPORT EXCLUSION

Ironically, management plans and tight controls on both commercial and subsistence forest uses are, for the most part, not necessary for environmental maintenance (Ribot 1999d). Almost all available studies show that natural regeneration in the Sahel is remarkably robust<sup>10</sup>. The scientific rotation of plots for cutting on 20-year cycles – required in most management plans – is not needed in an environment where natural regeneration takes place on its own. Certainly rural people wishing to foster regeneration might want to apply some management techniques, but in an environment where the forest has been cut and grown back many times over the centuries, cutting for wood fuel does not lead to permanent deforestation. Systematic management can augment production, but is not needed to 'save' the forest from local use. If

<sup>&</sup>lt;sup>10</sup> It is astonishing how little is known about natural processes of dryland forest regeneration. Bailly et al. (1982 p.28) noted that "knowledge of this subject is very insufficient..." Bellefontaine (1997, p.1) recently wrote: "The deficiency of knowledge relative to natural plant reproduction by shoots, coppices and branch rooting is flagrant: there is absolutely no existing synthesis for the Sahelian and Sudanien zones." A quick survey of the literature on regeneration in the Sudanian and Sahelian forests and wooded savannas, however, indicates that natural regeneration is occurring (Ribot 1999c).

anything, rural dwellers need protection from commercial woodcutters so that too much of their woodland is not clear-felled.

Management systems of today are rooted in a paternalistic and technocratic attitude. Villagers are all too often seen as land-hungry peasants, lacking the 'capacity' to make technical decisions over the use of forests, which forestry agents believe would be destroyed if not constrained by rules and regulations (see Fairhead and Leach, 1996; Peluso, 1992; Guha, 1990; Blaikie, 1985; Thomson, 1995:3). As in the colonial period, forests today are seen as being threatened by the actions of unregulated indigenous populations (Hubert, 1920:421-2, 426-3; Delevoy, 1923:471; Aubreville, 1939:486-7)<sup>11</sup>. Foresters have consistently argued that their 'expertise' is needed to control these risks. Rural populations are cast as lacking the 'capacity' for understanding and for implementing the technically complex demands of forest management and protection. They need 'capacity building', a view that justifies the channelling of rural populations into activities defined by the Forest Service. Villagers are given the opportunity to cut and sell forest products under the strict supervision of Forest Service agents. Such 'capacity' arguments, many of which are unfounded<sup>12</sup>, are used as excuses to stop resource control being devolved to rural populations, and keep them under the close tutelage of foresters.

#### **CONCLUSION**

Principles of scientific forestry might justify certain management practices determining *how* forests were used. However, they could never justify procedures concerning *who* profits from forest exploitation. The latter is a largely political matter, not a directly ecological concern. Yet, the rules of forestry that evolved over the 20<sup>th</sup> century, based on notions of 'protecting' and 'managing' forests, were almost all oriented toward determining who could gain access to forest land and how much they

<sup>&</sup>lt;sup>11</sup> Such fears of destruction are often wrong (cf Fairhead and Leach, 1996; Sullivan, 1996; Tiffen and Mortimore, 1996; Ribot, 1995). Much of the perceived ecology of the Sahel is an ecology of control. Fears of deforestation and the beliefs about its causality are often more relevant to justifying regimes of control than protection of nature.

<sup>&</sup>lt;sup>12</sup> Fiszbein (1997), reviewing World Bank projects in Latin America, found that 'capacity' follows the devolution of powers. All local groups she examined had the capacity once they had the resources to work with. Hence, the notion that resources cannot be devolved due to lack of local 'capacity' is little more than an excuse not to devolve resources to local bodies.

would be taxed. While there were numerous scientific and commercial arguments used to justify forestry policies, their effect – through protecting of species, creation of permits, licenses and quota systems – was to channel access to lucrative forestry activities into the hands of a largely urban elite. Very few of the rules about how to manage forests or how much could be cut were ever respected. But, the rules about who could engage and the taxes to be collected were much more rigorously enforced.

In the more recent era, great stress is placed on local participation, and design of elaborate plans for managing local forest use. These plans simultaneously spell out the use rights of local populations and new labour obligations if they exercise these rights. Management plans are almost always developed for commercial wood-fuel or timber production. Rural populations are allowed to participate in production under such plans, but they must manage burdensome forest rotations and regeneration-protection schemes. They are still obliged to sell their forest produce to licensed transporters and merchants who have exclusive access to the urban market. All this is based on the argument that such management is a 'scientific' necessity.

Ironically, the principles behind forest management plans in Francophone West Africa cannot be supported by ecological science. Elaborate management and rotational schedules are not necessary in an area where natural regeneration is robust. Woodcutting itself does not lead to permanent deforestation, and woodland regeneration does not require human intervention. Rural populations do, however, face problems of forest product shortages after woodcutting by commercial producers. When permits are given to commercial producers, they often cut intensively in the area around the village, leaving local people without forest produce between cutting and regeneration. This problem has not been recognised by foresters, nor has it been used as a justification for their management efforts.

One might expect that 'participatory' forestry programs would take greater account of problems experienced by local populations. Even current participatory and community-based projects do little to shift the power of forestry departments over planning, production, and marketing. At best, they advocate in favour of local populations gaining a share of the proceeds from sale of forest products. Even here the increased income is tiny (Ribot 1998). When villagers demand access to markets, their demands are usually strictly denied by foresters and 'participatory' development projects.

How is it that foresters can still control forest commerce? By determining where trees can be cut, how much can be cut, who can cut and with what methods. Control over access, transportation, and marketing is still in the hands of the forest departments. Commercial uses are put in the hands of licensed professionals. Subsistence uses are only allowed when they do not threaten commercial values. Such controls are exercised through forestry codes and via management plans.

Such an approach to forestry management also fits into a larger system of citizen and subject where citizens have commercial rights and subjects are relegated to usufruct. Use 'rights' of rural populations are privileges that can be taken away at any time, if commercial interests choose to expand their operations. At Independence, the distinction between citizens and subjects was dropped in law, but was maintained in the *de facto* distribution of rights between rural and urban worlds. The trend until the 1990s was one of progressive centralisation of forest management carried out under the scientific forestry model in which urban merchants were given rights to cut woodland areas in rotation as specified by the colonial and national forest services.

Over the last decade, decentralisation of forest management has become a favoured policy initiative around the world. Such policy initiatives are undertaken in the belief that local people's participation will increase use and management efficiency and equity, and will reduce conflicts around forest resources. However, in none of the initiatives thus far undertaken have commercial forest-product rights become openly available to local populations. Rights to commercial sales have been tightly guarded by forest administrations in the name of forest protection. A central aspect of equity, enfranchisement and citizenship is access to commercial opportunities, not just subsistence privileges. Current efforts to devolve forestry rights to local people must also dismantle the separation between commercial and subsistence rights. Otherwise they run the risk of strengthening the divergence between rich and poor people that decentralisation and participatory approaches have aimed to address.

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