INSTITUTIONS AND NATURAL RESOURCE MANAGEMENT
IN THE GAMBIA:
A CASE STUDY OF THE FONI JARROL DISTRICT

edited by

Mark Schoonmaker Freudenberger
INSTITUTIONS AND NATURAL RESOURCE MANAGEMENT
IN THE GAMBIA:
A CASE STUDY OF THE FONI JARROL DISTRICT

edited by

Mark Schoonmaker Freudenberg

with contributions from

Tor Claussen
Susan Gannon
Demba Komma

All views, interpretations, recommendations, and conclusions expressed in this publication are those of the authors and not necessarily those of the supporting or cooperating organizations.

LTC Research Paper 114

Land Tenure Center
University of Wisconsin-Madison
July 1993
# CONTENTS

<table>
<thead>
<tr>
<th>List of Figures</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Photographs</td>
<td>v</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Research objectives</td>
<td>1</td>
</tr>
<tr>
<td>Organization of the report</td>
<td>2</td>
</tr>
<tr>
<td>Research Methodology</td>
<td>3</td>
</tr>
<tr>
<td>The team</td>
<td>3</td>
</tr>
<tr>
<td>The study site</td>
<td>4</td>
</tr>
<tr>
<td>Limitations of the study</td>
<td>4</td>
</tr>
<tr>
<td>Part 1 Concepts</td>
<td>7</td>
</tr>
<tr>
<td>Customary land tenure in The Gambia</td>
<td>7</td>
</tr>
<tr>
<td>Introduction</td>
<td>7</td>
</tr>
<tr>
<td>Acquisition of land in The Gambia</td>
<td>7</td>
</tr>
<tr>
<td>Situation of immigrants or late settlers in the village</td>
<td>8</td>
</tr>
<tr>
<td>Family land</td>
<td>9</td>
</tr>
<tr>
<td>Lenders/owners and borrowers of rice lands</td>
<td>10</td>
</tr>
<tr>
<td>Customary land tenure and fruit trees</td>
<td>10</td>
</tr>
<tr>
<td>Customary land tenure and dispute resolution</td>
<td>11</td>
</tr>
<tr>
<td>Customary land tenure and the provincial lands acts of The Gambia</td>
<td>13</td>
</tr>
<tr>
<td>The land acts and leaseholds</td>
<td>15</td>
</tr>
<tr>
<td>Land acquired by the state for development projects</td>
<td>15</td>
</tr>
<tr>
<td>Customary law as process in the Gambia</td>
<td>16</td>
</tr>
<tr>
<td>Customary law as process</td>
<td>16</td>
</tr>
<tr>
<td>Legal traditions in The Gambia: fusion of &quot;modern&quot; and &quot;traditional&quot;</td>
<td>17</td>
</tr>
<tr>
<td>The use of history and law in customary land tenure traditions</td>
<td>20</td>
</tr>
<tr>
<td>Tensions, complaints, conflicts, and disputes in the evolution of tenure systems</td>
<td>23</td>
</tr>
<tr>
<td>The case of the broken pipe: the evolution of conflict over water resources</td>
<td>25</td>
</tr>
<tr>
<td>Institutions of tension resolution</td>
<td>29</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1       Map of The Gambia                     vii
Figure 2       Map of Foni Jarrol District         viii
Figure 3       Map of forests in the Foni Jarrol District  ix
Figure 4       Venn diagram of social institutions in Sintet   30
Figure 5       Venn diagram of social institutions in Kamamudu  31
Figure 6       Disputes matrix, district tribunal meeting at Kalagi  37
Figure 7       Ecological matrix of Sintet            42
Figure 8       Ecological matrix of Wassadun         43
Figure 9       Ecological transect of Sintet         46
Figure 10      Articulation of tenure rights by ecological zone  51
Figure 11      Preference ranking of fodder, village of Sintet, Fula Kunda  53
Figure 12      Percentage of families owning rice lands versus families borrowing rice lands  74
Figure 13      Youth labor migration in Sintet       78
Figure 14      Labor allocation for women of Sintet  82
Figure 15      Labor allocation for women of Kamamudu 83
Figure 16      Criteria of wealth in Kamamudu       86
Figure 17      Development agencies and village institutions  89

LIST OF PHOTOGRAPHS

Photograph 1   Dikes and rice fields in Sintet                      26
Photograph 2   The Sintet spillway                                  27
Photograph 3   The remnants of gallery forests                   41
Photograph 4   The wollo forest                                    54
Photograph 5   Stacked piles of keno wood                        55
Photograph 6   Collaring of keno trees                           56
Photograph 7   Removal of live keno trees                        57
Photograph 8   The kuntingo fallows                             59
Photograph 9   The kenokono upland fields                      61
Photograph 10  The dandango inner fields                        63
Photograph 11  Village of Sintet                                65
Photograph 12  Compound gardens                                66
Photograph 13  Rhun palm trees in fara tintinkingo               68
Photograph 14  Sacred forest of Sintet                          69
Photograph 15  Rice fields along Bintang Bolong, Sintet         71
Photograph 16  Abandoned rice fields in Sintet                 72
Photograph 17  The Bintang Bolong and mangroves                76
Photograph 18  Women’s garden of Sintet                        81
FIGURE 1
Map of The Gambia
FIGURE 2
Map of Foni Jarrol District
Map of forests in the Pohn Jarol District

Figure 3
Malang Nyassi, Community Development Officer, Division of Community Development, Ministry of Local Government and Lands, The Gambia; and


The sole female team member, a former Peace Corps volunteer who had worked in the Foni Jarrol District with the Soil and Water Management Unit (SWMU), was the only researcher intimately familiar with the zone. After each RRA exercise, Mamanding Kuyateh, Director, Department of Community Development, Ministry of Local Government and Lands, joined the core team to review the team’s findings.

THE STUDY SITE

The Foni Jarrol District was chosen by LTC for the case study for a variety of reasons. Anticipating that similar studies would be conducted in other agroecological zones of The Gambia, the central intention of this initial investigation was to test the RRA research methodology. The decision was deliberately taken to locate this study in an area known to be relatively free of intense tenure disputes.

LIMITATIONS OF THE STUDY

The study of conflicts and disputes surrounding natural resource use and ownership is a particularly difficult and delicate research undertaking. Attempts to gain a clear and accurate understanding of the history of present-day tensions within rural communities often opens wounds that might otherwise be best left untended. As team members found, villagers sometimes hesitated to go into the background of decade-old, contentious issues. As one villager said, "No one likes to say bad things, only good things." Even discussions of settlement histories led to quite heated debates among different village residents.

Regardless of these difficulties, the RRA team created useful techniques for gathering background information on village-level disputes and thus uncovered a considerable amount of pertinent material in a relatively short period of time. The openness and generosity of village residents as well as the enthusiasm and commitment of team members also contributed to a successful research program. However, as with any field study, team members noted that there never appeared to be enough time to go to the desired detail. In these instances, more in-depth and lengthier anthropological studies may be better suited to the study of disputes.

While the diverse disciplinary backgrounds of the team provided many useful insights throughout the study, it would have been useful to have greater technical expertise in agronomy, forestry, and animal sciences. In similar RRA studies, it might be useful to rotate such specialists into the team.
Even though RRA research methods promise to provide policymakers with timely and prompt information, the team found that the completion of the final report took an inordinate amount of time. In the future, mechanisms must be put in place to conduct field research and write-up in a single period of time. Otherwise, the momentum gained during the fieldwork is quickly dissipated once each team member returns to normal professional activities.
PART 1
CONCEPTS

CUSTOMARY LAND TENURE IN THE GAMBIA

INTRODUCTION

The question of what constitutes "customary land tenure" in The Gambia is complex and fraught with nuanced interpretations. Customary practices are not enshrined in a fixed body of mutually agreed upon laws. The case study in the Foni Jarrol District identified uncertainties in the interpretation of what constitutes customary law. The inherent indecision can be viewed in a favorable fashion as providing a corpus of precepts with considerable flexibility and adaptability. Yet customary tenure rules can also be a source of internal conflict as competing interest groups struggle to define rights of access to particular natural resources.

The following section is an interpretation of customary land law based primarily on the considerable experience of one of the case-study team members. This team member was the divisional commissioner of the Western Division of The Gambia for two years. He also reviewed cases for nine district tribunals of the Western Division, for six district tribunals of the North Bank Division, and for six district tribunals of the Lower River Division. Land issues were featured in many of these cases. The team member presided over all the combined district tribunal/district authority meetings of the McCarthy Island Division, with ten district tribunals, and the Upper River Division, with four district tribunals; as electoral officer, he explained the procedure for the registration of voters. Therefore, many of the precepts customary land tenure described below may be viewed as an interpretation of an administrator in these various capacities. As such they comprise a valuable contribution to what may be a common viewpoint about the broad features of customary law.

ACQUISITION OF LAND IN THE GAMBIA

Land is the basis of livelihood, something to be owned and utilized but not created by humans. In most communities of The Gambia, it is commonly held that land should not be sold but can be granted forever or subject to a condition or a term. A question such as "Who owns those lands to the east of the village?" is often answered by most sedentary villagers as "They belong to our family." One might also ask a villager, "How did your family get those lands?" The answer usually given is that the land was obtained from ancestors who were founders of the village. One might ask further, "Why haven’t you sold part of it for cash in order to buy other things of life?" A common response would be, "To sell land which is created by God will offend our customary norms of living together as a community as well as bring about family feuds." Land cannot be alienated through grants, loans, or sale from the holdings of the family without family consensus.
No family can afford to grant or sell all of its lands for fear of that lack of food will lead to the death of the family and its descendants. In this sense, land means farmlands on which upland food and cash crops are grown, rice lands on which rice is grown, as well as land for home settlement and for religious purposes.

Upon the founding of a village by any number of families, land was first allocated for homes with due regard to leaving an open space for streets, mosques, sacred areas, the cemetery, and the "bantaba." The bantaba refers to a shady place under a large canopy tree where elder villagers meet during the day to discuss matters of immediate concern to the community. Bantaba also serves as a meeting place for young men and women, though these men and women usually gather separately. In addition, the meeting place is used for social and sports gatherings. No family can claim ownership to these public places.

Every extended family owns its own home by mutual understanding and consent from the founding settlers of the village. Behind every family home there are inner fields for growing early millet and maize as well as sweet potatoes and vegetables. Land in the inner fields is owned by the families. Outer fields are cultivated in crops such as groundnuts (peanuts) and late millet and sorghum. Land here is also owned by the families. The outer fields are often used for livestock grazing during the rainy season. Since fallow lands are family lands left uncultivated, there are latent rights to what might otherwise seem to be unused land. All of the village's lowland areas which are cultivated in rice are also owned by families. The family as an entity can, and does, exclude all nonfamily members from its home, its inner and outer fields, and its fallow and rice lands.

The savannah woodland "commons" begins at the point of the last known clearing of one village and extends to the point of last known clearing of a neighboring village. There is a general rule that you cannot clear that part of the forest which is next to another family's fallow lands without that family's consent. With such a limitation, the forest can belong to no single family and no single village can claim it as its own to the extent of excluding members of other villages. Domestic animals from anywhere can be grazed in the forest at will, and firewood and wild fruits can be collected without hindrance. The customary rule on the forest also applies to forest or oil palm groves adjacent to the swampy areas.

Firewood for cooking can be cut and gathered in any forest by anybody because the forest does not belong to any one family or village. This freedom of collecting firewood extends to the fallow lands of families. If dead wood is on another's land which has been planted in crops, however, permission is required before firewood can be gathered.

**SITUATION OF IMMIGRANTS OR LATE SETTLERS IN THE VILLAGE**

**Family hosts.** After the establishment of a village by the founding families and the allocation of lands as described above, other persons may arrive for settlement. These latecomers must choose one of the originating families as their host in order to obtain land to settle and farm. The host family may either give a portion of its own family land to the new settler or request compound and agricultural land from other founding families. If the
founding families are convinced that the new entrants intend to remain in the village, their
gift of land is regarded as conferring permanent ownership to the new arrivals, who will then
exercise the same rights of landownership. When all available lands of the village have been
allocated for settlement and farming, the village is said to be fully occupied. At the same
time, landowning families can and do give rice-growing lands to their daughters as gifts, even
though these women leave the family because of marriage. Such gifts confer ownership to
the daughter and her issue forever. In case of divorce or lack of offspring, the rice land
reverts to the daughter’s family of origin. Such cases are rare, however.

If the male members of a landowning family decrease in number through death or
migration, the family can bestow custody or use of its farmlands on a yearly basis to others
in the village. This bestowed or borrowed land entails no rights of ownership. However,
the lending family can regain the land only after harvest, never while the land is under
cultivation.

Village hosts. Founder villages can become "hosts" to later arriving villages. In the
area of the case studies, Kamamudu is a host village to the Fulbe settlement of Santangkoto,
and Kampassa is host to Kansambou. This means that the host village grants approval to the
guest village for settling either on its fallow lands or on lands adjacent to its fallow. The host
village's founding families may agree to grant some swamps for rice and some lands for
upland crops for distribution among the guest village's members. As years go by, the guest
village may continue to cultivate the lands. If residents of the guest village leave, their lands
revert to the granting, landowning families of the host village. But as long as the guest
village stays and remains in good standing with the host village, the lands cannot be
reclaimed.

Some families in the host village will refuse to grant land to the guest village for
either settlement or farming. This situation can serve as grounds for land disputes between
two families from the two villages. Although land from the host village may be located close
to the guest village, the newer arrival in some cases still cannot obtain access. At best, the
host village lends such lands to some guest villagers on a yearly basis.

FAMILY LAND

As stated above, land in all its various uses belongs to the extended family. The male
head of the family represents the family’s interests to the outside world. The family head
allocates all family lands to male members of the family (land here includes rice-growing
areas as well), yet remains custodian of the family’s territory. He will distribute lands to his
younger brothers or, in their absence, to his sons. Upon the death of the family head, he is
succeeded by the next oldest brother or, this lacking, by the eldest of the sons within the
extended family. The land of the next oldest brother or son is thus increased by the addition

1. From a pool of family heads, one man is selected as the village head or one powerful family
head is acknowledged as the one who represents the community in its dealings with the outside world.
of the land formally held by the deceased family head. Even the house of the family head is taken over by the oldest brother or son. This situation continues until the demise of the last brother or the youngest son.

This system of inheritance is so respected and venerated that land disputes within the same family are rare. But as the family increases in number of male members, half brothers will sometimes dispute over certain pieces of land used by their deceased father. If the appeals of the family head to compromise and reconcile fail, maternal uncles are asked to intervene and settle the difference. In many cases the uncles may succeed because one brother will give up his claim to use the deceased father’s lands when his uncle grants him lands of equivalent value. Such land will become the land of the compromising brother and his offspring forever. In cases where the uncle(s) attempt to regain that piece of bestowed land, tension, conflicts, and disputes arise.

**Lenders/owners and borrowers of rice lands**

At this juncture it is necessary to clarify the situation of land borrowers. It has become common for land borrowers to give 10 percent of the land’s produce to the landowner (e.g., rice is paid to the owner by the borrower). Since landowners do not generally put their lands up for rent or hire, the land borrowers, in their eagerness to retain the land for the next cropping season, decide independently to give 10 percent of their proceeds (or, in some cases, a small monetary sum) to the landowner. In any case, lenders cannot enforce the payment of these tithes in local courts, because society ensures that any person who wants to farm has sufficient land for any cropping season.

**Customary land tenure and fruit trees**

Different opinions were noted during the field research about the relation of fruit trees to the land. The general rule is that wild fruit (fruit from trees not planted by a particular person) can be gathered by anybody for any family’s consumption. This is so even if the trees are located on somebody else’s land. If the landowner has planted his land with crops (say, during the rainy or farming season), however, his permission is required. Fruit of the baobab can be cut by anybody even if the tree is on another person’s land, but fruit gathered in this way must not be sold.

Fruit trees that were introduced into The Gambia (i.e., domesticated as opposed to wild mangoes) are grown either on the boundary line between the landholdings of two different families or on a single owner’s lands. It is against customary land tenure precepts to plant fruit trees on borrowed land unless permission is granted by the lender or owner of

---

2. Also, 10 percent of the produce of any farm goes to the imam if the farmer is a Muslim; these tithes are destined for the poor and the needy.
the land. Upon the borrower's permanent departure from the village, the trees he planted become the property of the landowner unless the borrower has specifically given such fruit trees to blood relatives (sons, daughters, brothers, sisters, nephews, or nieces). As the seyfo at Kalagi told the research team, a land borrower cannot plant fruit trees at will on borrowed land without the consent and approval of the landowner. Planted fruit trees are nearly always owned by the owner of the land on which they grow.

**CUSTOMARY LAND TENURE AND DISPUTE RESOLUTION**

Land disputes occur over a variety of issues. An aged village informant of Sintet thought that land disputes were most commonly rooted in disagreements over the location of boundaries. Land inheritance disputes can arise between half brothers of the same deceased father (this pertains as well to rice land).

Land disputes can take place between two villages. These are often cases of conflict between two founding families, and supporters of the respective positions will side with the particular disputant. Tensions leading to serious disputes can break out between two villages because the boundary between villages is marked by nothing more than the limit of each community's fallow land extending toward the forest. Such land disputes can arise, for example, when a guest village is settled on the fallow or farmlands of a host village.

**Informal dispute-resolution mechanisms.** The main characteristic of the dispute resolution process is that compromise and reconciliation should occur at the informal level before the case reaches a formal court. Land disputes are no exception to this customary norm. If a land dispute erupts between members of the same family, the family head, as custodian of the family land, settles it without going beyond the family. If he fails to resolve the dispute, the uncles (i.e., the brothers of the disputants' mothers and other close kinship relatives) will appeal to the contesting half brothers to strike a compromise and reconcile. If this also fails (or cannot take place for a particular reason), the matter can be brought to the "kabilo" (i.e., head of a group of families absorbed into one of the founder families) for arbitration on the issue. If the dispute still rages on, disputants can bring the argument to the attention of the *alkalo*, the imam, and other *kabilos* as well as other influential leaders.

In cases where the disputed land is cultivated in rice, the women cultivators may wish to keep their affairs apart from the business of the men. In these circumstances, the dispute is referred to the "ngansimba" (i.e., head of the female community) for advice and

---

3. Land is borrowed either for settlement or for farming; the growing of fruit trees is not included in the customary idea of farming.

4. Disputes can also occur when there is a disagreement among sons, generally half brothers, over who should take over the house of the deceased ancestor and thus become the head of the family.

5. These types of land dispute are, in fact, now becoming more numerous than they were in the past.
reconciliation. In a typical village, no woman will turn down the considered advice of the ngansimba regardless of her social status. Any woman of good will can report the dispute to the ngansimba. Disputes generally concern disagreements over the boundary of rice fields during tilling or over the heaping of weeds on another’s rice land during weeding.

**Formal dispute-settlement mechanisms.** When the informal dispute resolution mechanisms are exhausted or bypassed by one of the claimants, the matter then appears before the district tribunal. The tribunal reviews the case and makes a binding legal decision. The case may be appealed to higher authorities or courts.

The provinces of The Gambia are divided into 35 districts, each headed by a seyfo (chief). A cluster of villages form a district and a certain number of districts forms a division, headed by a divisional commissioner. Every district has a district authority, consisting of the seyfo and the village heads. The seyfo alone can act as district authority. The alcalo is the district authority’s representative in the village. Any action he takes concerning land must be approved by the seyfo.

The district authority can be viewed as the "parliament" of the district. In full session, it can make prohibitive decrees or edicts forbidding some actions. Transgression can be punished by a fine at the district tribunal.

Every district has a single district tribunal which acts as a court of first instance in land disputes; there are 35 district tribunals and 5 group tribunals in the provinces of The Gambia. The district tribunal is composed of persons who were recommended by the seyfo and supported by the divisional commissioner before their appointment by the Ministry for Local Government and Lands. These court members are selected for their knowledge of customary law and their high moral rectitude and social respect. In addition, every division has a group divisional tribunal composed of at least three seyfolu (chiefs) and select members from the single district tribunals in the division. The seyfo is the president of the single district tribunal in his district, and the most senior court member presides in his absence. One of the three seyfolu likewise acts as president of the group district tribunal, and he is assisted by a vice-president, also a seyfo. For any proceedings to be valid, a quorum of at least 3 members, including the president, must be present. Total court membership is always in odd numbers in case a decision requires a vote, though there is never legal inquiry into the number of votes for any judgment.

These courts of first instance exemplify the flexibility of customary legal systems, since as state institutions, they can be constituted locally to create rules governing land use in a specific locality. The district tribunal hears cases concerning land within the district. The group tribunal hears cases remitted to it by the divisional commissioner or the Supreme Court, when the land dispute involves two villages or is such that the particular district
The tribunal is rendered unsuited because of the relationship of its members with the parties involved.

The divisional commissioner has powers of review over the decisions of district tribunals and group tribunals. The records of the tribunals are sent to the commissioner at least once a month for review. The commissioner makes certain that the principles of natural justice have been observed. He can confirm the decisions of the tribunals in land cases or he can revise the conclusions and substitute his own finding. He can remit the case for retrial either before the same tribunal or in another court. The commissioner is not a court, and as a reviewing officer goes only by the record of the case.

A dissatisfied litigant can go to the divisional commissioner as a complainant on the decision, even before his case records are sent, or can engage a lawyer to appeal to the Supreme Court. The Supreme Court hears cases, including land cases, on appeal. It also can grant the litigant’s right to appeal by referring the case to the court of appeal. Since land suits are civil suits, any party with the leave of The Gambia Court of Appeal can appeal to the Judicial Committee of the Privy Council in London.

CUSTOMARY LAND TENURE AND THE PROVINCIAL LANDS ACTS OF THE GAMBIA

In April 1991, the Government of The Gambia signed four new land acts into law: State Lands Act, 1990; Physical Planning and Development Control Act, 1990; Surveys Act, 1990; and Land and Compensation Act, 1990. This section reviews briefly some of the central components of these acts and discusses their impact on customary land tenure.

Customary land tenure applies in the provinces of The Gambia under Lands (Provinces) Act, Cap. 103. It does not apply to Banjul and Kombo St. Mary’s Division, which are governed by Lands (Banjul and Kombo St. Mary’s) Act, Cap. 102, of the laws of The Gambia, under the administration of Lands and Surveys Department.

District-level authorities are vested with the power to allocate and administer land for the benefit of district inhabitants. This in no way affects the rights of families or individuals over their lands. One may view the district authority as a trustee who administers lands or estates for beneficiaries in the area. Neither the district authority nor the district tribunal can interfere in the family’s allocation of land.

Protection from deprivation of property in the absence of compensation is enshrined in the constitution of The Gambia as a fundamental right and freedom. Property used in this sense includes property in land.

Designation of provincial land as state land. Section 5 of the State Lands Act, 1990, empowers the Ministry for Local Government and Lands to designate land in any

---

7. This is provided in Chapter 52 of the Laws of The Gambia.
province as state land to be vested in the state and administered by the state for the use and common benefit of the community in which the land is situated. Although this act has just recently been passed, legal professionals believe that due compensation will be forthcoming to the owners of lands so chosen by the ministry.⁸

The Physical Planning and Development Control Act, 1990, does not interfere with proprietary rights in land. Yet the act provides expanded authority for more rational planning in the development of urban centers such as the greater Banjul area. The act establishes a planning authority for Banjul, for Kombo St. Mary, and for each division. These authorities are to devise plans for the "spatial development and effective use of land to ensure a well-balanced environment and good living conditions" at national, divisional, and local levels. The national plans are to spell out guidelines and policies regarding the location of urban and rural settlements, traffic and transportation routes, resource utilization and economic activities, and preservation of national and environmental reserves; and they are to provide the framework for divisional and local-level development activities. Fifteen- to twenty-year development plans are to be prepared for any area designated by the ministry.

The act also requires physical planning clearance before any land is developed. A land-use map, produced for the greater Banjul area by the Department of Physical Planning and Housing, so far ensures that land is developed accordingly. Some areas have been marked residential, and other areas agricultural; a landowner cannot use his land for agriculture when the land is in a zone marked residential and vice versa. This act will extend to the provinces as time goes by.

Various forest acts and regulations created parks and reserves in many places in the provinces. These statutes caused no popular concern as long as the reserved areas were within an uncovered forest. Complaints and grumblings emerged when fallow lands which belonged to specific families within a given village were designated as forest parks or reserves by mistake. The alkalo of Kampassa village expressed the dilemma in which his people are put:

On the one hand, migration of the youths has left much land uncultivated. The soil has lost its fertility. Fertilizer is too expensive for them to buy. They cannot now cut and clear their fallow lands for agriculture because the Forestry Department ordered that nobody should do this. Even if they could clear their fallow lands for farming, their produce would be destroyed by animal pests like bush pigs and monkeys.

---

⁸ Lands designated as state land in Farafenni village and Brikama town are currently causing local objection because compensation has not as yet been paid by the government. The government did pay due compensation, however, for the lands it acquired for The Gambia College at Brikama.
THE LAND ACTS AND LEASEHOLDS

One can lease provincial land only after its ownership has been determined. When one becomes the sole owner of a compound or an orchard, s/he can lease the property, with the consent of the appropriate district authority, in order to obtain a bank loan. The ministry approves the lease of provincial land upon receiving the consent of the district authority. Here again, one cannot say that the district authority owns the land. The district authority acts as a legal trustee and the family landowners as beneficiaries. Upon his consent, the ministry can grant approval for the mortgage or assignment of the provincial leasehold property. An exception is made to this procedure when an order of the Supreme Court vests the leasehold to a particular individual after a suit in the probate division or foreclosure of a mortgage.

LAND ACQUIRED BY THE STATE FOR DEVELOPMENT PROJECTS

From what has been described about ownership of land by founder families and subsequent grants to latecomers in the village, it can be discerned that any land required for gardening by women and other community members must belong to a family. Gardens for the women of the village must be located in the outer fields—in the fallow lands or near rice lands. If the garden is for the dry season only, there will be no problem in obtaining the consent from the families concerned. Problems emerge when the garden is to be fenced and wells are to be sunk for year-round cultivation. Such lands will forever be lost to the original family landowners. In these cases, a woman would need to pay just compensation for the land. In most cases, no compensation is demanded since the alkalo or any influential family head with enough land on the outskirts of the village can grant garden space subject to such conditions as watering his fruit trees during the dry season.

Nongovernmental organization (NGO) projects that require land for development purposes must negotiate their land needs through the appropriate channels, as government projects do. However, there are many instances of government services like schools, health centers, veterinary posts, and mixed farming centers that obtain land without compensation because the assistance was requested by the villages concerned.

The above describes briefly the customary concepts of land tenure in the provinces of The Gambia. Customary land law is similar between all ethnic groups in the country, though nuances may exist between the different branches of customary law as practiced by the various ethnic groups. On the whole, customary land tenure in The Gambia may be viewed as having a defined, uniform body of principles, classifications, categories, and rules applicable to all ethnic groups in the country.
Customary Law as Process in the Gambia

While the previous section viewed customary law as a set of rather uniform and unchanging norms and practices regulating the acquisition, transfer, and use of land and other natural resources, this section sees customary law as an ever-changing amalgamation of British colonial legal traditions, Islamic law and religious practices, and precolonial ethnic traditions. The different "sources" of customary law have influenced each other from the colonial period to the present. The major institutions of customary law persist from the colonial period more or less unmodified in The Gambia today. Local-level institutions such as the alkalo, the chief, the district tribunal, and the divisional commissioner are functioning, with some modifications, in much the same way as before independence. The judicial system respects and employs the precepts of customary law to a much greater extent than its Francophone West African neighbors, and for this reason The Gambia presents an excellent opportunity to investigate the relative strengths of this legal regime.

Customary Law as Process

From an anthropological perspective, law can be studied as a substantive body of rules (Gluckman 1965). Law viewed in this fashion consists of a static description of practices which regulate behavior in everyday life. Social and economic activities requiring legal transactions are seen as taking place regularly, with little focus on litigious collisions (Holleman 1973). Interviews with key informants concerning local legal practices in the Foni Jarrol District basically represented a review of the substantive body of rules governing resource use. Informants shared their knowledge of what is expected of the legal institutions. Authorities such as the alkalo and the seyfo, for instance, were expected to possess a solid basis of legal knowledge about customary law.

The Law Reform Commission (1992) has collected a corpus of empirical information on the traditional legal practices of The Gambia by recording the wisdom of local legal authorities. It has conceived the development of customary laws and usage in much the same manner as the early colonial administrators, for considerable efforts were made by the latter to record the precepts and practices of knowledgeable chiefs and customary holders of cultural knowledge.

In a classical study on customary legal traditions, Malinowski (1961) emphasizes the need to study law "in action" rather than simply to focus on a collection of rules and the coding of law. In an authoritative work on the anthropology of law, Sally Falk Moore (1978) discusses law as "rule orders in action." In her view, law is process that is endlessly vulnerable to being unmade, remade, and transformed . . . . To try to understand something about law and society in these terms is to address the question how such processes and counter processes operate together, and what the preconditions are for reproduction or transformation. It is far more than the study of a set of enforceable rules and the logical principles which may be inferred to lie behind them (Moore 1978, p. 6).
Law as process is far more than "a set of enforceable rules and logical principles." Law should be seen as something dynamic and changing rather than given and static. Furthermore, it is characterized as ambiguous, inconsistent, and often conflictive. Customary law and practices can be manipulated and changed to fit certain interests and adapted to meet certain needs. This flexibility is not without constraints. The historical context of a particular place shapes the legal tradition in a substantive way. Such factors as religion, kinship, and settlement history bring about change in the legal system.

In Western industrialized countries, the prevalent view is that history is based on identifiable events which are agreed upon as facts. Kinship, with a biological reference point, is also presented as a given fact. Religion is generally regarded as separate from secular institutions of society. Legal systems and practices of law normally strive to isolate themselves from other aspects of social life, such as alliance and sense of "belonging," religious faith and ethnicity. In non-Western societies, on the other hand, the "facts" of settlement history are manipulated and constantly reshaped to adapt to social interests and power structures. The sense of belonging can change according to context or by moving out of an area. Religious practice can be adjusted to suit certain purposes in relation to alliances and political interests. Negotiation and reconciliation are used to solve disputes and conflicts as much as possible. This is the basis of customary law as "process."

**LEGAL TRADITIONS IN THE GAMBIA: FUSION OF "MODERN" AND "TRADITIONAL"**

An important distinction is made in this section between "modern" and "traditional" legal systems. In traditional practice, the community is the point of departure. A traditional community is not created by individuals who decide to form an order. There is no defined, regulated, and reproduced position outside the organization which individuals can hold and from which they could, on an equal base, form new corporations. In traditional societies, the "individual" is, as a general rule, a member of some entity that defines the position from which s/he can form a new ordering. Membership in an original group defines rights and obligations that also affect, and are the framework for, the possibilities of forming new structures. The kinship-based arrangement determines the possibilities of forming new groupings in traditional societies.

The distinction outlined above is important, for it highlights the difficulty of applying legal concepts formed in a Western legal tradition to situations in the markedly different social context of rural Gambia. Concepts such as individuality, equality, fairness, ownership, and property have different meanings in a social setting where the "individual" never holds a position outside of a given assembly such as the kinship system, religion, extended family, or village community. As long as an individual is a member of such entities from "birth to death," this attachment will structure choices and actions in a predetermined way. Using the term "individual" can imply that these predetermined organizations are absent and therefore that the individual has considerable room for free choice.

The structures that predetermine the individual in customary social life are not necessarily static and given. They are manipulated to fit different social purposes and
interests. Kinship, religion, ethnicity, and history are modified for social purposes and privileges. This is an important aspect of the dynamics of customary law and goes far in explaining its flexibility and adaptability to new conditions and pressures.

It is important to remember that this flexibility is limited to the manipulation and adaptation of predetermined arrangements such as kinship, religion, ethnicity, and settlement history. These structures form the point of departure for the actions of the social members of a village as well as the opportunities for manipulation by others. The members of the Foni Jarrol communities do not experience a position outside of these predetermined groupings. Such a position can be experienced only in a social context regulated and structured by a legal system based on an abstract concept of individuality.

The implication of this theoretical digression is that customary law must be studied as part of a broader social and ecological framework. Every aspect of the local community will in some way or the another influence the practice of customary law. Changes in the social, economic, or ecological situation propel remodeling of customary practices. This constantly evolving characteristic of customary legal systems means that generalizations cannot necessarily be made when a nation is composed of a great diversity of social and ecological conditions.

Legal concepts, both useful and confusing. A great deal of caution must be exercised when legal concepts are used to compare and describe phenomena of jurisprudence in different social settings. In places like the Foni Jarrol District, legal concepts are often used indiscriminately to describe legitimate aspects of society. Terms such as individuality, ownership, user right, and equality are bandied about. For example, individual property rights are often mentioned when discussing tree ownership, land inheritance, and women's rights to garden plots. In many of these examples, rights refer to specific objects transferred to single persons (right in rem). In a Western industrialized society, individual rights would mean that a person, regardless of kinship relations, sex, ethnicity, or residence, would have certain exclusive rights to certain objects.

For an individual in the Foni Jarrol District, rights to certain objects are interrelated with duties and obligations toward other persons such as kinsmen, villagers, in-laws, and other relations. Individual rights to a natural resource suggest that an individual can dispose of an object regardless of other persons. In the Foni Jarrol District case-study villages, individuals do have various rights to natural resources. These rights are acquired through inheritance, gift-giving, and borrowing. But the rights to and terms of use of resources for women are closely related to the place of the individual woman in the village community, her kinship relations, or her degree of involvement in the women's kafo group. Traditional rights and responsibilities do change, however, in the context of institutions set up by development projects. Land allocation in women's gardens, such as those of Sintet, for instance, operates through a lottery system in which names are drawn out of a hat and plots allocated accordingly.
Valuable resources like rice fields are allocated as a function of the social position of the individual. Women may inherit land through family relations. The particular nature of the woman's rights to rice fields within the family to a large degree determines her access to cultivate other plots of land. Ownership of rice fields is thus a term that has little meaning before one specifies the particular user rights of the person involved in the transaction. Individuals do not possess exclusive rights over land. One's user right is exercised in agreement with other functions of the fields.

Land and other productive resources are in general not movable or exchangeable in traditional societies. This is especially true for land. "Gifts" or "tokens" may be given in "exchange" for the right to cultivate. In the villages of Sintet and Kamamudu, payment may be made in dalasis or in-kind to acquire access to a piece of land for rice cultivation. Kola nuts were traditionally given as gifts to acquire user rights. Today "kola-money" is given instead. This is not a payment for the land itself, but a token that defines a specific user right. Gifts and tokens are used for "payment" when the remittance does not reflect a market price for the object in question. The term "kola-money" reflects an attempt by the lenders and borrowers to maintain the premarket conception of land.

A confusion of concepts can arise if we use the same term to relate to property rights in both the Western sense and the Foni Jarrol context. The confusion is most obvious when we make a sharp distinction between user rights and property rights. In the Foni Jarrol, property rights are not generalized prerogatives separate from the use of the specific object in question. People can "own" land for a specified purpose, that is, are given rights and obligations to utilize the specific piece of land in question for a designated time period. Land can be "owned" for rice cultivation and it can be inherited. But this right is not an exclusive ownership right to the piece of land. It cannot be sold, for instance. The right to cultivate is often predetermined by a residential requirement. The right of ownership is never generalized and separated from rights and obligations to the community and to those who grant the user rights.

Property and ownership in the Western use of the terms often connote equality. It is presupposed that individuals exercise positions of similarity in relation to one another regardless of their social status, sex, ethnic belonging, or settlement history. In Western industrialized societies, according to law, people have equal opportunities to participate in important social matters regardless of sex, kinship, cultural background, or language. This is a generalized notion of equality rooted in the principles of fundamental universal rights.

In the Foni Jarrol District, equality is far from a universal and generalized concept. In relation to strangers, members of the same village will be treated on an equal basis. Yet there are many different social categories within the community itself. Specific rights and obligations tie people together in relation to each other and in relation to specific objects. There is no generalized and abstract notion of communality which gives definable rights and obligations apart from membership in kinship, ethnic, or village communities.
The Use of History and Law in Customary Land Tenure Traditions

History in a Western context strives to describe events consistent with recorded facts. These facts are established through the work of historians who bring scientific rigor to a common body of knowledge. History in rural Gambia, on the other hand, is manipulated to justify the actions of particular groups. Frequently during field research in the Foni Jarrol District, intense debate erupted around the subject of who first settled in a particular area. It soon became evident that the retelling of history represents the interplay of competing interests. Different factions within the same village have different versions of village settlement history. In Sintet as well as in Kamamudu, small deviations in the settlement histories of the villages were highlighted with great enthusiasm and involvement of all discussants. To youth within the village and to outsiders, this nuanced and at times heated discussion of settlement history might seem to be unimportant musings of the elderly. A closer look at the oral history of settlement within these communities reveals a shady interplay of power and politics.

In traditional Wolof empires on the north bank, oral historians were gewels (griots) with a specific social function. Accompanying the king, they would sing or tell myths and tales about important events in the history of the community—the backgrounds of founders of early settlements, the struggles for succession to titles, or the outcomes of conflicts and wars. These stories often bore important messages to help explain particular events to the community. Oral historians in many cases spoke for the interests of specific social groups (Claussen 1982).

The position of an oral historian is modified in some respects in The Gambia today. Now the elders are the village members who "remember" important events from the past. Those who claim to be "the oldest" are the true oral historians. In Sintet and Kamamudu, there were several oral historians who gave slightly different versions of settlement history. These elders serve much the same function as the Wolof gewel. They recount stories that justify the settlement history of particular groups within the community. These stories have much bearing on landownership. The case cited below illustrates how history is used to justify occupation of land.

The history of Sintet as recounted by Ensa Tamba. The village of Sintet has a long and colorful history beginning with its settlement at the turn of the century. There are several versions of the village’s origin, each told by members of the separate founding families and each with its respective elders playing the major role in starting the community. Below is the account of Ensa Tamba, a citizen of Busongai (one of the hamlets of Sintet) and a descendant of Yankuba Tamba.

Amalanga Badjie was the first of the Jola settlers to arrive in Sintet, which was then used as a prime palm wine-tapping area by the Bainunka living in the area. Amalanga cleared land given to him by the Bainunkas and established his home in the section of Sintet known as Bako (a second hamlet of Sintet). Descendants of Amalanga are still present in Bako and remain today the most powerful family in this
subsection of Sintet. Respect for this founding lineage is still shown by later settlers who, after killing a cow, always give the front leg of the animal to a member of the Badjie family.

A year or so after the Badjie settlement in Bako, another Jola settler arrived across the stream and densely forested palm grove which is currently used for rice cultivation, and settled in the area of what is now Busongai. Yankuba Tamba came from Kanbenseng, near Chaboi, after a few Bainunka friends told him of the land available there. He made his initial inspection of the area and returned to Kanbenseng to convince his family to move with him. He eventually succeeded in bringing along his brother, Akambi Tamba, but only after Yankuba gave Akambi young Howa Jammeh to marry.

A short time after the Tambas had settled in the Busongai area, they were greeted by Amalanga Badjie, who discovered the settlement while on a hunting expedition. The two families were only 1 or 2 kilometers apart, yet neither knew of the other’s settlement. Amalanga inquired about their residence in the area and asked them if they planned to stay there. For reasons not entirely clear, he was concerned that the Tambas would eventually take control of the area, which was valued for its palm wine. Badjie continued on to the village of Jwenkell to alert the Colley family of the potential threat that the Tambas posed to palm wine tapping and to rally their support for the expulsion of the Tambas from the village.

Representatives of the Colley family then traveled to Busongai to confirm Amalanga Badjie’s account of the new settlement. The Colleys met with the Yankuba and Akambi Tamba and asked who had given them permission to settle there. The Colleys claimed that the palm tapping area was theirs and ordered the Tambas to leave. The two Tamba brothers were divided on this, with Akambi agreeing to leave and Yankuba putting up resistance. However, the Tambas were no match for the Colleys; they were forced to remove their belongings and the Colleys set fire to their settlement.

Akambi Tamba retreated to Chaboi and Yankuba Tamba went to the chief of the region, Sori Sambou, of Jarrol. When he recounted how they had been forced from their settlement, the chief expressed disbelief that the Colleys were capable of committing such a heinous act. While Tamba was with the chief, the British commander arrived in Jarrol. The commissioner visited the site to verify the story and was angered by what he found.

The commissioner summoned his troops to Brumen, where the ship could easily unload its cargo of soldiers and arms. While the troops disembarked in the evening, Nil Sanyang, a citizen of Wassadun whose sister had married into the Colley family in Jwenkell, realized what was to take place and ran to warn the Colleys of the impending battle. Most of the women fled from Jwenkell as did several men. At daybreak the colonial troops proceeded to Jwenkell and captured the Colleys who remained and took them to the village of Kansala, approximately 20 kilometers west of Kalagi. Word of the seizure spread quickly through the region and all villages were told to send a representative to witness what was to pass at Kansala.

The British commissioner made it clear to all those in attendance that the British were the rulers of the land and would in no way tolerate the wanton
destruction of settlements. They warned that other willful actions of this type would be met with consequences similar to those facing the Colleys. The commissioner then ordered the execution of the Colleys and they were hung by machine, one by one.

Yankuba Tamba returned to Busongai and once again persuaded Akambi Tamba to join him. The two resettled together, but Akambi later moved to Kabumb, as Mandinka settlers from Kiang began to migrate to the area. This helped to secure a Jola stronghold in the village and the dominance in landholding by the families of Amalanga Badjie, Akambi Tamba, and Yankuba Tamba.

The _alkalo_-ship of Sintet was established sometime after its first settlers arrived, with the earlier days of settlement ruled by a council of elders without a designated _alkalo_. The first _alkalo_ was Jansa Badjie of Bako, who had to be removed due to his abuse of palm wine. He was succeeded by a Mandinka named Dahaba from Kabumb, but only for a brief period before Musa Badjie gained the post. He served as _alkalo_ until his death, after which Chief Kandion Sanyang appointed Malang Tamba, a migrant from Casamance, to the post. Malang Tamba served for forty years before his son Ebrima Tamba won the position by a show of hands. Ebrima Tamba is the present _alkalo_ of Sintet.

The story of the Colley assault on the Tamba family is seldom told, and Ensa Tamba attributed the existing harmony between the Tambas and the Badjies to their commitment to baadingyaa and the acceptance of differences between families in order to maintain social accord. A sense of collective guilt still hangs over the village for the massacre at Kansala. The elders of Sintet attribute the existence of four hamlets in Sintet rather than four separate villages to the realization that peace and harmony must be maintained between the different families at all costs.

**History, tenure, and development projects.** The attempt by elders to tell the "true" story of the past settlement history of the case study villages is used to this day to demonstrate primary rights of landownership. When different interest groups come into collision, telling the true story plays a decisive role in negotiating disputes both informally and in court. This has made the elders’ position as oral historians important in land disputes both among different fractions of a village and between separate communities.

Today, small discrepancies in settlement history are important issues in the resolution of land disputes. The use of oral history to document landownership is becoming increasingly important in The Gambia. The determination of leasehold arrangements and the resolution of disputes over the payment of compensation for land taken by the state for development projects often stem from the settlement history of a particular area. Similarly, disputes over landownership erupt frequently in peri-urban and urban areas of the country as holdings are converted from extensive agricultural enterprises to intensive horticultural or housing developments. Litigants may use their interpretation of history in both informal and formal conflict-resolution arenas. This is one of the reasons why rural people, especially elders, occupy themselves in arguing over the settlement chronology of agricultural lands, habitation areas, and village territories.
History can be used to strengthen specific group interests. The settlement history of Sintet described above cannot be told in a neutral way nor is it an orderly arranged sequence of events. It is important to know not so much the true history of an area, but rather how the story is used to defend a particular group's assertions. Historical facts are adapted to serve specific political and economic purposes.

This view of history in a traditional setting is also applicable to the practice of customary law. Different customs are brought into play in a dispute over land and other natural resources according to the particular social interests of the litigants. As with history anywhere in the world, specific land allocation customs are stressed in certain conflicts and redefined to meet specific needs. This is what gives customary law such flexibility in places like the Foni Jarrol District.

**TENSIONS, COMPLAINTS, CONFLICTS, AND DISPUTES IN THE EVOLUTION OF TENURE SYSTEMS**

Rural communities are filled with tensions which at times erupt into open and, indeed, violent conflicts. The process of resolving these "tenure pressure points" often reflects ways in which old rules have become dysfunctional and new customs created. The field research in the Foni Jarrol District identified a number of tension areas or situations in which conflicts, disputes, and court cases arise. Tensions abound around a myriad of issues: landownership questions, borrowing rights, marriage customs and alliances, access to the forested commons, or cattle paths to water points. At times these arguments break out into more serious conflicts. The causes of open confrontation may be rooted in longstanding disagreements within the village, but also may be attributable to external forces such as development projects. Understanding the dynamics of these tension points is critical to the success of development programs.

**Tensions around natural resources.** Tensions are expressed more or less openly in village situations. On the whole, villagers strive to live in peace and do not like to express signs of stress or disagreement, especially to outsiders and strangers. Many aspects of village life have not developed tension areas, yet latent uneasiness may be found just beneath the surface. These potential pressure points may reflect differences in opinion over such matters as who has rights of first occupancy in a particular area. Under certain circumstances different points of view can develop into recognizable tension areas, which may be categorized in order of importance as "complaints," "conflicts," and "disputes."

**COMPLAINTS.** Complaints are tensions addressed between different parties or between one party and a possible negotiator, like the alkalo or a compound head. Complaints are the first stages of what might lead to a tension area. If a number of complaints are expressed by different village members, it is a sign that a possible conflict may turn into an openly expressed tension.

Complaints can also indicate previous conflicts or disputes. If differences of opinion have been settled to the dissatisfaction of one or more of the parties involved, a tension area
can develop as a source of numerous complaints which may erupt into a dispute at a different time and place, often unbeknownst to an outsider.

CONFLICTS. Conflicts differ from complaints primarily in their openness. Conflicts are often more "official" than complaints and take place in front of a number of people or an audience. This makes them immediately known to everyone. They are talked about and discussed among villagers. Mostly they involve expressions of anger and/or violence. The conflict may lead to the intercession of a mediator, but usually not a truly authoritative person like a chief, seyfo, or other external actor.

DISPUTES. When an authoritative mediator is enlisted to solve a conflict, the controversy becomes a dispute. Disputes consist of the original parties in the conflict together with a third party who acts as the negotiating authority.

In a dispute the parties bring their arguments forward in an open forum, where an authority hears the case. Negotiation and conciliation are employed to solve the dispute and, hopefully, eventually establish consensus. To make peace between the parties involved is the main function of the mediating judge. The success and status of the authority depends to a great extent on this person's ability to engineer a peaceful solution to a disagreement. This is part of the respect which the judge manages to build up over the course of continued successful resolutions. In many rural communities, successful negotiation and consensus-making are keys to the maintenance of an authoritative position. Lack of success in solving disputes may undermine the prestige and respect of the mediator.

Village residents in the Foni Jarrol District go to great lengths to solve disputes within the village itself. As will be discussed below, residents in one of the case study villages created a "disputes mediation committee" to resolve local disputes and to avoid bringing cases into the court system.

When disputes enter into the legal sphere, they are negotiated on different levels. The court of first instance, the district tribunal, is the initial level of the formal legal system. Disputes can be handled at this level basically in two different ways: informally, by the chief and/or members of the court, who try to settle the issue through compromise; and formally, by the district tribunal in an official court case.

For a court case to be handled in a formal manner, the arguments must be recorded properly. Members of the district tribunal must hear the case, and certain members of the court must be present during the trial. From case studies in other parts of The Gambia, it appears that the court has a great deal of flexibility in dealing with disputes. Even though a court hearing is held, not all cases are recorded and handled according to specified requirements. Instances have occurred where a court case was handled like voicing a complaint, and compromise was reached without recording the various arguments at all. The chief, therefore, can order official hearings of complaints without recording any of the proceedings. He can call upon other court members to give opinions in matters without handling the dispute like a court case (Claussen 1982).
The distinction between a formal court case and an informal complaint resolution may be quite unclear. This is an important element in the flexibility of the practice of customary law in The Gambia. The system allows the seryo a considerable spectrum of choices and different alternatives in handling disputes. It also gives the chief strategic possibilities to consider when disputes and solutions can affect his position or reelection.

THE CASE OF THE BROKEN PIPE: THE EVOLUTION OF CONFLICT OVER WATER RESOURCES

The following case illustrates how tensions can rapidly evolve into conflicts which in turn threaten to become major disputes. The case demonstrates how external institutional interests can have a profound impact on local tenure relations, often inadvertently. The case of the broken pipe is not unusual and reflects the types of disputes that many development projects encounter on a regular basis.

CASE OF THE BROKEN PIPE

The rice-growing areas in Sintet have received several new development interventions in the last six years. Plagued by poor water retention in the inland valley area and salt water intrusion near the bolong [tidal stream], the villagers requested assistance from the Soil and Water Management Unit (SWMU). The SWMU began operations in the inland valley by constructing a series of dikes in the lowland rice-growing area [see photograph 1]. The first dike was constructed by voluntary labor from each section of the village, with as many as 300 participants showing up at each session. The enormous contribution of labor in an otherwise labor-scarce economy resulted in the construction of 7 dikes in Sintet. Long dikes now snake their ways across the inland valley and along the Bintang Bolong.

The SWMU worked with committees selected by villagers from each of the four sections of Sintet [recall the history behind the creation of these hamlets, as told by Ensa Tamba]. These committee members, representatives of the traditional kafos, were to serve as contact points for SWMU activities. The representatives then joined to form a village watershed committee, comprising three men and two women from each hamlet. The committee members were responsible for extending messages from SWMU staff and for mobilizing labor during construction of dikes. The committee also met with project staff to decide on the annual work plan for the Sintet and for the district as a whole. These committees seemed to function quite competently when there was project support in the village.

The dikes have been very effective at impounding water, as they were designed to do, but have altered the valley considerably. The largest of the three structures, known as Structure II, was built to retain a large pool of water to irrigate rice fields as well as to water cattle during the onset of the dry season. The dike was outfitted with a drainage pipe to help the natural spillways regulate the level of water on the rice fields [see photograph 2]. Even with the conduit many believed that there was excess water covering a large section of the fields, where there was a natural depression and a former waterway. In the past, when rainfall was much higher, it
PHOTOGRAPH 1

Dikes and rice fields in Sintet
PHOTOGRAPH 2
The Sintet spillway
was reported, these particular fields were always flooded and only since the drought have the fields been cultivated.

The ownership of rice fields in the inland valley is very clearly divided along family lines. The first founders of Bako claim close to 50 percent of the area, and the first family of Kabumb, who arrived in the village after the family in Bako, holds most of the remaining land. These families lend land to nearly everyone farming in that area, and there were no complaints about borrowing arrangements with either family and no known payments or "kola" exchanged.

A dispute eventually erupted between the farmers with fields farther up the valley and those with fields close to the dike, whose land was made unfertile by the high water level. The fields with excess water belong to the first family of Bako, which also has fields in other parts of the rice-growing region. The women who were no longer able to use their fields complained that they were never compensated for the loss of their land, and were angry that others benefited while they did not. Although these farmers also have fields outside of the affected area, they said that they preferred those particular fields because of their proximity to the compound. The affected farmers are direct descendants of the founders of Sintet, and hold high positions in the village.

After years of debate between the dissatisfied founding families, the two or three farmers of Bako decided to take action. To the dismay of many and to the benefit of very few, the pipe was cut, allowing most of the water to flow out to the bolong. The lowering of the pipe was done clandestinely, with the support of the alkalo, the husband of one of the farmers involved, as well as the SWMU, whose representative in the village felt tremendous pressure from these particular farmers. Unfortunately, the action did not have a popular backing in the village and was not argued through the proper channels such as the watershed committee.

Many farmers were outraged by what had happened and some attempted to block the hole in the pipe with sandbags. Their actions were met with stern warnings by the alkalo not to tamper with the pipe. A recent discussion with an SWMU staff member indicated that the case of the broken pipe was not openly discussed within SWMU either, and was more or less allowed to happen, possibly due to the SWMU's own internal struggles.

The broken pipe remains just that and is somewhat of a symbol of power in the village. Clearly more people lost than gained in this case, yet many believe that those who instigated the event are more powerful than anyone else in the village and that their decision will stand. As one man concluded, "Before the dike, we had trees and some rice. After the dike, we had more rice, water for the cattle, but the trees gradually died. Now, we have no rice, no water for the cattle, and no trees. We are worse off than before."

Several residents of Kabumb, who were beneficiaries when the water level was higher, suggested that the alkalo hold an election to vote on the issue. Another resident, and member of the SWMU committee, said that he and a few others were planning to visit SWMU headquarters and plead for a resolution. These people seemed to feel that a solution from outside the community would be more respected than one coming from within.
The SWMU project did not affect existing rights to the land and these rights did not change with project interventions. Those who borrowed lands that were improved by the dikes were not asked to return the enriched land to the owners. There were occasional remarks which indicated that a few women were concerned that their security of tenure to their rice lands was lessened with the reclamations, but there were no reports of fields actually being reclaimed by owners. The central tenure problem in this case is that the founding families suffered from the excess water level, impounded dikes, and sought to alter a design feature of the dike to serve their own interests (though not to reclaim former holdings). A tense situation now exists in the village, one that could potentially erupt into a violent confrontation.

INSTITUTIONS OF TENSION RESOLUTION (seyfo, alkali, kafo, imam, sutiyo, anifanao)

The lessening of tension or the resolution of disputes is accomplished at various levels. There is a strong preference to settle disagreements locally, starting within the compound or kabilo and gradually moving to the alkalo or chief, as necessary. The society is guided by two very strong concepts, "baadingyaa" and "faadingyaa," which in Mandinka represent harmonious and contentious relations, respectively. In interviews with villagers throughout the district, baadingyaa was repeatedly given as the reason that a more aggressive course of conflict resolution was not pursued and a compromise reached between parties disputing various issues.

In Sintet, for example, the SWMU dikes increased the water level in the central part of the inland valley, and while the majority of landholders benefited from the impounded water, a powerful few lost portions of their fields to the high water level. Eventually, the women who farmed the submerged fields convinced the alkalo and project staff to lower a water control structure and reduce the water on their fields. They completely circumvented the process of decision-making by committee, which is the usual route for SWMU matters. The action did not have the full support of the village. Despite the resentment of many toward the few individuals involved, all parties were recently seen working side-by-side while building a new village clinic. In the context of the sad history of Sintet and the massacre at Kansala, one can see how the villagers go to great lengths to maintain baadingyaa at all costs.

Religious figures are often important actors in the resolution of conflicts. Yet in the Foni Jarrol case-study villages, holy persons such as marabouts and imams did not take an active part in negotiating disputes or hearing complaints. This is quite different from the experiences on the North Bank, where marabouts are important authorities in the settlement of disputes and conflicts.

Traditional women's groups such as the kafo play an important role in dispute settlements. In Sintet and Kamamudu, the women's kafo groups are among the most important village institutions (figure 4 and figure 5). The women's kafo-teo, the head of the women's kafo, is reported to have some authority in the allocation of rice fields and garden plots and in the settlement of complaints and disputes between women over land.
Villagers are brought together in a general meeting and asked to identify the key village institutions or individuals in order of importance. The different sized circles are chosen to represent the relative importance of each institution or individual. Institutions/individuals outside of the circle represent nonvillage entities. Numbers indicate the order of identification of each institution/individual. Group discussions focus on the function of each institution.
Explanation: Villagers are brought together in a general meeting and asked to identify the key village institutions or individuals in order of importance. The different sized circles are chosen to represent the relative importance of each institution or individual. Institutions/individuals outside of the circle represent nonvillage entities. Numbers indicate the order of identification of each institution/individual. Group discussions focus on the function of each institution.
Another important woman is the ngansimba, who is responsible for the circumcision of girls. She was not reported to have any voice in allocation of land, but acts as an authority in disputes between women. The negotiating power of the kazo-teo and the ngansimba is greatly determined by their success in settling disputes.

The men's kazo is also an important institution in the Foni Jarrol, though the women's kazo groups seem slightly more influential. Men's kazo groups are headed by a man called the men's kazo-teo. The nganmamo is the man responsible for the initiation of young boys. While meetings among these men form the basis for dispute resolution, kafos did not have any significant part in the negotiations of disputes. Rather, the "conservator" of the sacred forest in Sintet played an important role in resolving conflicts and disputes. The sacred forest could be used to launch curses against someone, but it could also be the occasion for coming together beneath towering trees and within a mystical atmosphere to resolve a dispute. The elderly and highly respected conservator of the forest could be a key peacemaker.

Other methods may be used to resolve disputes. Villagers themselves have ways of exercising their rights and authority. One important method is through "ostracizing," a form of psychological pressure used to exert compliance to social norms. If, for instance, a "founding family" acting as host to a "stranger" decides that it wants its land back, shunning the newcomer can be a way of obtaining that land. This can be done in cases where reclaiming the land might be difficult without making the borrowers leave the village. For instance, in cases where land was "given as a gift for life," the only way to reclaim the territory would be for the recipient to leave the village.

Forcing someone out of the village can be done in several subtle ways. Ostracizing is exercised primarily by ignoring members of the group or family which one wants to exclude. The subject will not be greeted by other village members; wives at the well will be treated with silence. People ostracized will experience isolation and lack of "belongingness" to the village community. False accusations might be leveled at the person (allegation of drunkenness is often a way of shunning someone in a Muslim community). Thus ostracizing can be an efficient way of making people move from a community (Claussen 1982).
PART 2
CASE STUDY

INSTITUTIONS AND NATURAL RESOURCE MANAGEMENT IN THE FONI JARROL DISTRICT

The Foni Jarrol District is in the far eastern part of the Western Division of The Gambia. Three watersheds are situated in the district, each flowing away from the slightly elevated and uninhabited forested highlands. Within the valleys of these watersheds are found several villages and hamlets (see figure 2, p. viii).

The Foni Jarrol District is made up mainly of Jola and Bainunka populations, yet the Mandinka and Fulbe are well represented. The village of Sintet is populated primarily by Jola. Kamamudu and Kampassa are largely Bainunka villages, though these, too, contain a large number of Jola as well as other ethnic groups. A substantial population of Fulbe lives within or in close proximity to each of these villages. Other ethnic groups—Fula woodcutters from Guinea, Mauritanian shopkeepers from the Boulti limit, and former refugees from the once war-torn Guinea Bissau—were also found in each of the villages.

AN OVERVIEW OF THE SOCIAL, ECONOMIC, AND ECOLOGICAL HISTORY OF THE FONI JARROL DISTRICT

The casual visitor to Foni Jarrol would think that the district is at the periphery of the Gambian national economy. In contrast, for example, to the large rice cultivation projects in the McCarthy Island District, few large-scale development projects are found in this region. Official reports suggest that the Fonis are not problem areas because of an abundance of natural resources and a low population density. But the calm and tranquility of the district hide the fact that the local economy has been integrated into broader national, regional, and international production for decades. Thus, far from being isolated, the Foni Jarrol District is buffeted by complex and wide-ranging social and economic forces.

To understand present-day land tenure and natural resource management practices, one must consider the historical evolution of society and ecology in the Foni Jarrol District. Many of the institutions established during the colonial period continue to operate and strongly influence the populations of the district. While the physical ecology of the area has changed, it has not been a continual downward spiral, as many would suppose. Rather, there is a constant reshaping of nature that reflects the impact of the rapidly changing local economy.
THE SOCIAL HISTORY OF THE FONI JARROL DISTRICT: EARLY SETTLEMENT AND LAND TENURE

The Bainunka were probably the first settlers in the Foni Jarrol. Little is known of their early history, but they probably retained an uneasy association with the more powerful Mandinka kingdom to the east and the Jola power to the south. Many reasons are offered to explain the existence of the small Bainunka population found in the district today; some informants suggested that large numbers of this animist population were killed by Foday Kabba, a Muslim reformist of the late nineteenth century. The Bainunka who remained appear to have been assimilated through marriage into the broader Mandinka and Jola spheres. Today, relatively few people consider themselves Bainunka and continue to speak the language, though one of the case study villages, Kamamudu, is predominately Bainunka.

By the time of the initial European contact with the Fonis in the seventeenth century, the Jola were probably the dominant ethnic group. Historians suggest that the Jola had once occupied large parts of the south bank of the Gambia River. During the Mandingo expansion of the fourteenth century, many Jola fled southward into what is now the Casamance of Senegal. At the time of the arrival of European explorers, the Foni Jarrol District probably served as a buffer zone between the Mandinka kingdom to the east and the more densely populated Jola settlements of the Casamance. But the Europeans presence in the Fonis began only in 1833, when the Bintang Bolong was explored and commerce was established by entrepreneurs shortly thereafter (Archer 1906, p. 37). Following the founding of the British protectorate in the 1890s, many Jola moved back to the south bank districts from the Casamance. This in part accounts for the relatively recent settlement history of the case study village of Sintet.

Although the Foni Jarrol south of the Bintang Bolong was occupied primarily by Jola, other ethnic groups lived in the area. As in other parts of The Gambia, the Fula settled in small hamlets throughout the territory. Reciprocal economic relations were often established between the Fula and the Jola host villages; as one finds to this day, the Fula exchanged milk products for grains produced by the sedentary populations. Mandinka villages were also found in the Foni Jarrol, but the Bintang Bolong appears to have marked the separation of the Jola and Mandinka domains.

The settlement patterns of the Jola were quite different from those of the more powerful Mandinka. Jola villages tended to be rather isolated clusters, at times heavily fortified. In contrast to the neighboring Mandinka, the Jola were stateless communities in the nineteenth century, lacking centralized administrative structures. While much debate surrounds the reasons for this situation, one hypothesis is that the Jola had been reduced to small and relatively isolated villages after centuries of constant warfare with the Mandinka.

In these rather sequestered communities, authority was vested with the heads of lineages, usually those families that first settled in an area and cleared the forests for rice and upland crop cultivation. Agriculture became a prominent issue in local political affairs, and founding families ceded land as gifts or as loans to later arriving groups. The first settler
families generally assumed the chieftainship role of the community. As discussed in part 1, the history of the founding families' settlement is important because it influences a wide range of social relationships. Land allocation practices continue to be controlled to a large extent by the founding families of a particular village.

The Soninke-marabout wars. The Foni Jarrol District was the scene of considerable instability during the Soninke-marabout wars in the second half of the nineteenth century. From the mid-1800s to the early 1900s, Islamic reformers sought to convert the pagan Jola to Islam. Foday Kabba was one of the principal Islamic reformers, dominating the Foni Jarrol from the 1870s to the 1880s. As a result of fierce Jola resistance, the Foni Jarrol was plunged into decades of pillage and violence instigated by the allies of Foday Kabba. Villages were razed, and inhabitants captured and sold as slaves. As one old man recounted to the research team, "vultures followed Foday Kabba." In 1892, Foday Kabba was routed by British troops and driven to the Casamance, where he was eventually killed by French troops in 1902.

While there was insufficient time to explore the settlement history of the case study villages in detail, initial interviews suggested that Jola migrated from what is now the Casamance of Senegal into the district sometime during the mid- to late-nineteenth century. The reasons for this migration are not clear, but several informants suggested the enticement of plentiful natural resources, such as oil palm groves and uncultivated swamps suitable for rice cultivation. Of the three villages studied, Kampassa, the village farthest south, appears to be the oldest while Sintet, the farthest north, is the newest. Some sixty or seventy years ago, the Fulbe from the Casamance, from such villages as Santangkoto, migrated into the district to settle in close proximity to the Jola. Some of the early villages mentioned by informants, however, have since disappeared or shifted location; little remains except for towering baobab trees, silent witnesses to the sometimes violent histories of these former communities.

The British protectorate. In 1887, the Foni was placed under British protection. British traveling commissioners soon began to crisscross the district in the dry season, from November to the end of April. The Foni was difficult to oversee, an administrator recounting that "Jolahs are a wild people, but generally settling down and becoming amenable to the protectorate laws" (Archer 1906, p. 116). The governing bodies experienced considerable inconvenience in extracting commercial goods from the area. First, few Jola were willing to sell their herds of cattle (Archer 1906, p. 114). Then, even though latex trees in the area produced the sap that was valuable in the production of rubber, the harvested latex was exported across the border to the colony of Senegal, where better prices could be obtained. Finally, some rosewood was exported, though it was used mainly for shipbuilding and other construction by the administration.

---

9. In interviews, elderly Jola informants constantly mentioned acts of resistance by their animist ancestors.
The British administration also confronted difficulties with collecting taxes from the local population. Colonial tax collectors were accompanied by armed guards because, as one administrator noted, "[the inhabitants exhibit a] wildness and ignorance which stops them from paying taxes." The administrators were frustrated to such an extent that one reads frequently in the archives that "There is only one name for the Jola, 'savage,' and he must be treated as such"; "The Jolas are wild. There seems to be no chief of any power"; or "[There are] drunken bouts and fights among the Jolas which will continue as long as there are palm trees in the country" (National Archives of The Gambia).

Disputes about natural resources did take place, even in an area of plentiful wealth. Informants referred to violent confrontations over access to certain dense concentrations of grasses used for thatch. Intervillage squabbles were quite common over rice lands. During the construction of a "disputes matrix" with the selyfu and members of the district tribunal in Kalagi (see figure 6), references were made to the high incidence of conflicts and disputes over rice fields in the colonial period. Prior to the full acceptance of Islam by the Jola, villages argued over access to dense palm groves used for palm wine tapping. These disputes sometimes had disastrous consequences for the local populations, as recounted earlier in the sad settlement history of Sintet.

The British administration was repeatedly drawn into the village disputes. On several occasions, these conflicts consisted of intervillage land controversies. British authorities often used extreme force to resolve these cases, one administrator noting, "The people were shown convincingly that His Majesty's Government, while ready and willing to assist in the pacific administration of the country, would not tolerate gross acts of injustice and insubordination" (Archer 1906, pp. 90-91). Military columns, often accompanied by the traveling commissioner and at times the governor general, toured throughout the protectorate to quell local disturbances. A land dispute near Dumbutu led to the burning down of that village while a disturbance in what is now Sintet led to public hangings in Kansala. Nevertheless, British military force eventually pacified the protectorate, opening it for commercial activities of European traders and their Gambian associates.

The colonial lands acts. Following the conquest of the interior, the British authorities created a number of districts based on administrative and territorial factors, not tribal units. The administration, guided by the British colonial ideology of "indirect rule," appointed chiefs (seyfolu) to govern the districts under the surveillance of the traveling commissioners. This administrative approach introduced considerable confusion and tension into the community, however, since British authorities rarely picked selyfu from traditional ruling lineages which had resisted the colonial pacification campaigns. The allies chosen by the colonialists, therefore, often failed to garner respect from the local populations.

Land legislation, such as Ordinance No. 6, granted tremendous authority over land allocation to the selyfu. In effect from 1896 to 1945, this law decreed that all lands not defined as "public lands" were to be held by the native authorities and administered by their representatives according to the customs of the local people. Public lands included all lands not in actual occupation, lands conquered from a deposed ruler, or lands which prior to
**FIGURE 6**
Disputes matrix, district tribunal meeting at Kalagi: types of dispute, 15 January 1992

<table>
<thead>
<tr>
<th>DISPUTE TYPE</th>
<th>NUMBER OF BEANS</th>
<th>Present</th>
<th>Before 1970s drought</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Divorce</td>
<td></td>
<td>73</td>
<td>38</td>
</tr>
<tr>
<td>2. Farmland (kungko) (C)</td>
<td></td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>3. Debt (R&amp;J)</td>
<td></td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>4. Forest destruction (F&amp;J)</td>
<td></td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>5. Bush fires (F&amp;J)</td>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>6. Insulting language (F)</td>
<td></td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>7. Stealing (J)</td>
<td></td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>8. Farmland (faro) (C)</td>
<td></td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>9. Loving somebody’s wife</td>
<td></td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>10. Wounding somebody’s animal (F&amp;Com)</td>
<td></td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>11. Wounding people (F)</td>
<td></td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>12. Arson (F&amp;J)</td>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>13. Disputes on home settlements (O)</td>
<td></td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>14. Livestock damages to crops during rainy season (COM)</td>
<td></td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>15. Inheritance</td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. Child custody</td>
<td></td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>17. Livestock debt</td>
<td></td>
<td>28</td>
<td>10</td>
</tr>
<tr>
<td>18. Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Index:  
C - civil  
F - fine  
J - jail  
R - repay  
COM - compensation required  
O - other

Explanation: District tribunal members were asked first to list the types of disputes presently occurring in the district and then to rank them in order of frequency. Subsequently, the same exercise was repeated for the pre-1970s’ drought years.
annexation were the personal property of the seyfo. The legislation thus granted tremendous power to allocate large areas of land to the seyfolu.

Administration of public lands was vested in the seyfolu and the village headmen (alkalo). Chiefs were responsible for issuing permits for tree cutting and forest product gathering. Although authority in land allocation was traditionally vested in the first settlers of an area, the seyfolu's decisions were backed up by the traveling commissioners (Gailey 1964, p. 119). To the present day there remains considerable tension in many rural communities concerning who actually controls the allocation of land within a district.

District tribunals. Protectorate Ordinance No. 7 of 1902 created tribunals and councils for the management of local "native affairs." The statute was essentially an enabling act which recognized the claims of customary law and procedures throughout the protectorate. The seyfolu became the presidents of these native courts. District courts had civil jurisdiction over petty conflicts, adjudicating suits relating to ownership and possession of land, judging personal suits between persons living in the district, and ruling on petitions involving conflicts over inheritance. District tribunals also judged cases involving arson, theft, extortion, cheating, slander, seduction, and disobeying the orders of a headman or duly constituted chief (Gailey 1964, p. 116).

Initially the district tribunals were not used extensively by the local populations. As one commissioner recounted, "Native courts are improving though the cases are few, many cases being arranged out of court, defendants preferring to settle up rather than be brought before a court; but as civilization spreads, they will no doubt learn to appreciate the fair judgement of the Native Tribunals" (Reference 61/1, National Archives of The Gambia, 14 June 1897). The traveling commissioners, later called district commissioners, retained considerable power over the operation of the courts.

The Ordinance of 1902 gave the seyfo the right to appoint any number of "badge messengers" to keep the peace of a district. This established a local constabulary which to this day plays a key role in enforcing the decisions of the chiefs and district tribunals (Gailey 1964, p. 123).

Yard tax. In 1895, the British administration instituted a standardized yard tax. A yard was defined as "every parcel lot or enclosure of land (other than farmland) containing one or more huts or houses." Payment rates were based on the number of huts within the enclosed yard. Since the payment of taxes was strongly resisted, tax collection became one of the central preoccupations of the traveling commissioners. As one commissioner reported in mid-1896, "with regards to Foni, there is little to be said. The tax of the Mandingo towns has been paid in full, while the Jola tax has come in small" (Reference 61/1, 26 June 1896).

10. An attempt was made in 1915 to justify the use of public lands by providing the occupants with land certificates.
THE ECONOMIC HISTORY OF THE FONI JARROL

The precolonial economy of the Foni Jarrol District was based primarily on rice production in the lowlands and field crop production of staple grains in the uplands. Like today, the surrounding forests were important sources of a wide range of products such as bush meat, straw for roof construction, wood for building, firewood, edible fruits, and medicines. Although cattle were raised in the area and were highly prized for such Jola festivities as circumcisions, tsetse fly infestation tended to limit production. At the turn of the nineteenth century, moreover, the African rinderpest epidemic struck the region. Elders in Sintet referred to this catastrophic event of the 1890s, noting that in one village "so many cattle were lost that all but three remained." In June 1899, a colonial administrator reported that "there is scarcity of cattle this year and the Jolas are using gunpowder for funeral ceremonies."11

The British administration strongly encouraged the local populations to cultivate cash crops—groundnuts, sesame, mangoes, and, for a time, latex rubber.12 During the 1860s, cultivation of groundnuts expanded considerably in The Gambia, though the plant had been introduced to the area centuries earlier. Groundnut marketing centers were established along the Bintang Bolong to distribute the harvest. The major groundnut exporting companies, such as Maurel et Prom, built wharves and stores in Sintet. The Foni Jarrol populations were drawn into the groundnut economy in much the same fashion as that described in the literature on the Senegambia. Initially wharves were constructed in the neighboring villages of Kansalla, Bondali, and Jarrol. Little remains today of the bustling activity of such commercial centers except for the ruins of old stores along the banks of the Bintang Bolong. Trade in cash crops was not without its dangers—not until the establishment of the protectorate was business safe in the Fonis. A colonial administrator alluded to the instability of the era, noting that "at one time, not so long ago, it was dangerous for traders to go through Fogni, but now they are perfectly safe" (Archer 1906, p. 116).

Wealth at the time was generated through the production of groundnuts and rice. Those lineages that had access to large tracts of rice lands and that could command a large labor force for cultivation of cash crops like peanuts tended to be the most wealthy. Thus considerable power was vested in male household heads, who controlled the reproduction of the labor force through circumcision and marriage. These lineages were typically the founding families of the Foni Jarrol District.

During the international depression of the late 1890s, when groundnut prices fell dramatically, villagers turned to the extraction of latex from a vine found growing around


12. Local people also sold beeswax and other forest products to merchants traversing the interior of Senegambia.
large trees in lowland depressions. Latex production was marginal, however, and, through excessive tapping, may have contributed to the destruction of the species.

THE ECOLOGICAL HISTORY OF THE FONI JARROL DISTRICT

The villages of the Foni Jarrol District are mostly located along the banks of seasonal watercourses. The dense gallery forests that once covered these streambeds were cleared by the first settlers for rice fields. The plentiful oil palm trees of the forests were tapped for palm wine and, indeed, are mentioned in oral histories as one of the factors that drew the non-Islamic Jola into the area. Very little remains of these lowland gallery forests today. The few sacred forests and small pockets of dense growth in the bottoms of the streambeds attest to the once magnificent forest growth of these well-watered microecologies (see photograph 3).

The Fonis were integrated into the European economy probably as early as the seventeenth century. Export of forest products may have selectively destroyed certain plants, such as the latex tree. Heavy tapping tended to kill the species, a phenomenon noted by the first administrators of the colony (Archer 1906, p. 89). But more profound changes in the ecology of the district were brought about by the groundnut trade.

From the mid-nineteenth century to the early 1970s, the groundnut economy dominated the district and vividly shaped the physical and social dynamics of the villages. Time after time, elderly villagers noted that vast portions of the upland forests had been cut down to make room for groundnut fields. While walking from one end of a village territory to another, elders pointed out areas that were once cultivated in groundnuts but which have now been taken over by scrub forest.

Various research tools were used to reconstruct the history of the forest cover. Ecological matrices put together with the elders in Sintet, Santangkoto, and Wassadun indicated that the area of land placed under cultivation was considerably larger in the past than it is now (see figures 7 and 8). One elderly man suggested that during his youth roughly 50 percent more land was placed under cultivation than at present. Men devoted most of their labor to cultivating groundnuts while women were occupied with rice production. Female informants said that they used to cultivate groundnuts for supplemental income, though this practice has recently been abandoned in the Sintet area.

Wild animal populations were also decimated during the era of clearing lands for peanut fields. Although wild game had provided meat for the households, they posed a serious threat to cultivators in the outlying fields. While the wild animals are now returning to many parts of the district with the regrowth of the forest (see below), much of this game consists of wild boar and monkeys, species not edible by the local inhabitants.
PHOTOGRAPH 3

The remnants of gallery forests
**FIGURE 7**

Ecological matrix of Sintet:
evolution of natural resources in the environs of Sintet,
interviews with Joof Sanyang, 9-17 January 1992

<table>
<thead>
<tr>
<th>CATEGORY OF NATURAL RESOURCES</th>
<th>NUMBER OF BEANS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before 1970s drought</td>
</tr>
<tr>
<td>1. Fish</td>
<td>17</td>
</tr>
<tr>
<td>2. Trees</td>
<td>25</td>
</tr>
<tr>
<td>3. Fallow land</td>
<td>5</td>
</tr>
<tr>
<td>4. Fields (uplands)</td>
<td>55</td>
</tr>
<tr>
<td>5. Rice fields</td>
<td>98</td>
</tr>
<tr>
<td>6. Wild animals</td>
<td>80</td>
</tr>
<tr>
<td>7. Sheep and goats</td>
<td>76</td>
</tr>
<tr>
<td>8. Cattle</td>
<td>64</td>
</tr>
<tr>
<td>9. Mango trees</td>
<td>70</td>
</tr>
</tbody>
</table>

Explanation: First, the informant, an elderly fisherman, was asked to list the key resources in the environs of Sintet. Then, the man was asked to indicate with piles of beans whether the resource was more abundant, less abundant, or the same in different periods of time (i.e., before the drought years of the 1970s, in the present, and if present-day dry conditions prevail, in the future). Questions were posed about the reasons for the evolution in the abundance of the resources, that is, abundance of fish, density of trees, availability of arable land, quantity of fruit trees, availability of labor, or abundance of grasses.
**FIGURE 8**

*Ecological matrix of Wassadun: evolution of natural resources in the environs of Wassadun, 9-17 January 1992*

<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>NUMBER OF BEANS</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before 1970s</td>
<td>Present</td>
<td>Future</td>
<td></td>
</tr>
<tr>
<td></td>
<td>drought</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Forest (<em>wulo</em>)</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2. Upland fields (<em>kenoko</em>)</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3. Fallow fields (<em>kunyoko</em>)</td>
<td>10</td>
<td>34</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4. Rice fields (<em>faro</em>)</td>
<td>30</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Cattle</td>
<td>40</td>
<td>21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>6. Sheep and goats</td>
<td>7</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>7. Labor</td>
<td>37</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8. Gardening</td>
<td>15</td>
<td>130</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>9. Fruit trees</td>
<td>0</td>
<td>100</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>10. Grasses</td>
<td>100</td>
<td>12</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Explanation: First, a large group of elderly Wassadun men were asked to list the key resources in the village. Then, the group was asked to indicate with piles of beans whether the resource was more abundant, less abundant, or the same in different periods of time (i.e., before the drought years of the 1970s, in the present, and if present-day dry conditions prevail, in the future). Questions were posed about the reasons for the evolution in the abundance of the resources, that is, density of trees, availability of arable land, quantity of fruit trees, availability of labor, or abundance of grasses.
The early colonial period was an era of introducing new plant cultivars. In the early 1900s, mangoes had not yet been appeared in the Fonis. In one biannual report, a British official noted that the administration placed much importance on promoting the planting of mango trees:

In the first rains my interpreter will plant mangoes on each side of the roads so as to form avenues and I have told each headman that on my return from leave I will give three pence for each mango, properly fenced; of course the number is limited for each town. As Your Excellency is aware the mango tree is practically unknown up the river, though the fruit that I have sent up in former years has been much appreciated (Reference 61/1, National Archives of The Gambia, 29 June 1899).

As will be discussed in greater detail below, large numbers of mango trees are now being planted throughout the district as households abandon peanuts and invest in fruit tree production.

THE FONI JARROL IN THE 1990S

Profound changes took place in the society, economy, and ecology of the Foni Jarrol District between 1892 and 1992. The peanut economy dominated the Foni Jarrol until the early 1970s. But with the arrival of a severe drought at that time—a drought which villagers claim continues—consequential alterations occurred in the district. The household economy is no longer based on the two pillars of production, rice and groundnuts. Instead, it has diversified enormously. Horticulture, especially fruit trees, now rivals the older economies in importance. Also, livestock now make up remunerative commercial activities for the wealthy and for women investing profits from gardening. Yet, the greatest single stimulus for change in the district is the migration of young people to the Greater Banjul area and abroad. This phenomenon has profoundly shaken the foundations of the case study villages.

The physical environment as well is being reshaped by the social and economic changes occurring in the Foni Jarrol District. As the economy evolves from one centered primarily on groundnuts and rice to one focused on fruit tree, garden, and livestock production, unexpected ecological transformations are taking place. The sections below trace some of these changes and explore their implications for development and natural resource management programs.

13. In Sintet and Wassadun, mango trees are currently one of the dominant species found within village confines. Valuable young mango seedlings are carefully protected with "crinting" and thorn fences.
THE ECOLOGICAL EVOLUTION OF THE FONI JARROL DISTRICT

In order to comprehend the impact of the ecological changes that have occurred in the Foni Jarrol District over the past fifty years, it is necessary to look at specific transformations within the principal microecologies of the village territories. Such an understanding is critically important since development activities must be designed to fit the particular specificities of each ecological zone.

Each village studied by the research team has a territorial attachment. There is a strong sense of "belonging" to a specific area—"this is a part of Sintet" or "that is part of Kamamudu." The territorial limits of each village are well recognized through the location of boundary markers such as a large tree, a boulder, or a gully. These borders can generally be mapped by villagers, though some uncertainty may exist over the actual bounds within the forested commons of the district.

There is considerable ecological diversity within each village territory. Quite unique microecological zones exist, and land use patterns reflect a varied landscape that descends from a plateau of wooded forests and upland fields to the lowlands of rice fields, mangroves, and salt flats along the Bintang Bolong (see figure 9). Each of these ecological zones is exploited by a variety of user groups.

Tenure relations vary considerably among ecological zones. In some microecologies, use rights are highly articulated; in others, much less so. The field research team defined this articulation as the existence of a set of defined rules governing use of and access to natural resources: a tenure system is highly articulated where rules are strictly applied and enforced; it is less articulated where the rules are not applied with great consistency (figure 10). For instance, tenure regimes are highly articulated around the valuable rice fields, though rules are nearly nonexistent in the forested commons and mangroves.

Present ecological characteristics, uses, and land tenure practices are listed below for each of the major microecologies of the study villages. The Mandinka terminology for each ecological zone is listed, though similar terms exist in Jola and Fulbe.

Tenure patterns in the savannah woodland (woolo). The villages of the Foni Jarrol District are located along watersheds which flow toward the Gambia River. Between each watershed is found a forest which is shared by the contiguous communities (see photograph 4). The forest is of central importance to the surrounding villages: it is a source of firewood, wild fruits, timber, and medicinal plants; women collect and sell a wide range of tree products such as "netto" or locust bean (Parkia biglobosa), baobab fruit (Adansonia digitata), "tomborong" fruit (Ziziphus jujuba), and "kaba" (Saba senegalensis); children collecting firewood circulate throughout the forest eating fruit and chasing small animals; hunters make forays into the woods to stalk wild animals such as antelopes, rabbits, and squirrels. These forests are also the home of bush pigs, major pests for villages situated close to the fringes of the forested areas such as Kamamudu, and serve as an important grazing area, especially
during the rainy season. Certain places within the forest are used for men's and women's initiation rites.

**FIGURE 9**
Ecological transect of Sintet

<table>
<thead>
<tr>
<th>ZONE</th>
<th>MUD FLOODS/MANGROVES <em>Leo</em> (M)</th>
<th>SWAMP RICE FIELDS <em>Faroo</em> (M)</th>
<th>RIPARIAN WOODLANDS, PALM GROVES <em>Fara tintinkungo</em> (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land use</strong></td>
<td>Collecting crabs</td>
<td>Swamp rice growing</td>
<td>Palm fruit collection</td>
</tr>
<tr>
<td></td>
<td>Fishing</td>
<td>Mud for pottery making</td>
<td>Firewood</td>
</tr>
<tr>
<td></td>
<td>Salt collecting</td>
<td>Firewood</td>
<td>Grass for roofing</td>
</tr>
<tr>
<td></td>
<td>Firewood</td>
<td>Fishing</td>
<td>Fishing</td>
</tr>
<tr>
<td></td>
<td>Shrimping</td>
<td>Drinking water for cattle</td>
<td>Drinking water for cattle</td>
</tr>
<tr>
<td></td>
<td>Mangrove pole collecting</td>
<td>Shrimping</td>
<td>Grazing</td>
</tr>
<tr>
<td></td>
<td>For roofing and fencing</td>
<td><em>Oil palm collecting</em></td>
<td>Palm fruit collection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(cf kabumbo by faro land allocation chart)</td>
<td>Firewood</td>
</tr>
<tr>
<td>Soils</td>
<td><em>Boo</em> (M)</td>
<td><em>Banko</em> (M)</td>
<td>Grass for roofing</td>
</tr>
<tr>
<td></td>
<td><em>Kumarayko</em> (M)</td>
<td><em>Potto</em> (M)</td>
<td>Fencing materials</td>
</tr>
<tr>
<td></td>
<td><em>Kumu banko</em> (M)</td>
<td><em>Tungo</em> (M)</td>
<td>Broom making materials</td>
</tr>
<tr>
<td></td>
<td><em>Mankudaga</em> (F)</td>
<td></td>
<td>Sacred forest (Jola)</td>
</tr>
<tr>
<td>Trees</td>
<td><em>Jungo</em> (M)</td>
<td><em>Jungo</em> (M)</td>
<td>Medicines</td>
</tr>
<tr>
<td></td>
<td><em>Kurulungo</em> (M)</td>
<td><em>Kurulungo</em> (M)</td>
<td>Hunting</td>
</tr>
<tr>
<td></td>
<td><em>Barro</em> (M)</td>
<td><em>Barro</em> (M)</td>
<td>Grazing</td>
</tr>
<tr>
<td></td>
<td><em>Batiyo</em> (M)</td>
<td><em>Batiyo</em> (M)</td>
<td>Rope ladder making</td>
</tr>
<tr>
<td></td>
<td><em>Soto kuruwo</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Tomborong</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Kusso</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Nja yeiro</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Bamba nganingo</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Bantango</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Tengo</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Yerra</em> (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### FIGURE 9, Ecological transect of Sintet, cont.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>MUD FLOODS/MANGROVES</th>
<th>SWAMP RICE FIELDS</th>
<th>RIPARIAN WOODLANDS, PALM GROVES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Leo (M)</em></td>
<td><em>Faroo (M)</em></td>
<td><em>Fara tintinkungo (M)</em></td>
</tr>
</tbody>
</table>

#### Grasses
- Waa (M)
- Baara (M)
- Baa kinto (M)
- Baa nyamo (M)
- Kusamalegeh (F)
- Ugudeh (F)
- Chacatal (F)
- *Baara (M)*
- *Niantang foro (M)*
- *Solingo (M)*
- *Fula niantango (M)*
- *Kuntumango (M)*
- *Fara wulaito (M)*
- Rice stalks
- *Baara (M)*
- *Niantang foro (M)*
- *Solingo (M)*
- *Fula niantango (M)*
- *Kuntumango (M)*
- *Fara wulaito (M)*
- Rice stalks

#### Animals
- Bush pigs
- Monkeys
- Rabbits
- Squirrels
- Guinea pigs
- Jitawulo (M)
- Tahaiyo (M)
- Sunkang fallo (M)
- Wata kanjango (M)
- *Antelope*
- *Monkeys*
- *Bush pigs*
- *Rabbits*
- *Squirrels*
- *Ducks*
- *Konkolong (M)*
- *Antelope*
- *Monkeys*
- *Bush pigs*
- *Rabbits*
- *Squirrels*

#### Tenure system from village of Sintet perspective
- Commons for use of mangroves
- Host family required for fishing families from outside area
- Permit required from government for fishing, though agent not present
- Open access for salt collecting
- Dike construction area: village commons now, though latent property rights in area that had been cultivated in rice in the past
- Commons for grazing and hunting
- All swamp rice lands owned by founder families
- Founder families are those who first cleared lands
- Later arrival families borrow from founder families
- Land is given as a "conditional gift"
- Fula women give token kola annually to a founder Mandinka family (D10/year); kola may fluctuate annually due to social tensions
- Borrowed land may be retroceded as a function of disputes and departure of families
- Open access, "first come, first served"
- Planted palm trees are owned
- Open access to all resources as long as not tree products, not commercialized—at that time resources become the commons of Sintet
- Sacred forest (see separate description)
| ZONE | HABITATION  
Sedulaa (M) | UPLAND FIELDS  
Kenokono (M) | FALLOW WOODLANDS  
Kuntingo (M) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land use</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Homes, stores, tailors, smiths</td>
<td>• Crop growing (millet, maize, coconuts)</td>
<td>• Firewood</td>
<td></td>
</tr>
<tr>
<td>• Fruit trees</td>
<td>• Fruit trees</td>
<td>• Crop growing (millet, coconut, sorghum)</td>
<td></td>
</tr>
<tr>
<td>• Garden</td>
<td>• Grazing</td>
<td>• Grazing</td>
<td></td>
</tr>
<tr>
<td>• Drinking water for livestock and humans</td>
<td>• Tethering</td>
<td>• Tethering</td>
<td></td>
</tr>
<tr>
<td>• Domestic animals</td>
<td>• Wild fruit collecting</td>
<td>• Wild fruit collecting</td>
<td></td>
</tr>
<tr>
<td>• Foraging</td>
<td>• Firewood</td>
<td>• Hunting</td>
<td></td>
</tr>
<tr>
<td>• Village institutions/grain storage</td>
<td>• Medicine gathering</td>
<td>• Medicine gathering</td>
<td></td>
</tr>
<tr>
<td>• Stall feeding</td>
<td>• Sorrel</td>
<td>• Timber for carving and construction</td>
<td></td>
</tr>
<tr>
<td>• Sorrel/hay storage</td>
<td>• Beans</td>
<td>• Threshing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pepper, bitter tomatoes, melon, mescalabash, pumpkin</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Soils</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Kenyo (M)</td>
<td>• Kenyo (M)</td>
<td>• Kenyo (M)</td>
<td></td>
</tr>
<tr>
<td>• Data kungko (M)</td>
<td>• Dato (M)</td>
<td>• Dato (M)</td>
<td></td>
</tr>
<tr>
<td><strong>Trees</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Silk cotton, eucalyptus</td>
<td>• Mango, palm, silk cotton, baobab, Acacia albida, mahogany, wild mango</td>
<td>• Silk cotton, mahogany, baobab, Acacia albina, palm</td>
<td></td>
</tr>
<tr>
<td>• Baobab, neem, banana, palm</td>
<td>• Kaba (M)</td>
<td>• Netto (M)</td>
<td></td>
</tr>
<tr>
<td>• Mango, pawpaw, coconut</td>
<td>• Soto (M)</td>
<td>• Bunkungo (M)</td>
<td></td>
</tr>
<tr>
<td>• Oranges, tubers, vegetables</td>
<td>• Korolo (M)</td>
<td>• Kaba (M)</td>
<td></td>
</tr>
<tr>
<td>• Tabo (M)</td>
<td>• Keno (M)</td>
<td>• Woolo</td>
<td></td>
</tr>
<tr>
<td>• Tubab tabo (M)</td>
<td>• Netto (M)</td>
<td>• Soto (M)</td>
<td></td>
</tr>
<tr>
<td>• Neybedaye (M)</td>
<td>• Woolo (M)</td>
<td>• Santango (M)</td>
<td></td>
</tr>
<tr>
<td>• Kobs foro (M)</td>
<td>• Tabo (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Guava</td>
<td>• Bunkungo (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZONE</td>
<td>HABITATION</td>
<td>UPLAND FIELDS</td>
<td>FALLOW WOODLANDS</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>---------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>Sedulaa (M)</td>
<td>Kenokono (M)</td>
<td>Kuntingo (M)</td>
</tr>
<tr>
<td>Grasses</td>
<td>• Baara (M)</td>
<td>• Waa (M)</td>
<td>• Baara (M)</td>
</tr>
<tr>
<td></td>
<td>• Jambanduro (M)</td>
<td>• Baara (M)</td>
<td>• Fula niantango (M)</td>
</tr>
<tr>
<td></td>
<td>• Saloum nyamo (M)</td>
<td>• Solingo (M)</td>
<td>• Bongo (M)</td>
</tr>
<tr>
<td></td>
<td>• Namala (M)</td>
<td>• Jajewo (M)</td>
<td>• Waa (M)</td>
</tr>
<tr>
<td></td>
<td>• Jamba kasala (M)</td>
<td>• Groundnut hay</td>
<td>• Mborr mborr (M)</td>
</tr>
<tr>
<td></td>
<td>• Julundingo (M)</td>
<td></td>
<td>• Sudolo (M)</td>
</tr>
<tr>
<td></td>
<td>• Burubo (F)</td>
<td></td>
<td>• Siwundeh (F)</td>
</tr>
<tr>
<td>Animals</td>
<td>• Horses</td>
<td>• Monkeys</td>
<td>• Antelope</td>
</tr>
<tr>
<td></td>
<td>• Donkeys</td>
<td>• Bush pigs</td>
<td>• Bush pigs</td>
</tr>
<tr>
<td></td>
<td>• Fowl</td>
<td>• Rabbits</td>
<td>• Rabbits</td>
</tr>
<tr>
<td></td>
<td>• Dogs and cats</td>
<td>• Squirrels</td>
<td>• Squirrels</td>
</tr>
<tr>
<td></td>
<td>• Cattle</td>
<td>• Tahaiwo (M)</td>
<td>• Bush fowl</td>
</tr>
<tr>
<td></td>
<td>• Mice</td>
<td>• Kansolo (M)</td>
<td>• Guinea fowl</td>
</tr>
<tr>
<td></td>
<td>• Rats</td>
<td></td>
<td>• Kunkuwulo (M)</td>
</tr>
<tr>
<td></td>
<td>• Lizards</td>
<td></td>
<td>• Kuntango (M)</td>
</tr>
<tr>
<td></td>
<td>• Geko</td>
<td></td>
<td>• Njambeleugo (M)</td>
</tr>
<tr>
<td></td>
<td>• Snakes</td>
<td></td>
<td>• Kuto (M)</td>
</tr>
<tr>
<td></td>
<td>• Bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Insects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure system from village of Sintet perspective</td>
<td>• Land of compounds clearly demarcated and owned</td>
<td>• All kenokono lands owned by founder families</td>
<td>• Same arrangements as kenokono land</td>
</tr>
<tr>
<td></td>
<td>• Land is borrowed for gardening</td>
<td>• Founder families are those who first cleared lands</td>
<td>• Permission must be requested from original owners to cut live trees</td>
</tr>
<tr>
<td></td>
<td>• Land for community purposes (i.e., school) is compensated by other land</td>
<td>• Later arrival families borrow from founder families</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Public and private wells (community regulations govern use of wells with pumps for cattle and other uses)</td>
<td>• Borrowers must request permission from owners to plant trees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compound expansion negotiated between families</td>
<td>• If tree product is commercialized, borrowers must request permission from owners to collect fruits or other products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fruit trees generally owned by men, but in kubumbo garden trees owned by women</td>
<td>• Trees belong to the owners of the land; consent required to cut the trees down</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Land is borrowed for gardening</td>
<td>• Flexibility in tree tenure arrangement is evident</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All kenokono lands owned by founder families</td>
<td>• Tree planting confers ownership of trees only, not the land</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Founder families are those who first cleared lands</td>
<td>• Trees may be inherited by descendants of those who planted them, but not the land</td>
<td></td>
</tr>
</tbody>
</table>
**FIGURE 9, Ecological transect of Sintet, cont.**

<table>
<thead>
<tr>
<th>ZONE</th>
<th>SAVANNA WOODLANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wulo (M)</td>
</tr>
<tr>
<td><strong>Land use</strong></td>
<td></td>
</tr>
<tr>
<td>• Firewood</td>
<td></td>
</tr>
<tr>
<td>• Wild fruit collecting</td>
<td></td>
</tr>
<tr>
<td>• Timber for wood carving and construction</td>
<td></td>
</tr>
<tr>
<td>• Hunting</td>
<td></td>
</tr>
<tr>
<td>• Grazing</td>
<td></td>
</tr>
<tr>
<td>• Medicine gathering</td>
<td></td>
</tr>
<tr>
<td>• Initiation</td>
<td></td>
</tr>
<tr>
<td>• Ponds for cattle drinking</td>
<td></td>
</tr>
<tr>
<td><strong>Soils</strong></td>
<td></td>
</tr>
<tr>
<td>• Kenyo (M)</td>
<td></td>
</tr>
<tr>
<td>• Dato (M)</td>
<td></td>
</tr>
<tr>
<td>• Laterite</td>
<td></td>
</tr>
<tr>
<td><strong>Trees</strong></td>
<td></td>
</tr>
<tr>
<td>• Mahogany</td>
<td></td>
</tr>
<tr>
<td>• Baobab</td>
<td></td>
</tr>
<tr>
<td>• Acacia albida</td>
<td></td>
</tr>
<tr>
<td>• Santango (M)</td>
<td></td>
</tr>
<tr>
<td>• Keno (M)</td>
<td></td>
</tr>
<tr>
<td>• Bunkungo (M)</td>
<td></td>
</tr>
<tr>
<td>• Kaba (M)</td>
<td></td>
</tr>
<tr>
<td>• Jambakatango (M)</td>
<td></td>
</tr>
<tr>
<td>• Faara (M)</td>
<td></td>
</tr>
<tr>
<td>• Kembo (M)</td>
<td></td>
</tr>
<tr>
<td>• Kulunkalango (M)</td>
<td></td>
</tr>
<tr>
<td>• Baradanejo (F)</td>
<td></td>
</tr>
</tbody>
</table>
FIGURE 10
Articulation of tenure rights by ecological zone

Microecological zones
The forest is exploited by three rather distinct user groups. Commercial woodcutters selectively remove certain species of trees which are highly esteemed in the urban markets. The *keno* tree (*Pterocarpus erinaceus*) is prized in the cities both for its high caloric value and for producing little smoke while burning. It is also much in demand for fence posts since it is not consumed by termites and its wood rots slowly. Much of the wood sold in the urban market is removed by Fulbe woodcutters from Guinea. Known locally as "Fula Guinea," these Fulbe live with host families in most of the villages. Teams of woodcutters enter into the woods to cut and stack the wood. Large trucks from Banjul arrive periodically to pick up the piles of logs and transport them back to urban outlets (see photograph 5).

The selective removal of *keno* for firewood and fence posts has affected the livelihood of another user group, the Fulbe residents of contiguous villages (see photographs 6 and 7). The Jola village herds, which are guarded primarily by the Fulbe, drink from shallow ponds in the interior of the forest and graze these woodlands far from village fields. The Fulbe depend not only on the herbaceous forage found in the forests (e.g., *baara*, *futa niantango*, *bongo*) (see figure 11) but also on the ligneous forage from especially prized trees like the *keno*.

The forests are also used by women, men, and children for the collection of firewood. The various ethnic groups of the district have different firewood gathering practices. In Mandinka households, boys and young men will generally collect and transport firewood, yet Jola and Fula women are responsible for gathering firewood used in their households. Jola women generally assemble and stack the firewood most intensively in April and May, when the wood is driest and when they have time before the onset of cultivation activities during the rainy season. Jola and Fula men carry firewood for the women, charging D15 to D20 per cartload.

The forests surrounding the villages of the Foni Jarrol are not used equally by the contiguous villages. For instance, the villagers of Kampassa and Sintet often go to the forests of neighboring Senegal rather than collect from their more depleted woodlands. Wassadun gatherers mainly use the forested area to the west of the village. This differential pattern of use would complicate resource management schemes since the villages which surround the forest of Sintet retain divergent interests.

**Tenure patterns in the "commons" (wulo).** From the perspective of the villagers, the savannah woodlands farthest from the villages are considered the commons, and everyone has a right to collect forest products from these areas. However, the state can prohibit the extraction of wood products for home consumption or commercial sale. The Forest Code prohibits commercial exploitation of these lands unless prior authorization is obtained. From time to time a Forest Service agent polices the forest, and a corps of volunteer forest guards has been formed to assist the agent.14

14. These village forest guards complain vehemently that they are not paid.
### FIGURE 11
Preference ranking of fodder, village of Sintet, Fula Kunda

<table>
<thead>
<tr>
<th>REASONS FOR PREFERENCE</th>
<th>Waa (M)</th>
<th>Baara (M)</th>
<th>Niantang-Foro (M)</th>
<th>Niantang-Rimo (F)</th>
<th>Fula-Niantango (M)</th>
<th>Sojo Wereh (F)</th>
<th>Bongo (M)</th>
<th>Tiakalo (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wabba (F)</td>
<td>Buludeh (F)</td>
<td>Sewko (F)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Food</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2. Milk</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3. Health</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td></td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>4. Fertility/reproduction</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5. Most available now</td>
<td>0</td>
<td>6</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6. Most available before drought</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td></td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

(M) - Mandinka
(F) - Fula

**Explanation:** Fulbe men were asked to list the key grasses in the Sintet area (horizontal axes). Then the group was asked to list the different uses of the grasses (vertical axis). Each grass was then ranked with piles of beans to indicate the relative importance of each. Following this step, the group was asked about the comparative availability of the grasses before the drought years of the 1970s and at present.
PHOTOGRAPH 4

The *woolo* forest
PHOTOGRAPH 5

Stacked piles of *keno* wood
PHOTOGRAPH 6
Collaring of keno trees
PHOTOGRAPH 7
Removal of live *keno* trees
Territorial limits of the contiguous villages lie within the commons, yet these boundaries do not hinder the exploitation of the forest by members of the villages. It is not clear whether exact dividing lines exist within this forest commons. As in other parts of The Gambia, contiguous villages may refrain deliberately from establishing boundaries in order to retain maximum flexibility for future resource use and/or to avoid conflict.

The forest commons is a tension area for some, such as the Fulbe herders. The Fulbe herding community and the Jola cattle owners resent the destruction of the *keno* by commercial woodcutters (see discussion below). Most villagers interviewed decried the seasonal bush fires that sweep through the area, arguing that while fires have some advantages, the destruction to the forests will have long-term negative consequences. While one may consider these forested commons to be an open access resource, free for all to use, most of the long-term residents interviewed expressed frustration that "outsiders" such as the Fulbe woodcutters from Guinea were permitted to remove valuable timber without restriction.

As will be argued further in the policy recommendations, there is potential for the creation of a common property resource-management regime, for there is a growing sense among residents that outsiders should not to be allowed to exploit the zone without restriction. Fulbe cattle herders, for instance, strongly condemn the many practices used by woodcutters to kill live *keno* trees. Out of this frustration may grow the construction of a tenure system that fixes rights to those forest resources presently considered "open access."

Tenure patterns in fallow land (*kuntingo*). The fallow lands serve much the same function as the forest commons—that is, they are a source of forest products for the contiguous villages. For an outsider, it is often difficult to distinguish the true forest from the fallow forest, but for the experienced eyes of the long-time residents, the differences are highly apparent (see photograph 8). Many of the same tree and grass species are prevalent in both zones. The height of the trees may vary, however, depending on the age of the fallow. Fallows of only a year or two may be composed primarily of grass and low shrubs, whereas areas which have been dormant for a decade or more may be characterized by quite large trees. In the case study villages, the age and height of trees was generally visually greater the farther the trees grew from the village centers. Selected, mature trees were scattered in agricultural fields, farmers having protected them from the plow. Over time species diversity increases as the fallow fields gradually revert to forest.

The fallow lands possess the same status as the village forest commons up to a certain point. Informants indicated that the land "owners" would need to be consulted if someone wanted to cut a live tree. While this norm was often expressed in discussions, however, in practice it is difficult to enforce. Commercial woodcutters ring live trees without asking landowners for permission and thereby kill the trees. The subsequent dead trees are then harvested by woodcutters granted forest-cutting permits. Village residents have few ways to halt this practice. Informants indicated, also, that if nonwood products were to be commercialized, permission would need to be obtained from the original landowners.
PHOTOGRAPH 8

The kuntingo fallows
Tenure patterns in upland fields (*kenokono*). The upland fields consist of zones that are cultivated in millet, groundnuts, some maize, and a variety of secondary seasonal crops (see photograph 9). Sorrel, gourds, and cowpeas may be intercropped with the millet and groundnuts. While most trees are removed from these fields, domesticated tree species are found in the area (i.e., trees deliberately protected against removal by the farmers). These tree species include the rhun palm, wild mangoes, silk cotton, baobabs, *Acacia albida*, and netto.

Land tenure rights are carefully articulated in these cultivated zones. All of the farmed lands were possessed at one time by the founding families through the generative act of clearing. However, these founding families have subsequently lent or given some of these lands to others.

Numerous borrowing arrangements regulate use. While loan agreements can be either long-term or short-term, landowners generally place restrictions on the use of the lent land. For example, borrowers must request permission before planting trees and may not cut any valuable tree (e.g., rhun or *Acacia albida*) without first obtaining authorization from the landowner. While the land borrower may gather fruit and dead wood from existing trees on the land, s/he must get the consent of the landowner before selling the collected products.

Landowners hesitate to grant permission to plant trees on borrowed acreage, not because it confers ownership, but because it reduces other uses of the land at a later date. The *seyfo* and many landholders asserted that permission is always required to plant any type of tree on a borrowed field, and many owners said that they would not allow this to happen on their land. Yet a degree of flexibility exists. One elderly landowner remarked that if the borrower planted one tree for himself and another for the owner, then he would permit the planting. A different landowner said that he would agree to the planting of *Acacia albida* but certainly not mangoes since this would decrease the amount of land area available for cropping through shading.

Naturally regenerated trees belong to the owner of the land. Generally anyone may collect fruit and small branches from these trees, but if someone wants to cut the tree down or lop off a major branch, the owner needs to give permission.

Women have access to upland fields for personal crops such as sesame and groundnut. In Kampassa, about half of the women grow groundnuts for personal use, yet in Sintet, women are abandoning groundnut cultivation. The percentage of women cultivating groundnuts has declined over the past few years from about 50 percent to approximately 25 percent.

---

15. Once planted, a tree belongs to the person who planted it.
Tenure pattern in the inner fields (dandango). The inner fields are located in the immediate vicinity of the village settlements (see photograph 10). Their soils are often the most fertile due to the addition of household wastes and intensive livestock manuring. During the dry season, the Fulbe are paid to tether cattle at night on fields devoted to the production of maize and a variety of noncereal crops such as hot pepper, tomatoes, cassava, and bitter tomatoes.

Within close proximity to the village, one often finds community and private gardens. These gardens and orchards are tended by both men and women. Women often have small gardens just behind the compound houses while men will generally care for the fruit tree orchards.

Tenure arrangements in the inner fields are highly articulated. Boundary markers such as trees, stones, or furrows mark the limits between one field and another. Interdictions against tree planting by land borrowers are very strong, and disputes often arise over the planting of fruit trees. As one Sintet resident noted, "People are now planting trees in other people's fields and this is causing disputes." Husbands usually allocate land to their wife or wives for as long as the women remain in their family. The land most often allocated to women by their husbands is located close to the villages. Divorced women who leave the family must abandon this land. In some areas, women can receive a plot in their natal village from their own relatives.

Tenure rights are also highly articulated in the numerous gardens which surround the villages. Often the alkalo grants land from family reserves for community gardens while male lineage heads lend land to women for gardening. Men ultimately control the land used for gardening, for, as one said to the research team, "The hands of the men must be involved in making the fence, otherwise the garden will not succeed." Each participating woman is given a prescribed number of plots within the community garden. In principal, women are not supposed to plant fruit trees in these gardens to avoid tying up future uses of the land. Women do plant trees, however, and as recent research has illustrated, their tree planting activities may result in tension (Schroeder 1991).

Tenure patterns in the settlement areas (suwo). The villages of the Foni Jarrol District are shaded by a wide variety of useful trees. From a distance, the dense tree growth of the villages emerges from the haze like an oasis (see photograph 10). Silk cottonwood, baobab, and mango trees tower above the village huts. Lower down in the enclosed yards is a variety of fruit trees such as papaya, coconut, orange, banana, and guava (see photograph 11). Neem trees are grown for shade in public places and within compounds. More exotic introduced species such as Gmelina spp. and Eucalyptus spp. are found here and there.
Photograph 9
The *kenokono* upland fields
PHOTOGRAPH 10

The *dandango* inner fields
The settlement areas of the Foni Jarrol are intensively managed, diverse, and productive microecological zones. Intensely cultivated dry-season gardens of tomatoes, hot peppers, and sorrel (see photograph 12) are found behind the homes in the villages. In the communities visited, numerous private wells have been dug to facilitate gardening. Horses and other domestic animals are occasionally fitted with small stalls and fed grasses which are cut and carried from the surrounding area. Peanut hay is carefully stocked in large piles on top of platforms behind the homes.

The tenure arrangements of the village land is the most highly articulated of any of the microecological zones. The founding families generally grant land to new arrivals, and the land is carefully demarcated by a fence or other marker. This compound land is considered a gift for as long as the newcomer extended family remains in good standing with the original host. If the family were to leave, the land would revert to the grantor. Stranger farmers are favored in a similar fashion, borrowing land from their host families and returning it when they leave. Yet, it was reported in Kamamudu and Sintet that the presence of stranger farmers is not common these days, with poor soil quality and insufficient farm implements given as the reasons for their absence.

The household may do as it pleases with the land within the compound. Since no restrictions hinder the planting of fruit or shade trees, the compound yards are often much more densely planted than are adjacent public lands. Fruit trees tend to belong to the woman or man who planted and nurtured them, though it appears that they generally belong to men. Since the compound land is the space that can be most readily controlled by the household, it is of premium value. Families negotiate with each other to expand the size of the compound and, failing this, dispute with neighbors over compound boundaries.

Fruit trees planted on unfenced compound land may be exploited by anyone as long as the product is not commercialized. As with trees found on other lands belonging to the founder families, the owner of the land may choose to impose restrictions whenever the product is sold for a profit. Generally children may pick the fruit of any baobab tree for their own consumption, but if they collect the fruit for eventual sale, owners may prohibit the practice.

For the siting of such utilities as the bantaba, mosque, markets, and public village wells, there are spaces considered as commons within the village. These are often maintained by the community, usually by one of the kefo subgroups.
PHOTOGRAPH 11

Village of Sintet
PHOTOGRAPH 12

Compound gardens
Tenure patterns in palm groves (*fara tintinkungo*). Palm groves bordered the rice fields in all of the case study villages. From an ecological perspective, these dense borders may be important vegetative barriers to block the flow of silt-laden water from upland fields as well as water coming down the stream courses (see photograph 13). Rice is cultivated underneath these groves in an indigenous agroforestry system. The palm groves of the district have been affected both by the drought and by development projects. The changing water regimes, in fact, may be hindering natural regeneration. In Sintet, for instance, the construction of a dike across one rice field caused excessive flooding in one palm grove, killing many of the trees.

Until the advent of Islam in the late nineteenth century, palm trees were extensively tapped for palm wine, though today they are used primarily for palm oil production. In many parts of the Casamance since the drought of the 1970s, the artisinal processing of the nut into palm oil has become a major income-generating activity (Ryckmans 1990, p. 7).

The tenure regimes around the palm trees were difficult to determine. Some evidence suggests that use rights were at one time highly articulated due to the great importance of these trees as sources of palm wine. During the palm wine-tapping season, Jola may have migrated from one palm grove to another to tap the trees. The origins of a serious conflict in Sintet may have been due to a struggle between two families to obtain clear collection rights to palm trees. But today, the palm groves are resources that may be used on a "first come first served basis." Use is somewhat restricted because only a few specialist palm cutters climb the tall trees to pick the fruit. These specialists sell the fruit to women, who transform the nuts into palm oil (Ryckmans 1990). Where rice has been planted underneath the trees, the palms are considered open access to all, yet the land underneath still belongs to the families that first cleared the underbrush for rice cultivation.

Palm trees planted by individuals grow for the exclusive use of that person (permission must be obtained to cut fruit or fronds), though palm tree planting is not extensively practiced in the Foni Jarrol. While improved varieties of oil palm trees have been planted by enterprising people near Kalagi, they apparently have produced little output. No case of planting palm trees within rice fields was reported. One informant touched on potential tenure conflicts in this regard by noting, "No trees are planted in rice fields because it could bring problems."

The "sacred forest" of the Jola, about 10 hectares found within the rice and palm thickets of Sintet (see photograph 14), is what foresters call an "island of relic forest" (Ellenburg 1988, p. 12). A stream of fresh water used to flow year-round within this dense gallery forest, and, even today, crocodiles are said to live deep within the mud. The forest of towering silk cottonwood and baobab trees provides many uses. Livestock graze on the tree forage and drink water from the pools. Dead wood, fruit, nuts, and honey may be gathered. The roots of certain trees may be dug up for medicines in this living pharmacy.
PHOTOGRAPH 13
Rhun palm trees in *fara tintinkungo*
PHOTOGRAPH 14

Sacred forest of Sintet
The most important function of the sacred forest is to fill social needs. Prayers are administered, disputes resolved, and a variety of ceremonies conducted within the arching gallery of the tall trees. Jola go to certain sacred trees, often a silk cottonwood, to ask for intercession to resolve problems. As one elderly informant explained, "Go to the sacred tree and tell it what bothers you and ask it to help you." Women come to the forest to pray for good harvests, plead for goodwill in the family, and beg for fertility. From the forest curses may be launched against one's enemies. Yet often the sacred grove is where disputes are settled among the Jola. The parties come together and negotiate the resolution of a conflict, but, as the conservator of the forest said, "If you go falsely, the bees will sting you."

The use of the forest is governed by the "conservator," an elderly man with considerable mystical and magical powers. This person attends to most of the ceremonies held within the forest and participates in the resolution of disputes. The conservator is charged with the upkeep of the forest.16

**Tenure patterns in swamp rice fields (faaro).** Rice is the most important product cultivated by women in the Foni Jarrol District. Women of all ethnic groups grow the crop. The rice-growing areas are limited to the seasonally flooded inland valleys, such as in Kamamudu, Kampassa, Wassadun, and Sintet, and to a narrow band of fields along the Bintang Bolong near Sintet (see photograph 15).

Numerous ecological problems beset the rice fields of the district. The fields along the Bintang Bolong inlet have been seriously affected by saltwater intrusion as the decline in the amount of rainfall discharged into the bolong has allowed the saltwater boundary to move further inland. Large portions of these rice fields have been abandoned (see photograph 16). This reduction in the cultivable area along the bolong has increased pressure on the inland valley rice fields. This process was seen especially in Sintet, but it also occurred in Kamamudu and Kampassa.

Inland valley rice fields with low water retention have also been abandoned because of the low precipitation levels of the past thirty years. Similarly, soils with high clay content have been left uncultivated since they do not capture enough run-off to flood adequately for rice cultivation. Sand intrusion from the uplands has also removed areas from production in Sintet and Kamamudu rice fields. For the Fulbe women of Santangkoto, a small village next to Kamamudu, this sand intrusion has filled fields once used for rice cultivation. Now these women must borrow land from the distant Senegalese village of Kansamajan and they pay quite substantial sums for this privilege.

---

16. Tree feeling is strictly forbidden. The conservator has tried tree planting on several occasions in an effort to restore parts of the forest.
PHOTOGRAPH 15
Rice fields along Bintang Bolong, Sintet
PHOTOGRAPH 16

Abandoned rice fields in Sintet
Founder families control the distribution of the valuable rice lands. The two original founding families in Sintet possess rights of first occupation to nearly all of the rice fields in the inland valley. The first founders of the hamlet of Bako claim close to 50 percent of the lowland rice-cultivating area, and the first family of Kabumb, who arrived after the family in Bako, holds most of the remaining land. Approximately three-quarters of the rice land throughout the Foni Jarrol District is owned by the founding families (see figure 12), though these families lend land to nearly everyone. Descendants of the founder families distribute rice fields through gifts and various long- and short-term borrowing arrangements, depending upon the needs of the families involved.

Women obtain rice land through marriage, inheritance from mothers, gifts from parents and relatives, and borrowing from a range of people, including the alkalo and members of the founding families. When a women marries, she is generally given lowlands suitable for rice cultivation for as long as she remains in her husband’s family. Women who receive land as a gift can pass it on to daughters and retain it in the event of divorce. Most rice lands farmed by the women in the Foni Jarrol are obtained through marriage.

An estimated one-half to three-quarters of the women in the district borrow land. About half of the women of Kamamudu, Kampassa, and Santangkoto borrow land in the neighboring Senegalese village of Kansamajan. Women usually give kola nuts to the land-owning families (male heads of household) as a symbol of their borrowing status. Women who borrow land from family members might offer a gift of grain or cash as a token of appreciation for their being granted the temporary right to cultivate. Yet there are reports that cash payments or “kola money” are now requested by some landowners. The rate is a function of the relationship between the borrower and the owner, and is recorded to vary from D10 to D50 per field borrowed plus an additional gift of 10 to 20 percent of the rice harvest.

The relative scarcity of rice fields has provoked land disputes in the past, but most of these seem to have been settled. The seyfo of Foni Jarrol District said that there was a general acceptance of the landownership patterns of the rice fields, even though the area under cultivation is reported to be significantly smaller than in predrought days (figure 6). There appear to be tensions associated with the borrowing of land and the payment of kola money, however. Informants preferred not to discuss the exact nature or amount of payments involved.

17. One woman from the hamlet of Kabumb has a rice field which she inherited from her father’s family in the Casamance. Due to the distance and time involved in traveling to the field, she spends most of her time cultivating the areas she received through her marriage in Sintet.
FIGURE 12
Percentage of families owning rice lands versus families borrowing rice lands, village of Sintet, 9-17 January 1992

I. Interview with elders of Kaboab

A. Rice land (jarrow) owned by original settler families versus land "borrowed" by later arrivals

Original settler owners (2/3 of bean pile)

Late arrival borrowers (1/3 of bean pile)

B. Numbers of land "owners" and land "borrowers" of rice-growing land (jarrow)

Owners (3 compounds)

Borrowers (14 compounds)

One compound (owns land in Bako)

Explanation: Informants were asked to use beans to indicate relative landholdings in the village. Discussions were then generated around the reasons for the variation in landholding between "settlers" and "late arrivals" and between "owners" and "borrowers."
Tenure patterns in the mud flats/mangroves (*leo*). The mud flats and mangroves (*Rhizophora* spp.) used by the populations of Sintet have a dramatic history. Until the drought years beginning in the early 1970s, much of what are now considered sterile mud flats (see photograph 16) were rice fields and mangrove swamps. Substantial areas bordering the Bintang Bolong were at one time prime rice-growing lands. Jola women constructed small dikes to control the flow of run-off water, and collected *nyantan faro* grass (*Andropogon* spp.) along the upland borders of the rice fields. But now most of the rice lands have reverted to a sterile wasteland which is used only for the extraction of salt and some crab gathering. The density and species composition of the mangroves has likewise changed, and while trees are still cut for poles used in roofing and fencing, the resource is much reduced in importance. The Bintang Bolong is also as yet used for shrimping and fishing, but species availability has changed considerably.

An interview with an elderly fisherman in Sintet highlighted some of the complex and interconnected ecological transformations that have occurred in this zone. Many of his observations have been confirmed by scientific studies conducted in similar mangroves along the West African coast. During the first years of the drought, the reduction in the flow of fresh water in the Gambia River and the Bintang Bolong profoundly altered the water regime and ecology of the zone. As the water became more saline, the kinds of fish changed and certain types of mangrove died. The reduction in leaf litter reduced the amount of food for fish. At the same time, removing the upland forests for new field-crop cultivation exposed the soil to erosion. Silt filled the streams. Fish harvests declined and, today, a harvest of fish hardly "feeds the family."

The mangroves are the commons of the village of Sintet (see photograph 17). Much like the upland forests of the *wulo*, anyone may enter the area to cut firewood and poles. No restrictions limit the entry of wood gatherers or hunters. Women tend not to cut firewood from these swamps since they are a considerable distance from the village. During the late dry season, women scrape off the top crust of the alkaline soils of the mud flats as a first step to making salt. While the mud flats are presently considered the commons of the village, latent property rights do remain to the land once cultivated as rice fields. The construction of water retention dikes by the SWMU raised the specter of potential land tenure conflicts, but since the dikes never became functional, this issue has not been raised.

---

18. This grass, which was highly prized for roofing material, is now nearly extinct.
PHOTOGRAPH 17

The Bintang Bolong and mangroves
THE EVOLUTION OF THE LOCAL ECONOMY

Profound changes have occurred in the economy of the Foni Jarrol District since the colonial period. Until the advent of the drought in the early 1970s, the Foni Jarrol was an exporter primarily of groundnuts. The economy has since diversified considerably. While the district continues to sell surplus products in the broader economy, the range of its exports has mushroomed to include milk from cattle, vegetables, and forest goods in addition to groundnuts. But, most important, the district has become an exporter of labor to the urban and international markets (figure 13).

Groundnut production. The abandonment of groundnuts was one of the most remarkable changes noted by the research team. The populations of the case study villages have adopted the strategy of diversifying into other income-generating activities while simultaneously dropping out of groundnut production (figure 7). The reasons for this switch are many. While old people frequently complained about the onerous work of groundnut cultivation, this is especially the case now that young men rarely return home from urban areas to assist their families during rainy season. As one villager remarked, "If we wanted to acquire our wealth from peanut growing, we would end up in the hospital." Many noted that the market price of peanuts was too low and suggested that more remunerative alternatives could be found. One farmer said, "We do not grow groundnuts now because the world price is low and the work of growing them is hard. Working on groundnuts is the hardest labor but the least money-earning."

Fruit tree production. "The mango is the president of trees," one informant said to the team. Throughout the study villages respondents highlighted the growing importance of mango tree production (figure 8). Elders in the village of Wassadun commented that while they were young men, there was a taboo against planting fruit trees; now everyone was planting trees. One noted that growing fruit trees and selling the produce were much easier for the elderly: "We who have lost our muscles cannot do much." Young mango trees, each carefully fenced and protected from livestock damage, have been planted throughout the villages close to the paved road.

Mango tree production is particularly profitable. The Foni Jarrol District exports mangoes to Banjul and to the markets of northern Senegal.¹⁹ In Sintet, it is reported that a productive, mature tree yields 10-15 50-kilogram bags of mangoes. Mangoes without fibers in the fruit offer a premium price of D45 to D50 per bag, though the price varies considerably from year to year and within the season itself. Thus a mature tree can yield about D450 to D750 per year, a considerable revenue for a rural household. In ranking the different sources of income from agricultural production, one Sintet resident listed the following cash crops, in descending order: mangoes, tomatoes, oranges, bananas, groundnuts, cassava, papaya, and sweet potatoes.

¹⁹. Merchants from Senegal come directly to the villages to buy the fruit largely because the district mangoes ripen earlier than the produce near Dakar.
FIGURE 13
Youth labor migration in Sintet,
village of Sintet, 9-17 January 1992

I. Interview with Doof Sanyang

Youth in Banjul
(3/4 of bean pile)

Youth in Sintet
(1/4 of bean pile)

II. Interview with elders of Kabumb

A. Proportion of young people in Kombo St. Mary, abroad, or in Kabumb

Youth in Kombo St. Mary or abroad
(2/3 of bean pile)

Youth abroad
(1/6 of bean pile)

Youth in Kabumb
(1/3 of bean pile)
[FIGURE 13, Youth labor migration, cont.]

B. Proportion of young people helping families with remittances

Proportion of youth abroad helping families with remittances
(1/3 of bean pile)

Proportion of youth abroad not helping families in Kabumb with remittances
(2/3 of bean pile)

Proportion of youth in Kombo St. Mary helping families in Kabumb with remittances
(2/5 of bean pile)

Proportion of youth in Kombo St. Mary not helping families in Kabumb with remittances
(3/5 of bean pile)

Explanation: Informants were asked to use beans to indicate the proportions of young people migrating out of the villages. They were then queried further to illicit discussions about the reasons for the respective migrations.
Contractual terms for mango production vary from village to village. In Kamamudu, merchants pay a flat fee of D200 to D300 for the crop of an entire tree. A merchant with a couple of workers arrives in a large truck, pays cash on the spot, and usually hires some young boys at D2 to D3 per day to pick the fruit. Fruit marketing is a key production constraint, however, for prices are low, and at the height of the season, mangoes are hard to sell because of gluts on the local market. In Sintet in the past, fruit has been sold on credit to Senegalese merchants, though sometimes these dealers fail to return to the village with the cash. One Sintet farmer lost the value of 60 bags of fruit.

**Horticulture.** Women’s gardening has become one of the dominant income-generating activities of the district (see photograph 18). Labor- and time-allocation calendars for both men and women dramatically portrayed the importance of gardening (figures 14 and 15). While this undertaking may generate critical sources of cash for the women, its seasonal labor demands are considerable. The constant chore of watering requires daily attention and the expenditure of much effort, something lamented by the female gardeners. The women get little free time, despite the new income-generating opportunities of dry-season gardening. They are, therefore, attempting to plant mango trees in some community gardens to diversify income sources and reduce labor demands. However, as mentioned earlier, male landowners have lodged complaints about this practice.

**Livestock production.** Small agricultural surpluses seem to be invested in livestock production. While in the past the populations of the Foni Jarrol raised livestock primarily for ceremonial purposes (circumcisions, marriages, funerals), cattle, sheep, and goat production has today taken on important commercial overtones. Interviews with men and women showed that both genders own livestock and invest surplus resources in livestock production. Small sums appear to be used first to purchase sheep and goats. These animals are then sold or exchanged for cattle. While cattle are still used for ceremonies, they now generate important revenues, primarily as milk sold to local village markets as well as urban markets in the Kombos. While relatively few cattle are sold for meat, sheep and goats are continuously marketed in the district for relatively small amounts of money. Residents did not believe that sheep and goat populations had risen in the district, however, because of a constant reduction through sales to local and urban markets.

The Fulbe residents living in settlements and hamlets next to the Jola and Bainunka villages often care for the cattle of their host families. Jola farmers pay a set annual fee to the Fulbe herders. Contractual rates vary considerably.
PHOTOGRAPH 18
Women’s garden of Sintet
FIGURE 14
Labor allocation for women of Sintet

<table>
<thead>
<tr>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUG./SEPT.</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Garden work</td>
<td>- Harvesting and marketing vegetables</td>
<td>- Cutting vegetables</td>
<td>- Collecting salt</td>
<td>- Plowing rice fields, groundnuts, cowpeas, sesame</td>
<td>- Cleaning house</td>
<td>- Bird scaring</td>
<td>- Drawing water</td>
<td>- Bird scaring</td>
<td>- Drawing water</td>
</tr>
<tr>
<td>- Weeding, watering, transplanting</td>
<td>- Weeding, watering</td>
<td>- Marketing vegetables</td>
<td>- Cutting firewood</td>
<td>- Weeding rice</td>
<td>- Weeding groundnuts</td>
<td>- Harvesting rice, groundnuts, millet, sesame, cowpeas</td>
<td>- Weeding rice</td>
<td>- Harvesting rice, groundnuts, millet, sesame, cowpeas</td>
<td></td>
</tr>
<tr>
<td>- Collecting leaves</td>
<td>- Threshing rice</td>
<td>- Garden work</td>
<td>- Locust bean collecting</td>
<td>- Drawing water</td>
<td>- Planting and weeding sesame, cowpeas</td>
<td>- Drawing rice water</td>
<td>- Pounding grain</td>
<td>- Pounding grain</td>
<td></td>
</tr>
<tr>
<td>- Threshing rice</td>
<td>- Pounding grain</td>
<td>- Harvesting mangoes</td>
<td>- Firewood collecting</td>
<td>- Pounding grain</td>
<td>- Transplanting rice</td>
<td>- Pounding rice</td>
<td>- Preparing garden beds</td>
<td>- Preparing nursery beds</td>
<td></td>
</tr>
<tr>
<td>- Pounding grain</td>
<td>- Firewood collecting</td>
<td>- Harvesting mangoes</td>
<td>- Firewood collecting</td>
<td>- Cooking</td>
<td>- Preparing meals</td>
<td>- Pounding grain</td>
<td>- Cleaning house</td>
<td>- Cleaning house</td>
<td></td>
</tr>
<tr>
<td>- Firewood collecting</td>
<td>- Childcare</td>
<td>- Childcare</td>
<td>- Childcare</td>
<td>- Childcare</td>
<td>- Childcare</td>
<td>- Gardening</td>
<td>- Sorrel gathering</td>
<td>- Sorrel gathering</td>
<td></td>
</tr>
<tr>
<td>- Childcare</td>
<td>- Household cleaning</td>
<td>- Household cleaning</td>
<td>- Household cleaning</td>
<td>- Household cleaning</td>
<td>- Household cleaning</td>
<td>- Firewood collecting</td>
<td>- Firewood collecting</td>
<td>- Firewood collecting</td>
<td></td>
</tr>
</tbody>
</table>
FIGURE 15

Labor allocation for women of Kamamudu

<table>
<thead>
<tr>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Watering</td>
<td>• Harvesting peppers and tomatoes</td>
<td>• Weeding and marketing</td>
<td>• Collecting hakaw</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Weeding rice fields</td>
<td>• Threshing rice</td>
</tr>
<tr>
<td>• Harvesting tomatoes</td>
<td>• Watering and weeding</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Preparing pepper nurseries</td>
<td>• Weeding rice fields</td>
<td>• Kafó income-generating activities (sesame)</td>
</tr>
<tr>
<td>• Plowing rice fields</td>
<td>• All household chores</td>
<td>• Weeding rice fields</td>
<td>• Watering and weeding pepper and tomato nurseries</td>
<td>• Scaring birds</td>
<td>• Kafó fields</td>
<td>• Threshing rice</td>
<td>• Harvesting pepper</td>
<td>• Watering and weeding tomatoes</td>
<td>• Collecting groundnut gleanings</td>
<td>• Cooking</td>
<td>• Childcare</td>
</tr>
<tr>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Gathering firewood</td>
<td>• Drawing water</td>
<td>• Drawing water</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Cooking</td>
</tr>
<tr>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Collecting firewood</td>
<td>• Launder</td>
<td>• Laundry</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Cooking</td>
</tr>
<tr>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Watering</td>
<td>• Harvesting peppers and tomatoes</td>
<td>• Weeding and marketing</td>
<td>• Collecting hakaw</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Weeding rice fields</td>
<td>• Threshing rice</td>
</tr>
<tr>
<td>• Harvesting tomatoes</td>
<td>• Watering and weeding</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Preparing pepper nurseries</td>
<td>• Weeding rice fields</td>
<td>• Kafó income-generating activities (sesame)</td>
</tr>
<tr>
<td>• Plowing rice fields</td>
<td>• All household chores</td>
<td>• Weeding rice fields</td>
<td>• Watering and weeding pepper and tomato nurseries</td>
<td>• Scaring birds</td>
<td>• Kafó fields</td>
<td>• Threshing rice</td>
<td>• Harvesting pepper</td>
<td>• Watering and weeding tomatoes</td>
<td>• Collecting groundnut gleanings</td>
<td>• Cooking</td>
<td>• Childcare</td>
</tr>
<tr>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Gathering firewood</td>
<td>• Drawing water</td>
<td>• Drawing water</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Cooking</td>
</tr>
<tr>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Watering</td>
<td>• Harvesting peppers and tomatoes</td>
<td>• Weeding and marketing</td>
<td>• Collecting hakaw</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Weeding rice fields</td>
<td>• Threshing rice</td>
</tr>
<tr>
<td>• Harvesting tomatoes</td>
<td>• Watering and weeding</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Preparing pepper nurseries</td>
<td>• Weeding rice fields</td>
<td>• Kafó income-generating activities (sesame)</td>
</tr>
<tr>
<td>• Plowing rice fields</td>
<td>• All household chores</td>
<td>• Weeding rice fields</td>
<td>• Watering and weeding pepper and tomato nurseries</td>
<td>• Scaring birds</td>
<td>• Kafó fields</td>
<td>• Threshing rice</td>
<td>• Harvesting pepper</td>
<td>• Watering and weeding tomatoes</td>
<td>• Collecting groundnut gleanings</td>
<td>• Cooking</td>
<td>• Childcare</td>
</tr>
<tr>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Gathering firewood</td>
<td>• Drawing water</td>
<td>• Drawing water</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Cooking</td>
</tr>
<tr>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Watering</td>
<td>• Harvesting peppers and tomatoes</td>
<td>• Weeding and marketing</td>
<td>• Collecting hakaw</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Weeding rice fields</td>
<td>• Threshing rice</td>
</tr>
<tr>
<td>• Harvesting tomatoes</td>
<td>• Watering and weeding</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Preparing pepper nurseries</td>
<td>• Weeding rice fields</td>
<td>• Kafó income-generating activities (sesame)</td>
</tr>
<tr>
<td>• Plowing rice fields</td>
<td>• All household chores</td>
<td>• Weeding rice fields</td>
<td>• Watering and weeding pepper and tomato nurseries</td>
<td>• Scaring birds</td>
<td>• Kafó fields</td>
<td>• Threshing rice</td>
<td>• Harvesting pepper</td>
<td>• Watering and weeding tomatoes</td>
<td>• Collecting groundnut gleanings</td>
<td>• Cooking</td>
<td>• Childcare</td>
</tr>
<tr>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Gathering firewood</td>
<td>• Drawing water</td>
<td>• Drawing water</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Cooking</td>
</tr>
<tr>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
<td>• Marketing</td>
</tr>
<tr>
<td>• Watering</td>
<td>• Harvesting peppers and tomatoes</td>
<td>• Weeding and marketing</td>
<td>• Collecting hakaw</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Drying peppers</td>
<td>• Gathering firewood</td>
<td>• Weeding rice fields</td>
<td>• Threshing rice</td>
</tr>
<tr>
<td>• Harvesting tomatoes</td>
<td>• Watering and weeding</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Laundry</td>
<td>• Gathering firewood</td>
<td>• Baobab collecting and selling</td>
<td>• Preparing pepper nurseries</td>
<td>• Weeding rice fields</td>
<td>• Kafó income-generating activities (sesame)</td>
</tr>
<tr>
<td>• Plowing rice fields</td>
<td>• All household chores</td>
<td>• Weeding rice fields</td>
<td>• Watering and weeding pepper and tomato nurseries</td>
<td>• Scaring birds</td>
<td>• Kafó fields</td>
<td>• Threshing rice</td>
<td>• Harvesting pepper</td>
<td>• Watering and weeding tomatoes</td>
<td>• Collecting groundnut gleanings</td>
<td>• Cooking</td>
<td>• Childcare</td>
</tr>
<tr>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Drawing water</td>
<td>• Gathering firewood</td>
<td>• Drawing water</td>
<td>• Drawing water</td>
<td>• Childcare</td>
<td>• Marketing</td>
<td>• Cooking</td>
<td>• Childcare</td>
<td>• Cooking</td>
</tr>
</tbody>
</table>
The cattle herds generate milk for sale in the village and export to the Kombos. Demand for fresh milk is so great from the Kombos that during the rainy season merchants purchase gallon containers (5-liter paint cans) for as much as D15 apiece. A Kamamudu respondent said that a herd of about 40 head (mixed male and female) will generate approximately 4 gallons of milk per day during this period. Revenue then falls considerably during the dry season, when the herd produces only 1.5 to 2 gallons of milk per day, selling for D10. The contractual terms for this informant stipulate that all profits from the sale of milk go to the Bainunka herd owners during the rainy season, and to the herder during the dry season. Thus while the herder loses revenue from milk production during the rainy season, he does earn D15 for each adult and nonsuckling calf guarded throughout that time.

The manure from cattle is an important source of income for the Fulbe. Farmers largely abandoned the use of chemical fertilizer with its dramatic increase in price, and now ask the Fulbe to tether their cattle in particular fields. A herd will stay in the same field for ten to fifteen days, manuring the location at night. Farmers compensate the Fulbe for this service, but payment varies considerably; in Sintet, rates were D25 for fifteen days of tethering.

Other income-generating activities. The villages of the Foni Jarrol District export a variety of agricultural and tree-crop products to the urban centers of The Gambia and Senegal. Merchants from the Kombos will purchase groundnut hay at D10-D15 per large bag during years of forage shortage. Residents indicated that in the past, prior to the drought years of the early 1970s, groundnut hay was simply left in the fields. Today, all the hay is carefully collected, stored, and protected from livestock. Sale of hay also occurs between Jola villages and the surrounding Fulbe settlements.

The export of tree-crop products such as baobab fruit and netto (Parkia biglobosa) by women is difficult to measure adequately, but it is probably quite appreciable in some years. Marketing of these products fluctuates. As in many parts of West Africa, sale of baobab and other wild fruit most likely increases during times of household economic crises, but tapers off when other, more remunerative income-generating activities are available. The conservation and regeneration of forest resources in the district are thus critical; the forest serves not only as a daily source of tree products, but also as a "savings bank" which can be used during times of economic stress.

The forest generates revenues for the commercial woodcutters as well. While the RRA team did not interview woodcutters, it seems that most of their income comes from patrons who live outside of the district and transport the harvested wood to the Kombos for marketing. Yet the local populations of the district also profit from this lucrative business. Host families receive rent, food money, and gifts from the woodcutters whom they house.

---

20. Three years ago chemical fertilizer cost D15-D25 per 50-kilogram sack. This year fertilizer costs D150 per sack.
All but three villages in the district host the woodcutters, who are often young Fulbe men from Guinea.

**The determinants of wealth.** In the pre- and early colonial economy of the Foni Jarrol, the wealthy were those who had access to considerable amounts of labor and cattle—that is, prosperous individuals had large families and thus could feed themselves year-round. At a time when shortages of land were not acute, people who could amass sufficient labor through marriage affiliations could assure themselves adequate sustenance from agricultural production. Although prime rice fields were certainly important assets, land was constantly being borrowed or loaned to satisfy the needs of the female workers.

Today the situation has changed somewhat, as demonstrated through wealth-ranking exercises conducted in the case study villages (figure 16). Members of founding families are not necessarily the wealthiest members of the community, and access to arable land does not necessarily guarantee wealth. Rather, determinants of wealth in the case study villages were commercial activities that generated a constant flow of cash (e.g., remittances from youth, business activities, cattle) and the ability to mobilize sufficient labor and farm implements for cultivation.

As the exercise shows, factors that generate wealth may differ sharply from village to village, including communities that are in close proximity. The village of Kamamudu represents a rather typical farming village, where founder families are the wealthiest persons in town. In this case, the wealthiest families have sons who work abroad, have taxi cars which make daily trips to Banjul, possess livestock which are used for animal traction, and own ample land. The nearby village of Kampassa is markedly different, however. This village is dependent on its border trade with Senegal. The wealthiest individuals in this case are primarily the Fulbe traders and some Jola who are associated with the export of commercial goods to Senegal. The poorest in the village area, on the other hand, are members of the major landowning families.

**The evolution of village institutions**

The administration of village affairs continues to be the responsibility of the alkalo, who usually finds counsel with a group of elders, the oldest men of the founding families, and late-arrivals who have proved particularly sagacious. The alkalo may be elected or the position may be inherited. In the case study area, each alkalo-ship was passed through family lines yet confirmed by a show of hands during an election.
**Criteria of wealth in Kamamudu**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>COMMENTS</th>
<th>HOUSEHOLD CARD NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richest</td>
<td>◦ Members of the founder’s families &lt;br&gt; ◦ Two owned commercial cars &lt;br&gt; ◦ Have cattle, cash, implements and draft, enough labor, and enough food to serve them until the next growing season</td>
<td>1, 14, 16, 19, 24</td>
</tr>
<tr>
<td></td>
<td>◦ Members of the founder family &lt;br&gt; ◦ Have enough labor, some cattle, draft, and implements; two have fruit trees &lt;br&gt; ◦ No cars &lt;br&gt; ◦ Have enough food, but cannot serve them up to the next growing season</td>
<td>12, 26, 27, 25, 20, 3, 10, 18</td>
</tr>
<tr>
<td></td>
<td>◦ Not enough food and labor &lt;br&gt; ◦ Fewer cattle, implements, and draft &lt;br&gt; ◦ Only one has fruit trees &lt;br&gt; ◦ No cars &lt;br&gt; ◦ Few are founder families</td>
<td>7, 21, 22, 13, 11, 15, 17, 5, 4, 9, 23</td>
</tr>
<tr>
<td>Poorest</td>
<td>◦ Food is scarce all the time &lt;br&gt; ◦ Labor, implements, and draft animals are always major constraints &lt;br&gt; ◦ Only one is a member of the founding families</td>
<td>2, 8, 6</td>
</tr>
</tbody>
</table>

**Explanation:** Wealth-ranking exercises consist of compiling a list of all of the households in the community (numbered cards with household names). The definition of "household" is determined by informants' providing the list of names. A village informant, or a focus group, is asked to define the criteria of wealth in the community and the number of distinct categories. Then the informant divides the households into different categories from "rich" to "poor." Discussion is encouraged regarding these categories.
**Kafó groups.** *Kafó* groups are important village institutions throughout the Foni Jarrol District. They ranked high on the list of case-study village institutions identified through RRA research methods (figures 4 and 5, pp. 30, 87-31). *Kafó* groups are organized by gender and generation and serve as labor networks for village activities such as the construction and maintenance of public infrastructure. Young men’s or women’s *kafó* groups can be hired on a reciprocal or cash basis during the farming season. Both male and female *kafos* provide labor for income-generating enterprises—the cultivation of a woman’s *kafó* cowpea field in Sintet or women’s communal pepper farms in Kamamudu, for instance. The revenue generated by these activities is held in the *kafó* bank and is used for village functions or as a source of credit for members in need. Men’s *kafos* cultivate communal fields of cereal crops, the produce from which is set aside and lent out to members who face grain shortages during the year (the grain is a loan and must be repaid after the next harvest).

The hierarchy within the *kafó* is determined largely by age and status. Often the older members of the founding families are given the more prominent positions. A person with proved leadership abilities has been chosen when the *kafó* kuniyó, or head, is not an elder of the group. This individual will be guided by the older, more respected members. In Sintet, for example, the woman’s *kafó* kuniyó for the Kabumb section of the village is a descendant of a later-settler lineage and works closely with members of the founding families. All women’s *kafó* groups have a male *fælifo*, or father figure, who serves as an advisor and helps argue their cases at village meetings. Male *kafos* also have a *fælifo* whose role is to link the *kafó* with other organizations.

Migrant youth from Kampassa who live in the Kombos have established a *banta kafó*. This group meets each week, with its members contributing small sums to a fund earmarked for development activities in the home village. In 1991, the group raised enough money to hire a tractor and trailer for use in repairing the dirt road which links Kampassa to the paved road leading to Banjul.21

**The Tongo Resource Management Institution.** The *tongo* is a resource management practice commonly used by Jola and Bainunka to protect tree fruit against premature picking and theft.22 The entire district of Foni Jarrol has devised a system by which an embargo is placed on the picking of these fruit. The *seyfó* and the *alkalo* of all villages meet to set a date for the *tongo* to begin. The appointed time is announced throughout the district by a *konkoran*, a fearful-looking forest creature dressed in red who dances from fruit tree to fruit tree placing bits of string on each protected plant. If a child is so foolish as to pick even a single fruit, the family must buy a goat and a couple of liters of oil for the community and

---

21. Roads are of great importance to the economic survival of Kampassa, for the village depends to a large degree on the re-export of commercial goods to Senegal. Therefore, the priority placed by the migrant youth group on road maintenance was well conceived.

22. Children and young adults may pick immature mango, baobab, and *netto* fruit—this is not only a problem of theft, but also a source of many a stomachache among the youth.
pay D100 to the village treasury. After the feast, the offending youth is taken into the bush and flogged. Of course, few kids steal fruit. Since the netto tree has become scarce, the tongo no longer applies to it, but instead, for the first time, to the baobab. This is a sign of how the baobab tree has become an important source of cash revenue for the villagers.

This tongo case illustrates how rural Gambian communities establish and enforce local rules regarding the use of their natural resources. It serves also as an example of how resource-use arrangements can be tailored to meet local needs. Yet, as many elders have pointed out, a tongo placed on the use of trees or other forest species cannot be effective unless the state supports the local rule-making. As one elder reminded the team, "White man, how do you stop woodcutters when they are armed with forest permits granted by the Forestry Service itself?"

**Development committees.** One of the most profound changes in the Foni Jarrol since the colonial period is the rapid growth of social institutions connected to the international aid community. Institutional Venn diagrams conducted in the three case study villages clearly showed the existence of child-feeding programs sponsored by Catholic Relief Services (CRS), schools, seed banks, and well-maintenance committees (figure 4). While the respondents did not mention the existence of formally recognized "village development committees" (VDCs), there appeared to be a proliferation of non-kafo groups.

Complex interrelationships characterize the linkages between the kafo and several types of VDC (figure 17). These relationships are often sources of tension within the community. In the case study villages, it was noted that kafos tend to form two rather distinct subgroups within their structures. One such group consists of "permanent subgroups" charged with ongoing community activities. Such subgroups are the "dispute mediation committees" in Kampassa, the bantia kafo which oversees the maintenance of village wells in Kamamudu, and the women's kafo which hosts visitors. A second type of subgroup within the kafo is the "functional subgroup," which is formed for particular community tasks, often activities funded by donor and government development agencies.

When a development organization first arrives in a village, it usually meets with the women's or men's kafo, which forms a functional subgroup charged with implementing the particular project. The subgroup frequently coalesces only because of the presence of external financial or technical assistance. Over time, the government or donor development agency may seek to build the "institutional capacity" of these groups by requesting the creation of some form of recognized village development committee, often as a precondition to the receipt of further funds.

23. Subsequent interviews have shown that the tongo exists in other districts in The Gambia. Team member Susan Gannon reports that the system is found for mango and baobab trees in the Kerewan area.
**FIGURE 17**
Development agencies and village institutions

- Kafo (Men and Women)
  - Permanent Groups
  - Functional Groups

- Village Development Committees
  - CRS Committee
  - School Committee
  - District Watershed Committee
  - Village Development Committee

- *Nouveaux Habitants (Later Arrivals)*

1. First Relations between Development Agency and Local Committee Groups
2. Formation of Village Development Committees of Kafo Groups
3. Funding and Organizational Support

External Development Agencies
The external development organization tends to require the *kafop* functional subgroup to register with the government, hold elections from time to time, and operate with bylaws. Field research in the Foni Jarrol showed that sometimes these committees are dominated by the nouveau riche of the community, those who are not necessarily members of the long-established, founding families. The leaders of these committees often possess the education or contacts with the outer world that make them appear (to the development agency) to be particularly dynamic, motivated, and conscientious. The village development committee sometimes gives these newcomers an opportunity to acquire power, prestige, and personal benefits which would not otherwise be available through the traditional *kafop* structure.

Thus, the influx of development aid has created a wide array of new committees which often reflect their funding origins. Women's garden groups receive funding from US Embassy or Peace Corps self-help funds; village watershed-management committees created by the SWMU build and maintain dikes in rice fields; forest fire-fighting brigades combat the late dry-season conflagrations that sweep through the district; health committees maintain the CRS mother-child feeding centers. Often the village selects "specialists" to head these committees. These individuals are often the intermediaries between the external development organization and the village.

So long as the aid flows into the village for a specific community task, the village development committees remain functional. But when a donor-driven activity terminates, the committees become dormant and may dissolve. The case of the SWMU's district and village watershed-management committee illustrates the dynamics at work. During the years when the SWMU was active in building water-retention dikes across rice fields in the Foni Jarrol District, the unit established watershed-management committees at the village and district level. These committees were very effective in mobilizing and coordinating the considerable amount of labor needed to construct the many kilometers of dikes which now crisscross the district's rice fields. The committees also functioned as a forum for project personnel to explain the intentions of the enterprise and to negotiate a wide range of organizational issues. Now that the project no longer is building dikes, the district watershed committee no longer meets. While a village *barrage* (French term for dam) committee meets from time to time to organize workdays for maintaining the water-retention system, its functions are confined to this specific task. The dream of a self-sustaining watershed-management committee that is involved in a wide array of soil and water conservation activities is nothing more than that. What remains, year after year, are the *kafos*, organizations which can be mobilized to respond to community needs when the occasion arises.

**THE EVOLUTION OF STATE INSTITUTIONS**

The district commissioner and the *seyfo* continue to play a central role in the Foni Jarrol District, much as they did during the colonial era. Yet there are new institutions at

---

24. Kamamudu has a "Mr. Forest" who represents the forest-fighting committee—and who happens to be the village hunter, so has a good knowledge of the forest.
work in the district. One example is the district council, based in Brikama, whose elected representatives are responsible for planning and coordinating development activities in the area. The council uses locally generated tax revenues to construct village infrastructure such as wells.

During the early colonial period considerable administrative authority was held by the traveling commissioners (who subsequently became district commissioners). Over the years administrative and development powers have gradually become concentrated in centralized ministries in Banjul. Residents of the Foni Jarrol now directly lobby the ministries in the capital city. Delegations are sent to the Ministry of Health, for instance, to solicit a public health center. Other delegations visit their ministers of parliament to ask for Peace Corps volunteers. Complaints are lodged with the Ministry of Agriculture over the conduct of SWMU workers in the field.

While the central ministries control the flow of funds through both bi- and multilateral aid organizations and, to a large degree, NGOs, the Foni Jarrol residents keep tabs on the aid bureaucracy through various means. One development committee leader in a case study village had a remarkably sophisticated understanding of the goals, objectives, and strategies of a wide range of development organizations in Banjul, and this person leads delegations to Banjul to lobby for assistance. The educated sons and daughters of the Foni Jarrol who work for these development bodies are important conduits of information and assistance to their home communities. Far from being isolated villages, the villages of the Foni Jarrol are intimately linked to the broader national and international sphere of economic and social relations.

Control over forest resources has been similarly transferred from the seyfo to the national Forest Service. Although during the early colonial period, the seyfolu were charged with collecting forest product taxes, this function has now been shifted to the Forest Service. The current Forest Code establishes rules for many forest-use practices (which are to be enforced by Forest Service agents), but village residents complain that this legislation does not protect local forest resources against depredation from outsiders. Woodcutters, for instance, armed with permits issued outside of the district, cut where they will. Villagers feel that they cannot enforce abusive exploitation. Forest Service agents themselves are frustrated due to a lack of sufficient resources to patrol the entire area under their supervision.

Judicial system. The district tribunal continues to resolve most of the disputes in the Foni Jarrol. Over the past twenty years or so, only one case has left the district. The types of dispute handled by the district tribunal have evolved, however. The "disputes ranking chart" indicates the changing nature of conflicts reaching the court (figure 6).

Many of the controversies reaching the district tribunal over the decades were and are linked to dominant economic conditions. Until the decline of the market in the early 1970s, many disputes were related to conflicts over land used for groundnut production. Other disagreements concerned the rice economy, again until the drought years. Boundary disputes
regarding land placed under rice or groundnut production often reached the court during years of relative expansion of these two commodities.

Today, many of the disputes reviewed by the district tribunal concern boundaries over land used for orchards and irrigation projects—the highly coveted lowlands (used for gardening, rice production, and mango orchards) have now become the locus of conflicts. There is also a dramatic rise in the number of divorce cases heard by the tribunal. Court elders consider this a reflection of the changing income-generating activities available for women. Women can now "buy" a divorce; they have greater access to funds from commercial activities, seasonal labor in the cities, and gardening. As one court member sadly lamented, "As soon we marry off our daughters, they buy their divorce."

CONCLUSIONS

Part 2 has described the tenure and natural resource situation found in the Foni Jarrol District of the Western Division in considerable detail. From an explicitly historical perspective, it has sought to chart the evolution of society and environment in three case study villages.

The society and ecology of the Foni Jarrol District are considerably different today from what they were a hundred years ago. Yet one cannot describe the result as continual ecological decline or progressive economic stagnation. The local economy is diversifying from a dependence on groundnut production to reliance on a variety of fruits and vegetables produced for the urban and broader regional economy. New opportunities are being opened for women in this changed situation. Urban and international migration of young Gambians also generates substantial revenues for the local economy. Yet, the cost of this migration is a severe shortage of labor. This labor shortage limits the types of development intervention that will succeed in the zone. Projects that promote a minimum of labor investment over the long term may be more likely to succeed than those that require substantial and continual investments of work.

The evolution of the physical ecology of the district has similarly changed, though not uniformly. The forested areas around villages were removed progressively during the early twentieth century, the consequence of the expansion of the groundnut economy. The contiguous villages around the forest of the Foni Jarrol District expanded into this zone during the height of the groundnut era. Recently, however, the forest has begun to cover the land once cultivated in groundnuts and grain crops. As the rural communities move out of groundnut cultivation, demand for upland fields is falling off and, hence, scrub brush is invading previously cultivated land. One now finds that river banks and lowland rice fields are increasingly transformed into gardens. Mango orchards are planted in and around village settlements. Rapid ecological change—indeed, regeneration—is occurring within the immediate vicinity of the villages.
The consequences for the land tenure system are quite clear. As this section has shown, the lands placed in fruit tree production and horticulture are rapidly increasing in importance. As the value of land in the community rise, conflicts surface as individuals and linages compete for access to these prime locations. Demand for the upland groundnut fields is falling off and so, too, are conflicts over this land. The questions posed are: How will the local land-tenure institutions respond to these pressures? Will the conflict resolution bodies, such as the alkalo, seyfo, senior kafo groups, village conflict mediation committees, and the elders of the district tribunal, successfully define new tenure arrangements following resolution of disputes? Are the current tenure pressure points generating a new tenure regime or are tenure crises in the district threatening to disrupt social harmony?
PART 3
RECOMMENDATIONS

LAND TENURE AND NATURAL RESOURCE DIALOGUE IN THE GAMBIA: OVERVIEW OF POLICY RECOMMENDATIONS

This section presents policy recommendations stemming from the case study of land tenure and natural resources in the Foni Jarrol District. The suggestions are based solely on the field work conducted in the district and thus reflect perspectives born from that experience. Further field work along the same lines as this study is required to test the tentative conclusions reached and to gather additional material from other districts in The Gambia. More important, a similar participatory research process is needed to generate further debate on the directions that land policies should take in the future.

DEBATE ON THE PLACE OF CUSTOMARY LAND TENURE IN RURAL GAMBIA

Officials of The Gambia currently hold three opposing views on how land legislation should advance in the future. One set of interests proposes that customary land law be progressively replaced with a statutory system along the lines of the 1990 Lands Act. A second set of interests proposes that the customary land allocation practices be systematized in a fashion similar to the codification of early Roman law, much along the pattern adopted by the Law Reform Commission of The Gambia.25 The third set of interests argues that current land tenure institutions are quite satisfactory as they stand now, with most disputes over land and other natural resources being resolved at various levels within the sphere of the household or, failing this, at the district tribunal level.

The research team concluded that customary law in the Foni Jarrol District should not be regarded as a fixed body of legal rules. The case studies showed that customary legal practices are flexible and adaptable, yet can also be the source of considerable internal conflict as people compete and struggle against each other for access to resources rather than searching for peaceful resolutions.

The rural communities studied displayed notable ability to adjust to changing ecological and social conditions. Care must be taken to ensure that development projects do not destroy the capacity of the local communities to resolve internal disputes peacefully (which often happens when new organizational structures are imposed on villages).

---

25. That is, specialists would meet to consider what constitutes a common body of land allocation precepts and practices and would then write down which principles should be used by the judiciary in the resolution of land disputes.
Further field research is required to determine the nature of tenure constraints and opportunities in other parts of The Gambia (governmental policy recommendations cannot be based on a single case study) and to explore the three avenues of policy orientation identified above. Government personnel and nongovernmental staff should be intimately involved in this research, which could lead to a broader debate on the land tenure situation of the country.

POLICY-ORIENTED CASE STUDIES ON LAND TENURE IN RURAL GAMBIA

The Foni Jarrol District is not necessarily representative of the tenure and natural resource situation in other parts of The Gambia. This district was chosen for case study analysis in order to test a specific research methodology in a relatively noncontroversial region of the country—one with low land pressures, a somewhat heterogeneous ethnic composition, and a high level of rainfall. The criteria that might used to select other areas for similar case studies are:

- existence of larger numbers of land disputes;
- greater land pressures;
- existence of ethnic homogeneity and racial predominance;
- lower rainfall zones; and
- higher concentration/presence of governmental and nongovernmental projects.

Future field research should be integrated into a process of debate of national tenure policy. Multidisciplinary teams of researchers from different ministries should be formed. Nongovernmental staff should be included.

IMPLEMENTATION OF THE 1990 LANDS AND PHYSICAL PLANNING ACTS

The team questioned whether full-scale implementation of the 1990 Lands and 1990 Physical Planning Acts is either desirable or feasible at this point in time. While the acts may serve as useful planning tools for urban and peri-urban areas, caution should be exercised in extending the law elsewhere at present. Further field research and policy dialogue are needed to determine how these acts can be enforced in an open and equitable fashion. The donor community should work closely with the Ministry of Local Government and Lands to investigate in greater depth the opportunities and constraints posed by this new legislation.

The new Lands Acts permit the acquisition of 99-year leases through the registration of traditional rights to land. The field work data from the Foni Jarrol suggest that attempts to formally recognize the rights of founder families to land and other natural resources would be extremely difficult. Research indicated that there are conflicting views not only over who has first rights of occupation but also over the delineation of landholdings. From experience gained in other parts of Africa, it is known that land registration programs are very expensive and difficult to maintain.
The present modus vivendi of constant negotiation and adjustment of relations among short- and long-term borrowers and founding families may be the most practical method of land allocation in the Foni Jarrol District. This is not to say that there are not inefficiencies or inequities in the system. Rather, it is the tentative stance of the team that the local community possesses the skill and knowledge required to regulate the allocation and distribution of land for the time being. This situation, however, may not be the same in other parts of the country.

**Tenure Conflicts and Project Management**

Development programs often encounter tenure tension points during project planning and implementation and may generate conflicts and disputes therefrom, as the case studies demonstrated. Rather than avoiding such tenure hot spots, program and project planners must face the fact that such tensions and conflicts are an inherent part of rural life. They may find it useful to confront the issue of tenure controversies through the following method:

1. Identify tension areas in the local community at the outset of the project. When designing the program, employ rapid rural appraisal techniques to identify the existence and dynamics of conflicts.

2. Set conflict resolution mechanisms in place for the duration of project activities. Personnel must invest administrative time and financial resources to assure not only that the interests of different target groups within a community are well articulated in the design phase, but also that competing interests are constantly negotiated throughout the life of the project. Planners should also consider whether there are ways to leave conflict resolution mechanisms in place at the termination of venture.

3. Consider the impact that customary law and local tenure relations may have at the beginning of project design. Variations between communities in local-level tenure practices can be important, and development programs must scrutinize the obstacles and opportunities presented by such differences.

**Tenure Research and Project Implementation**

Development projects should incorporate the study of tenure relations into their design and implementation phases. The research process should adopt methodologies and research tools that can be used by both project personnel and village beneficiaries themselves. The following outline suggests some steps, tools, and procedures that can be exercised in this applied research process.

1. Rapid rural appraisal methodologies should be used as part of the project design and implementation process to ensure maximum input from local communities. In addition to the methods and tools available, new devices and procedures should be developed that take specific account of customary law
and land tenure. During field research in the Foni Jarrol District, several techniques were used that can be refined and elaborated elsewhere. Research procedures must be devised to lay out major family relations and the loci of tensions within the community.

- RRA research methods used in preparing the case studies presented above indicate that there are innovative local and indigenous institutional practices that portend well for the improved management of natural resources in The Gambia. The cases cited in previous sections illustrated probably only a few of the many successful changing institutions in rural Gambia. These innovations should not only be uncovered for possible incorporation into the design of participatory natural resource management programs, but should also be monitored carefully to assess the causes and consequences of their probable evolution.

- Rapid rural appraisal methods may also be used by local communities to devise strategic development plans, which might go a long way toward resolving tension areas in rural areas. A participatory planning process can encourage the identification and resolution of local-level conflicts. The work of nongovernmental organizations which use RRA techniques needs to be followed systematically (i.e., Save the Children and Action Aid) and, if successful, incorporated into the broader development arena.

THE FUTURE OF NATURAL RESOURCE MANAGEMENT IN THE FONI JARROL DISTRICT

Field research in the Foni Jarrol District indicated numerous possibilities and several constraints for improved natural resource management in the zone. The reflections listed below suggest that the populations of the district possess the institutional capacity to manage their own natural resources for themselves, but that state intervention would be helpful to facilitate, encourage, and protect local resource-management innovations. Natural resource-management programmers should keep some of the following factors in mind when planning and implementing new activities.

OPPORTUNITY COSTS OF CONSERVATION MEASURES IN THE FONI JARROL DISTRICT

Programs and projects to protect and regenerate natural resources in the Foni Jarrol must proceed from a recognition that a severe lack of labor in the district restricts opportunities to establish and maintain labor-intensive soil and water conservation activities. The labor force consists primarily of old men, young women, and children. Workers who once engaged primarily in upland field-crop cultivation no longer return to engage in rainy season farming. The SWMU enterprises in the district demonstrated conclusively that a considerable amount of labor (primarily women) can be mobilized for community projects such as the construction of dikes. But these are short-term bursts of investment. Planners must carefully consider the types of conservation programs that are possible in a labor-scarce
environment, where there are limited opportunities to mobilize a large number of workers for sustained participation.

The Foni Jarrol District's populations are quite capable of self-organization. As this research has shown, village institutions abound. These institutions devise rules and regulations governing not only their own internal functions but also their uses of the broader natural environment. Rule-making and enforcement of restrictions on resource use may be one of the more labor-efficient methods to conserve and regenerate natural resources. The existence of strong traditional organizations, like the alkalo, the village elders, and the seyfo, opens up considerable possibilities for some self-governance over natural resources.

CO-MANAGEMENT OF COMMUNITY FORESTS

The strength of the Foni Jarrol populations rests in their capacity to organize collaborative actions throughout the district. The institutional structures of the seyfo, the alkalo, and the women's and men's kafo groups are assets which must not be ignored by development programs and projects. For this reason, one of the least labor-intensive environmental activities may be preventive and controlled early forest burning.

Village informants repeatedly stressed the negative consequences of late dry-season forest fires. As the economy of the Foni Jarrol District progressively shifts into livestock production, forest fires will become ever more noxious occurrences. Several elders suggested that the residents of the villages surrounding the forest commons be granted the authority to set early dry-season forest fires. These slow-burning though "cool" fires would cause less destruction than the inevitable "hot" fires of the late dry season. Also, although these late-season fires stimulate the growth of fresh Andropogon grasses, they kill trees which are useful for forage. Recent scientific evidence suggests that well-timed, controlled burning deserves serious consideration.

Precedents exist within West Africa for promoting participatory, decentralized early burning of forests (the Government of Mali is currently experimenting with a new early burning program). At the local level, suitable dates for igniting forest fires would be set by government and resident populations. These dates would reflect the particular microecological characteristics of the zone. In The Gambia, appropriate district authorities could be vested with the powers to meet regularly with the appropriate government technical services to establish dates for early burning, set fires at the prescribed time, mobilize the labor to prevent uncontrolled burning, and institute prohibitions against burning outside of the designated interval. From this initial exercise in joint management of forest resources, further proposals and initiatives for community conservation might emerge from the beneficiaries themselves.

The state would create the boundaries of the forest territory to be managed jointly by the contiguous communities and the state. This territory would consist primarily of the wulo forest (i.e., the wooded resources of the Foni Jarrol that are considered the commons and, thus, an area owned by no single founding family). The territory could be vested with special
legal status, something like a forest reserve, though jointly controlled by the state and local user groups. The state would work with the communities to set up a joint management plan. The local communities would be conferred with the power to devise rules and regulations governing this territory, and the state would back the local arrangements through its enforcement and police authority.

The institution set up to manage the territory could be granted any number of prerogatives, such as the powers to grant forest permits, set dates for early burning, or determine seasons for hunting of wild animals (the tongo system, which regulates the harvesting of mango, netto, and baobab fruits, represents an model case of a districtwide institutional structure). Such an institution would have to include the traditional authorities of the Foni Jarrol, the alkalo and seyfo. The SWMU’s district watershed committee could serve as a prototype to guide the formation of such a body. Experience has shown that in the Foni Jarrol, however, such institutions must have real responsibilities and powers; otherwise, they will flourish when they have something to do, but wither away and become dysfunctional when they have no specific functions.

COMMUNITY RESOURCE MANAGEMENT AGREEMENTS

Considerable discussion is currently being generated in The Gambia over the need to create "community resource management agreements" (CRMA), a formal covenant signed between a community (i.e., traditional group, village development committee, resource user group) and the government. The agreement would authorize shared control over a natural resource that was previously controlled exclusively by the government. It would set out the rights and obligations of both parties with regard to control, management, and usufructuary rights related either to particular land areas with multiple resource uses or to a single resource.

CRMAS would have much potential for application to the wulo forest commons. Yet considerable advance extension work would be needed for public education, negotiation of use-rights agreements between communities, and consensus-building among the various interest groups using the jointly managed territory. One of the key elements of such a process of negotiation will be to determine which local-level institution should become the focal point of such co-management plans. As discussed previously, there is a proliferation of both traditional and modern institutions, each with unique strengths and weaknesses.

Forestlands such as the wooded commons of the Foni Jarrol District are often devoid of territorial subdivisions among contiguous villages. Either the wooded areas act as buffer zones of disputed regions between villages or villagers deliberately avoid delineation for fear that conflicts would break out. CRMAS should not always require clear delineation of boundaries but rather should specify the rules and regulations which structure use. Such agreements should clearly outline enforcement procedures and judicial processes of appeal.

The field research in the Foni Jarrol highlighted the considerable rule-making capacity of the local populations. Those intermediary organizations working with villages to negotiate
CRMAS (nongovernmental organizations, forestry service department) should pay particular attention to defining how the target communities develop rules and institutional structures governing resource use. External agencies should seek ways to use CRMAs as tools to promote the local-level rule-making potential of the community.

**TREE PLANTING AND LAND BORROWERS**

One of the central constraints to the regeneration of forest cover in The Gambia is the customary interdiction of tree planting on borrowed land. Since tree planting often confers ownership on borrowed fields, most land lenders refuse to allow planting of fruit trees or other species used in agroforestry programs. While trees which naturally regenerate on borrowed lands, such as the *Acacia albida* or rhone, may generally be exploited by borrowers, it is quite rare to find lenders who will allow borrowers to plant trees. This practice greatly hinders the acceptance of agroforestry techniques based on intercropping leguminous trees with field crops.

Public debate needs to be launched concerning this interdiction. Radio talk shows, national seminars with elected representatives, and discussions with government administrators ought to examine ways to overcome this tenure constraint. In the Foni Jarrol District, several residents suggested innovative ways in which land borrowers might be allowed to plant trees on land loaned on a long-term basis.26

**TECHNICAL RESEARCH ON FOREST MANAGEMENT TECHNIQUES**

Applied research is needed to determine whether and how the wulo forestlands can be better managed. Forest regrowth currently consists of several species of scrub trees. More knowledge is needed on ways to increase the value of this already forested zone. There ought to be in-depth studies of the rates of regeneration of these types of dry savannah bushlands, the effect of cool and hot burns on the forest cover, and appropriate coppicing practices. Considerable information on these topics may be available from neighboring Sahelian countries and thus need little more than synthesis of details.

---

26. One individual suggested that for every single tree planted, a specified number might be planted in addition to be protected by the borrower for the use of the lender. In gardening projects, also, landowners will let borrowers work on valuable lowlands on the condition that they plant and tend mango trees. While the women gardeners eventually lose access to the land as shade from the trees begins to cover the field, planting trees does provide a way for nonowners to gain temporary access to land.
APPENDIX 1
RESEARCH OBJECTIVES

1. TENURE AND NATURAL RESOURCE MANAGEMENT IN FONI JARROL DISTRICT

Identify uses of natural resources in Foni Jarrol District.

» Conduct inventory of village natural resource use.
» Define concept of territory from perspective of the Foni Jarrol populations.

Describe natural resource practices, expressed in both theory and practice, of the populations of Foni Jarrol District.

» Define and describe ownership patterns (user rights) within the village territories and watersheds of the Foni Jarrol District (e.g., grazing lands, sacred forests, fishing ponds and Bintang Bolong, hunting areas).
» Examine differences in patterns of natural resource management by socio-professional status.
» Examine gender differences in access rights to natural resources.

2. INSTITUTIONS OF NATURAL RESOURCE USE IN THE FONI JARROL DISTRICT

Identify social structures in the Foni Jarrol District and the role of local institutions (e.g., kafo, ngansimba, kabila kuntiyo, bantaba, alkalo, kabilo, seyfo, imam) in natural resource management.

» Assess effectiveness of institutions in adapting to changes in resource use patterns.
» Assess functionality of rules governing resource use in the Foni Jarrol District.

Interpret influence of social and ecological factors on the evolution of tenure systems in Foni Jarrol District (e.g., climatic changes, population changes, technological changes like agricultural mechanization, development project interventions such as soil and water management unit projects, horticultural projects).
3. **NATURAL RESOURCE DISPUTES AND CONFLICT RESOLUTION**

Identify the types of conflicts that appear within the Foni Jarrol District.

- Identify conflicts around natural resources (e.g., tenure "pressure points").
- Identify intra- and intergender conflicts.

Identify local conflict resolution mechanisms in the Foni Jarrol District.

Analyze the natural resource disputes that pass through the court system (e.g., court of first instance and higher).

4. **POLICY PERSPECTIVES**

Establish guidelines to aid policymakers concerned with tenure and natural resource management in the Gambia.
APPENDIX 2

SCHEDULE OF RRA ACTIVITIES:
VILLAGES OF FONI JARROL DISTRICT

RAPID RURAL APPRAISAL IN VILLAGE OF SINTET

Day 1 (January 10)

Evening Group discussions with men and women of Kabumb.

Day 2 (January 11)

Morning Village meeting.
Afternoon Transect walk.
Evening Informal group discussions in Kabumb with both men and women (approximately 10 people) on the SWMU structures and "The Pipe."

Day 3 (January 12)

Morning Visit to the rice fields and the sacred forest of Kabumb
Afternoon Interview with Ensa Tamba and elder men and women.
Evening Informal discussions with men and women of Kabumb concerning various topics.

Day 4 (January 13)

Morning Interview with Fulbe opinion leader.
Afternoon Group interview with the men of Fula Kunda.
Evening Informal discussions with three men and five women primarily concerning topic of "The Pipe."

Day 4 (January 14)

Morning Group interviews in Bako garden with women from Bako and Fula Kunda; topics included horticultural activities and constraints, bed allocation within garden, and collection of firewood.
Interview with garden committee president on history of garden, division of land within the garden, and similar topics.

Interviews with two elderly women of Alkali Kunda concerning the allocation of rice fields and collection of forest products.

Afternoon
Interview with a garden owner.

Group interview with four women from his compound on benefits of gardening verses pottery.

Interview with a female resident of Kabumb who owns a private garden.

Group interviews with gardeners in the Kabumb garden; topics included allocation of land within the garden plot, tree planting by women, the problems of inadequate water in the rice fields, and "The Pipe."

Evening
Group discussions with Kabumb women on marketing of vegetables and other income-generating activities.

Day 5 (January 15)

Morning
Group interview with members of the district tribunal of Kalagi.

Afternoon
Group interview with gardeners in the Kabumb garden on the issue of collecting forest products.

Evening
Group interview with three men of Kabumb.
Constructed a labor calendar with the same three men.

Day 6 (January 16)

Morning
Group interview with women from Bako; topics included the allocation of rice fields, "The Pipe," the collection of forest products, and income-generating activities.

Afternoon
Two separate interviews with groups of six to seven women of Fula Kunda; topics of discussion included collection of forest products and ownership of animals as an investment strategy.

Interviews with representatives of the dike committee; topics of discussion included SWMU activities and ownership and borrowing arrangements of Fula Kunda rice fields.
Evening  

Informal discussions with both men and women of Kubumb.

Day 7 (January 17)

Morning  

Team preparations for village meeting.

Afternoon  

Village meeting.

Evening  

Informal discussions in Kabumb.

Day 8 (January 18)

Morning  

Team meeting at Tendaba Camp.

RAPID RURAL APPRAISAL IN VILLAGE OF KAMAMUDU

Day 1 (January 20)

Evening  

Introduction to village and then brief walk around to get bearings.

Day 2 (January 21)

Morning  

Village mapping and discussion of characteristics of wealth (entire team).

Transect walking with Youth Club (entire team).

Interview with young men (entire team).

Afternoon  

Group interview with several old men; discussion topics included the history of Kamamudu to construct an historical calendar.

Day 3 (January 22)

Morning  

Interview with milk herder (Komma and Freudenberger).

Interview with the custodian of mango trees (Komma and Freudenberger).

Wealth-ranking interviews (Gannon and Suso).

Afternoon  

Group interviews with Fulbe of Santangkoto (Komma, Nyassi, and Freudenberger) to construct an ecological matrix.

Transect walking (Komma, Suso, Claussen, Nyassi).

Interview with an SWMU/Peace Corps volunteer.
Day 4 (January 23)

Morning  
Wealth-ranking interviews (Suso).

Construction of a Venn diagram (Nyassi, Komma, Freudenberger) with a group of older men.

Construction of a labor calendar (Gannon) with a group of women.

Interview with alkalo; constructed a ranking of land disputes (Claussen, Freudenberger, Komma).

Day 4 (January 23)

Afternoon  
Team discussion to review initial findings.

Day 5 (January 24)

Morning  
Subteam A of Komma and Freudenberger conducted interviews with elderly Fulbe in Santangkoto. Also gathered historical background of the village and constructed an ecological matrix.

Subteam B of Suso, Gannon, and Nyassi conducted a wealth-ranking.

Afternoon  
Departure for Banjul in the afternoon. Death in neighboring village precluded more interviews.

Day 6 (January 25)

Whole day  
Initial analysis at workshop in Banjul.

- Tor Claussen: presentation on tensions, conflicts, disputes.
- Preparation of final report outline.

RAPID RURAL APPRAISAL IN VILLAGE OF KAMPASSA

Day 1 (January 27)

Afternoon  
Arrival in Kampassa in afternoon; walk around the village.

Evening  
Discussion of land disputes.
Day 2 (January 28)

Morning  Constructed village map which included spatial layout of buildings; also drew Venn diagram.

Afternoon  Village meeting in Kamamudu.

TRANSECT (Freudenberger and Komma).

Day 3 (January 29)

Morning  Group interview with alkalo and key informant, Coly.

Subteam A of Gannon and Suso conducted interviews with women (Gannon) and ranking of wealth (Suso).

Subteam B of Komma, Freudenberger, and Nyassi conducted interviews in Wassadun and constructed ecological matrix.

Day 4 (January 30)

Morning  Subteam A conducted a wealth-ranking exercise and visited Kansambou; met with an SWMU representative.

Subteam B constructed a transect of Kampassa’s territory and interviewed the brother of alkalo. The interview covered such topics as comparative use of forests, ownership patterns of rice lands, and labor migration.

Afternoon  Subteam B interviewed the head of mediation team to conduct a disputes-ranking exercise.

Subteam A visited Sintet to conduct wrap-up interviews with Fulbe and Jola women.

Day 5 (January 31)

Morning  Village meeting and discussion of RRA team findings; both women and men present.

Afternoon  Group interview with seyfo in Kalagi (entire team).

Return to Banjul.
COMPLEMENTARY RESEARCH ACTIVITIES

Day 1 (February 1)

All day Team workshop in Banjul.

Day 2 (February 4)

Morning Susan Gannon conducts research at the National Archives.


