Review of Policies in the Traditional Energy Sector

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REVIEW OF POLICIES IN THE TRADITIONAL ENERGY SECTOR

RPTES

LOCAL FORESTRY CONTROL IN BURKINA FASO, MALI, NIGER, SENEGAL AND THE GAMBA: A REVIEW AND CRITIQUE OF NEW PARTICIPATORY POLICIES

A Regional Synthesis Report
January, 1995

Dr. Jesse Ribot
Center for Population and Development Studies, Harvard University

NOTE: THIS DOCUMENT WAS PRODUCED AS PART OF A CONSULTING ASSIGNMENT BY THE AUTHOR TO THE RPTES PROGRAM. IT IS NOT AN OFFICIAL WORLD BANK DOCUMENT. THE FINDINGS, INTERPRETATIONS AND CONCLUSIONS PRESENTED HEREIN ARE ENTIRELY THE RESPONSIBILITY OF THE AUTHOR.
L’absence de surveillance des coupes de bois a entrainé le gaspillage des ressources forestières du pays, qui trouvera de plus en plus de difficultés à subvenir à ses besoins en combustible. Une exploitation mieux organisée lui eût permis, au contraire, de mettre facilement à la disposition de sa population relativement peu dense tout le bois et tout le charbon nécessaires.

On s’est ému à diverse reprises de cette situation. Une réglementation a été édictée, mais son application est restée jusqu’à ce jour très restreinte. Il serait cependant de tout première urgence de préserver de la destruction les bois encore existants, dont la disparition ne manquerait pas d’avoir à brève échéance des conséquences désastreuses pour l’avenir du pays.

Director of the French West African Colonial Service of Agriculture and Forestry (GGAOF February 1916:15-16)

Il est à prévoir que l’application rigoureuse de cette réglementation créera des difficultés dans l’approvisionnement en bois et charbon des principaux centres de la Colonie.

Secretary General of the Colony (GGAOF July 1916:13)
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Acronyms</td>
<td></td>
<td>viii</td>
</tr>
<tr>
<td>Glossary</td>
<td></td>
<td>ix</td>
</tr>
<tr>
<td><strong>SECTION I: INTRODUCTION</strong></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>I. Overview</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>A. Rights, Benefits and Responsibilities</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>B. Issue Areas</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>C. Organization of the Report</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>II. Forests as a Motor for Rural Development</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>A. Increasing Rural Benefits</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>B. Why Create or Increase Rural Benefit</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>C. Establishing local control--the real experiment</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>III. Woodfuel Markets</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>SECTION II: FORESTRY REGULATIONS</strong></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>I. An Abbreviated History of West Africa's Francophone Forestry Policies</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>II. Post Independence Policies in the Francophone RPTES Countries</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>III. A Sketch of Recent and Proposed Reforms--Woodfuel Management in the Era of Participation</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>A. Burkina Faso</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Forest Management in Nazinon: the proposed cooperative statute</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Management Plans</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Additional State Controls</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Management Fund</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Prices and Taxation</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Comments on Participation</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Implementation</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>B. Mali</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Management Plans</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Quotas</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Management Fund</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Prices and Taxes</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Observations on Participation</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Implementation</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>C. Niger</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Rural Administrative Structures</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Rural Management Structures and Rural Woodfuel Markets</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Management Plans</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Annual Quotas</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Management Fund</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Prices and Taxation</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Articulation with the Rural Code</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Comments on Participation</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>D. Senegal</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Forest Management in the Protected Domain of the State</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Management Plans</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Management Fund</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Prices and Taxation</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Comments on Participation</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>E. The Gambia</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Organization of Commercial Production</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Rural Administrative Structure</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>A Brief History of Forestry Policy</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Management by License and Permit</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Participatory Forest Management in Project Areas</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Management Plans</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Prices, Tariffs and Taxes</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Disposition of Tax, Auction and Fine Revenues</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Comments on Participation</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Recourse in The Gambia</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>IV. Regulating the Woodfuel Markets—Merchants, Transporters and Vendors</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>V. Policy Implementation</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>A. Consequences of Incomplete Implementation</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>VI. Conclusions</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>SECTION III: INSTITUTIONAL ISSUES</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>I. Who Controls The Forests? Deconstructing the Simultaneous Processes</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>of Decentralization and Concentration</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>A. Decentralization and the Creation of Local Elected Governments--</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Territorial Collectives</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>E. Non-Governmental Organizations</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>C. Access by Women</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>
D. Repartition of Resources within the Territories of the Decentralized Governance Structures .................................................. 44
E. Repartition of the Forested Domain ........................................ 44
F. Repartition of Competence and the Elaboration of Forestry Codes 45
   1. Greatest Good for the Greatest Number ............................ 45
   2. Rational Peasants? .................................................. 45
   3. Checks and Escape Valves--Voie Reglementaire .................. 46
G. The Electoral Codes ................................................... 46
H. Conclusions ................................................................ 46

II. Management Planning and Intra-Village Dynamics ..................... 47

III. Rules vs. Process ..................................................... 49

SECTION IV: POLICY DISCUSSION ........................................... 52

I. Follow Success .................................................................. 52
   A. Successful Peasant Participation in Benefits ....................... 52
   B. Successful Merchant Participation in Benefits .................... 52
      1. A "Natural" Oligopoly ............................................... 52
      2. Collective Action .................................................... 54
      3. State Support for Merchant Oligopoly ......................... 54
      4. Summary and Lessons .............................................. 54
   C. Lessons for Peasant Participation in Benefits .................... 54

II. Broad Lines of Forestry Code Reform .................................. 55
   A. Shifting the Focus of Codes .......................................... 55
   B. The Project Problem ................................................... 56
   C. The Competition Problem ............................................. 57

III. Policies and Mechanisms for Increasing the Rural Benefit: ......... 58
   A. Fiscal Options .......................................................... 59
      1. Fixing the Producer Price ......................................... 59
      2. Local Institutions Taxing and Charging Stumpage Fees .... 59
      3. Profit Sharing Arrangements .................................... 59
      4. Who Should Receive Tax Revenues ............................. 60
      5. When to Pay Cutting Tax or Fee ............................... 60
   B. Tenure and Tenure-Related Options ................................ 61
      1. Privatizing Forests ................................................ 61
      2. Creating a Domain of Local Representative or Legitimate Institutions 61
      3. Devolving Control over Commercial Disposition of Forests ... 62
      4. Making Production Rights Contingent onUsufruct Claims ... 62
      5. Eliminating Channels of Access to Non-Locally Controlled Forests ... 62
   C. Facilitating Market Access--from the bottom up ................. 62
IV. Problematic Policies
A. On Cultivation Contracts
B. On Quotas
C. On High Fines, Percentages and Coercion
D. On Collective Guilt
E. On Recourse
F. Relative Price of Charcoal and Firewood
G. On Laws vs. Projects

V. Research Options
A. Assessing the Magnitude of the Problem
B. Study of the Relative Efficiency of Indigenous Charcoal Production Technologies
D. Study of the Relation Between Woodfuel Cutting, Agricultural Clearing, and Managed Woodfuel Production
E. Study the Perverse Effects of Allowing Agents Percentages of Fines
F. Comparative study of integrated forest management--successful methods

VI. Summary of Options
Reorganization of the Forestry Code
Taxation
Building Participation in Benefits
Building Participation in Decision Making
Forest Tenure/Access
Stop Supporting Transport and Market Oligopolies--Start Enabling Market Entry by Rural Producers
Facilitate Access to Information
Other Policy Measures
Accompanying Measures

Acknowledgements
Bibliography
Works Cited
## List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANEB</td>
<td>Association Nationale d'Energie-Bois (National Firewood Association--Niger)</td>
</tr>
<tr>
<td>ANR</td>
<td>Agriculture and Natural Resources project (USAID project, The Gambia)</td>
</tr>
<tr>
<td>BKF</td>
<td>République du Burkina Faso</td>
</tr>
<tr>
<td>CFMA</td>
<td>Community Forest Management Agreement (The Gambia)</td>
</tr>
<tr>
<td>CL</td>
<td>Collectivités Locales (Local Collectives)</td>
</tr>
<tr>
<td>CR</td>
<td>Communautés Rurales (Rural Communities)</td>
</tr>
<tr>
<td>CTD</td>
<td>Collectivité Territoriale Décentralisée (Decentralized Territorial Collectives--Mali)</td>
</tr>
<tr>
<td>D</td>
<td>Delasi (The Gambia’s currency, U.S.$1.00 = 10 D)</td>
</tr>
<tr>
<td>FCFA</td>
<td>Franc of the French African Community (U.S.$1 = 500 FCFA)</td>
</tr>
<tr>
<td>GEAP</td>
<td>Gambia Environmental Action Plan</td>
</tr>
<tr>
<td>GGAOF</td>
<td>Gouvernement Général de l’Afrique Occidentale Française</td>
</tr>
<tr>
<td>GGFP</td>
<td>Gambian-German Forestry Project (GTZ project, The Gambia)</td>
</tr>
<tr>
<td>GIE</td>
<td>Groupement d’Intérêt Economique (Economic Interest Group)</td>
</tr>
<tr>
<td>GREC</td>
<td>Gambia Renewable Energy Center</td>
</tr>
<tr>
<td>MLGL</td>
<td>Ministry of Local Government and Lands (The Gambia)</td>
</tr>
<tr>
<td>MR</td>
<td>Marché Rurale (Rural Woodfuel Markets--Niger)</td>
</tr>
<tr>
<td>MTIE</td>
<td>Ministry of Trade Industry and Employment (The Gambia)</td>
</tr>
<tr>
<td>NEC</td>
<td>National Energy Council (in the MTIE)</td>
</tr>
<tr>
<td>PSD</td>
<td>Program for Sustained Development (The Gambia)</td>
</tr>
<tr>
<td>RAF</td>
<td>Réorganisation Agraire et Foncière (Agricultural and Tenurial Reorganization--Burkina Faso)</td>
</tr>
<tr>
<td>RDM</td>
<td>République du Mali</td>
</tr>
<tr>
<td>RDN</td>
<td>République du Niger</td>
</tr>
<tr>
<td>RDS</td>
<td>République du Sénégal</td>
</tr>
<tr>
<td>RPTES</td>
<td>Review of Policies in the Traditional Energy Sector</td>
</tr>
<tr>
<td>SLG</td>
<td>Structure Locale de Gestion (Rural Management Structures--Niger)</td>
</tr>
<tr>
<td>SRG</td>
<td>Structure Rurale de Gestion de bois (Rural Wood Management Structures--Mali)</td>
</tr>
<tr>
<td>UNCF</td>
<td>Union Nationale des Cooperatives Forestières (National Union of Forestry Cooperatives--Sénégal)</td>
</tr>
</tbody>
</table>
Glossary

Alkalo(lu)
Village head(s) (The Gambia).

Competence
The domain over which an individual or institution has legal decision making powers. Jurisdiction.

Codes
The Francophone countries call their forestry laws forestry codes, reflecting the history Napoleonic code law in these countries.

Corvée
Obligatory or forced labor. Tax in Labor.

Decentralization
The process of devolving decision making powers to smaller and more deconcentrated administrative and representative bodies. This may include transferring the power to manage natural resources from the Forestry Service to a local Territorial Collective.

Deconcentration
The process of moving government agencies and services closer to the constituent and recipient populations. This may include having representatives of the Central Government or its Ministries at the level of the Arrondissement or Circle.

Filière
This French term (meaning string) refers to the entire chain of production from the rural origins of woodfuels to their final consumption. It is analogous to the term sector, but more specifically focuses on the set of market relations that hold a sector together.

Forestry Service
Rather than calling the Forestry Service of each country by its proper name (Direction de l’Environnement, Direction Nationale des Eaux et Forêts, etc.), this report uses the convention of calling them all “the Forestry Service.”

Groupements
Economic or social interest groups or organizations.

Legal Personality
Having legal status and legal administrative powers. A body that is given the power by the state to make decisions has Legal Personality.

Moral Personality
Having the legal status of a person, as in a corporation.
Préfet  Prefect in English. The préfet is the administrative appointee of the central government (ministry of the interior) at the level of the region, province or arrondissements.

Responsibilization
The giving of responsibilities often including the giving of authority. It usually refers to the teaching of rural populations to manage forests accompanied by the devolution to them of forest management tasks.

Seyfo(lu)
District chief(s) (The Gambia).

Sous-Préfet
The administrative appointee at the next lower level of administrative organization below the préfet.

Territorial Collective
These are territorial divisions recognized by the central state such as Regions, Provinces, Arrondissements, Circles, Rural Communes, Rural Communities, etc.

Terroir
The usage area of a village or other social group. The area in which a group has usufruct claims or exercises usufruct rights. The village commons.

Vois Reglementaire
Literally, "the regulatory path," refers to regulation by application decree or administrative order.
SECTION I: INTRODUCTION

I. Overview:

A. Rights, Benefits and Responsibilities:

Woodfuels (firewood and charcoal) make up near sixty percent of all primary energy consumed in Senegal and The Gambia and nearly ninety percent in Burkina Faso, Mali and Niger (RPTES 1994c:10). In all of these countries almost all households depend on woodfuels for virtually all of their energy needs. Maintaining a steady supply of affordable woodfuels to urban centers is a major concern for Forestry Departments and Environmental Ministries in the RPTES countries. This report reviews new and proposed policies aimed at better management of the woodfuel resource.

The benefits that flow from the commercial use of forests in Burkina Faso, Niger, Mali, Senegal and The Gambia accrue mostly to merchants and transporters. Forest-village populations, who bear the costs of forest vegetation changes, have benefitted little from the commercial woodfuel trade. Over the course of this century policies have concentrated forest resource control in the hands of Forestry Departments and of urban merchants while limiting rural populations to usufructuary rights to non-commercially valuable forest products. These policies have diminished rural incentives to manage or maintain the forest resource since rural populations have had no rights over the commercial disposition of the resource and often could not access forest product markets.

There is, however, change afoot. Starting in the late eighties, Forestry Services and donor agencies have launched participatory forestry projects and elaborated new forestry laws. All of the RPTES countries are working toward including rural populations in the management and protection of forest resources. Each country is developing local management planning schemes and speaking of the "responsibilization" or "participation" of local populations. These new laws and projects attempt to decentralize forest management by devolving the responsibility of resource management to local groups.

Today foresters and donors are worried that without well managed woodfuel production, woodfuel shortages will follow. They see rural participation as an efficient way of attaining such management. Devolving responsibilities to forest-village communities is a way of reducing administrative costs of maintaining the forests to sustain woodfuel supplies. But, many of the participatory policies, as now framed, are quite similar to the policies of the colonial period in which local institutions were depended on for the management of the colonial territories. Indigenous authorities were supported and rural populations were used to advance the colonial project. To avoid reproducing or maintaining the extractive productive conditions created by colonial policies, rights and benefits, in addition to responsibilities, must also be devolved.

No degree of participation can work if it is based on responsibilities without rights and benefits. The African peasant has been a master at withdrawal from and obfuscation in the face of Government requests and requirements (Hyden 1980; Richards 1985). Responsibilization alone is not participatory development. It is participatory corveé. For participation to result in locally rooted rural development, it must confer real rights and real benefits. It must motivate populations to choose to participate by conferring sufficient benefits and the rights that can secure those benefits. Management responsibilities are a cost of local control. Secure benefits from keeping or selling the resource are the incentives to take on those responsibilities.
The forestry codes being put in place in West Africa today devolve differing degrees of responsibility, rights and benefits to rural populations. This report examines the new and proposed legislation in each of the RPTES countries with an eye toward how these new laws will shape rights over local forest resource access and control.

The report examines who will make decisions over the commercial disposition of the forest resource; the type of body to whom resource control decisions are being transferred (Is the body local? Is it appointed or elected? What is its relation to customary and state authorities?); and the repartition of competence (What decisions can these bodies make? What are its powers and jurisdiction?).

Access to resources and opportunities are critical for rural development. This report explores who controls access to the benefits that can flow from the forest resource, and how. The analysis focuses on control over the disposition of the forest resource. The report also examines access to forest labor opportunities, access to transport, access to urban markets, and access to those within the state who control state resources and other parts of the commercial circuit through which forests can be transformed into monetary income. By transferring rights over the resource and control of these channels of access into local hands, forest villagers can decide whether to withhold the forest resource from the market so as to reap the benefits that accrue through local use, or to sell on the market. The ability to decide whether the commercial or subsistence uses of the forest are more valuable is part and parcel of local forest resource control. It is the essence of local participation.

The report also examines the multiple mechanisms available for increasing the benefit retained in rural areas by local populations. These include such policies as creating a forested domain of local communities, devolving control over commercial disposition of forests to local populations, making production rights contingent on usufruct claims, fixing the producer price of woodfuels, channeling taxes or obligatory fees toward rural communities, instituting profit sharing arrangements, moving toward the systematic elimination of channels of access to non-locally based commercial forest users, facilitating the market access by primary producers, facilitating their access to transport, facilitating the flow of information, etc. This report examines these options, some of which are already in place and working, and others that may play a role in fostering greater local benefits.

As for responsibilities, the report suggests that these be limited to meeting a set of minimum environmental standards.

B. Issue Areas:

The policy discussion section of this paper enumerates a number of issue areas and some possible measures that could be used to redress them. Here the most critical problems and options are presented in resume form. The main issues are those of: 1) devolving control of commercial decisions to local populations; 2) creating locally accountable representation to which resource control can be devolved; and 3) creating accessible channels of recourse to assure that rights are respected. Related issues that both help establish local control and raise local benefits include: 4) integrating women into woodfuel decision making, production and exchange; 5) using successful experiences to guide the way to increasing local benefits; 6) eliminating unfair competition; 7) subsuming management planning to a set of minimum environmental standards;
8) preventing artificial shortages from shaping policy; and 9) favoring enabling policy over projects as the best way forward.

1. **Devolution of Control over Commercial Decisions**: While all of the RPTES countries have moved toward forestry policies more inclusive of rural populations, they have all retained highly centralized decision making over critical aspects of the commercial disposition of the forest resource. This has been done with different mechanisms—through ownership and through the repartition of decision making powers.

   Some of the RPTES countries are creating forested domains for rural communities. Others are retaining national ownership of the forests. In Mali, local governance structures are able to classify all or part of their forest resource (in Mali local Territorial Collectives will have their own forested domains). This allows them to remove their forests from the commercial circuit. Mali’s policy is the only example of solid local rights to withdraw forests from the market.

   But even where forested domains of rural communities are being created, the Forestry Services often maintain control over commercial decisions by including it under the technical competence of Forestry Services (see Management Planning, below). The right to make the ultimate decision as to whether a forest is available for commercial exploitation has been retained in the hands of Forestry Departments.

   Niger has made engagement in commercial forestry in its project areas contingent on having customary usufruct claims to the area. This has helped exclude outside interests, supporting greater local control.

   Options:
   
   a. Devolve the decision as to whether or not to commercialize forest products into the hands of local communities. Give them the absolute right to refuse access to their forests. (cf Mali’s new codes.)
   
   b. Repartition all forests among the smallest Territorial Collectives, creating local forested domains.
   
   c. Make commercial production rights contingent the woodcutter holding established usufruct rights in the area from which wood is extracted (cf Niger case).

2. **Representation**: While devolving control to local populations is a critical aspect of local participation, the local population needs to have locally accountable representatives to whom decision making powers can be devolved. In all of the Francophone countries, the elected representatives of the Territorial Collectives are chosen for election by party lists. Independent candidates cannot present themselves for elections. Because it is costly to constitute a party, rural populations appear to have little control over the selection of their "representatives." In The Gambia the representatives (Alkalolu and Seyfolu) are elected for life. In both cases, elected officials are not necessarily accountable to the local population. In addition, in The Gambia only heads of households vote. This constitutes less than ten percent of the population and is almost entirely male.

   Customary authorities are usually hereditary. While their proximity to the community may make them partly accountable, it does not assure accountability. Further, whether projects
or forestry laws should legitimize customary authorities is questionable. This is a matter that requires broad public analysis, discussion and debate.

While those areas with projects have constituted management committees, these committees often do not represent the village or community as a whole, but rather gives majority representation to those economically interested in exploitation of the forest resource. Further, these committees depend so closely on the Forestry Department or project supervision, who often place themselves as key members on these committees, that they cannot be said to be accountable to the community or in control of decision making. The support of existing or the creation of new authorities by Forestry Projects can interfere with other national efforts to create locally accountable and legitimate representation.

Options:
- Establish locally accountable representation for Forestry Projects in the context of broader efforts to transform rural representation.
- When other national efforts are insufficient for natural resource management purposes, use Forestry Service experiences to shape the debates over rural representation.

3. Recourse: If real rights of control are devolved to local populations there will also need to be recourse channels when these rights are not respected. Legal recourse outside of the forestry service is not available in the Francophone countries. When there are disputes over abuses by forest agents or interpretations of forestry laws, or when merchants or woodcutters break laws, rural populations do not have access to alternative recourse channels to resolve these problems.

Options:
- Establish accessible channels of recourse independent of Forestry Services (cf The Gambia).

4. Women's Access to Labor and Exchange Opportunities: In all of the countries, except for Burkina Faso, women have not been included in woodcutting activities. They are often excluded through presuppositions by projects and foresters that they are not interested in these activities. Women do, however, work all aspects of the woodfuel sector except charcoal production and transport. Further, because women bear many of the costs of forest destruction, excluding them from discussions and opportunities will externalize those costs from decision making processes. The efficiency of resource use is diminished and women pay the cost. (cf Representation Problem.)

Option:
- Include women proportionally in elections and decision making.
- Encourage women to become lumberjacks and wood traders.

5. Increasing Local Benefits—follow success: Three methods of increasing local benefits have worked in the RPTES countries. These include producer price fixing; channeling of tax revenues back to the rural communities (for their own discretionary use); and facilitating market access for primary producers.
In addition, wood is abundant. This is partly due to state-supported open access to the forest resource. Making wood more scarce by cutting off non-locally controlled channels of access for forests could help raise prices. This problem is also discussed in the following paragraph. Further, giving rural communities the right to withdraw their forests from commercial circulation (see "Devolution of Control" discussion, above) would also help to make wood scarce.

Options:
   a. Use available tools to raise local benefits.
   b. Make wood more scarce by establishing and supporting local control and by eliminating non-locally controlled access to forests.

6. The Competition Problem: Non-locally controlled production undermines community forestry efforts. Producers and merchants working these alternative production channels, such as parastatals, concessions, the army, the allocation of permits to urban merchants, etc., can easily avoid internalizing the costs of production. They can also easily circumvent state controls and taxes. Rural communities will not be able to augment the price of their product to cover its costs if these parallel forms of production continue.

   Option:
   a. Generalize local control over the entire territory. Make all access to forests contingent upon local populations.

7. Management Planning: Management plans are conceived of as corporate operation plans. Economic and technical decisions are rolled together and the Forestry Services are currently guiding both. By mixing technical and economic decisions this is one manner in which the Forestry Services justify retaining control over economic decisions. If management plans were eliminated in favor of a set of minimum environmental standards (requiring management plans for some types of activities), the confounding of economic and technical decisions would be resolved.

   This report does not assume that woodfuel production threatens woodfuel supply. Indeed, such an assumption would be unfounded since regeneration after woodfuel production is robust (Peasant and Woodcutter interviews in all RPTES countries; Jensen 1994; Arbonnier and Faye 1988; Giffard 1974; Clément 1982; Niang 1985). The primary cause of deforestation that may ultimately threaten supply is agricultural expansion, and perhaps wild fires. Hence, the necessity for management planning is seen as minimal compared to the necessity to raise the rural price of woodfuels to encourage a choice of forest maintenance over agricultural expansion. (The agriculture-forestry interface needs more analysis and debate.)

   Options:
   a. Create Minimum Environmental Standards in place of required management planning.

8. Artificial Shortages Shape Policies: In all of the RPTES countries the Forestry Services fear that merchants will generate shortages if policies are not in their favor. Threatening shortages is very effective policy tool that merchants are using. This threat is much more real
(both scientifically and psychologically) than the threat of deforestation causing shortages any time in the foreseeable future.

Options:
- a. Evaluate the possibilities for creating strategic urban woodfuel reserves to buffer against such artificial shortages.
- b. Prosecute the perpetrators of these false crises.
- c. Break powerful urban oligopolies:
  - i) stop supporting them through state policies,
  - ii) facilitate entry into urban markets by primary producers.

9. **The Project Problem:** Spatially limited participatory projects are isolated islands in a sea of open-access exploitation. They are protected by the project, often being given market access and other supports they could not have outside of the project’s cover. Hence, they are artificial and may not teach us many of the things we need to know. Further, projects are often used as an excuse not to make more general changes in the laws until their experiments have borne fruit. But, given their artificial nature, they do not reflect the conditions that broader policy changes could bring about.

Options:
- a. Use national-level policy to create an enabling environment for local control.
- b. Reserve projects or project funding to encourage experimentation and information diffusion (see accompanying measures in policy discussion) within the new enabling environment.

C. **Organization of the Report:**

This Introductory section of the report includes a discussion of participation and a broad description of the woodfuel markets to which the policies discussed later are applied. Section II of the report reviews Forestry Regulations. This review starts with a historical section followed by sketches of new and proposed regulations in each country. The country sketches focus on the local resource control, and are followed by a composite sketch of regulations applied to woodfuel transport and marketing in all of the study countries. Section II closes with a discussion of policy implementation. Section III examines Institutional Issues, focusing on decentralization, administrative structure, repartition of the forested domain, repartition of technical jurisdictions, representation, unequal intra-village dynamics and the implications of conflicting legal paradigms. Section IV closes the paper with a discussion of Policy Issues and Options.

This report is an overview of forestry policies affecting local resource control and management in Burkina Faso, Mali, Niger, Senegal and The Gambia. It is supported by individual country reports with much greater detail on the situation in each of the study countries. This report is neither an exhaustive review of the literature nor of existing programs in the study countries. Rather, it is a study of the most salient legislation and programs aimed at increasing local participation in forest management for commercial woodfuel production.

Focusing on “participatory” approaches does not mean that community-based forestry is widespread. Indeed, these approaches are marginal. Most commercial production is by urban, parastatal, military or other non-local interests. Such non-locally based extraction severely
inhibits the raising of local benefits from commercial production. When local populations are competing with these other institutions, who rarely have to engage in the tasks of forest management and can externalize the costs of forest loss, the price of woodfuels is held down and local benefits remain minimal. If "participatory" experiments are to succeed, they cannot remain as islands in a sea of open-access extraction. Hence, the report also explores options for generalizing the community-based approach and eliminating unaccountable and unfair competition.

This report focuses on large-scale woodfuel markets. In West Africa these are the markets supplying urban centers. For simplicity of discussion this synthesis report examines only the primary fuel in each country: firewood in Burkina Faso, Mali, Niger and The Gambia, and charcoal in Senegal, and draws its examples from the primary city in each country. The fieldwork for this report was conducted in July and August 1994.¹

II. Forests as a Motor for Rural Development:

A. Increasing Rural Benefits through Voluntary Participation:

In the RPTES countries only a small portion of the benefits from the commercialization of woodfuels remain within the rural economy. In the case of Senegal, which may or may not be an extreme example,² only ten percent of the net profits remain with woodcutters (who are migrant laborers from Guinea), and only four percent of the gross revenues from woodfuels accrue to other village institutions (mostly payments by migrant woodcutters for room and board). How can a larger percentage of the benefits that woodfuel commercialization generates be retained within the forest villages from which this wood is taken? Whom within the village should benefit from the mobilization of this rural resource? What purposes can these increased revenues serve?

Participatory forestry is one proposed method for improved forest management and higher rural benefits. Participation, however, is just another word for corvée if it is not voluntary and beneficial. One objective of this analysis is to examine how to increase the portion of the benefit stream that flows from the commercial forest-based production remaining in the rural economy. How can the locally retained benefits flowing from the woodfuel trade be sufficient to motivate voluntary involvement of the rural populations in both commercialization and management of the forest resource? How can rural populations be empowered to conserve their forest resource for other more-valuable (to the rural populations) purposes if the benefits of commercial forestry are insufficient?

B. Why Create or Increase Rural Benefit:

A dip into West African forestry history, in Section II of this report, helps explain how existing forestry policies have systematically excluded rural populations from control over the commercial disposition of the forest resource. The decision to commercialize or not to

¹For discussions of policies applying to secondary woodfuels and to non-participatory forms of extraction, see individual country studies.

²The data are simply not available to fully evaluate the distribution of income in the other RPTES countries. Nonetheless, what data are available would support the hypothesis that the distribution is highly unequal and skewed toward urban merchants.
commercialize forest resources has never been in the hands of rural populations. They neither own the forests nor have any rights to determine whether, when, or by whom those forests will be transformed from a subsistence resource, over which they have usufruct "rights," to a commercial good over which they have no control. In effect, usufruct "rights" only exist as long as there is no commercial interest in the resource.

There are moral, economic, political and development reasons to transfer some control over the disposition of the forest resource into the hands of rural populations. Here I will focus on a few simple political-economic reasons, including rural development, greater efficiency, and internalization of external costs.

First and foremost, forests could be an important engine for rural economic growth. Due to the multiple means of peasant exploitation (taxation, rent in kind, rent in cash, sharecropping arrangements, terms of exchange, corvée, etc.), most of the surplus produced by peasants is already being extracted from the peasant economy (Ellis 1988; de Janvry and Kramer 1979; Watts 1983). In the forestry sector, these same mechanisms supported by state policies, leave rural populations with a tiny fraction of the flow of benefits from commercial forestry. In short, villagers lack the resources to invest in local development or in the maintenance of the forest resource. With local control of forests, revenues from commercial forest exploitation could be made to support local development and forest maintenance.

Forests can also serve as a motor for development, if local populations can retain surpluses that are normally captured by merchants and state actors higher in the market. If surplus revenues are collected by some preferably representative and locally legitimate decision making body, they could be channeled into public works or a credit fund. The idea is that forest management should provide more than subsistence labor opportunities. It should profit the community. If it can generate revenues above the costs of maintenance, then it can be a tool for development and change. The object is not simply to maintain the forests. It is to provide development funds to rural populations.

Second, efficiency arguments are also made to justify local control. Some researchers argue that management and monitoring would be less costly and more efficient if conducted by those who are physically closer to the forests (i.e. live in the forests) and have knowledge about those forests that would be useful in forest management (Fortmann 1988; Peluso 1992; Peluso and Poffenberger 1989; Rocheleau 1991; Rush 1991). The long history of poor results of state management of the forest resource also supports the arguments for transfer of management to local populations. Many State imposed policies have been based on misinterpretation of the ecology, village role in forest management, the role of forests in village life, misconceptions of land and tree tenure, local problems and needs, etc. (Fortmann 1988; Lai 1986; Rocheleau 1991; Rocheleau 1987; Ribot forthcoming). With local control of the resource, mis-interpretation of local problems would not be as likely, understanding of local ecology and the role of local populations in resource management may enhance forest management efficiency.

Third, local control can, in theory, lead to better internalization of external costs. Often under the banner of forest protection, rural populations have been excluded from forests only so that those forests could be given to commercial interests for un-managed cutting (K. Freudenberger 1991; Peluso 1992; Peluso 1991; Rush 1991; Ribot 1993). This practice leaves villagers bearing the costs of an exploitation whose benefits accrue elsewhere. Such practices may be less likely with local forest control since the local decision to cut could internalize the
value of the standing forests to rural populations. In addition, with local forest control those cutting the forests would be more accountable to those affected by that cutting.

Local control does not solve the problem that villages are highly unequal social entities in which, for example, notables can take advantage of village resources at the expense of others. The effects and accountability of local decision making depends, of course, on the structure of representation. (This is one reason that structure of representation is so critical.) Nor does local control solve the problem that villagers also do not always know how to manage or how they will be effected by forest exploitation (Ribot forthcoming). But, it does make it easier for villagers to stop deleterious practices when they see them.

In addition to economic efficiency, local retention of benefits from forest exploitation increases the incentives to maintain and manage the forest resource. If those benefits come not only from sale, but also from the collection of taxes on that sale, then this additional retained benefit provides a motive for local populations to engage in tax collection as well (see the cases of Niger and Burkina Faso for successful examples).

C. Establishing local control--the real experiment:
The real experiment that could be conducted in these West African countries would be to transfer rights over the commercial disposition of surrounding forests from the state and urban merchants to rural populations. The real experiment would be to give rural populations the power to make the following critical decision: will the forests be available for commercial wood cutting or will they be conserved for local uses. Then, if forests are to be commercialized, which parts will be commercialized and how much. In short, give rural populations the right to withhold from commercialization all or part (as in surface area or species) of the forests on which they depend for many of their subsistence needs (cf RDM 1994j).

Providing this right does not mean that once a rural population has decided to commercialize the forests in which they live that they can do so without obligation or in any manner they wish. The decision to commercialize should carry responsibilities and limits. It should be subject to limited technical constraints and to practices that conserve a sufficient forested area to continue to supply these populations with the use values--food, fodder, fuel, fiber, medicines and dies--they have enjoyed in the past. These obligations are not just for protecting the forests, but also for protecting rural populations. But, this protection is not from themselves, as in the protection of the forests from the "anarchic," "irrational" and "abusive" cutting by "hungry" "ignorant" peasants--terms that continuously arise to describe rural populations and to justify Forest Service control of the resource. Rather, this protection is from powerful individuals and groups within a highly unequal rural society, it is from powerful urban interests and it is from the Forest Service itself, which in all of these countries has a history of allocating forest resources to powerful urban interests and individuals. This protection is not for the forests alone, but for the rural populations who depend on these forests for their daily needs.

3If the populations decide they prefer commercialization to the maintenance of use values, then only the ecological characteristics of the forests are in need of protection. However, it is important that this type of decision is being taken by those who it most effects--usually the poorest and least enfranchised social classes, ages and gender.
Hence, to protect forests, once rural populations decide to commercialize them, these populations must produce within the constraints of some agreed upon set of minimum environmental standards, and where necessary, a planning process aimed at meeting these standards. This planning process will draw on technical and social information much of which cannot be known a priori. Plans cannot be developed in advance and applied upon request. They must be negotiated among the different sectors of rural society and the different authorities (customary and state) with power over resource use. The object is to bring local knowledge and competence together with that of the Forest Service. In the end, production must take place within the limits set out by the intersection of these constraints.

Additionally, participatory forestry or even local forest control cannot succeed in raising benefits for rural populations if the local populations are competing against the other forms of state-supported open-access production that are widespread today. If next door to locally controlled forests are state-allocated concessions, permit wielding producers working for urban merchants, or even the army cutting woodfuel for its own or for commercial use, then local management is unlikely to thrive. If these parallel forms of production don’t have to internalize the opportunity costs of forest or the expenses of forest maintenance, then the prices that managed or locally controlled forests can obtain will remain low. Hence, the real experiment would also include the generalization of local control so that access to all forests depends on the populations that live within them.

Different segments of this experiment are underway in the different RPTES countries. But, this experiment will not really begin until it is implemented in its entirety. This report reviews what the study countries are doing and how this participatory experiment can be fully launched.

III. Woodfuel Markets:

This section quickly reviews the organization of West Africa’s woodfuel markets. The functioning of these markets is not independent of policies regulating them. This section introduces the actors in the market and their rough functions while later sections flesh out how these markets are regulated and the effects of that regulation.

The woodfuel sectors of the study countries all include woodcutters, who are either village based or are brought in by urban-based merchants. The merchants are often urban-based entrepreneurs who hire woodcutters, rent or own means of transport, and sell woodfuels to retail outlets in the major cities. Transporters in the markets sometimes act as woodfuel merchants themselves and at other times sell their services as transporters to a merchant or woodcutter. In Senegal the merchant class is broken up into merchants and urban wholesalers. Similar urban wholesalers are present in emerging forms elsewhere. Retail outlets are usually a simple fenced in plot of land within the city where vendors sell their wood or charcoal in small bundles. There is tremendous diversity among the study countries as to the types of arrangements and contracts at each level of the market. There are also large differences in the margins and incomes at each level of the market. In general the woodcutters and vendors appear to profit the least and the merchants and transporters the most.
The power and reach of these urban merchants varies greatly from country to country. Historically, as steamship, railroad, producer-gas vehicle\textsuperscript{4}, industrial and urban demand grew, so did networks of urban-based woodfuel merchants. In Senegal the urban merchants are now exceedingly wealthy and powerful. They threaten the Forestry Service with shortages and influence political actors higher up to leverage policy changes in their favor. In Burkina Faso merchants cut off supplies to the Ouagadougou in 1985 in protest of new environmental policies. The Burkina Faso Government sent the army in to cut wood and transport it to the city. This move undermined the power of the woodfuel merchants. To prevent them from regrouping, the Burkina Government made vertical integration of the market illegal. In Niger there appears to be an emerging woodfuel network. The head of the National Firewood Association (Association Nationale d'Énergie-Bois--ANEB) in Niger is also the president of the party of Niger's prime minister. But, Niger too has taken measures to prevent vertical integration of the market. In The Gambia a monthly limit of seven truckloads of firewood for each of the fifteen licensed merchants was instituted to help prevent concentration. In Mali, there are certainly individuals controlling certain parts of the distribution network, but it is difficult to evaluate their strength. The Malian State does not regulate woodfuel transport or exchange beyond a production tax.

There are differing degrees of concentration of wealth in the woodfuel markets of the five countries studied. Senegal's charcoal markets have the greatest degree of concentration with a small group of merchants reaping most of the benefits that flow from the woodfuel trade, while Mali, Burkina Faso, Niger and The Gambia have much less powerful merchant classes—due to the size of the markets in question and to the different histories of each market. It is impossible to say just how powerful urban merchants are or just how concentrated wealth is in these markets without additional data on profit margins, numbers of actors in the markets, or the horizontal distribution of market shares among each group of actors. In the four countries discussed in this report, state policies have served to varying degrees to either support or destroy the concentration of benefits from forest exploitation in the hands of urban merchants. In all of the countries it is clear, however, that the governments fear the political ramifications of urban woodfuel shortages. Merchants use this fear to their advantage by threatening to create artificial shortages. Threatening shortages is an important merchant tool for influencing forestry policy making and implementation.

One clear characteristic of distribution of the benefits in all of these markets is that rural populations and woodcutters, whether local or migrant, gain very little. The most important reason for this situation is their lack of rights over the disposition of the forest resource, their lack of access to transport and markets, and the set of dependent productive arrangements that characterize the relations between merchants, woodcutters and the peasant populations.

Forestry policies have played an important role in empowering merchants in some countries while breaking up their oligopolies and vertical integration in others. Currently these countries are making and implementing policies to increase the benefits in the hands of rural producers and of rural populations living in and depending on the forests from which these woodfuels are extracted. The next section examines historical and current policies affecting distribution and participation in the Francophone RPTES countries.

\textsuperscript{4}These are called gasogenes in the French literature. They are woodfuel-operated trucks that were introduced during World War II.
SECTION II: FORESTRY REGULATIONS

Given the different colonial histories, forestry sector policies in The Gambia differ greatly from those in the Francophone RPTES countries. This section focuses on the history of the Francophone countries while a brief history of The Gambia’s forestry policies will be presented with the country presentation in Section II,III-E.

I. An Abbreviated History of West Africa’s Francophone Forestry Policies:

Since the beginning of state forestry under the French colonial regime in the West African Sahel there have been several common characteristics of forestry policies. Forests have been and remain nationalized. In 1904, following the French Civil Code, the colonial administration decreed: "lands that are vacant and without master, in the colonies and territories of French West Africa, belong to the state" (République Française 1904:4). Many small changes in this law have occurred throughout the Sahelian countries, but the basic principle of national ownership has remained the same (Gouvernement Général de l’Afrique Occidentale Française--GGAOF 1928; GGAOF 1955; RDS 1964; RDS 1965; RDM 1973; RDM 1986a; RDM 1987; BKF 1991:art.2; RDN 1959; RDN 1993).6

Within a context of nationalized forests, forestry codes beginning in 1900 systematically limited the use rights of indigenous populations to a residual category of non-commercially valuable forest resources (GGAOF 1916:3-7; GGAOF 1935). All subsequent forestry codes have effectively reproduced these usufructuary laws (RDS 1965; RDS 1994; RDM 1973; RDM 1986a; RDM 1994b; BKF 1991; RDN 1974; RDN 1993a).

Permits for commercial production delivered by the Service of Agricultural and Forests, later the Forest Service (established in 1932), were introduced with the 1900 Forestry Code, the first tax was instituted in 1908 along with transport permits, to monitor taxation (GGAOF 1916; Aubreville, 1938:1; Foury, 1953:14). Cutting permits marked the beginning of policies of control over access to commercialization of forest products. They gave the Forest Service the power to decide who gets permits, and enabled the limiting of quantities specified on permits. Power of the colonial Forest Service to ration entry into the woodfuel markets was further secured by the creation of merchant licenses available only to urban-based French citizens in 1941.7 In 1941 decrees were also issued giving the French Colonial State control over the price at which charcoal could be sold (RDS 1941:443-445).

II. Post Independence Policies in the Francophone RPTES Countries:

At independence, the Burkina Faso, Mali, Niger and Senegal inherited State ownership of virtually all forested lands; control over who could cut, where, when and how much they could cut and who could enter markets via usufruct laws, cutting and transport permits and

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5 "Les terres vacantes et sans Maître, dans les colonies et territoires de l’Afrique Occidentale française, appartiennent à l’État" (République Française 1904:4).

6 For further discussion of forest tenure—both public and private ownership—see individual country reports (Ribot 1994b; 1994m; 1994n; 1994s). Note that while private forest ownership has been possible, it has remained insignificant.

7 More precisely, one had to be a French citizen, and the only Africans with French citizenship were those living in the Communes, which were urban areas, and literate in French (Gellar 1982:17).
commercial licenses; and control over the price at which woodfuels could be sold. Rural populations in these countries had virtually no legal control over the commercial disposition of the resources around them. Most of these policies have been maintained to the present.

After independence through the late eighties, the policies of these countries varied with only subtle departures from the colonial past. In most cases these departures were toward tightening centralized control over the forest resource (usually based on environmental arguments), rather than toward greater local control.

Limited usufruct laws are included in all, even the most recently proposed, forestry codes. For access to commercial production cutting permits (now called exploitation permits in some areas) are also on the books in all of the countries of this review. The use of production permits varies from country to country. In all of the countries the delivery of commercial exploitation permits requires the payment of a forestry tax (RDM 1994g; RDM 1994i; BKF 1993; RDN 1974:39,53; RDN 1992; RDS 1993; RDS 1994). But, while permits are required, most cutting takes place without them. The main reason is that woodcutters cannot afford to pay the forestry taxes until after they have sold the wood. Therefore, they cut without permits and pay at the time of sale, when they are in need of a transport permit and have the necessary cash. In Mali and Senegal foresters allow this practice on an informal basis. In Burkina Faso and Niger under the managed forest projects permits are no longer required. Rather, membership in a rural forest management structure is sufficient. In these cases the tax is paid upon delivery of a transport permit or coupon.

While in all of the study countries production permits specify the quantity of woodfuel permitted to the recipient, two other mechanisms to regulate quantity have come into practice. One is an annual quota, and the second is that of specifying the quantity to be cut in local management plans. In Burkina Faso, the state can allocate woodfuel production concessions based on estimates of urban demand (BKF 1991:art.298). In Mali and in Niger, the state can specify a quota as part of the elaboration of forest management plans. In Senegal and Burkina Faso the National Forest Service and Ministry responsible for forests annually fix a national quota for charcoal (Senegal’s primary commercial woodfuel) and firewood (in Burkina Faso). This production quota is then allocated to commercial forestry cooperatives, groupements and private enterprises.

The spatial distribution of woodfuel production has also had a long and complex history. In Senegal spatial distribution of production is determined through annual decrees specifying national production regions, and on cutting permits specifying the plot to be cut. But, since Senegal’s first rotations in the late 1800s, to the present, these policies have had very poor record of implementation (M. Freudenberger 1992:194; GGAOF 1941; Ribot 1990). Cutting

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8Local management plans will be discussed further under recent reforms below.

9Production regions are specified in annual decrees organizing the production season.

10In July 1941 further legislation was directed at charcoal and firewood production in a few newly created "managed" forests not far from the major centers of consumption. These forests—eventually denuded—were to be rigorously managed to provide fuel to Dakar. These management restrictions, specifying and limiting quantities to be produced and designating production plots, were not applied in other zones. (RDS 1941:143-144,444.)
locations have been shaped more by wood availability and merchant needs than by forest service directives. In Burkina Faso, Mali, Niger and Senegal master plans for urban woodfuel supply are being developed to orient the national-scale spatial distribution of woodfuel cutting.

All of the study countries except for Mali have developed systems of control over their rural-urban woodfuel markets. These market regulations, as opposed to those policies controlling direct access to and use of the forest resource, regulate who can enter which parts of the market and how. Entry into woodfuel markets is controlled through licensing, permitting and the allocation of quotas.

In 1985 Burkina Faso segmented its market by forbidding vertical integration of the markets. They did this by introducing professional categories within which each operator had to register. Niger followed suit in 1992. Both Niger and Burkina Faso also introduced the practice of painting woodfuel transport trucks green in order "professionalize" the transport of woodfuels. This practice simply serves to create entry barriers to the transport of woodfuels, giving woodfuel transporters protection against competition by other transporters wishing to occasionally carry wood to the cities (on the return from another delivery, for example).

Independent Senegal introduced new merchant licenses (carte professionnelle) in 1972 giving the Forest Service the right to limit the number of licenses delivered in each region (previously the number of licenses was not limited) (RDS 1972:1539). Control over access to markets was further concentrated in the hands of licensed merchants. They were the only group given production quotas which gave them exclusive rights to hire woodcutters, and to obtain an identity card and cutting permits for them. This system gave the licensed woodfuel merchants complete control over forest labor and over access to woodfuel markets. Further, Senegal required the organization of the market into cooperatives in 1983. These cooperatives were populated by powerful merchants, rather than woodcutters, and the National Union of Forestry Cooperatives eventually served as a base for collusive coordination on producer price fixing and market access control among the merchants.

Price fixing in Senegal (the wholesale and final price) and in Burkina Faso (the producer, wholesale and retail prices) have continued to the present (BKF 1993:10). In Niger and Mali the price of woodfuels is no longer fixed.

Throughout this history the primary role of the Forest Services was as a para-military rural police force (McLaine 1991; Elbow et al. 1991; RDM 1987a). While they have been involved in forest management projects from the beginning of the colonial period to the present, their role as extension services has been minimal.

III. A Sketch of Recent and Proposed Reforms—Woodfuel Management in the Era of Participation:

The four Francophone countries in the RPTES study group are all in the process of revising their forestry sector laws. Senegal has passed through its National Assembly the legislative portion of a new forestry code in February 1993, replacing their 1974 forestry code.11 Mali has written a legislative portion of their forestry code which was presented to the National Assembly in mid-October 1994. When approved, this new code will replace the 1986

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11 At the time of this writing, the application decree for Senegal’s forestry code was pending in the approval process.
Malian code. Mali's forestry code will be accompanied in the approval process by two decrees concerning the management and taxation of the woodfuel sector. Mali has not yet drafted an application decree for its new forestry code. In Burkina Faso the 4 July 1935 colonial forestry code and its 1948 application decree, written by the Gouvernement Generale de l'Afrique Occidentale Francaise, were rewritten and simplified in 1984 and 85 as part of Agrarian and Tenure reforms (RAF) (GGAOF 1935; Haute Volta 1948; BKF 1984; BKF 1985g). The RAF and its forestry section were again revised in 1991 (BKF 1991). Burkina Faso recently reviewed their 1991 forestry laws and made some proposals for a new forestry code and application decree (Tavares de Pinho 1993). In Niger the 1974 forestry code (modified in 1976) is still in force (RDN 1974). Legislation in Niger in 1992 introduced new tax structures for woodfuels. Niger's forestry laws are currently under study for revision (RDN 1993a). Niger's new forestry code will be part of a larger legislation, the Code Rurale, an integrated set of resource management laws that currently include general forestry principles as one chapter. The Gambia is not revising its forestry laws (see discussion of The Gambia, below), but is introducing community forest management through donor sponsored forestry projects. For more detailed analysis of these new laws see the country studies.

In this section I will describe how participation in woodfuel production or management is, or is proposed to be, organized in each country. I will focus on the primary form of participatory management being put in place. In each country there are multiple forms of resource management occurring simultaneously. Some are legal and some not. Here, I will simply examine those forms of recently introduced resource management that are aimed at increasing popular participation.

A. Burkina Faso:
In Burkina Faso, projects are underway in which the responsibility for forest management has been given to cooperatives (or groupements) constituted of individuals within forest villages wishing to engage in woodfuel production (cf Niger). These non-governmental incorporated organizations are organized into unions. The management and use of the forest resource by these unions is structured by management plans drawn up by the Forest Service in collaboration with the councils of these unions representing the members of their constituent groupements. These project-based practices are also being proposed for more general application (BKF 1993b).

Burkina Faso's 1991 forestry code outlines extremely broad management guidelines (BKF 1991). Management practices will be further specified with the elaboration of the application decree of the new forestry code, currently under study (Tavares de Pinho 1993; BKF 1994a). Within Burkina Faso woodfuel production practices vary greatly from uncontrolled production by the military to highly managed woodfuel production projects such as the UNDP/FAO project in the Nazinon forest south of Ouagadougou. Below I will focus on the Nazinon forest project and the legislative proposals that have emerged from it. It is from the practices in Nazinon that much of the recent and proposed reforms emerge. Currently these managed forests supply on the order of five percent of urban woodfuel demand.

Forest Management in Nazinon: the proposed cooperative statute
A generalized statute of cooperatives has been proposed based on the management of the forest of Nazinon (BKF 1993b; BKF 1993a). The basic unit of forest management in Nazinon is the Groupement. These private corporations are constituted of members of the village in
question interested in forest exploitation. Each groupement elects a President, Secretary, Treasurer, and Monitor as well as a Management Unit, from among its members. The Management Unit is simply an elected official of each groupement designated to represent the groupement at the union's Administrative Council. The Management Unit's officer is also charged with assuring the implementation of the forest management plan (discussed below), under the guidance of the a Technical Office set up by the Forest Service (BKF 1993b). The groupements, represented by their Management Unit officer, are regrouped into a union organized around the common interest in management of the forest within or around which this group of villages is located.

The Union will include an Administrative Council, a General Assembly, a Technical Unit and a Co-management Committee. The General Assembly and Administrative Units are representative of the groupements members while the Technical Unit and Co-Management Committee are dominated by Central Government representatives. The General Assembly is constituted of the officers of all management units and the elected members of the directorate of each groupement. The Administrative Council is constituted of the officers of management units and a president elected from the General Assembly. The union's Administrative Council is empowered to make daily management, administrative and business decisions of the union and is also responsible for surveying the implementation of all laws concerning the union and forest management (BKF 1993b:art.27-51). The General Council meets once a year to deliberate on issues of union policy such as work plans, approval of the annual budget, etc. (BKF 1993b:art.39-43).

Management Plans

The Technical Office is constituted of a technical director, a forestry extension worker, an accountant, a book keeper, a guardian storekeeper and a driver. This office is directed by a forester, hired by the General Assembly, and operates under the guidance of the Regional Director of the Ministry responsible for forests. This office elaborates and proposes a management plan in collaboration with the Administrative Council (BKF 1993b:art.47-51).

Additional State Controls

A Control Committee will be created to survey the books and accounts of groupements and of the cooperative. This committee is constituted of a representative from: the Government's Control Service, Village Authorities, the Minister responsible for cooperatives, and the Minister of Territorial Administration (BKF 1993b:art.52-53). The Co-Management Committee will be presided over by the Regional Director of the Ministry responsible for forests, and populated by the members of the Administrative Council. It is to write an annual accounting report, provide accounting assistance, and oversee the use of the Management Fund (discussed below). This committee must also approve all financial activities of the cooperative. Decisions are made by a simple majority vote of members present. (BKF 1993b:art.54-63.)

Management Fund

Each union will have a Management Fund fed by resources drawn from the sales price of woodfuels, gifts, inheritances, or loans (BKF 1993b:art.16-17). This fund is co-managed with the Forest Service (BKF 1993b:art.17). The revenues for this fund are discussed next.

Prices and Taxation

In Burkina Faso, the Producer price, the wholesale price and the retail price are fixed by the Minister of Commerce (BKF 1993:10; BKF 1985g:art.276). The rural price of firewood
(the price at which groupements can sell to merchants) is fixed by the state at 1610 FCFA per stère. The entire fixed amount is paid by merchants to a local control post of the Forest Service. This control post is overseen by a representative of the Union. Each groupement gives a ticket identifying the groupement from which the wood was taken to merchants who come with their trucks to pick up firewood. The groupement keeps a stub for their own records. The merchants then go to the local Forest Service control post with the ticket, pay the 1610 FCFA per stère and receive a circulation permit attesting that they have paid.

The 1610 FCFA is divided four ways. The woodcutters working for or within the groupement receive 610 FCFA per stère, 500 FCFA is placed in the Forest Management Fund, 200 FCFA funds the treasury of the groupement, and 300 FCFA covers the cost of the cutting permit. The funds that enter into the treasury of the groupement are further divided 1) to finance forest management activities, 2) for credit for groupement members, and 3) for public works serving the larger village community.

Comments on Participation

These arrangements certainly integrated rural populations into forest management and also guarantee increased access to the benefits through the fixed price, and the groupement’s management fund. Further, a portion of the groupement funds is earmarked for public works that serve the larger village community.

But, these structures neither invest decision making control in a representative nor customary authority. No decisions concerning the disposition of the forest resource are in the hands of the broader populations of forest villages. The only place where a representative of the village populations is present is in the Co-Management Committee. Here the village representative is a minority among representatives of the state. Rather, control of the disposition of the forest resource is placed in the hands of those economically interested in commercial forest exploitation and the Forest Service.

In short, here participation in the labor of production and management as well as the benefits (to a degree I have not been able to evaluate) is accomplished. But, this participation includes only a special sub-set of the larger community for whom the forest constitutes an important commons. While part of the revenues returns to the village as a whole, the decision as to whether or not to cut the forests is not in their hands.

Implementation

There are a number of means by which merchants have been able to circumvent the fixed price, and by which village notables and even non-village based woodcutters have made claims on the resources of groupements. Village groupements have had trouble keeping urban woodcutters (brought from the cities by their merchant patrons) out of their forests. Wood cut in one village is often sold by these woodcutters through the tickets of another groupement.

12I am not arguing to place decisions in the hands of the chiefs or elected representatives. I am simply pointing out that because whole community is affected by forest vegetation changes, it is important that decisions are made by some body representing the whole community. If decision are made by professional woodcutters, then the interests of domestic firewood collectors, honey gatherers, pole cutters, pastoralists, hunters, etc. may not be taken into account. These other persons have an equal right to the forests, hence, they should be involved in decisions concerning the commercial disposition of the forest. If they are not consulted, and if they do not have the power to shape decisions, then the costs of commercial production will not be internalized.
channeling the management and other funds to the latter groupement's account. Merchants at times pay woodcutters less than the 610 in the forest and then arrange with groupements to receive back the 610 FCFA earmarked for the woodcutters, in this manner undercutting the fixed price. Foresters have also engaged in woodfuel commerce themselves. All this occurs under the surveillance of project coordinators and agents.

It is impossible, however, to evaluate the magnitude of these deviations from the formal policies of the groupements and union without further study. For further details see Burkina Faso country study.

B. Mali:

In Mali, the responsibility for forest management will be assigned to elected Decentralized Territorial Collectives (Collectivité Territoriale Décentralisée--CTD), including the Commune Rurale, the Circle, and the Region. The smallest CTD, that which most closely represents rural populations, the Commune Rurale, regroups between 15 and 30 villages. The next level is that of the Circle regrouping approximately nine Rural Communes. Seven to eight Circles will be regrouped by each of Mali's eight Regions. Each CTD will have its own forested domain (see Ribot 1994m for a discussion of repartitioning process).

The management of firewood and charcoal production in the CTDs is shaped by Mali's new forestry code (RDM 1994b) and the "Law Setting up Wood Exploitation, Transport and Commerce" (RDM 1994g). These laws subject woodfuel and other forest exploitation to: 1) the development of a management plan in conjunction with the Forest Service (RDM 1994b:art.54), 2) the determination of a maximum exploitation quota, 3) the payment of an "exploitation tax," and 4) the procurement of an exploitation permit. Below I will examine how access to and control over the benefits of forest exploitation are shaped by these new policies.

Management Plans

Any individual or group of individuals wishing to commercially exploit woodfuels within the forest domain of a CTD must organize into a Rural Wood Management Structure (Structure Rurale de Gestion de bois--SRG). This structure can be an Economic Interest Group (Groupe d'Intérêt Economique--GIE), a cooperative, or any other form of organization recognized by the state as having a moral personality (legal standing as a corporation). Before this group can begin exploitation, there must be a management plan proposed by the Forest Service (dite "service compétent"), for approval by the CTD (RDM 1994b:art.54). This process guarantees that production will not take place within the forested domain of a CTD without the approval of that CTD.

However, there are no guarantees that those who do want to produce, and where there is approval by the CTD, will be able to obtain a management plan in a timely and free manner. There is also no guarantee that local populations will be able to shape these management plans. The forestry department appears to have reserved for itself all decisions over the elaboration of

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13Note to translator: the original French titles of laws such as this can be found in the bibliography.
this plan (see RDM 1994b:art.54). The role and rights of local populations, other than their approval of the plan after it is drawn up, are entirely unclear in the new forestry documents.

The forestry code does not specify how elaborate such a plan must be, where the Forest Service will derive the means to draw up such plans, how responsive the Forest Service must be to those requesting plans, or whether rural populations will be able to propose their own management plans. To prevent foresters from being able to use their power to allocate forestry plans (on which the production quota, discussed below, depends), some checks and balances would be helpful.

The new forestry laws create three types of exploitation zones: 1) controlled, which are part of delimited and managed forests, 2) oriented when they are part of delimited but non-managed forests, and 3) uncontrolled when they are neither delimited nor managed (RDM 1994b; RDM 1994g). These zones are differentially taxed in order to encourage production in zone one over zone two and zone two over zone three.

**Quotas**

Article 6 (RDM 1994g) creates an annual woodfuel production quota. This quota will, according to forestry officials, be determined as a function of the sustainable potential production of the forests of the CTD in question. It will be part of the development of the management plan.

The new law on the exploitation, transport and organization of woodfuel commercialization creates an ad hoc commission at the level of the rural commune to determine the annual quota.

The commission is composed of:
- 2 representatives of the rural management structure,
- 1 representative of the CTD, and
- 1 representative of the Forest Service.

The mode by which the quotas are allocated are defined by order of the regional governor. (RDM 1994g:art.10.)

This article creates a committee in which the elected official from the CTD is a minority. The "...mode of allocating the quota..." is left to the order of the Governor of the region (appointed by central government). In this manner, this article has placed decisions in the hands of a non-representative body and maintained the control over the disposition of the resource at an administrative level far from the communities to whom the resource "belongs" (according to the new repartition of the forested domain).

Article 11 creates a regional commission to resolve conflicts over the fixing and distribution of quotas. The composition and modus operandi of this commission is left to order.

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14 If it is intended that, for example, the "Plan d'Approvisionnement des Villes en Bois-Energie" will constitute a management plan, then the forestry department has reserved for its own discretion the decision as to where woodfuel production will be permitted and where it will not. The effects of this centralized control cannot be evaluated until after the elaboration of such plans.

15 A team in Burkina Faso is currently working on this set of problems (personal communications, Forest Service, November 1994).

16 Translators Note: "...modélités d'attribution du quota...."
of the Minister responsible for forests. Here the Forest Service has maintained control over a highly charged and politically sensitive process. Perhaps this control should be arbitrated by the courts.

To carry out production once a management plan and quota have been established requires a cutting permit which is delivered by the Forest Service upon the payment of the exploitation tax (RDM 1994g). A transport coupon, delivered by the Forest Service upon the payment of a transport tax, is required to transport woodfuels.

Management Fund
In Mali funds for forest management will be derived out of the tax revenues from forestry taxes. Amount, repartition and disposition of these funds is as-of-yet unspecified (see below).

Prices and Taxes
No price fixing is practiced in Mali.

In the current legislation under consideration in Mali (RDM 1994g), the funds derived from forest exploitation taxes will be divided between the state, the CTD from whose forests the wood is taken, and the SRG of those who cut the wood. The funds derived from the transport tax is divided between the state and the CTD. The repartition of these funds will be determined by decree.

To encourage woodfuel production in the managed areas, the level of the taxes on woodfuels will different for the three different production areas, controlled, oriented and non-controlled (cf Niger). For example, see the table below. Also note that this tax structure perversely favors charcoal (which is less energy efficient than burning firewood directly) over firewood through significantly higher firewood taxes.

Combined Exploitation and Transport Taxes in Stère Equivalents:

<table>
<thead>
<tr>
<th>Type of Zone</th>
<th>Combined Tax on Firewood (FCFA/Stère)</th>
<th>Combined Tax on Charcoal (FCFA/Stère-equivalents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrôlée</td>
<td>250</td>
<td>140-210</td>
</tr>
<tr>
<td>Orienté</td>
<td>400</td>
<td>200-290</td>
</tr>
<tr>
<td>Incontrôlé</td>
<td>700</td>
<td>320-470</td>
</tr>
</tbody>
</table>

Source: RDM 1994g; RDM 1994i. The range of values under charcoal represent the uncertainty in the conversion to stère equivalents. See Mali Country Study for detailed breakdown of this table.

Observations on Participation
Mali’s great innovation in the area of participation is the creation of the possibility for local communities to remove from commercial access any or all forests or forest species that they deem suited for protection. This gives rural communities the possibility to withdraw forests from commercial production, thus, giving them the possibility to bargain over the value and disposition of their forests.
In Mali, local populations have little control over the allocation of quotas (assuming that there should be quotas), and could have considerably more control over the elaboration of management plans. Furthermore, the Rural Communes may be large (15 to 30 villages) for an effective articulation with village-level authorities, and since the "representatives" of the Rural Communes are elected by list they may not actually represent local populations.

**Implementation**

In Mali there have been many implementation problems in the past. Given a history of abuses of policy levers by the Forest Service and poor records of policy implementation, implementation patterns are critical for determining the form these policies will eventually take. For a discussion of past implementation problems in Mali see Mali country study.

**C. Niger:**

In Niger, a World Bank supported project, entitled Energy II, has launched an experiment in rural woodfuel production management. In this experiment local participation in woodfuel cutting and commercialization is organized through the creation of a system of Rural Woodfuel Markets managed by Rural Management Structures. To help assure local participation, only people with customary usage rights to the forests in question may be members the new Rural Management Structures (RDN 1994:30; RDN 1992a:art.11). These structures are designed to devolve control over the resource and responsibility for its management into the hands of rural populations.

While the 1974 forestry code is still in force, new and perhaps interim forestry laws of Niger include some broad principles spelled out in Title III, "Des Ressources Vegetales," of the March 1993 Rural Code, and the August 1992 law and decree organizing the commercialization and transport of wood (RDN 1974; RDN 1993:arts.58-108; RDN 1992a; RDN 1992b). As a whole, forestry laws are currently being reconsidered for revision (RDN 1994; RDN 1994a; RDN 1994b). The experiences in Energy II will probably play a major role in the revision of these laws. In existing laws forest exploitation in Niger can still take place via parastatals, state sale of parcels and the simple delivery of exploitation permits by the Forestry Service. Rather than focus on these old policies, below I focus on the basic organization of the Energy II project, which indicates the management direction Niger’s Forest Service is trying to move.

**Rural Administrative Structures**

Niger’s rural population organizes itself into what are administratively called "Customary Collectives" (Collectivités Coutumières), including 10,000 villages and 200 cantons and "regroupements" (equivalent of cantons for nomadic populations).¹⁷ Niger’s 17 July 1964 law on decentralization legislated the repartition of Niger into 200 Communes (or local collectives). But, customary village and canton chiefs have retained their power and only 21 of the 200 expected Communes were ever established. (Diallo 1994:7) Administratively, the country is divided into eight Regions, 36 Arrondissements and the 21 established Communes.

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¹⁷There are also two sultanates and two indigenously organized provinces (Maradi and Dosso) (Diallo 1994:7).
Rural Management Structures and Rural Woodfuel Markets

A Local Management Structure (Structure Locale de Gestion--SLG) is any organization recognized by and registered with the Minister responsible for forests. These institutions manage Rural Markets (Marché Rurale--MR) and supply them with firewood. They also manage wood cutting, and forest monitoring, protection, and regeneration (RDN 1992a:art.4). The SLGs are composed of persons with customary usage rights. SLGs are created with the approval of the Forest Service (called the Environmental Service).

An MR is a market established for the sake of woodfuel sale. It is a place where members of the SLG in the area must bring their wood for sale by the market's manager (a member of the SLG). These markets are placed in areas where there are SLGs organized for commercial woodcutting (RDN 1992:art.8). The rules by which these markets operate are specified through the regulatory process (RDN 1992:art.8). Only the SLGs and owners of private forests are permitted to engage in woodfuel exploitation in the areas having MRs.

Two types of MRs are created by this new forestry code. "Oriented" areas are those where the production zones are delimited but not managed, and "managed" areas are those defined and managed. (RDN 1992a:art.9-10; RDN 1992b:art.1). These MRs are under the control of the SLGs (RDN 1992b:art.2). There are also "non-controlled" areas, where exploitation will remain free of the SLGs and MRs. This latter type of exploitation is expected to be ended, at some unspecified time, by decree.

In practice, the project Energie II creates an SLG at the level of the village. These structures were conceived as a group to reflect on woodfuel resource management and to speak for the village community. These committees are constituted of:

1 Honoré, President--the village chief,
1 President of the rural market,
1 Treasurer,
1 Manager (of the MR),
1 Representative of the woodcutters,
1 Representative of the herders, and
1 Representative of farmers (Madougou 1993).

About 50 rural markets were established as of November 1994. These markets are estimated to supply on the order of seven percent of urban firewood demand.

The SLG management committee sells the wood and uses the revenues to pay required taxes to the Forest Service and for forest management.

Management Plans

In the MR system, the Forest Service chooses villages as a function of the forest production potential. They first determine, in conjunction with village authorities, the village's usufruct area (their terroir). The village's forests are then divided into four blocks which are

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18There are problems with the Rural Market system. This is not a critique of Rural Markets and their problems. Rather, this is a short description of the system as it is presented in existing documents. Other researchers have pointed out overemphasis on firewood to the detriment of other forest products, the difficulties in establishing a workable relation with herders, exclusion of women, ineffectiveness of management training, inadequate legal structures to support the MR system, etc. This report does not attempt to enter this level of analysis.
further subdivided by three. The Forest Service then sets cutting quotas, based on a forest inventory for each of the village's four blocks.

Elaborate discussions of the ecological criteria and practices to be encouraged through the MR system are described in a recent volume (RDN 1994).

**Annual Quotas**

Each SLG is allocated an annual production quota fixed by an ad hoc commission composed of:
- one representative of the concerned SLG;
- two representatives of the forestry administration, one from the departmental and another from the arrondissement service;
- one representative of the Territorial Collective (commune, arrondissement or regions), in which the SLG is found;

The new code also creates a national arbitration commission with power over the ad hoc commissions charged with fixing the annual production quotas. The composition and function of this commission will be defined by decree of the minister charged with forests. (RDN 1992a:art.12.) "The principle function of the quota [is]: to limit the quantities exploited to the potential of the local resource" (RDN 1994:68).19

**Management Fund**

The Forest Service has left financial decisions concerning management in the hands of SLGs. The funds for management will come, at least in part, from the taxes—see below. Some management funds may also be derived from the sale price. They have also left credit arrangements to the normal channels for rural credit.

**Prices and Taxation**

Each SLG negotiates its producer price in an open market (in Niger's previous Cooperative projects where the prices were fixed by the administration—RDN 1994:25-27).20 Foresters do not fix the producer price. A union of rural markets is expected to emerge to help rural producers to raise the price (RDN 1994:38). Retail prices of other energy products are fixed in Niger, but available documents do not indicate that woodfuel retail prices are fixed by the state.

The tax on woodfuels is viewed as a major tool for orienting woodfuel commerce toward the regions with higher wood supply potential and where production is organized into rural markets. With these aims, the tax will be assessed on woodfuel as a function of 1) whether the area from which the wood came is managed, oriented or non-controlled, and 2) the distance from the city where the fuels are being sold. These taxes on firewood are to be collected by the manager of the MR or by the Forest Service in non-controlled areas. (RDN 1992:12-14; 1992a.)

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19 Translator Note: "La fonction principale du quota: limiter les quantités exploitées à la possibilité de la ressource locale."

20 Note that "open" refers here to lack of state price fixing. It does not eliminate the types of controls on terms of exchange exercised by urban merchants and transporters.
Tax revenues are to be divided between the Public Treasury, the SLG and the Local Collective. This repartition takes place before the revenues earmarked for the public treasury are turned over to the state. (RDN 1992a:art.22-23). To provide an incentive for organizing MRs and SLGs, the repartition of these revenues is also a function of the type of management under which the woodfuels were cut. If one assumes that the State is also affected by these tax structures—i.e. that it is not just a neutral arbiter—these structures give the State considerable incentives to allow non-controlled production.

Repartition of Woodfuel Tax Revenues:

<table>
<thead>
<tr>
<th>Recipient/origin</th>
<th>Non-controlled production</th>
<th>Oriented production</th>
<th>Controlled production</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLG</td>
<td>-</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Budget of Collective</td>
<td>10%</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Public Treasury</td>
<td>90%</td>
<td>50%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: RDN 1992a:art.23.

Of the non-tax revenues accruing to the SLGs from firewood sale, these are divided 80 percent to the woodcutter, ten percent to the manager, and ten percent to the village authorities. These incentive structures have been decreed, but they are not yet in place. Currently the tax stands at 350 FCFA per stère.

Articulation with the Rural Code

Researchers working on tenure issues related to agriculture and ranching are concerned that the setting up of MRs and the creation of decision making bodies to optimize the management of the forest resource is confusing issues of integrated resource management that the new rural code is aiming for. They point out that the SLGs are guiding the management of the village territories for the optimization of firewood production, rather than taking a more integrated approach.21

Another tenure issue that needs to be addressed is that highlighted in the research conducted by Ngaido (1994) on the relation between land use objectives, tenure relations and land degradation. In his study in the canton of Tamou in Niger, he found that new policies of food self-sufficiency in the mid eighties changed the objectives of production in rural areas from family self-sufficiency to increasing national production. Consequently, the relation between land users and land managers changed. Village chiefs continued their role of land allocation, but the foresters (Department des Eaux et Forêts) lost much of their control over forest clearing for agriculture. At this moment the new land users were dignitaries, functionaries, officials and merchants—almost sixty percent of them coming from Niamey. The status of these new users reduced the capacity of the forest service to control land use changes. "This situation lead to soil degradation and destruction of the vegetation cover" (Ngaido 1994:6).

In short, the cause of land degradation here was changing relations of production (cf Turner 1994). The introduction of Marché Rurale in Niger changes the production objectives of these rural communities. It directs
The current procedures are extremely sensitive to local needs and desires (see Madougou 1993). However, because SLGs have not been set up with consideration of the current research and planning for the elaboration of sub-sections of the Rural Code, SLGs risk to undermine the longer-term and larger efforts toward integrated resource management that the architects of Niger's Rural Code are aiming for.

Comments on Participation

SLGs are not representative of the populations of the terroirs from which wood is being taken. While the SLG management committee may appear to represent a cross-section of village interests, it does not represent the village as a whole--i.e. the ensemble of people affected by woodcutting activities. Even if one assumes that the chief represents the village, s/he is a minority on the committee. This committee is neither elected nor necessarily locally accountable. Further, women are excluded from decision making. In short, there are some disenfranchised groups who are still not included, and there is no locally accountable representative with control over the disposition of the forest resource. The quota committee is even less representative or locally controlled. By setting up non-representative structures for woodfuel management, the Energy II project may hinder efforts on the part of those elaborating the Rural Code to create representative bodies to engage in rural resource management.

The Forestry Service has made membership in SLGs contingent upon usufruct rights in the use area. Only those having historical usufruct claims to the forests in question are permitted to engage in commercial woodfuel production. This ingenious innovation still does not make SLGs representative of the entire population of the terroir. It assures that control is local without addressing whether that control is representative of the other groups within the terroir who may want to use or maintain forests for other than commercial woodfuel production.

Officially there are no new rights (as opposed to privileges) over forest management or commercialization in the hands of locally accountable authorities, although chiefs and other local groups are consulted. Informally, resource management rights rest, according to researchers interviewed, in the hands of the préfet and technical services. In addition, in the committees established to allocate quotas, decision making powers are retained by central government decision making bodies.

Tax revenues are repartitioned among the central state, local collectives and the SLG. None of these are representative of the local population. Nor has the local population had any decision in creating this repartition. The smallest level of Territorial Collective, local collective, is the commune, regrouping on the order of 50 villages. This level of aggregation can hardly be called local. Further, these collectives will be elected by lists chosen by political parties, hence, they may not represent local interests. Nonetheless, ten percent of the revenues from wood sales do go to the village (via the SLG).

the community toward managing the forests for woodfuel, and it introduces new values into the territory. Both of these could be good things. They could also have unforeseen effects, particularly depending on how control of decisions over these new resources are located within village decision making structures.

23This exclusion was justified by project officials on the grounds that "women are not interested in woodcutting." The author found women woodfuel merchants in nearby villages. Further, women are affected by woodfuel cutting, even if they are not interested in participating in it.
While the SLGs move in the direction of more local control and greater local benefits, it is not clear to whom within the local communities the control or benefits accrue to.

Implementation

Since 1959 the tax on firewood has been set at 35 FCFA per stère. The head of the National Association for Woodfuels (ANEB) explained that from 1980 to 1985 nobody collected the 35 FCFA per stère tax on woodfuels because of the Uranium boom. In 1987 the tax was raised to 350 FCFA per stère and the inspector started controlling collection. But he had no means to do so. Very little tax was actually collected. In 1988, the Forestry Service started controlling taxation with the Energy II project. They hired guards, bought motorcycles and set up two 24-hour posts. Today only about 40 percent of the taxes due are actually collected. This is because of 1) fraud at control posts, 2) functionaries bring wood when returning from missions, 3) people transport wood on public transport vehicles, 4) non-wood transporters bring in wood among other goods, and 5) the army brings wood in and does not pay the taxes. In addition, truckers pay about 5000 FCFA in bribes or tips to police on each trip. This facilitates them not having to have their papers in order. Also, the 25 percent of taxes and fines that is supposed to get returned to the forestry agents never gets paid. Once it enters the state coffers, it never comes back out. While this incentive structure is questionable, the fact that it is in place and not respected by the State creates resentment among forestry agents, further reducing their incentive to enforce the laws. (Abdou 1994.)

According to the Forestry Service, the level of tax collection in the MR areas is close to 100 percent. This speaks to the motivation of local populations to engage in enforcement when they have a stake in the policy (i.e. reap a portion of the tax).

Without further systematic study of implementation, it is difficult to know how, to what degree or why policies other than tax policies will or will not be implemented. (For further discussion of tax circumvention and its causes, see Abdou 1994.)

D. Senegal:

Senegal's new forestry code consists of Law 93 of 4 February 1993 (RDS 1993) and the proposed Application Decree (RDS 1994), now under consideration for ratification in Senegal's National Assembly. While the laws speak of including local populations in resource management (as does the 1964 Law of National Domain, RDS 1964), it is not clear from these documents what benefits local populations will reap from their participation. Senegal's new code creates privileges to be allocated, but does not create any new rights for local populations. Below I sketch out what the new laws allow and why they do not truly constitute decentralization or devolution of the benefits that flow from Senegal's forests to local populations.

Senegal's forested domain is divided into the Classified domain of the State, the Protected domain of the State, and the Private forested domain. The Classified domain of the State will be managed essentially as it has been in the past, with State discretion over classification, declassification and production in this domain. The new Private forested domain is a special case of planted forests--this may only pertain to forests planted on agricultural lands. It is within the Protected domain of the State that the greatest opportunities for local participation in forest management will be ushered in by the new policies. In this section I will focus on the management of production in the Protected domain of the State.

Forest Management in the Protected Domain of the State
All lands not having been subject to classification belong to the Protected Domain of the State. Within the protected domain of the State some rights over forests have been devolved to local populations. The first article of the new code affirms the state’s primacy over the forested domain, while creating the possibility of granting some control over forest resources to individuals and to Local Collectives (Collectivités Locales--CL). It reads: "The right to exploit forests and forest lands in the national domain belong to the State which can exercise them directly or grant them to third parties or local collectives, following procedures defined in the present chapter" (RDS 1993:art.L1,p.1). These procedures boil down to the elaboration of a management plan by the Forest Service for CLs (more on management plans below) (RDS 1993:art.L6). In the application decree the preamble confirms that this is only a possibility and not a right or certainty in enumerating among other changes that the new code brings "...the possibility to concede a part of the forest patrimony of the State to Local Collectives..." (RDS 1994:2).

In the National Domain the Forest Service can also permit forest exploitation, after the payment of forestry taxes (RDS 1994:art.D41) or after sale of the plots or forest products by the Forest Service (RDS 1994:art.D49,D50). The Forest Service can deliver permits in these cases or sell the wood on a plot to individuals (physical or moral persons--meaning an individuals, corporations, cooperatives, etc.) or Rural Collectives (RDS 1994:art.D51,D52). In short, the Forest Service can decide who will exploit which forests, when. They control commercial exploitation in all forests. The Forest Service can license forest production, it can sell forest resources, or it can give commercial exploitation rights to CLs within the its forested domain.

**Management Plans**

Article L6 of Senegal’s new code states that the Forest Service will draw up and approve a management plan for each CL. This plan will specify the rights and the obligations of each CL. (RDS 1993.) The CL can then assign forest plots to physical or moral persons within an area under a management plan (RDS 1993:L8). The CL can also auction or sell the wood on plots not assigned (RDS 1993:L8). These plans will be elaborated by the Forest Service for, and at the request of, CLs (RDS 1994:art.D12).

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24 Local Collectives or Collectivités Locales are the smallest unit of elected representation with legal standing. Rural Local Collectives are called Rural Communities or Communauté Rurales (CR).

25 Translator Note: "Les droits d'exploitation des forêts et terres à vocation forestière du Domaine national appartiennent à l'Etat qui peut les exercer directement ou les concéder à des tiers ou aux collectivités locales, selon des modalités définies au présent chapitre."

26 Translator Note: "...la possibilité de concession d'une partie du patrimoine forestier de l'Etat à des collectivités locales...."

27 CLs have the right to sub-contract their managed area to any moral or physical person of their choice.

28 To be taxed 20 percent in addition to the exploitation taxes and fees (RDS 1994:art.D53).
Management plans require all owners and users of forest formations to manage regrowth or plant forests as maintenance is needed, and to delimit their property and to implement their management plan in collaboration with the Forest Service (RDS 1993:L9,L10). The Forest Service will monitor implementation and will also retain the right to revoke these management plans (RDS 1994:D13). In short, the occupants of the lands subject to a management plan drawn up by the Forest Service will be obligated to implement that plan. This constitutes an important new power of Senegal's Forest Service: power over labor within CLs. There is no explicit appeal procedure for local populations to reject management plans.

The new laws require the Forest Service to take into account ecological as well as socio-economic concerns in the elaboration of management plans (RDS 1994:art.D11). The laws also require them to elaborate the plans with the CLs. But, it is the Forest Service that ultimately approves these plans.

If CLs can obtain a management plan in a timely manner and if they can shape the obligations related to those plans, then this management system does give CLs considerable control over the disposition of the forests within planned areas. However, while texts make this possible, they do not assure it. Hence, they do not establish any new rights.

The Forest Service can also grant concessions within the Protected domain. There is no requirement for the Forest Service to consult the CLs if they are to concede forests or sell forest products in the terroir of an CL. There is no clause stating whether the Management Plans of CLs take precedence over State granted concessions.

Management Fund

Senegal's National Forestry Fund is to be financed by taxes, sales and auction revenues, license and permit fees, fines, damage compensation with interest, and the sale of confiscated products (RDS 1993:art.L3). It will also be fed by a 20 percent tax on forest products sold by CLs. This fund will finance conservation and protection of forest resources, restoration of forest resources and soil conservation, Forest Service equipment and infrastructure, temporary personnel and Forest Service transport costs and uniforms. (RDS 1994:art.D53,D54.)

Concerning CL access to these funds the application decree states: "Subsidies and reimbursements, not totaling in excess of 25 percent of the annual amount of the National Forestry Fund, can be allocated to CLs and local organizations, to public and private establishments, as well as to physical persons who are distinguished by their acts of environmental protection and reforestation" (RDS 1994:art.D55--emphasis added). These

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29Here owners are the State, CLs and private owners in the case of planted forests.

30Article D12 states that the forestry service is responsible for management in the forests of the State (Classified forests and the private domain of the state--e.g. military installations...). For all other forest formations in the National Domain, the Forest Service will elaborate management plans, at the request of CLs, who will be responsible for their management.

31Rather, the new code simply admits the possibility of privileges to be allocated by the Forestry Service.

32Translator Note: "Des subventions et récompenses, en dépassant pas globalement 25% du montant annuel du Fonds Forestier National, peuvent être accordées aux collectivités et organisations locales, aux établissements publics et privés, ainsi qu'aux personnes physiques qui se sont distinguées dans des actions de protection de la nature et de
subsidies and reimbursements are allocated by the Minister responsible for the Forest Service following proposal by the director of the Forest Service (RDS 1994:art.D56).

In short, there is no local control over these funds.

Prices and Taxation

Senegal fixes the wholesale and retail price of charcoal. As mentioned above, the taxes on woodfuels will be channeled into the National Forestry Fund. The tax on woodfuels will be uniformly applied independent of the origin of the woodfuel, as has been the practice in the past.

Comments on Participation

In the name of participation, Senegal’s new forestry laws are the first legislation that gives the Forest Service a handle on rural labor. It does so with little in the way of checks and balances, presenting a formula for participatory corvée. The new laws require the participation of rural populations in forest management by giving them responsibilities (often called responsibilization), but giving them little control over what those responsibilities will be. Further, while intending to greatly increase the taxes on woodfuels, none of the revenues from these taxes will be under the control of local communities. Indeed, 20 percent of the profits gained in selling forest resources will now be added to the Forestry Fund which is administered without the participation of local populations.

Control over the disposition of the resource is also not clearly in local hands. There is still no mechanism by which villagers wishing to conserve their forests can do so. If they choose not to engage in forest exploitation they are faced with the prospect of the Forest Service allocating their forested terroir to others from outside of their area.

Implementation

There is a long history of partial and selective policy implementation in Senegal’s forestry sector (see country report). The new policies still concentrate control of decisions and the allocation of access to resources with the Forest Service, leaving room for continued selectivity and interpretation in application. They give villagers little incentive to engage in policy implementation and enforcement, hence, leaving the Forest Service as a policing unit overseeing a population engaging in management activities now mandated by law.

E. The Gambia:

The Gambia, being a former English colony, has inherited and developed a profoundly different set of forestry and administrative policies from the Francophone RPTES countries. Given its unique situation among the RPTES countries, many of the comments and options presented later in this paper may not apply. Nonetheless, the experience of The Gambia provides insights by dint of its differences. Below is a brief outline of The Gambia’s current commercial woodfuel policies and some new directions that projects are taking.

Organization of Commercial Production:

Men, almost entirely Fulbe Futa (Guinean Fulfulde), cut for commercial markets (RPTES 1994g:sec.2.7). Woodcutters are officially required to have an exploitation license or to be the assistant of an exploitation-license holder. The number of exploitation licenses are limited to 40 per district, and each license holder is permitted to have a maximum of three assistants.
Each assistant must hold a permit. Typically the license holders do not cut wood themselves. They are older woodcutters who hold the license and hire younger assistants. The number of assistants a license holder hires ranges greatly and is certainly not held to the legal limit. Both license holders and their assistants are called *surga*.

As in The Gambia there are also *kontrapalaas*, or foremen, among the woodcutting assistants. These foremen will coordinate work and transport between the woodcutting assistants and the license holder or between the assistants and the urban merchants.

Urban merchants, called *patrons*, have organized themselves into a union. These merchants are required to hold "vender's licenses." There are about fifteen currently issued. The merchants explained how they work (Interviews). When they have someone who wants to work cutting wood for them, they bring that person to Lamin Bojang, the head of the forestry control post at Birkama, the entry to the urban peninsula. Lamin Bojang explains to the applicant the process of obtaining a license. They then follow this process (discussed below). These licensed woodcutters generally work for the merchants.

The transport in this sector is rented on an open transport market. There are no woodfuel merchants who own their own trucks (Merchant Interviews, Forester Interviews). In theory, each merchant is limited to five truckloads per month of seven tons each. In practice, the number of truckloads varies and the trucks carry about ten tons of wood.

When the patrons' surga have prepared a truckload of wood and the kontrapalaas has brought a truck, the surga are paid and the patrons accompany the truck to the Banjul area. There they are met by small intermediary distributors, called *bana bana*, who buy whole-truckloads and then sell them bit by bit to retailers.

**Rural Administrative Structure:**

In Gambia there are three recognized rural administrative levels other than the central government. The country is divided into 5 divisions, 35 districts, and 1873 villages. Villages are the smallest recognized administrative/representative unit. Each district contains somewhere between 18 and 200 villages, averaging 55. Each Division is made up of 4 to 7 districts. At the village level there is a village council, and a village head. The village head, called Alkalo, is traditionally the village founder or one of his descendants. Since about 1963, when an Alkalo dies, the village then can elect a new Alkalo. The Alkalo is elected for life, but can be deposed if he breaks the laws of The Gambia. Village elders and the Imam usually constitute a council to advise the Alkalo. Each District elects a Seyfo or District Chief. The Seyfo is advised by the Alkalolu and any other traditional advisors. (RTG 1990a:cap.33.01.) Seyfo depend on Ministry of Local Government and Lands (MLGL) and are answerable to Divisional Commissioners.

At the level of the Division, there is a Divisional Commissioner, appointed by the president. There is also an elected Area Council. For the Area Council each district has two to three Wards, each one of which elects a councilor. Each Area Council has about 15 to 20 elected councilors. The Area Council is chaired by a Commissioner (RTG

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33The district of Georgetown is unique, only containing one town.

34There are six Area Councils since Macarthy Island has two, due to its size.
Only "compound heads," can vote for Alkalolu, Seyfo. Those who pay taxes and are registered on the tax lists are permitted to vote. These lists are composed of heads of households (or compounds), 98 percent of whom are male. Further, there are an average of 10 to 13 persons per household, so only a small fraction of the population is enfranchised to vote at these levels. Additionally, the village head is elected for life. In addition, candidates for local elections must also be registered on the tax lists, limiting the pool of candidates to a narrow sub-set of the population. Area Councilors are elected by all citizens above 18 years of age.

A Brief History of Forestry Policy:
The Gambia's forestry policy history is indeed brief. A forestry committee was first established in 1938. But, no forestry actions were taken until 1948 when an advisor was sent from England. The Gambian Forestry Service was then established in 1950, not attaining the status of Department until 1976. In its first decade it gazetted 66 forest reserves covering three percent of the country. After independence in 1965 permits for charcoal and firewood were introduced. Licensing for woodcutting was handled by local authorities. (Bojang 1994:1; Foley 1994:10.)

The 1977-78 Forestry Acts and Regulations transferred the control of land and forest management from village chiefs to local forest scouts [community members hired and trained by the Forestry Department]. The intent of this change was to slow deforestation and land degradation, especially due to the uncontrolled clearing of forests for agricultural use. The effect of this change was to formalize state control over the use of forest resources for timber felling extraction and land clearing, although usufruct rights for non-timber forest products and deadwood extraction remained intact. Local farmers as well as non-local entrepreneurs, needed to obtain a permit for felling trees, and to apply for a license for timber harvesting. These changes were made largely without public input or participation.... (ANR 1992a:J24.)

As a move to preserve the forests the production of charcoal in The Gambia was made illegal (Foley 1994:25).

Management by License and Permit:
Commercial access to forests is now controlled by a process of licensing and permitting placing access control largely with the Forestry Service. Commercial woodfuel production licenses are officially obtained through a four-step process. Someone wishing to cut wood for commercial production first obtains an application form for a woodcutting license from the district Commissioner’s office. The applicant must obtain the stamp of the Alkalo at the village level, then of the Seyfo at the district level, followed by delivery of the application to the Commissioner at the Divisional level. The commissioner presents the applicant’s request to the Divisional Forestry Committee. This committee meets once a week and is presided over by the

35Each village, district and division has a Development Committee. These committees are designed to coordinate development activities. These structures are informal, but they could play a role in resource management. These committees are only active in some Districts.
Commissioner. It is composed of the District Head Chiefs (Seyfolu) and civil servants at the
district level, including Forest Service staff. Once approved, the Commissioner authorizes the
Forestry Staff to de...r a license upon the payment of required fees. Through this form of
official access contro... villagers can deny permission to commercial woodcutters, but when they
approve an application it can still be denied at a higher level. Hence, officially, villages have
the power to withdraw their forests from commercial production.

In practice, if the Alkalo refuses to sign a license, the Seyfo can still sign off depending
on the grounds on which the Alkalo has refused. For example, the wood merchants explained
that if there is dead wood and the Alkalo refuses access, then, "of course, the Seyfo or Commissioner will still issue a license." This was confirmed by forestry officials. Hence, the
Alkalo does not control the commercial disposition of surrounding forests. This practice
contradicts the Forestry Service procedures that village Alkalo in all areas of the country sign
off on production licenses. A recent report on a forest village that was part of The Gambian-
German Forestry Project, an integrated natural resource management project, further illustrates
the problem:

The major constraint observed by the villagers is the issuing of commercial
timber wood extraction licenses to outsiders by the Department of Forestry. The
village leaders at Ndemban argue that commercial extraction of forest products
was one of the major causes of the extensive degradation in the un-gazetted forest [forests surrounding villages but not in the delimited managed area] and since the
communities Ndemban, Besse and Berefet signed an undertaking of co-
management of the Kasiila forest, they should be given the mandate to also
manage the trees in the vicinity of the communities and be in a position to exploit
the matured trees for timber production. (Dumbuya 1994:iii.)

Clearly this case, even in a project area reflects that Licenses to cut are not in the control of the
local populations, but rather are handed out by Foresters.36

In short, while the Alkalo’s decision is required for commercial production, it is not
necessary. That is, if the Alkalo makes the wrong decision, to be judged by the Forestry
administration, then Alkalo approval is not required. It is no surprise that rural people believe
"...that the state owns the land and other natural resources..." (Dumbuya 1994:1).

The Forest Service also maintains control of the number of licenses to be delivered and
the distribution of these licenses among the Districts. Up until 1989, 300 licenses were
delivered. After 1989 the number was 150, and then it went down to 120 in 1992. But, this
delivery of licenses has little to do with the quantity of wood produced, since most wood is

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36 The Forestry Department recognizes and is trying to redress these problems. The director of The Gambia's Forestry Department clearly outlined the reasons rural populations do not participate in forest management. He stated that these include:

1. Inability of the local Community to derive any commercial benefits except through the payment of license fees which were generally beyond their means,
2. The licensing of ‘outsiders’ by government to exploit the community forest,
3. The constant policing and prosecution of offenders, including those resident in the villages, by the state,
4. The withdrawal, in 1976, of all licensing activities from the local authorities and its transfer to the newly created Forestry Department. (Bojang 1994:1.)
produced illegally. Some donor agencies support the limiting of permits, pointing out that the justification is better control of licensing (ANR 1992a:28). But, if the limit is below the actual demand for licenses, it simply pushes more people into illegal production. As Merchants recounted in interviews, "they are trying to put us in jail," referring to the fact that limited permits pushed them to produce illegally and to import wood illegally from Senegal just to meet demand. Because demand will not shoot up if more licenses are issued, and demand must be met to prevent urban unrest, it is not clear what justification there is for limiting the total number of Licenses.

In short, access to production licenses is controlled and allocated by the Forestry Department. This is the primary tool for forest "management" today. A community licenses was also recently created. This license allows whole villages to obtain a license for themselves. This new policy facilitates village entry into commercial forestry.

**Participatory Forest Management in Project Areas:**

There are currently two major woodfuel management, production and supply projects in The Gambia. These are the Agriculture and Natural Resources (ANR) project of USAID and the Gambian-German Forestry Project (GGFP) (Bojang 1994b).

ANR is a well thought out attempt at decentralization of resource management (Dumbuya 1994:2). Unfortunately, this project is on hold due to the recent military coup. "The goal of the ANR program is to increase rural incomes from crop, livestock, and forest products." "Two sub-purposes of the program are: (a) to establish a policy framework conducive to the adoption of improved resource management practices; and (b) to promote the adoption of these improved practices." (ANR 1992:2.) While on-the-ground components of this project have not been launched, several important studies and an in-depth policy analysis have been conducted (ANR 1994; Freudenberger 1994, 1993; Bobb et al. 1994; Freudenberger and Sheehan 1994; Sheehan 1994). The policy analysis document provides an excellent discussion of both incentives for local participation and for institutional engagement (ANR 1994:6-12). It does not, however, evaluate the structures of representation so necessary for equitable local resource control. Rather, it proposes that management agreements modeled after those used by the GGFP be used to establish local management bodies (ANR 1994:12).

The GGFP is predicated on community forestry management organized through the establishment of a village forest management committee, a Community Forest Management Agreement (CFMA) and a forest management plan. GGFP personnel first "sensitize" a village population to forestry issues, then facilitate the establishment of a village committee if the community shows interest in participating in the project (Bojang 1994). These committees are chosen in a general meeting of the village. The only expressed stipulation is that the project has required the committees to include women.37

Communities interested in forest management, as represented by the committee, complete a CFMA application form. The CFMA application includes a list of members of the

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37One study pointed out that "...local village elders expressed their concern about the legal status of the management committees established to supervise the implementation of the community forestry project" (Dumbuya 1994:iv). The lack of legal status of these committees may threaten the security and generalizability of such structures. It is also difficult to assess the degree to which these committees are representative or legitimate in the village context. Such an assessment would be essential prior to generalizing this approach.
management committee, a memorandum of understanding, an attestation that the members understand the terms, and the signature of the Seyfo attesting that the forests in question can be claimed by the community. The Memorandum of Understanding asserts that the delimited forest lands will be set aside for the project, common property management principles in which all members have equal access will be followed, that land rights are not conferred by the project, that members will adhere to sustainable management principles "as they have been explained to them," and that Foresters can enter and inspect the forest at any time (Bojang 1994). The committee and project personnel also elaborate a management plan (discussed below). In addition, an inter-village management agreement has been drawn up to facilitate joint-management of forests by surrounding communities.

The Minister must approve the CFMA application, and with this approval exempts the area to be managed from other forestry laws. Granting this privilege is facilitated by a clause in the 1977 Forestry Act by which the Minister of Natural Resources and the Environment can exempt areas from existing forestry laws. This clause reads: "The Minister may by notice in the gazette and either for the period mentioned in the notice, or without any period assigned withdraw from the operation of all or any of the provisions of this Act: any class of persons or any area specified therein." Within such designated areas a new set of management and use rules (a CFMA and management plan) can be set up to allow communities to manage and benefit from the resource. In these areas the Forestry Department waives license payments by the community and forbids outside license holders from operating within two kilometers of the designated area. (Bojang 1994:3-4.)

The benefits from the sales of products from the managed forests are placed in a community-owned bank account. They are used for forest management and for other community development activities. (Bojang 1994:5.)

Management Plans:

In the GGFP, the project delimited the forest to be managed and began the process of management with specific management tasks. These tasks included the planting of hedge species to demarcate the boundaries and the making of fire breaks. GGFP does not allow commercial production as part of the plans for the first three years of management "to give villages time to feel ownership" (personal communication, project representative). It appears that these plans are drawn up by the project personnel in cooperation with village committees. It is not clear who has ultimate authority over plan approval nor which aspects of plans are at the discretion of the villagers. The division between technical decisions for Forestry Department and village rights is not evident. (See Bojang 1994:annex 3.)

Prices, Tariffs and Taxes:

Woodfuel prices in The Gambia are not State regulated. The current royalty on woodfuels in The Gambia is ten Dalasis (U.S.$1.00) per truck (Bojang 1994). License fees are D 500 per extraction license holder and D 250 for each of the three assistants they are allowed.

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38Ironically, this clause makes participation in the privilege to be allocated by the Minister, rather than a right. Framework legislation (such as that proposed by the ANR project) could enable integrated forest management and facilitate the local retention of benefits. In this way villagers would not have to depend on the good will of the Minister or on loopholes in a set of restrictive policies.
There is also a community production license for D 1000 per village, allowing the entire village to enter commercial production.

Disposition of Tax, Auction and Fine Revenues:

Section 22 of the 1987 Forestry Regulations states that "The Accountant General shall pay a royalty to each Area Council, with respect to collection of any revenue from exploitation of forest produce that is within that Councils' area of jurisdiction but outside any Government forest parks and protected forests" (RTG 1987:59). Fees collected from licenses, permits and royalties are presently shared between local Area Councils (30 percent) and the Treasury (70 percent). These funds are at the discretion of Area Councils for development purposes.

According to one evaluation, "this is not adequate compensation for a loss of absolute use rights to communities for forest goods, and does not provide the incentive to adequately manage forest resources." (ANR 1992a:j27.) From available however, this is difficult to evaluate.

Comments on Participation:

The Gambia's most recent statement on forestry policy goals indicates that The Gambia aims to promote "community ownership and management of forest lands to: increase awareness and willingness of the rural populations to protect forest resources, ensure active participation of the public in management of community forests, ensure that significant benefits are realized from the forest by the community" (RTG 1994:6). These intentions are reflected in some current policies. But they are not in practice. While Alkalolu signatures are required on permits, the Alkalolu can and are easily over-ridden. For example, Alkalolu cannot deny woodcutters access if the Forestry Department deems the forests ready for harvest. Further, as one policy analysis pointed out: "To sell forest products, licenses must be bought and fees paid. However, once a permit is sold to the tree-cutter, villages have no right to refuse admission to their forest." (ANR 1992a:j27.) In short, the "required" signature of the Alkalolu provides little local power over the commercial disposition of forest resources.

Participatory approaches can certainly be seen in projects. But, projects are isolated in both space and time, and present an artificial environment where cooperative efforts are supported and protected by the authority, finances and skills of the donors and project coordinators. Further, to raise the value of the forest resource for local populations, local control should cover the entire nation, since with open access in some places and local management in others, those populations managing their forests will never be able to compete with the prices that merchants can get in non-managed or open-access areas. If open access practices are maintained in some areas, management in other areas will remain an unprofitable act made worthwhile solely through externally funded projects.

Lastly, and most importantly, it is not clear that there is locally accountable representation at the village or at the district level to which decisions over forest management and commercialization can be devolved. First, Alkalolu and Seyfolu are elected by only about ten percent of the population, almost entirely males. These elections can hardly be considered to be by universal suffrage, and the elected can not be considered representative. Second, the elected hold their posts for life. While they can be deposed for breaking the laws, and according

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39New legislation has not been drafted.
to government officials often are, this life-long appointment removes them from electoral accountability. While they may be accountable as members of the community, they are not accountable through an electoral process. For there to be local control there must be legitimate and accountable local representation. Given the complex relation between customary and state practices in The Gambia, this relationship should be reviewed, reconsidered and perhaps reworked if more equitable and accountable local control is to come about.

Recourse in The Gambia:

District Chiefs (Seyfolu) are third-class magistrates. They can hold court and sentence. They are empowered to uphold local laws and to preside over local land and resource disputes. A recent study of land tenure and resource management shows that most disputes (over land, marriage, water, livestock, etc.) are resolved at the household level, many are resolved by the Alkalo and only a few percent, usually livestock, migrant farmer and farm boundary disputes are resolved by the district Seyfo (Bobb et al. 1994:46). The Imam (the Islamic religious leader) enters into dispute resolution between the Alkalo and disputing parties.

District tribunals are critical in resolving tenurial and other natural resource management disputes (Freudenberger 1994:54-56). It is not clear whether they are legally charged with hearing cases concerning abuses of forestry laws by the Forestry Department or by non-village economic interests. This power is critical if the "arrangements" that characterize the relation between Forestry Departments and those interested in commercial forestry are to be locally monitored and controlled.

In comparison to the Francophone countries The Gambian recourse channels are much more readily available to rural populations. Article 32 of the Forest Act of 1977 (RTG 1977:48) requires review by a magistrate prior to the sale of confiscated forest products. Article 39, however, states that the product in question is presumed to be "property of the Government unless the contrary is proved." In other words, the burden of proof is on the accused. They are guilty of the accusation until proven innocent. It is not clear from these acts whether the review of a magistrate is necessary for other offenses not involving confiscations. Whether the Seyfolu can challenge (on its own or on its constituents' behalf) decisions taken by the Forest Service is not clear.

Implementation:

The licensing system, if it truly required the Alkalolu signatures, could afford greater local control. But, its implementation is not only compromised by current Forestry Department practices. It is also compromised by the powers of the woodfuel merchants. Most license holders do not limit themselves to the three assistants permitted by law and many illegal woodcutters supply the markets (cf ANR 1992a:J27). Further, when community permits were created by the Forestry Department to allow local populations to benefit from production, the Alkalo of one village was paid off by an urban-based merchant who brought in his own woodcutters from outside of the village area. The old system of external exploitation persisted. These types of abuses can perhaps be reduced through informing villagers of their rights and of the recourse channels open to them in the event of problems. But, such measures first require the unambiguous establishment of such rights. In addition, only a small portion of the taxes due on woodfuels are actually collected by the Forestry Department (RPTES 1994g:2.6).
IV. Regulating the Woodfuel Markets--Merchants, Transporters and Vendors:

The Forest Services of each of the RPTES countries, except for Mali, have begun, or have stated their intentions to, "better regulate" the woodfuel markets (BKF 1993:f:19-21; RDN 1992:4,7,9-11; RDS 1993:i; RDS 1994; RTG 1977; 1978). The tools for this regulation include: segmentation of the market through forbidding vertical integration; creation of professional cards, licenses or identity cards for different groups (producers, merchants, transporters, vendors) within the market; required or encouraged formation of professional cooperatives, firms and unions; allocation of quotas to particular groups within the market; the dedication of trucks to woodfuel transport through painting them green and white; and special taxes on woodfuel transport.

In Burkina Faso (since 1985) and in Niger (since 1992) Forestry Services have forbidden vertical integration of the markets, breaking them up into professional groups (RDN 1992a:art.3,5-7; RDN 1992b:art.9-12; BKF 1991:art.299-302; BKF 1993f:14,19; RPTES 1994b:22-23). In Burkina Faso, Niger and Senegal professional cards are required for those working as merchants within these markets (BKF 1993f:20). In The Gambia separate Licenses for merchants and for woodcutters discourage vertical integration.

The formation of cooperatives and firms by merchants and transporters is also part of Burkina Faso, Niger, and Senegal’s policies (BKF 1993f:20). In Niger the National Woodfuel Association is lobbying hard to make membership in their organization obligatory. In Senegal merchants are required to organize into cooperatives or firms. Furthermore, in Senegal, access to production opportunities are controlled by the merchants since 1) merchants are allocated production quotas, and 2) it is only through merchants that woodcutters can get cutting permits and woodcutter identity cards. In The Gambia the merchants organize themselves into an organization called the Sandika (Foley 1994:17).

In Senegal, as is likely the case in other RPTES countries, the structure of access to the merchant class is based on credit, capital, exchange relations within the market, and relations of production between merchants and producers. These structures support segmentation and are reinforced by state policies such as cooperatives, quotas, licenses and permits (Ribot 1990; Ribot 1993).

In Burkina Faso and Niger, the government has required woodfuel transporters to paint their trucks green and white. In Niger lawmakers compared this practice with the painting of taxis. But, the theoretical reasons for painting taxis do not support the painting of trucks in the woodfuel sector. The taxi sector paints its cars to restrict entry into the profession, and so that it can be well monitored and regulated. But, there is no reason to restrict entry into woodfuel transport and woodfuel trucks are easily identified without painting them. Because the taxi sector is very competitive, painting is a measure to protect taxis from competitors who may be willing for quick cash to sell below the cost of living or of amortizing and paying the maintenance of the car. Taxis are painted, licensed and regulated so that the competition in this easily entered sector will not drive the prices below subsistence. Woodfuel merchants and transporters do not need such protection. If woodfuel is not profitable enough for them they can transport other goods.

On the other side of this equation are the rural producers who have been struggling to enter these firmly closed rural-urban markets. Woodcutters in Niger wanted to purchase trucks and wanted to open vending points in the urban areas. Villagers in Burkina Faso expressed
similar sentiments. In Senegal, rural producers have also struggled to be able to transport and market their own produce. A big problem in this market is access to transport. Villagers have little if any access to transport. They cannot just rent a truck and bring wood into the city. The professional card and the green and white trucks make this even harder. They cannot even rent a pickup truck (Bachet).

In Mali the markets are relatively unregulated with only a proposed tax on woodfuel transport. Transport taxes have also recently been introduced in Niger (RDM 1994g:arts.26-30; RDN 1992a:art.13-14). Malian woodcutters do rent means of transport, transport their wood to the cities and sell it. Even in a market where state policies don’t exclude producers from commerce, these woodcutters run into numerous problems in marketing their wood. They often cannot find buyers, or get credit to advance their wood to a vender so as to pay off a transporter, etc. Hence, even if the state-constructed barriers to market entry are lifted, market entry will not be easy. Other measures to facilitate producer entry may be necessary to even the playing field, since these markets are natural oligopsonies.

One of the primary reasons not to over-regulate these markets is that the creation of entry barriers such as licenses, the requirement for merchants or transporters to organize into cooperatives or unions, the allocation of quotas to these groups, etc. all facilitate and strengthen oligopsony and oligopoly formation and consolidation. The object should be to facilitate entry and to eliminate oligopoly formations to the extent that the returns on transport of woodfuels become so low that rural producers will not even be interested in transport as anything other than a purchased factor of distribution.

Indeed, there are good reasons to undermine the power of merchants and transporters in these woodfuel markets. First, due to poor communications and extremely high entry barriers to the merchant class and transport sector, exchange and transport of woodfuels is a natural oligopoly in these countries. In Senegal and in Burkina Faso, the governments fear the woodfuel lobbies due to their power to turn off the flow of woodfuels to the cities. In 1985, Merchants in Burkina Faso created woodfuel shortages because they did not want to follow newly mandated forest management laws. Recent threats of shortages in Senegal by the woodfuel merchants helped the woodfuel merchants force a re-allocation of Senegal’s national quota. If the merchant oligopolies were less powerful these threats may be reduced.

The situation in Mali demonstrates that an unregulated market is not necessarily a freely entered market either. Credit, communications problems, networks of social relations among transporters, merchants and clients and the need to develop a clientele in the cities, access to land for setting up a vending point, etc. also create market entry barriers for small producers. So, the mere removal of state regulations on these markets is not sufficient for facilitating better rural participation in woodfuel commerce. Other measures facilitating access to credit, transport, retailers, and retail outlets will be necessary to devolve benefits of woodfuel commerce to those who work and live in the forests.

Breaking the woodfuel oligopolies will have at least two positive effects: 1) it will reduce their leverage over the policy process, and 2) it will reduce their bargaining powers over rural producers.
V. Policy Implementation:

The history of forestry policy cannot be understood without looking at how, when and to what degree these policies are implemented. As early as 1898, a government memo expressed concern that deforestation due to charcoal production along the Senegal River was causing river siltation. The memo set up rotational woodcutting schedules. But, this rotational scheme was not enforced (M. Freudenberger, 1992:194; also see early complaints of non-implementation expressed in GGAOF 1916:15; GGAOF 1933:143). During World War II the managed forest of Thiès was over-cut (due to oil shortages in the colonies), in the 1980s and 90s quotas were grossly over-allocated, in the 1950s and early 90s protected forests were de-classified at the request of powerful religious leaders (GGAOF 1898; GGAOF 1916; RDS 1941; Ribot 1990; O’Brien 1971:223-224; K. Freudenberger 1991).

Until today many policies are only selectively applied. In all of the Francophone RPTES countries, cutting takes place in un-managed areas and most cutting is carried out before the delivery of a permit. In Senegal, production quotas are far exceeded, production takes place outside of the production season. In Burkina Faso, Niger and Mali, only a fraction of the taxes on woodfuels delivered to the urban centers are actually collected, the delivery of permits and many other practices are inconsistent with existing laws. Furthermore, in some areas forestry policies have been used by forestry agents and officials and by the state as forms of taxation and of extraction of resources from rural communities. (See individual Country Reports) (also see Abdou 1994).

A. Consequences of Incomplete Implementation:

The manner in which policies are partially applied, circumvented and transformed helps shape who—as in the state, urban merchants or forest villagers—has control over and access to the forest resource. The effect of incomplete forestry policy implementation is not just that policies do not accomplish their nominal goals. Non-implementation, just as implementation, has multiple causes and effects. Non-implementation is a selective process. Regulations are applied as a function of the structure of the law in question, the status of the agent applying the law, the status of those to whom the laws are to apply, the political regime in power, the particular conditions of application, etc. Who is being regulated by whom and why they are being regulated are as important in shaping policy outcomes as the content of the policies themselves. The multiple relations between the regulator and regulated profoundly shape outcomes.

The fact that most policies are only partially implemented is of utmost importance. The fact that they are selectively applied as some function of social relations, social status and economic wealth, makes these policies fundamentally regressive. Under these circumstances their distributional effects are to take resources away from those lacking in the appropriate social or economic leverage to access state agents and officials for favors or to either avoid prosecution or payoffs for infractions. To affect a distribution of benefits that favors forest villagers, will require the dismantling of policies, such as quotas and licensing, that explicitly or through selective application channel resources toward notables, functionaries and urban merchants.

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40 Status here includes such important categories as caste, class, religion, ethnicity, age, gender, clan, family, place of origin, political party, etc.
Furthermore, making policies that cannot be or are not implemented, such as quotas below demand or low fixed prices in Senegal, and fixed prices in Burkina Faso (Ribot 1990; RPTES 1994b:24-26), undermines the ability of the state to regulate.

VI. Conclusions:
In the final analysis, villagers have been left with little control over the commercial disposition of forests. The colonial period created a system of forestry control in which forests belonged to the state and were managed by the Forest Service, indigenous populations were relegated to limited non-commercially valuable forest uses, commercial production and transport were regulated by the Forest Service through permitting, access to marketing was under Forest Service control, and the State had the right to levy taxes on, and fix prices of forest products. After independence, most of these policies have been maintained, with some new regulations added to the array of controls open to the Forest Services.

While policies are only partly applied, in some cases their partial application was itself a form of selective control. Those with the social status or economic resources to influence application patterns can benefit from the selective application their influence creates. Urban merchants and transporters maintain control over woodfuel markets, and in the use of Senega: over access to woodfuel production labor opportunities as well. Their control is partly a function of their social and economic status. Their control is often supported by forestry policies, except in Burkina Faso where merchant power was a clear threat to the Sankara State. Merchants are able to use this control to varying degrees to capture the benefits that flow from woodfuel production and trade. They are able to capture the benefits of commercial forest use. In the end, very little benefit from commercial forestry remains with those who live in and depend on these forests.

New policies now emerging that attempt to include rural populations in the process of forest management. But, the important thing is to include villagers in the powers of decision over the disposition of the forests and in the benefits that flow from them. The policies described above leave most decisions in the hands of foresters. They include rural populations in labor and in some of the benefits of commercial production.

It is important to remember that the forms of management described above are not the sole forms of commercial forest exploitation occurring in these countries. This fact is critical since rural populations engaged in participatory management are constantly competing with the other forms of resource management. If those forms of management are cheaper, or if they cannot be controlled—either because they are illegal or because they are by the army (as in Niger and Burkina Faso)—then the prospects for raising the benefits flowing to rural populations, as well as managing the forests are, slim. Hence, no form of resource management can be viewed outside of the context of other woodfuel production activities occurring in these countries. If participatory management is to include participation in the benefits that flow from commercial forest exploitation, then participatory management cannot be competing against other forms of exploitation that do not incur the same production, management and taxation costs. It cannot compete against government supported open-access production. In addition, there is no need to provide competition to make these small producers more efficient, since they are and will continue to be in competition with each other—even if control is local and costs are integrated.
In short, while these brave new policies promise to integrate rural populations into forest resource management, the degree to which rural populations will have control over the disposition of the forest resource, and the degree to which they will benefit from their participation in woodfuel management is still highly uncertain and probably marginal. Participation should mean more than the obligation to work for the state. Participation in decision making and in benefits are essential if the participatory approach is to be successful. Positive and secure incentives for forest management must be provided.
SECTION III: INSTITUTIONAL ISSUES--A sweeping scan

I. Who Controls The Forests? Deconstructing the Simultaneous Processes of Decentralization and Concentration:

Forestry policy in the Francophone RPTES countries is embedded in a web of other policies and policy initiatives that will shape local resource management and control. Who decides the disposition of forests and other resources is a function of the forestry code and this broader institutional environment. A thorough evaluation of this institutional environment is beyond the scope of this report. Below, I outline and briefly discuss the types of institutional structures and laws circumscribing the new forestry policies, that will have an important effect on forest resource control. For more detailed discussion of these issues see individual country reports.

In this section I will use the term Territorial Collective to refer to the territorial administrative structures such as regions, provinces, circles, arrondissements, rural communes, etc.

A. Decentralization and the Creation of Local Elected Governments--Territorial Collectives:

Each of the countries in this study have entered into varying degrees of deconcentration and decentralization of their elected and appointed administrative structures. The laws that shape these administrative structures are important for resource management. These new laws shape the Ministries and their organization and the appointed officials that will represent different central government agencies within the various spatial territorial divisions (which I am calling Territorial Collectives) existing in this group of countries, such as regions, departments, circles, cantons, arrondissements, communes, rural collectives, and rural communes. As such, these laws shape who (elected and appointed) will be present within the rural areas, and at what level of administration they will be present, to be making decisions over natural resources.

In determining the levels at which representation will occur, the major issue that arises is the question of the role of customary social institutions, such as the village, and sub-village institutions such as village chiefs, village councils of elders, land chiefs, etc. In the current arrangements, these customary structures will have very limited decision making power. The lack of power of the village, which is the customary unit of organization for most natural resource management activities, has a multitude of implications for natural resource management. It also has a multitude of implications for the legitimacy of the governance structures now being constructed by the decentralization process. The questions that emerge include: Will the non-recognition of customary authority structures and customary levels of social organization bring into question the legitimacy of the governance structures being established by the central government? Will the scale of managing resources at the level of the smallest Territorial Collectives (regrouping from 5 to 50 villages) conflict with customary resource management authorities (at the village level, for example)? Will these conflicts undermine management at the smallest Territorial Collective level?

The question of whether customary authorities should be recognized is also a contentious issue. There is no a priori reason for the central government to legitimize these hereditary and often unequal existing authority structures. However, if they are not included in some manner, then there is a risk that the new governance structures will not be trusted or legitimate in local
eyes. Hence, the fact that customary authorities will not be recognized or treated in one manner or another does not eliminate the powers these customary authorities maintain.

In Senegal, the councilors and presidents of Rural Communities feel powerless and disrespected. The rural populations also have little respect for these elected Territorial Collectives. One reason for this lack of power is that they are not empowered to make decisions over most issues and have no resources with which to work. It is often argued that the weakness of new elected bodies comes from the strength of the customary authorities. But, an alternative hypothesis is that it comes from their utter lack of decision making powers. An elected body that cannot deliver any goods to its constituents is not likely to have great respect in the community. If the legitimacy of these new governance structures is to grow they will need to have decision making powers over real resources and will also need to have an income to invest back in the community as a whole. Control of the commercial disposition of the forest resource by the Rural Communities and a Community Development Fund from woodfuel taxes could serve this function. (See Senegal report; also see Hesseling n.d.)

B. Non-Governmental Organizations:

In Mali, some non-governmental institutions have raised the issue that customary organizations have not been recognized. They have lobbied for the official recognition of villages and of sub-village resource management institutions. While there exist ways in which these institutions can incorporate to obtain a "moral personality," that is to be recognized as having the civil rights of individuals, there are no channels by which they can obtain a "legal personality," or the power to exercise their practices and to enforce the rules and regulations (or even the rules and regulations of the government) within their historical sphere of influence. Without a legal personality, these institutions are powerless. In this manner, customary authority is undermined, or at least not supported by the new governance structures. This is, in my esteem, appropriate. There is no reason that non-elected or consented to bodies should have any such State powers unless they are ordained with these powers by and under the supervision of elected officials within the laws that elected bodies have established.

These non-governmental structures will, however have the ability to register and obtain a legal personality under the new laws. They will be able to register as Economic Interest Groups or Cooperatives.

The central question that remains un-answered is whether and how these customary authorities and customary institutions should be drawn on and systematically included in the management and use of the resources of the new Rural Communes, Provinces and resource management strategies. Should there be required consultations with representatives of these groups? Should the modus operandi of these groups be drawn on for the elaboration of official policies? Should these groups be delegated responsibilities and powers ordinarily retained in the domain of government?

In Burkina Faso, customary authorities are recognized and can be integrated into resource management. The councils of all collectives have the right to contract to private or public, physical and moral persons (including other collectives) for the execution of tasks relevant to their competence (Kiemdé 1994:34,38). Under current law the execution of important forestry sector tasks, what are called the "Three Fights," against forest fires, abusive woodcutting, and the straying of domestic animals, are within the competence of the Province (Ouali et al. 1994:29). Hence, since in Burkina Faso councils have legal standing, the province could
contract these responsibilities to village or to department councils. Under current administrative law the villages and departments, however, have no responsibilities or rights in this domain.

C. Access by Women:

Women constitute the majority of wood sellers in Niger, Burkina Faso and Mali. In Senegal, there are very few women in the wood retail business. Women transporters are extremely rare, if they exist, in any of these countries. Some women do work as woodfuel merchants. Of the Francophone RPTES countries, Burkina Faso is the only country in which women work as woodcutters. It would be interesting to know more about why this is the case and attempt to learn from Burkina Faso's success in this area.

Often women are excluded due to the presuppositions of researchers and foresters in setting up woodfuel projects. In Niger, for example, women have been excluded from Management Committees and forest labor opportunities (cf Christopherson et al. 1993:20). Forestry officials simply explained that there were no women working in this profession, except as vendors in the cities. When local foresters and extension workers were interviewed, they explained that women were not interested in being lumberjacks or in woodfuel commerce, except as vendors in the cities. When I visited the town of Torodi after conducting these interviews, I quickly discovered that at least three women were engaged in hiring woodcutters, stocking large quantities of wood for the rainy season when the prices go up, and then selling their wood to transporters to take to the cities.

If given the opportunity, it appears that women would work in the woodfuel trade. This is an area that needs more attention.

D. Repartition of Resources within the Territories of the Decentralized Governance Structures:

Control over the country's resources, such as minerals, animals, vegetation, monuments, cites of touristic value, etc. will also be divided among the Territorial Collectives. This partitioning of resource control will overlay the territorial divisions over which the collectives have jurisdiction. Hence, even if the Territorial Collectives govern a given territory, they will only have control over certain resources or a certain portion of the resources within their domain. In Mali, the controls they retain will be determined in a process defined by the Law of Constitution and Management of the Domain of Territorial Collectives (RDM 1994j). This law allows the central government, with the approval of the national assembly, to affect the repartition of resource control among these domains. This is a top down process in which the "national goods" are divided up. It is a process by which the resources controlled by progressively smaller units of governance are the residual resources that the next larger units find of no interest. Hence, this is a process by which central powers can maintain considerable control over the disposition of the national natural resource base.

E. Repartition of the Forested Domain:

Similar to the repartition of other goods, the repartition of the forested domain will shape who controls the forest resource. Redistribution of these domains is proposed or underway in Niger, Burkina Faso and Mali. It is not clear from the texts what process will be used to determine this repartition. In Mali, it would appear that this process will be the same top-down process defined for the repartition of other resources. This process too has great potential for retaining control over a large portion of the resource base in central hands. (See discussion of the Repartition of Resources, above.)
F. Repartition of Competence and the Elaboration of Forestry Codes:

The ways in which centralized control of resources has been maintained within the forestry codes has been discussed at length above and in Country Papers. Here I will outline some of the more general issues that allow the forestry codes to serve the maintenance of concentration.

Who has the technical competence to make which decisions? This is one key question that is addressed in the elaboration of laws. When the forestry laws are elaborated, the laws lay out who can and who cannot make what decisions over the disposition of forest resources located in the domains of different governance structures. Some decisions are left to individuals, some are allocated to the newly elaborated Territorial Collectives and some are retained for the technical Forest Service. The laws also determine what measures and fines can be taken to enforce this division of powers. It is here that much of the division of control over the disposition of forests is determined. Two key questions arise in determining this division of powers: 1) what is the national good?--which will determine the problematic being addressed by the laws, and 2) what is a technical decision?--which will determine what must be decided by the Forest Service.

1. Greatest Good for the Greatest Number:

The definition of the national good is itself a complex ideologically laden issue and so is the definition of the problem. For example, is commercialization of forest products to gain foreign exchange or to supply cities with fuel a matter of national good? Or, is the local control over forests for subsistence purposes or the clearing of forests for agriculture the more critical matter of national good? These are clearly questions that depend on who is asking. Is deforestation a problem? Or is the clearing of forest lands for much needed agricultural expansion a benefit? These are not simply technical questions. There are certainly technical aspects to them--such as watershed protection, wind erosion protection, etc. But, they are not questions that should be left entirely to the technical agencies that have a direct interest in and a specific ideological position on the disposition of forests. That is, the elaboration of forestry policy should not ultimately be in the hands of foresters. Rather, they are political economic and sociocultural issues that should be technically informed and opened to public debate.

In short, the notion of "the greatest good for the greatest number" can be the greatest way to justify extraction of the greatest amount from the weakest populations. The question is: will the greatest good be achieved by allowing urban areas to siphon off rural resources and profit from it or will it come from allowing rural areas to profit off of these resources so as to have a high standard of living and to have resources to invest in local development?

2. Rational Peasants?

Who is technically competent? How is local knowledge of forest management weighed into the definition of the problem, into the measures that must be applied, and into the repartition of "competence." These too are questions that have not been debated in the elaboration of the new forestry laws, which have not systematically evaluated local knowledge and its role in resource management.

Peasants behave in an economically rational manner (Scott 1976; Popkin 1979; Ellis 1985; Fafchamps 1992). They appear irrational to national planners, because national planners do not understand their rationality (i.e. what is their productive function, what are they trying to optimize, etc.). Their rationality is rarely observed to reflect the self-serving anti-social
behavior predicted by Garret Hardin’s tragedy of the commons argument (Hardin 1987). Indeed, peasants have consistently been depicted as ignorant, "anarchistic" (meaning chaotic) and abusive in their use of forest resources. This is simply not the case.

If the Forest Services of these countries took peasants to be rational, and to be optimizing for different ends than themselves, policy would look very different. Policy would have to be based on local goals, hence, the Forest Service might have to tolerate some sub-optimal management in the direction of their own, "national"-level goals.

3. Checks and Escape Valves--Voie Reglementaire:

The laws that circumscribe the repartition of competence are all passed through representative bodies before they are implemented. They are reviewed by the National Assembly, which examines these laws to determine who has maintained which powers for what purposes. It is here, if the Deputies and their staffs have the technical competence to discern, that excessive maintenance of centralized control of resources with the Forest Service can be checked. But, even this check is circumvented since, the codes reserve for decree many critical regulations that influence the repartition of competence. They reserve the elaboration of certain decisions for discretion of the Forest Service. This is what is called the regulatory path (voie reglementaire). The practice of leaving the elaboration of laws to the regulatory path has left discretion over the control of resource use in the hands of the Forest Service.

In short, there are numerous places for interpretation and mechanisms within the elaboration of forestry laws that permit the Forest Service to maintain control over certain aspects of resource decision making in its own hands. How much of this maintenance of control is justified is a matter for interpretation. Indeed, it is a matter that needs further analysis, discussion, and debate.

G. The Electoral Codes:

Even with the most beautifully constructed Territorial Collectives and the most favorable repartition of the forest domain and of competence within the new forestry codes, there will be no local control unless the elected members of the councils of the Territorial Collectives represent the populations within their jurisdiction. With the present electoral codes this is not the case. The current codes specify the election of the councils of the smallest Territorial Collectives by a process in which lists of candidates are presented for election by the existing political parties. Independent candidates cannot present themselves for election to these councils.

If these councils are not representative of the local populations, then the entire decentralization process and the elaboration of the new codes is just smoke and mirrors to make it appear that decisions are being made by local populations. Instead, what is happening is a political deconcentration rather than political decentralization. The rural councils will represent the nationally registered political parties rather than the populations of the smallest Territorial Collectives. While the decisions will not be made by representatives of the central government, they will not be in the hands of local populations. Without a representative composition of the Territorial Collectives decentralization of resource control is somewhat of a sham.

H. Conclusions:

Decentralization and attempts to establish local control will not automatically benefit rural populations. There remain a large number of concentrating processes that will continue to extract resources from the rural regions. Customary authorities based on dependent or noble-
captive relations will continue to generate and maintain unequal distribution at the level of the village. Competition will pit one rural area or village against the next, bringing down the price of forest products and other natural resources. Exploitation in all its forms, corvée, sharecropping, unequal terms of exchange, rents in cash and kind, usury, etc. will persist. These phenomena will still have to be fought on separate fronts.

In addition, there is a long history of non-implementation of the existing forestry laws. Laws are selectively applied as a function of the economic and social status of the individuals and groups to whom they are supposed to apply. Agents use their state sanctioned authority to extract benefits from rural populations. Bribes or gifts are often used to avoid being fined or having to follow forestry regulations. In general, forestry laws are and have been at best only partially implemented. These trends will certainly continue, to the benefit of those with sufficient economic means or social status and to the benefit of forestry agents and officials.

The decentralization process appears to be riddled with patterns of simultaneous releasing and recapturing of centralized control over the natural resource base. Does this indicate that decentralization is yet another external imposition of international institutions? Is decentralization moving in a positive direction, or is it paving a new road to the same old hell. What is being implemented may not be decentralization or participatory development, but rather participatory corvée. What appears to be being constructed through these processes is a new form of indirect rule, where rural populations are being given new responsibilities with very few new rights, and the central government institutions are being given the instruments to discipline those in the rural areas that don't assume their new responsibilities.

Once again, decentralization and participation may not be fostering the growth of African institutions, but rather European notions of democratization and of governance being applied like a new pall over a persistent, resilient and dynamic set of rural African institutions that have survived the colonial period, survived the post-independence period and will yet survive the period of "decentralization" and "participation."

It is time that Africa's rural institutions be taken seriously. They are tenacious, flexible and able to both avoid and circumvent the desires and mechanisms of the state (Hyden 1980). They are so fungible that they can squeeze around state requirements in much the way state institutions squeeze around the decentralization process. Fighting them may ultimately be a loss for everyone.

The objective in my mind is to establish new, more-democratic rural representative institutions. But the process of institution building will have to manage the dynamic tension between customary and new authorities, carefully building local legitimacy of the new. To gain legitimacy these new institutions will need to have real decision making and financial powers. Elected Rural Councils are disrespected when they have no powers to act. If they are to become legitimate institutions in an environment now shaped by customary authorities they will need to have something to offer. In short, new institutions are not going to emerge in a vacuum. Their construction must attend to their relation with existing institutions, simultaneously out competing them, drawing them in, and building on them.

II. Management Planning and Intra-Village Dynamics:

Each of the countries in this study are preparing to implement one form of forest management planning or another. All require villagers to make commitments to manage the
resource if they are to cut it or sell it to others to cut. There are, however, some problems that emerge given the unequal nature of relations within villages and because village knowledge of the circumstances they are entering is not perfect. Below, I list some problems that may arise.

**Not-so-visible costs of management may outweigh the benefits:** Reforestation has had little success in the Sahel. It has always required more time and labor than expected. The management of regeneration and protection of forests may be easier, but it is still not known by either the foresters or the villagers how much labor it will require. Hence, there is little basis for rural populations (or foresters) to judge whether entering into a management contract with the Forest Service is a net cost or benefit. Villagers may enter into a contract they cannot fulfill, seeing the up-front benefits without seeing the multiple longer-term costs (see Ribot forthcoming).

**Villagers may risk losing their forests if they don’t enter management contracts:** If villagers refuse to accept or elaborate management plans, in most cases foresters can give or auction their forests away. Hence, they may accept sub-optimal terms given that with the threat of losing their forests to urban merchants or migrant woodcutters or charcoal makers (as is happening in Senegal and The Gambia today), villagers will gain nothing.

**Entry into contracts that are net losses for rural populations is more likely since decisions in many rural areas are made by those who reap the benefits but don’t pay the costs--i.e., the costs and benefits are not both internal to the decision maker’s accounts:** Those who are making the decisions over these plans are often not the same persons who will be supplying the labor for reforestation and forest protection, nor will they be the ones who must walk farther for firewood and other non-timber subsistence forest products (roots, barks, twigs, nuts, fruits, leaves and game used for food, fodder, medicines, fiber, fertilizers, fences and dyes). Women gather non-timber forest products and tend to manage forest plantations in these areas. Men are the woodcutters and men occupy the positions of authority--Members and Presidents of the Rural Councils of the Territorial Collectives and chiefs of villages. In the past, in Senegal’s villages, for example, men have made choices to allow woodfuel production to the detriment of a large portion of their population. This is one reason that the structure of representation is critical for sound resource management. (See Ribot forthcoming and see discussion of the case of Maka in the Senegal Country study).

**The conditions set out in new forestry codes do not necessarily foster a high producer price:** The right to sell is not necessarily worth having for an abundant good. It is also not worth having if there is no effective stumpage fee. Territorial Collectives, or local cooperatives and groupements, will be competing for buyers with the Forest Service who will be delivering permits to cut at the price of the forest tax, and who will be auctioning production plots at as-of-yet unspecified prices. They will also be competing with other Territorial Collectives, and

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41In this report I will use the term Territorial Collective to refer to any elected unit of government with a territorial jurisdiction. This includes: Regions, provinces, arrondissements, circles, rural collectives, local collectives, etc.

42Without defining a domain of the Territorial Collectives and without giving them the right to protect that domain from all and any exploitation, the Forestry Service is essentially reserving the right to give their forests away or sell their forests out from under them.
in some places with the army. Unless the product is made scarce the producer price will remain low. This can be accomplished by 1) the possibility of removal from the market (as can partly be done under Mali's new laws) by those groups who don't want to have surrounding forests cut, along with 2) closing of access channels that are not controlled by villagers (such as army production, production in classified forests, and the auctioning of production plots).

The current price for wood in the forests is effectively zero. Hence, unless some changes are made, the privilege of selling trees and production plots will not constitute a benefit. The sale price may also not be sufficient to cover management costs. The price may remain low with the new policy since the Forest Service will be selling plots and allocating permits outside of the areas under territorial Collective management plans, constituting competition with any Territorial Collective that attempts to raise its price. There is no incentive to pay more to Territorial Collectives. The Territorial Collectives will also be competing against each other. Some mechanism will be necessary to assure that 1) the expenses of management are covered and set aside, 2) to help increase the income from forests that does not have to be reinvested in those forests, and 3) to help retain that income within the forest villages.

III. Roles vs. Process:

This report has focused primarily on the analysis laws and legal institutions. There are two related major problems with this focus. First, there is a gaping space between state laws and actual practices in the countries in question. Second, it is not clear that the legal paradigm is appropriate in central Africa. Processual, rather than legal, practices of dispute resolution are widespread and indigenous. They are continuously competing with and winning over the legal structures applied by colonial powers and post-colonial states. Insights of Western scholarship into the nature of non-Western law begin in the 1920s with Malinowski who, according to Comaroff and Roberts (1981:11) posited that "...while our legal institutions have no direct counterparts in some societies, their functions in maintaining order and managing conflict must nevertheless be performed in all of them, and the range of mechanisms by which they are performed--irrespective of their institutional nature--should thus define the universe of research."

In the West African context, I would propose that part of the non-implementation of laws observed in the countries under study derives partly from the relation between indigenous processual legal systems and the Western overlay of legal rules and institutions. I would also argue that it derives from the marginal legitimacy of the state in the rural areas of these countries—I will return to this later. Comaroff and Roberts (1981:14) argue that:

...indigenous rules are not seen a priori as "laws" that have the capacity to determine the outcome of disputes in a straightforward fashion. It is recognized, rather, that these rules may themselves be the object of negotiation and may

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43Maintaining a higher producer price and maintaining higher flows of forest benefits to villages can be separate issues. The latter can be dealt with through a tax and a local fund. The prior can be dealt with by creating scarcity, by providing producers with information on urban prices, or by fixing the producer price—through legislation or through the creation of producer organizations.

44In Niger, Burkina Faso and Mali, there is a portion of the tax that goes directly into a local forest management fund.
sometimes be a resource to be managed advantageously.... This fact in turn reiterates the self-evident need to regard the cultural logic of such rules and precepts, in whatever manner they happen to be expressed, as problematic.\textsuperscript{45}

The non-implementation and circumvention of policies, hence, should not be interpreted as merely criminality or fraud as the rent-seeking literature tends to view them (cf Migdal 1988). In this context, rent-seeking in the forms of policy non-implementation and policy circumvention are not about self-maximization, rather they are about struggles among classes, castes, ethnic groups, and other social groupings over who within society should wield authority. That is, who should make, in an ongoing process, the evolving rules of conduct and exchange. Forestry policy circumvention and non-implementation reflects the struggle within these societies over who should control (as in make the rules of access to) society's resources--forests in our case. These struggles are then played out in the interstices between state law and indigenous process, where the chasm between law and practice is shaped. Interpretation and transformation in implementation of state laws is an integral part of the indigenous legal processes.

In this context a number of questions are raised about the legal tools of resource management. If laws will not operate as expected, what kinds of structures are needed to help assure that natural resources are managed toward the good of both the local and national communities? If outcomes are more a matter of processes that depend on authority which in turn depends on some mix of social identity--as in caste, ethnicity, lineage, age, gender, literacy, religion, etc.--and economic wealth (see Berry 1993), then how can these forms of authority be integrated into the resource management process? How can authorities responsive to both local and national agendas be legitimized in both local and national arenas? There are two issues that emerge here one is that of legitimacy, and the other is that of rules vs. process. The state and its branches have little legitimacy in rural West Africa. They are also on the law side of the law vs. process question. This lack of legitimacy is partly due to the fact that the reproduction of the state has so heavily depended on external financial sources rather than on its own populations. Given that these states have depended on the international community they have had little need to cultivate internal popular legitimacy.

In a processual system of dispute resolution perhaps broad agreed upon guidelines of resource management and use could be upheld by locally legitimate authorities--customary or those created by the decentralization process. Here the next level of questioning begins: What constitutes existing customary authorities in this context? Often legitimacy is associated with customary authorities. Is this because the "elected" local authorities (such as decentralized Territorial Collectives, rural communes, etc.) have never represented local populations--due to the types of election processes? Is this because the elected representatives have never had real powers over the matters of importance to local populations? Is it because these bodies have been constrained by a set of non-locally-legitimate rules or codes that don't allow them to exercise the interpretive functions that might give these elected bodies relevance to local communities? Is it because the social status of elected officials does not correspond with the social status of

\textsuperscript{45} Note that while rent-seeking theories would come to the same conclusion, they base their explanation on individual self interest, while legal anthropology bases its arguments on the social-historical structural context shaping social norms (cf Bates 1981; 1983; Bhagwati 1981; Krueger 1979). These two theoretical approaches are reconcilable (Fafchamps 1993).
existing customary authorities, and hence, cannot, even when backed with the leverage of the state, impose an external set of rules around which interpretation can be made?

These are just a few questions that I raise to bring under discussion: 1) the appropriateness of the forestry code as the primary tool for forest management, and 2) some alternative approaches to resource management that may be drawn on to replace, rather than implement, the current forestry laws. Finally, it is incumbent upon lawmakers to better understand the role of law and process and the relation between process and law in forest management, since law is the primary tool open to the state.
SECTION IV: POLICY DISCUSSION

I. Follow Success:

A. Successful Peasant Participation in Benefits:

What measures have brought successful participation in the benefits that flow from commercial forest production? In reviewing the experiences in Burkina Faso, Niger, Mali and Senegal the following techniques appear to have worked to give peasants access to the benefits of commercial woodfuel production and marketing:

1. Producer price fixing in Burkina Faso;
2. Channeling a percentage of the tax revenue back to the village or to some local organization as in Burkina Faso and Niger, and as is proposed in Mali; and
3. Providing access to urban markets as in Senegal.

While the first two of these are self evident, the latter may need more explanation.

In Burkina Faso, as discussed above, the producer price is fixed so that producers do not have to negotiated with the merchant-transporters. It appears that this practice has significantly raised producer income. Merchant-transporters, however, partly circumvented these prices, reducing the apparent gains (see Burkina Faso report).

Channeling a percentage of the tax revenues on woodfuels to the producers and the communities in which production is taking place, while not taking care of the producer’s income does guarantee that some of the benefits remain local. In addition, as is evident in Burkina Faso and Niger, giving the local community a stake in the taxes significantly increases tax collection on the whole. (Foresters claimed that in areas where local populations collected the tax and had a stake in the tax revenues themselves, tax collection went up to 100 percent.)

The Forestry Service in Senegal provided access to urban markets for several peasant cooperatives. The Forestry Service established two producer cooperatives in the mid-eighties to promote the diffusion of a presumably higher efficiency charcoal kiln. These producers received quotas from the forestry service so that they could market the charcoal they produced. While there was considerable protest by charcoal merchants, the Forest Service defended these producers and continued to provide them quotas even after they abandoned the new kiln. In addition, a World Bank transmigration project helped set up peasant cooperatives in the early eighties to provide the relocated communities revenues from the clearing of their new fields. These cooperatives persist to today. In both types of experience the peasant producers profited greatly from the access to the markets that forming cooperatives and obtaining quotas provided. In both cases the peasant producers were protected in the process of cooperative formation--helping to reduce the costs of entry--and they were directly allocated the quotas so essential to conducting business in Senegal’s woodfuel sector.

In short, these are three examples of ways in which rural communities and woodcutters have benefited from the woodfuel trade. All have been promoted by the Forestry Departments in these countries.

B. Successful Merchant Participation in Benefits:

A whole other set of techniques has also worked to allow merchants to participate or partake in these benefits. This success has been based primarily on control over access to urban markets. This control can be through natural monopolies or collective action, and is often supported by state policies.

1. A "Natural" Oligopoly:
Merchants have a natural oligopoly over urban markets due to 1) control over transport, 2) access to capital or credit 3) control over information, and 4) mastery of social relations. Often through capital and credit merchants or transporter-merchants are the only ones who can afford to transport woodfuels to the cities. This quickly narrows the number of operators in these lucrative markets. This number is further narrowed by the need for information and social relations to negotiate one’s way through the woodfuel markets.

The need for information has two dimensions, first information allows the merchants to exercise control over prices by providing mis-information to their client woodcutters. This is commonly practiced. Peasants interviewed in all of these countries think that the urban prices are far lower than they really are. Peasants are told by merchants that the prices are low. In this manner, information can help peasant producers make decisions about the prices they will accept or whether they will (if they have access to transport) take their woodfuels to the cities themselves.

Information also allows merchants to increase their efficiency by knowing where they can go to buy woodfuels and where they can go to sell it. Knowledge of whom to buy from and whom to sell to is an essential part of exchange. Even rich newcomers to these markets will find that they run into trouble filling their trucks and then cannot find buyers when they arrive in the cities to sell. Peasants trying to sell their woodfuels in the cities themselves have run into the same problem. This is partly because they cannot find buyers who can afford to buy a truckload of wood. Those who bring their wood to the cities and cannot find a rich buyer must then deal with the problems of obtaining or advancing credit.

Trust, interdependence and having a network of social relations are critical for obtaining credit or knowing whom one can extend credit to. Small producers usually don’t have the appropriate social ties that merchants have developed to be able to trust that they will be repaid if they advance the wood to a potential buyer. In addition, they cannot afford to keep coming back to the city or even to the particular quarter to continue to collect the money they are owed if they were to find a buyer they trusted and advance them the product. In Senegal’s charcoal market, exchange takes place in a complex web of interdependent social relations. The situation is similar to that described by Paul Clough in his study of grain marketing in Nigeria, where the markets were not ‘perfectly competitive,’ since the need to develop a network of clients and agents as well as the knowledge necessary to operate within the market allow for a degree of concentration in the control of trade (Clough 1986). These social relations not only tie labor and increase the merchant’s control over price, but are also important as criteria of entry into the merchant class. Hence, again narrowing the number of operators in the market.

Woodfuel markets are constituted of numerous interlocking markets (where credit, labor and price are interlinked). Such interlocking relations are complicated by the need to develop trust (as in a developed dependent or amicable relationship), and the transaction costs of having to return to collect on the debts. It becomes rapidly clear that a larger operator who can return frequently and is known in the community is at an advantage. This provides a solid basis for oligopoly. Interlocking credit-labor arrangements are also functioning on the rural end of these markets. Peasant producers who have taken loans to produce for a given merchant will only sell
to that merchant—they cannot sell to others and pay their patrons back.\footnote{This is supported by the Islamic prohibition on interest.} This interlocking market clears via price on the producer side and the allocation of loans on the merchant side. The same issues of trust and transaction costs on the rural end can play a role in limiting entry into the merchant class.

Lastly, even those merchants with the status and relations to operate in the market sometimes lose their loans to runaway workers. Hence, another barrier to entry to the merchant class is the ability to take risks and absorb losses.

In sum, natural barriers to entry into the merchant class help support a merchant oligopoly. These include: knowledge about prices and about where to buy and sell; ability to access capital and credit; ability to trust that advanced products or credit will be repaid; ability to tie labor and shape prices through interlocking credit-labor arrangements; the ability to absorb losses.

2. Collective Action:

Merchants can also band together to exclude others from entering the market and to lower producer prices or raise sales prices. They form associations as in Burkina Faso, Niger and The Gambia, unions as in Senegal. Here they can meet among themselves and create strategies to maintain their control over the markets. The only evidence of such behavior is that of producer and transport price fixing in Senegal. The National Union of Forestry Cooperatives serves as a base for collusive price fixing.

Also, when, as in Senegal, the market is organized into cooperatives, entry into those cooperatives can be restricted by high entry fees, limited membership, social identity, etc.

3. State Support for Merchant Oligopoly:

Permits, licenses, cooperative membership, and quotas are all factors that limit entry into woodfuel markets. If, as in Senegal, they are allocated only to merchants, they serve to hand merchants a complete oligopoly over marketing.

4. Summary and Lessons:

In short, through oligopoly formation—using the nature of exchange and exchange relations, collective action and state policies, the merchants have been very successful at raising the benefits they gain through woodfuel exchange.

Some useful lessons for transferring merchant success elsewhere in the market are that merchants control the terms of trade with producers through: 1) inter-locking relations, 2) information control, 3) maintenance of entry barriers, and 4) collective action.

C. Lessons for Peasant Participation in Benefits:

What combination of mechanisms would give rural producers a sufficient hold on the resource and the market so that merchants compete with each other for meager benefits of trade while peasants gain an income sufficient to invest in long-awaited and much-needed rural development?

The natural oligopolies cannot be transferred to rural populations who are geographically diffuse and distant from the markets they serve. They live spread across a broad landscape where communications and collective action are naturally difficult.
There are tools that can be transferred to producers. They can be provided with information (as proposed in Mali) and with tools for communication. They can be given the means to fix producer prices (as in Burkina Faso). Fees on woodfuel production can be channeled to producers and to rural communities (as in Burkina Faso and Niger). Credit arrangements can be supported. Access to transport can be facilitated (as in Burkina Faso and Niger). They can be assisted in organizing among themselves (as in Burkina Faso and Niger, and as with the three examples in Senegal). In addition, access to urban vending points to be run by the producers could also be supported by the state. With time and by understanding better the functions of social relations in trade, the mastery of social relations can also probably be fostered.

Lastly, there are tools that can be taken away from the merchants—indeed, if the benefits remain locked up with the merchants, then the producers will not be able to have them. Hence, permits, licenses, quotas and the support for or requirement of associations or cooperatives for merchants can be eliminated, while the decision of whether to commercialize the resource can be devolved to local groups.

Below, I outline options that might help devolve the benefits that flow from commercial forest production into the hands of those who depend on those whose livelihoods depend on the forests.

II. Broad Lines of Forestry Code Reform:

A. Shifting the Focus of Codes:

All of the past forestry laws in the four RPTES Francophone countries separate usufruct from commercial decisions. They limit usufruct rights to a residual category of non-commercially valuable products over which rural populations have the power of decision, while placing commercial decisions in the hands of central state powers. Niger has recently introduced the requirement that commercial exploitation rights be tied to usufructuary rights. As in Niger, I recommend that these two realms, commercial and usufruct be collapsed back together. Currently the forestry codes are organized around 1) usufruct rights; 2) commercial production; and 3) crimes and punishments. I suggest a reorganization around 1) distribution of rights and authority over the resource (not separating commercial and subsistence uses); 2) minimum ecological criteria for exploitation and management of exploitation; 3) crimes and punishments.

First, rights and authority over the resource should be specified. The new code should specify who has rights to which resources and who gets to make decisions as to the disposition of that resource. The decision as to whether to consume or commercialize local resources would be left in the hands of local populations. So would the decision as to whether to commercialize or leave their forests and forest products in place. In this manner local populations can decide whether the use value is greater then the exchange value of the resources around them. This would eliminate any problems of outsiders having to weigh (or for that matter ignoring) the relative value of a monetized commodity with non-exchanged goods. Hence, the first part of

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47If local control is indeed a goal of the new policy reforms, the distinction between usufruct and commercial uses is not necessary. Nonetheless, it is still not a bad idea to assert usufruct rights in a new code. Such an assertion could allow local populations to defend themselves and their use of the resource against other local users wishing to commercialize a resource that belongs to the entire community.
forestry law should establish local control over commercial and subsistence forest use in a
category of forested domain that constitutes the terroir of local populations. This question is
tightly linked to the repartition of the forested domain, discussed further below.

Once it is known who has rights to what resources, then a simple set of minimum
environmental standards for use and maintenance of the resource should be established. The
concept of minimum environmental standards is to create rules that protect the forests in the
name of national good (here I would exclude from inclusion any notion that requiring
commercialization of the resource is in the national interest--that should be a local choice).\textsuperscript{48}
In addition, technical assistance from the Forest Service, or any other willing provider, should
be available for helping populations 1) to meet these minimum standards, 2) to meet any other
goals they may have for the use of the forest resource.

Lastly, there are and will be forestry violations and punishments. Violations should be
defined as the failure to meet minimum environmental standards. They should not, however,
be enforced by the Forest Service. While determining what is a forest crime may be a matter
of technical competence, the policing function should, in most cases, be in the hands of branches
of other armed forces. If the Forestry Service is to be an extension agency, it should not be a
military or para-military force--either in training or action. Here I would encourage separation
of the extension, taxation and policing functions of the Forest Service. Place tax collection in
the hands elected bodies of local populations (not to mention giving them part or all of the tax
collected), and place highway circulation permit and tax receipt control in the hands of the other
Police services, perhaps under the surveillance of the Ministry of Commerce. In this manner
Foresters could focus on forestry extension. Foresters would still have a policing role, but this
would be limited to the classified forest domain.

B. The Project Problem:

Some of what projects accomplish is made possible through backing of local traditional
authorities by the projects. For example, in Burkina Faso's FAO Natural Resource Management
(Gestion des Ressources Naturelles--GRN) project (1986-1991), the project legitimized the power
of traditional authorities to accomplish its aims. First the project repartitioned space between
forested and agricultural lands. Migrants who had settled in these forests without the permission
of the traditional chiefs were resettled in the designated agricultural lands under the direction of
the land chief. This act, backed by the project, strengthened the local authorities. (Mathieu
1993:3.) Unfortunately, what cannot be learned here is how these actions might have evolved
if the same repartitioning of space and management goals were to be constructed without a
project to back the local chiefs.

One objective of reforming the forestry sector is to create an enabling environment that
permits such management actions on a more generalized basis. It is not to propagate isolated
project after project. For example, there needs to be access by locally legitimate authorities to
channels of recourse to back their decisions. But there also needs to be powers of decision that
rest squarely in locally legitimate hands--whether that be chiefs or elected bodies. Projects can
provide recourse. They can avert the need for recourse merely by the resources and authority

\textsuperscript{48}National good must be defined and applied with extreme caution. See discussion above.

56
(however invested) they wield. Hence, projects can tell us something about what is needed, since the role they play does enable local management and local retention of benefits. I would argue that it does so by dint of the powerful resources and state backing that projects bring. They raise the following critical question: What new structures can replace projects by generalizing the legitimacy they bring to local decision makers. I venture to guess that these structures would include: 1) real legal powers of decision over the resource, 2) recourse in the event that these powers are not respected. Additionally, both real powers of decision and recourse require real resources in the hands of those decision makers. With resources such as tax revenues or fees on the resource exploited, these bodies may have the ability to travel to and communicate with the authorities that could potentially serve as their recourse. These two first ingredients will build on and will reinforce whatever legitimacy (traditional or elected) decision makers come to their decision making position with.

Another problem with projects is that they are attempting to raise the price of a good—woodfuel—that is freely available elsewhere in the region or the country. They are trying to raise the benefits to a community that is competing with other communities and operators who don’t have to comply to the same requirements of management etc. They are competing with concessions in protected or classified forests of the State or with fraudulent production elsewhere. This leads to such extreme measures as have been taken in Niger and Burkina Faso, where the merchants have been forbidden to buy wood elsewhere until the project’s wood is used up, or where the forestry service or army lends the project their trucks since merchants won’t buy from the projects. This is hardly a situation that one can extrapolate from. What it tells us is that as long as the merchants have cheaper alternatives they will continue to access them. If the principles of these local forest management projects were extended to the surface of the country, then such circumvention would, with time, become more difficult. The money now being pumped into projects could be poured into education campaigns to inform rural populations of their new rights (and associated responsibilities) over the resource (when such rights matter beyond the confines of a project) and in elaborating and experimenting with a recourse system that will serve to help enable rural populations to make resource management decisions.

The experiment is over. There have been plenty of projects. It is time to stop funding projects. It is time to start providing what these projects have done so well in a form that can serve everyone and not just the limited groups for a limited time in project areas.

C. The Competition Problem:
Another problem arises when trying to raise the income of local groups. Local groups involved in forest management are continuously competing with neighboring producers who are not subject (either legally or illegally) to the same management obligations as they. This competition can make resource management more efficient. It can also discourage managers and make them want to give up the enterprise, as was the case among some of the rural markets in Niger—one group could not sell its wood. The wood ultimately rotted. They could not get a price worth their management efforts. This competition is exemplified by the discussion in the previous sub-section of needing to require merchants to buy from projects or bringing in State-owned trucks to transport project wood since the merchants can get wood cheaper elsewhere. In the case of projects the reasons are perfectly clear. Project participants are subject to requirements that are not part of the general body of laws to which other groups are subject.
But, the manner in which most of the new laws in the Francophone RPTES countries are constructed, there are still going to be legal parallel pathways for merchants to access wood outside of locally managed forests. There still will be classified and protected state forests in which production by parastatals, concessions or by permit is allowed. There will also continue to be competition with such producers as the army, as in Burkina Faso and Niger, who are not subject to any regulations nor taxes. This situation is not conducive to raising producer prices.

A solution to such a conundrum is located somewhere between the repartition of the forested domain, and the creation of locally legitimate or elected decision making bodies to decide over the disposition of that domain. If all of the forested domain in which production were to take place were locally controlled and subject to the same minimum management requirements (minimum standards), then the question of unfair competition would be relegated to the residual of illegal production. One way to accomplish this is to 1) eliminate all non-essential commercial activities in any State-owned (including classified) forests, while 2) eliminating the protected domain of the state by dividing it among the most local collectives (making a forested domain of local collectives). This would relegate commercial production to locally controlled forests. Where there is essential management cutting in classified forests rights to the labor opportunities and to the product of this activity could be held only by villages surrounding the forest (this, incidentally, helps compensate these people for the problems that arise from of having a reserve next to them.)

In such an arrangement the remaining competition would be among the local groups controlling their resources. Here a mechanism to keep the price up would still be in order since many of these local collectives or groupements will be embedded in dependent productive relations with merchants, or for various reasons of cash flow, etc. (discussed above) will be willing to sell below the cost of resource reproduction. Such mechanisms as a stumpage fee (plus compensation for the temporary loss of the resource and a development fund) channeled to the most local legitimate representative body would be in order.

III. Policies and Mechanisms for Increasing the Rural Benefit:
To encourage participatory development, enough revenue should be gained from the sale of woodfuels to:
1. Cover forest reproduction and management costs,
2. Cover remuneration of forest laborers,
3. Provide a credit fund for forest-based production and trade,
4. Compensate village (the population of the usage area) for the loss of resource,49 and
5. To act as a motor for rural development--to create a development fund to invest in community development activities.

49This compensation must be made explicit, rather than assumed to be recuperated in the sale price of the product, since it is not the same people selling the wood that use the forests. The village is not uniform. The woodcutters may be a small sub-set of village interests. Those not directly benefiting from the commercialization of forests should be compensated for the loss of the forests that they would otherwise use. Were we speaking of only one user or a village with a single production function, then there would be no need to include compensation on this list.
In this manner the reproduction of the resource and of labor is covered. The losses that this particular economic activity has caused are also covered (perhaps via a community development fund), and the purposes of rural development can be served.

One major problem in raising local benefits is the low producer price of wood. If only wood were scarce, its producer price may rise. Wood currently has no stumpage value because it is abundant. Contrary to the feared cries of scarcity and shortage, wood is not yet a scarce resource. The neo-classical solution for making wood scarce is to privatize the forests. But, outright privatization comes with problems that make it an unattractive option (see discussion under Tenure and Tenure-Related Options, below). Creating other mechanisms for local control can also make wood more scarce. Below I review some of the available tools for this purpose.

A. Fiscal Options:

1. Fixing the Producer Price:

One way to increase the producer price is to fix it. This can be done by the state or by collective action among primary producers. Burkina Faso has fixed the producer price in such a way to raise the benefits to woodcutters while earmarking a portion of that price for taxes, forest management and other uses. Producer unions, such as those being formed in Burkina Faso could also act among themselves to fix the producer price. This is the type of action that has enabled the merchants and transporters in other countries to maintain high margins. I would encourage this type of organization among primary producers while discouraging it among merchants and transporters, since the diffuse geographic nature of primary producers makes their organization difficult while the concentration of merchants and transporters in the cities makes collusion likely even under conditions where the state is discouraging it.

In examining these markets it becomes evident that the most successful ways of increasing profits have been through these two mechanisms: state and collusive price fixing. While the former could be eliminated, the latter will re-emerge where the conditions facilitate it. State price fixing appears to be having some success in Burkina Faso. It would be valuable to examine just how successful Burkina Faso's price fixing is.

It appears that fixing a minimum (allowing them to sell for more when they can) producer price that permits primary producers to profit from production and insures sufficient gains to encourage resource management seems to be among the best available options.

2. Local Institutions Taxing and Charging Stumpage Fees:

Taxation and fees charged by producers are now in place in Niger and Burkina Faso. These taxes and fees could be fixed while letting the producer price float. In Burkina Faso the producer price is fixed along with the taxes and fees. In Niger the price floats while the producers (organized into Rural Markets) are required to pay taxes and fees out of the sales price. Both of these techniques could be effective for increasing local benefits. There is a risk, however, that if the price floats, that it will float downward to a point at which it no longer covers the costs of the reproduction of the resource. While this may appear economically efficient, it may not serve the purposes enumerated above. To be a motor for development, the locally retained income from the forests must be above the reproduction costs of labor and of the resource itself.

3. Profit Sharing Arrangements:

In West Bengal, India, local populations have contracted with larger forest corporation to share the profits from the final sale of wood. This ongoing experiment in India has been...
lauded as a success, sufficiently motivating local communities to plant and protect forests in a previous denuded area. (Peluso and Poffenburger 1989.)

4. Who Should Receive Tax Revenues:

Taxes are not collected now, they have not been collected since the early colonial period, and they are not likely to be collected in the future. It is difficult to imagine how the highly complex taxes that are functions simultaneously of controlled, oriented and non-controlled areas as well as three distances will be successfully implemented. There will certainly be ferrying of woodfuels over the distance lines, as well as arbitrage into controlled areas.

The lack of tax payment is due to a number of factors, including avoidance of control posts, overloading trucks, and payoffs to forestry agents. There are several ways to avoid these problems. The simplest would be the elimination of the tax and to fund the Forest Service from another part of the state coffers. But, the tax does serve two purposes. It constitutes at least a minimum stumpage fee and it provides funds that could be channeled toward its management. A different way to make the tax more effective would be to have those now being placed in charge of forest management, that is the local communities, be the direct recipients of the taxes, as has been done in Burkina Faso. Having the local forestry groupements and local collectives collect the taxes then divide them into their own budgets (as discussed in country papers and above), provides tremendous motivation for local groups to monitor activities and to collect the taxes on their forest products. But, the question of community representation (discussed above) must first be addressed if this practice is to be equitable.

These tax revenues could serve important functions at the local level, making forests and their management much more valuable to the local populations.

5. When to Pay Cutting Tax or Fee:

Most peasants cannot afford pay this tax until after they have cut and sold their wood. Because they cannot afford to pay in advance, in all of the study countries, most peasants cut without a permit and obtain a permit only at the moment of sale. This situation has created opportunities for forest agents to make special arrangements with woodcutters. In the villages I visited in Mali, for example, the forester was allowing the woodcutters to cut without permits. In other instances, foresters fine or extort payments from woodcutters who cut without permits.50

According to members of the committee that elaborated Mali's new code, there was a discussion of when the tax on exploitation should be collected--before or after the cut. The foresters argued for payment before the cut. Some members of the commission argued for after the cut. There was to be a commission set up to discuss this issue. The commission never was established and the final disposition was that the fee will be paid in advance.

Options:

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50 According to Magassa (1989:34) ten percent of the woodcutters he interviewed in Mali claimed to pay for their permits after having cut. However, he claims that the percentage is much greater than this since the issues is sensitive and his respondents did not want to reveal their practices. He also points out that each permit is used by three or four persons at a time. In addition, foresters give permits to migrant woodcutters, legitimizing their presence, while villagers complain that they don't want them cutting in their area (Magassa 1989:34). Magassa also describes situations where a permit to cut one stère is used to gather cartloads of 2.5 to 3 stères of wood.
Make the payment of the taxes (discussed below) at the time of transport, that is, the time of delivery of the transport coupon, and not at the furnishing of a cutting permit—as was the legal specification in the past. I recommend that in the domain of the CTDs the permit to cut be eliminated. Instead, membership in a Rural Management Structure should be accompanied by an identity card specifying the name of the holder and of the CTD and SRG to which s/he belongs. This card is itself equivalent to a cutting permit. It will identify who has the right to cut in a given domain. The cards should be delivered annually by the CTD. There should be no limit to the number of cards delivered, just criteria by which they are delivered (such as having customary usufructuary claims to the resource). In this manner taxes will not have to be paid in advance. Under this system any wood cut in excess of the annual production ceiling determined through the planning process will simply not be privileged to a transport coupon—i.e. the SRG will not be able to sell or transport it. This should be sufficient to discourage overcutting. The SRG will have to coordinate among its own members the allocation of cutting rights.

B. Tenure and Tenure-Related Options:

1. Privatizing Forests:

Mali's new forestry code carries forward from earlier codes a private forested domain. Previously private ownership was only possible for planted forests and sacred forests or socio-religious forest areas (RDM 1986:8-9, art. 51). The new code, however, adds an important dimension to this domain. The private domain now admits the possibility of private ownership of natural forests. This is the only one of the RPTES countries allowing this possibility. While private ownership of forests in Mali has always been marginal, this new law creates the possibility of concentration of ownership leading to exclusion of local populations—even in the event where it is the Territorial Collectives that sell these forest properties. Previous laws reserved privatization of forests for areas with symbolic value (to be privatized by communities) and for planted forests. Privatization of planted forests involve a real investment in the improvement of the forest. The new code admits privatization of natural forests, which require no investment by those purchasing these forests. Under these circumstances there is a risk that natural forests will be sold off and purchased at low prices to those who see speculative interest in their ownership or who see immediate commercial value in the resource—which as private owners they will then be able to exploit without paying taxes (RDM 1994g:art.22). In short, while previously the cost of privatizing forest land would be the cost of improving that land, the current laws provide an incentive equal to the cost for privatizing. Under this new situation, Territorial Collectives could be set up competing with each other in a circumstance where they would sell forests for a nominal sum, or lose the customer to the neighboring collective.

2. Creating a Domain of Local Representative or Legitimate Institutions:

Another option is to create forested domains of Territorial Collectives, effectively giving the elected Territorial Collectives control over the forests. Such an approach is part of Mali's

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51 None of the other Francophone RPTES countries privatize natural forests.
plan and has been proposed in Burkina Faso. This gives Territorial Collectives more control over who has access to the resource, making it somewhat more scarce. Unfortunately, these collective often are not local enough, such as the in Niger where the smallest Territorial Collectives regroup 50 villages. In Mali and in Burkina Faso, it is also not clear what portion of the forested domain will be devolved to the smallest Territorial Collectives and how much will remain with larger Territorial Collectives. For this approach to constitute local control all of the forests in the protected domain would have to be devolved to the smallest level of Territorial Collective (see discussions in Burkina and Mali cases).

Alternatively, control over domains could be devolved to village level institutions. Here the choice of a representative institution or one with local legitimacy can be problematic. The village, is nevertheless, the basic unit of social organization in the region and is level at which most forest management decision are made.

3. Devolving Control over Commercial Disposition of Forests:

Another way to create scarcity, equivalent to the creation of local forested domains over which local population have control is to devolve decisions over the commercial disposition of forests in the usage areas of any community to its elected or legitimate representatives. Mali has done this by giving Territorial Collectives the right to classify--as in remove from commercial access--any species within, any part or the whole of their forested domain. This permits them to create scarcity.

Options: Give local collectives the right to classify any and all species, part or parcel of their forested terroir.

4. Making Production Rights Contingent on Usufruct Claims:

Niger has established tighter local control over the disposition of the forest resource by stipulating that only those enjoying usufruct rights in the forests in question can be members of organizations that cut wood there.

5. Eliminating Channels of Access to Non-Locally Controlled Forests:

The shortcoming of many of the above possibilities is that there will also be forested domains belonging to larger Territorial Collectives and the central state, resulting in competition for the resource between the most local Territorial Collectives (where control could be said to be at least quasi-local--15 to 13 villages) and the other larger, non-local entities. Hence, there remains forest users who are too far away from the resource to necessarily internalize the costs of production. Indeed, even the army cuts and commercializes wood in Burkina Faso.

In short, there is a need to generally apply any policies being put in place. Local control in one locality will not achieve the type of scarcity that will raise the stumpage value of woodfuels.

C. Facilitating Market Access—from the bottom up:

Facilitating access to transport and to urban markets and vending points is another way of helping to devolve benefits to forest communities. This can be accomplished through facilitation of information flow, access to transport and the reduction of barriers to the merchant class.
Transport is the primary bottleneck making it difficult for rural producers to market their wood. Transporters use their oligopsony position to keep prices down. This oligopsony can be broken if the state stops supporting it through professional cards, facilitating their monopolization, the painting of trucks to allow them a monopoly on transport. The state can also facilitate the flow of information which is another key monopoly of the merchants and transporters. Knowing who has wood where is critical for operating in the woodfuel markets. Also knowing the prices and keeping them information from peasants is critical. While truckers know where wood is produced and can go look for it, villagers are not able to call trucks when they have wood.

Options:

**Turn the Barriers Around:**

**A. Removing State Supports to Oligopoly:**

1. Eliminate Dedicated Woodfuel Trucks the Painting of Trucks Green and White

2. Eliminate Licenses and Professional Cards.

3. Eliminate national quotas, and provide transporters and merchants no privileged access to woodfuel resources.

4. Do not support or require in any way the organization of merchants and transporters. Do not strengthen professional associations such as ANEB in Niger, UNCF (Union Nationale des Cooperatives Forestières) in Senegal, Tis La Viim in Burkina Faso or the Sandika in The Gambia.

5. Do not create special taxes on woodfuel transport. Treat wood transport as any other transport. Incentives to encourage transporters to work in one area vs. another, can be built into the tax on woodfuels.

**B. Support Farmer by Rural Producers:**

1. Rather than breaking the vertical integration of the market, I would suggest that the only organisms permitted to work at the production end be the populations belonging to the terroir or usage area from which the wood is taken. In addition, the only members of woodfuel management structures, groupements, cooperatives and unions, should be active woodcutters, to avoid the excessive concentration of power in the hands of rural merchants or notables (cf RDN 1992a:art.11). These structures should be allowed to integrate the market vertically in any way they see fit. This would be facilitate market entry from the ground up.

2. Transfer firm control of the commercial disposition of the forest resource to local populations.

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52 Note that residential requirements are not sufficient for keeping urban-based merchants from creating or operating within local cooperatives. They can easily establish residency by building a home or through claims that the village is their place of origin.
3. Facilitate Information Flows (see discussion, next paragraph):
   - Make telecommunications available for villagers to call transporters.
   - Broadcast price information

Give them Telephones:

Access to transport is also a matter of communications. If when firewood or charcoal was ready villagers had a way of communicating with transporters, then they would be able to sell at a more competitive price. Here I suggest that Forest Services allow villagers to use their telephones to call a list of transporters who are interested in the transport of charcoal and firewood. These interested transporters can register (free of charge) with the Forest Service. The transporters will then be called by villagers when their product is ready. Villagers should be required to pay only the nominal cost of the telephone call. In this manner the Forest Service would truly be operating as a partner for the producers by supplying them with critical infrastructure. Such telecommunications infrastructure is available in most sous-préfets offices and in most Forest Service offices. This may sound far fetched, but I think it would revolutionize these markets.

Another even farther fetched option is to provide cellular telephones in rural areas. Satellites for such communications are or will be in place within the next few years. Perhaps they could be provided to local store keepers. This access to telecommunications along with a list of interested transporters may revolutionize the market.

Options:
1. Provide list of interested transporters to producers.
2. Provide access to telecommunications to producers.
   - Provide access to sous-préfet’s phone or Forest Service’s phones.
   - Provide cellular phones.

Provide them Information:

Prices of charcoal in the city are unknown in the villages. Patrons do not tell the cutters the real prices and they say they get a lower price than they actually get. I suggest that the price of charcoal and firewood in the cities be broadcast periodically on the radio. This information would increase the bargaining power of peasant producers.

Option:
1. Create information diffusion system: Have periodic radio announcements of the urban prices of woodfuels, just as grain prices are announced by Ministries of Agriculture. Mali’s Forest Service has a written proposal to this effect. I would recommend other countries follow suite (see RDM 1994m).

2. Support Transparency: Be prepared to appeal to the media to indicate to the population who is responsible for woodfuel shortages.

Accomplishing these aims is not easy. Merchants have many ways of squeezing around regulations. Their power is quite fungible. If local residence requirements are instituted, they will become local residents or will organize local residents to incorporate for them. In one way or another, merchants will squeeze around whatever barriers are set up. But, the higher those
barriers are made, the less this will happen, and perhaps it may at some point no longer be worthwhile for them to try.

D. Accompanying Measures:
Accompanying measures, such as informing rural populations of their rights and obligations, are critical in any program of change. However, it is not worthwhile to conduct such exercises if these measures are only to inform rural populations of their new responsibilities. Rural populations will not be interested unless there are real rights attached. They already have plenty of responsibilities. Now they need to be granted and informed of real rights.

Policy Options:
1. Translation of the texts of the new forestry code into the written national languages, and phonetic translation into the non-written languages so as to enable the reading of these texts to all villages.
2. Diffusion of these texts to all villages in the forested sections of the countries.
3. Courses and instruction explaining to rural populations their new rights, powers, and recourse channels.
4. Training workshops for Forestry Service officials and agents.

IV. Problematic Policies:
A. On Cultivation Contracts:
Cultivation contracts are a way in which the Forest Service can permit cultivation in a classified forest. These have been used as ways to allow woodfuel production in some cases and to give classified forests to cultivators. I suggest that this loophole be eliminated.

Option:
1. If there is to be any cultivation in classified forests, the appropriate channel of access is through declassification.
2. For commercial cutting in classified forests the question is more complex. Perhaps the only authorized commercial cutting in these forests should be by the surrounding communities. In this manner, these forests could be considered part of the terroir of those villages, but would be subject to much stricter management criteria to be elaborated by the Forest Services. This method of benefiting surrounding populations will at least help compensate them for the loss of forest access that Classification of the forest constitutes.

B. On Quotas:
National scale quotas have not worked in the countries they have been implemented in and have, indeed, served to help merchants corner the markets.

Options:
1. Eliminate National Quotas.
2. Do not establish local quotas. Instead establish production ceilings to be specified as part of the management plans. These will specify the maximum production to be permitted in a given area according to logical and social constraints.
C. On High Fines, Percentages and Coercion:
The practice of giving percentage of fines and taxes to field agents must be further examined. This practice has perverse effects on which policies are applied, and on forest agent interpretation of the laws (see Mali country study). Historical and analytical research should be done before such policies are reproduced. For further discussion see Mali country study.

Option:
1. Study percentage system. This could be accomplished in a review of the existing literature.
2. Give policing functions to another agency.

D. On Collective Guilt:
Clauses still remain in almost all of the forestry codes making all accessories to forestry crimes equally culpable as the perpetrator. This clause has been abused in the past to go as far as fining whole villages for crimes where the culprit is not found (every person in the village being fined at the rate for an individual committing the crime).

Note that under community forest management and control, community interest in the forests should help create collective responsibility for forest production.

Option:
1. Eliminate clauses allowing the equal fining of accessories to a crime.
2. Create limited definition of criminal accessory.

E. On Recourse:
Rural populations often have no recourse in the face of disputes with Forest Agents. Many conflicts require appeal to the Forest Service director. While there are courts in all of these countries, these are not practically accessible for most rural dwellers. Further, it is not clear whether Abuses or disputes over policy interpretations could be tried in these courts.

The Gambia's legal system appears much more accessible. For further discussion see The Gambia section of this paper.

F. Relative Price of Charcoal and Firewood:
Charcoal is a premium fuel. It serves the same purposes as firewood, but with a few conveniences and a higher price. Unfortunately, cooking with charcoal requires considerably more of the primary resource than does cooking with wood directly. The taxes currently applied to charcoal vs. firewood in the RPTES countries (except for Burkina Faso and The Gambia) encourage charcoal use. Taxes should on a stère-by-stère basis (primary wood used) be equal to or higher for charcoal than for firewood.

G. On Laws vs. Projects:
The question of whether changes should be project or law led is important. The relation is certainly a dialectical one. Projects are the points at which foresters have the most detailed experience of the reality that they are trying to manage. It is natural that this is the place at which the tools available to them, the actualities they confront and the aspirations they hold collide. It is here that the problems and limitations of existing tools and policies become visible, and it is also from here that solutions often emerge.
A major problem, however, with projects is that they do not reflect the larger reality that policies must be generalized to if they are ever to have a significant effect. Rural Markets in Niger or Test Projects in Senegal cannot demonstrate what would happen if the entire country was organized so that rural populations had control over their forests. Without generalizing to the rest of the country, woodcutters and merchants can go elsewhere. Project based producers cannot get a price better than the going price--usually a price attached to no obligation to reproduce the resource. Until there is generalized rural control over the disposition of forests, no project attempting to raise rural incomes can succeed. Such tactics as were used in Burkina Faso and Niger, requiring merchants to buy from projects or bringing in the Army to transport project wood, teach us nothing about what the real and generalized transfer of rights would accomplish.

Until policies that generalize local control over the entire forested surface of these countries are in place, there will be little real possibilities for increased prices and for a realistic sense of what local control will actually lead to.

Options:
1. Apply policies across the entire nation.
2. Eliminate the maintenance of areas not under the regime of the new participatory policies.
3. Focus on legal changes that enable participation rather than projects that prop it up.

V. Research Options:
A. Assessing the Magnitude of the Problem:

**Hypothesis 1:** The woodfuel crisis has been grossly over estimated.

**Sub-Hypothesis A:** The following can be shown to be over-estimated or based on high end or over-estimated assumptions: 1) woodfuel demand, 2) surface area deforested annually from woodfuel cutting;

**Sub-Hypothesis B:** The following can be shown to be under-estimated or based on low end or under-estimated assumptions: 1) Net Primary Productivity, 2) regeneration in areas cut for woodfuel, 3) percentage of commercial woodfuels derived from agricultural fields, and 4) charcoal production conversion efficiencies.

**Hypothesis 2:** There is not sufficient data to accurately assess most indicators of "crisis."

**Sub-Hypothesis A:** There is insufficient data to determine whether woodfuels cut in areas not immediately converted to agriculture constitute deforestation (i.e. whether there is sufficient regeneration).

**Sub-Hypothesis B:** Many of the indicators of the woodfuel "crisis" for which there has been insufficient analysis to provide accurate information can be established based on existing data.

**Hypothesis 3:** Rural, non-commercial woodfuel consumption does not harm forests.

**Hypothesis 4:** Rural populations in deforested areas have successfully adjusted through agroforestry techniques (wood growing in their fields).
Hypothesis 5: Much data counter to the "crisis" hypothesis are systematically ignored.

Hypothesis 6: Discourse analysis (based on existing texts) will show a systematic depiction of crisis independent of evidence.

This set of hypotheses could easily be tested based on existing data. Many of these hypotheses could be examined by evaluating the information provided in the RPTES country studies.

B. Study of the Relative Efficiency of Indigenous Charcoal Production Technologies in RPTES Countries.

There is reason to believe that the indigenous technologies for charcoal production are the best adapted and most efficient available. There are, however, wide variations in practice, from the 1000 sack kilns of the Fulbe in Senegal to the two sack pit kilns of Niger. I propose research to identify the best kilns in the region and to diffuse the best techniques across the region.

a. Research on yield--find most efficient kiln in West Africa, and
b. Hire best charcoal makers to teach everyone the technique.

C. Revision of the Concept of Suivi Ecologique:

Ecological assessment could and should be based on sociological techniques. These techniques can be used to determine what the ecological problems are and for whom (see Blaikie 1985).

-Using interviews and sociological techniques, not just satellite photos, to determine ecological problems and conditions.
-Regeneration Studies
  -Woodcutters typically recut after only seven to ten years. If regeneration is this good, then they must know something that the Forest Service has yet to find out.
-Percentage of woodfuels coming from fields
-Monitoring and Searching out Evidence of Forest Management. Some examples include:
  -Fairhead and Leach 1993--Forests cultivated by local populations in Guinea
  -Mortimore 1992--Wooded density in agricultural fields often higher than in "natural forests."
  -Niger example of cultivated forest gardens

D. Study of the Relation Between Woodfuel Cutting, Agricultural Clearing, and Managed Woodfuel Production:

If the real threat to future woodfuel supply is agricultural clearing (which it appears to be), then several questions about woodfuel management emerge: 1) is it worth slowing agricultural clearing and is this either economically, politically or socially possible; 2) if agricultural clearing is not to be stopped in the name of woodfuel provision, then what makes it worthwhile for peasants to grow woodfuel crops on agricultural land or to reserve land in
natural forests for this purpose; 3) is the cost of producing woodfuel on agricultural land or the 
opportunity cost of producing on agricultural land or keeping forest in tree crops greater than 
the cost of importing woodfuel substitutes.

Study dynamics of woodfuel production in peri-urban areas. Surrounding Bamako there 
are indications that woodfuel production may have risen over the past several years. The 
number of ass carts, which tend to have a limited radius of operation, carrying wood to the city 
has gone up. If this does indicate more woodfuel production in this agriculturally intensive area, 
then a lot could be learned about managed commercial woodfuel production by studying how 
and why it is worthwhile to produce commercial woodfuel in this zone.

This peri-urban study could help to determine the basis for a stumpage fee. It would 
constitute research on the actual costs of forest management in the absence of a project. 
Research on the costs of natural forest management in the absence of projects should also be 
conducted.

An additional question that may shape policy toward woodfuel management is: does 
woodfuel cutting in natural forests contribute to deforestation or is there sufficient natural 
regrowth? (indications are that there is significant regrowth).53

E. Study the Perverse Effects of Allowing Agents Percentages of Fines:
-Giving agents percentages of fines can motivate implementation of policies. It 
can and has also motivated numerous abuses. This system should be reviewed 
and alternative options should be sought.

F. Comparative study of integrated forest management--successful methods:
Community forest management methods are being developed around the world. West 
Bengal has been lauded as a great success. There are other such management projects in India. 
There are also social movements, such as Chipko. Rubber plantations in Malaysia have been 
held up as a community success. These efforts should be reviewed and compared with the 
successes in the RPTES countries.

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Villagers in Senegal, Niger, Burkina Faso and Mali all claim that after seven years they can return to an area 
cut. There has not been sufficient research to determine the yield in these unmanaged natural forests, but 
indicates that woodfuel cutting does not, has many documents proclaim, cause "deforestation." Rather, it causes 
temporary forest clearing.
VI. Summary of Options:

Reorganization of the Forestry Code:
1. Integrate usufruct rights with commercial rights by making both contingent on customary usufruct claims. This would place both in the hands of rural populations.

2. Specify minimum environmental standards.

3. Separate extension, taxation and policing functions of Forest Services.

Taxation:
1. Collect any tax or fee for cutting permits only after production has taken place.
   - Deliver permits (or identity cards) before cutting.
   - Collect taxes and fees before transport.

2. Channel taxes directly to local institutions representing the inhabitants of the usage area from which wood comes.

3. Have another existing agency collect taxes due to the state.

4. Set relative tax on Charcoal and Firewood to reflect high wood used in charcoal production.

Building Participation in Benefits:
1. Eliminate Parallel Channels to Woodfuel Production: If the producer price of woodfuels and the benefits retained by local populations is ever to go up, merchants will have to have no other choice but to buy from these local actors.
   - End production by the armies in Niger and Burkina Faso must be ended, or the prices will continue to be undercut by these publicly subsidized producers.
   - Direct access to National Domain lands (classified or protected) by merchants should be ended or taxed beyond interest. Alternatively, repartition of the protected National Domain forests among the smallest Local Collectives, accompanied by the forbidding of commercial production in Classified Forests would have a similar effect.
   - Make the only access to forests be through local representative or legitimate institutions.
   - Generalize structures such as the Rural Markets of Niger and the Groupements and Unions of Burkina Faso to the entire country: Such generalization will help eliminate competition from non-controlled areas.
   - Eliminate Incentives for Forest Service officials and agents to allocate access to woodfuel production to non-village interests by eliminating quotas (see discussion below).

2. Concentrate on Participation in Benefits through Access to Markets: (See discussion below).
Building Participation in Decision Making:
1. Facilitate Local Elaboration of Management Plans:
   B. Create checks on Forest Service powers to allocate management plans:
      - Time limit for responding to requests for plans,
      - Time limit for approving plans presented by local communities.

2. Give Representative or Legitimate Local Authorities the Power of Decision over whether to conserve their forests or whether to cut them (cf. Mali, RDM 1994g).

3. Create Recourse Channels that do Not Require Appeals to Foresters when Disputes over Decision Making or Resource Use Occur.

Forest Tenure/Access:
1. Give rural communities the right, in one form or another, to exclude all outside interests from commercial exploitation of the forests of their usage area.54

2. Do not privatize natural forests.

3. Devolve decision of whether to commercialize or conserve forests to representative local institutions.

4. Create a Forested Domain of local Territorial Collectives.
   - Repartition Protected Forested Domain of the State to create this new domain.
   - Eliminate so-called "Protected" Forested domain.

5. Give local representative institutions rights to classify any or all species and all or part of their usage area or their Forested Domain.

6. Do not permit any commercial production in Classified forests of the State.

7. Make commercial rights contingent on usufruct claims.


9. Keep the army out of woodfuel sector. They create competition (since their labor and equipment are subsidized) that will drive producer prices down.

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54 An even stronger, and I believe appropriate formulation is to entirely divided the forested domain among the lowest level of Territorial Collective in place. Since, for example, the Rural Community in Senegal or the Rural Communi in Mali form a contiguous repartition of the entire territory of the nation, I suggest that the commercial disposition of forests within these domains be the decision of the Rural Councils.
10. In the choice of administrative level at which the organization of resource management should occur, consider transportation problems for communications purposes. Use indicators such as no more than half a day bicycle ride across any given management area, etc. The primary purpose is to maintain face-to-face contact with representatives and to allow for easy communications among members.

Stop Supporting Transport and Market Oligopolies--Start Enabling Market Entry by Rural Producers:
1. Eliminate Dedicated Woodfuel Trucks the Painting of Trucks Green and White
2. Eliminate Licenses and Professional Cards.
3. Eliminate national quotas, and provide transporters and merchants no privileged access to woodfuel resources.
4. Do not support or required in any way the organization of merchants and transporters. Do not strengthen professional associations such as ANEB in Niger, UNCF in Senegal, or Tis La Viim in Burkina Faso.
5. Do not create special taxes on woodfuel transport. Treat wood transport as any other transport. Incentives to encourage transporters to work in one area vs. another, can be built into the tax on woodfuels.
6. Rather than breaking the vertical integration of the market, permit vertical integration by production-end organizations or the populations belonging to the terroir or usage area from which the wood is taken.
7. Transfer firm control of the commercial disposition of the forest resource to local populations.

Facilitate Access to Information:
1. Provide list of interested transporters to producers.
2. Provide access to telecommunications to producers (to contact these transporters). 
   - Provide access to sous-préfet’s phone or Forest Service’s phones.
   - Provide cellular phones.
3. Create price information diffusion system on national radio.

Other Policy Measures:
1. Be prepared to appeal to the media to indicate to the population who is responsible for woodfuel shortages when merchants and transporters resist.
2. Eliminate Cultivation Contracts.

3. If there is to be any cultivation or any commercial woodcutting in classified forests, the appropriate channel of access is through declassification.


5. Do not establish local quotas. Instead establish production ceilings to be specified as part of the management plans. These will simply specify the maximum production to be permitted in a given area according to local ecological and social constraints.

6. Give policing functions to another agency.

7. Eliminate clauses allowing the equal fining of accessories to a crime.

8. Create limited definition of criminal accessory.

9. Alternative channels of recourse for rural populations in the event of mis-interpretations by, conflicts with or abuses by Forest Service agents should be established.

10. Participatory policies should be applied across the entire nation. Otherwise villagers are competing with non-participatory regions, where costs may not be internalized and prices may therefore be lower.

11. Eliminate the maintenance of areas not under the regime of the new participatory policies.

12. Focus on legal changes that enable participation rather than projects that prop it up.

Accompanying Measures:
1. Translation of the texts of the new forestry code into the written national languages, and phonetic translation into the non-written languages so as to enable the reading of these texts to all villages.

2. Diffusion of these texts to all villages in the forested sections of the countries.

3. Courses and instruction explaining to rural populations their new rights, powers, and recourse channels.

4. Training workshops for Forestry Service officials and agents.
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75


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82


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