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The Implications of Land and Tree Tenure for
the Introduction of Alley Farming
in Tropical West Africa

A Preliminary Research Report

Submitted to the
International Livestock Center for Africa
by the
Land Tenure Center, University of Wisconsin-Madison

December 1989

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In June, 1989 the International Livestock Center for Africa (ILCA) and the Land Tenure Center (LTC) entered into an agreement by which the LTC would undertake research on the implications of land and tree tenure for the introduction of agroforestry, and specifically alley farming, in the humid zone of West Africa. The agreement stipulated that LTC carry out the research in collaboration with national research institutions in three countries in West Africa. The research program is divided into three phases: research design and preliminary field work (June-December 1989); field investigations (January 1990-March 1991); and final report preparation (April-June 1991).

This Preliminary Research Report presents the results of activities carried out during the first phase of the program: research design and preliminary fieldwork. According to LTC's agreement with ILCA, the Preliminary Research Report is to include a review of the relevant literature on tree and land tenure, a description of the proposed program of fieldwork, and evidence that LTC had entered into agreements with national research affiliates in West Africa, to collaborate in the fieldwork phase of the research program.

Section I below provides information on the research affiliates in each country, and describes the national research programs. Section II provides a summary of general research issues which, on the basis of preliminary study, will be examined in depth in the research program. The scopes of work for each country research program have been compiled as Annex A. The literature review is attached as a companion document. Evidence of agreements with national research affiliates is also attached.

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I. National Research Programs

1. National Affiliates

Between 15 November and 5 December 1989, Dr. Steven Lawry, Principal Investigator for the ILCA/LTC program, and Mr. Douglas Stienbarger, LTC Field Manager visited institutions and researchers in Cameroon, Nigeria and Togo which had expressed interest in collaborating with LTC in implementing the research program. The Land Tenure Center has entered into agreements with researchers or institutions in each of these countries. This section provides information on the research affiliates in each country, as well as summary discussion of likely research issues.

Cameroon

Our affiliate in Cameroon is the Institute de la Recherche Agronomique (IRA). IRA is an agency of the Ministry of Higher Education and Scientific Research. IRA is the government agency responsible for agricultural research in Cameroon. The Principal Investigator for the IRA/LTC research program is Dr. Jean Tonye, IRA deputy director for agroforestry research. Dr. Tonye, an agronomist, is vice chairman of the AFNETA (Alley Farming Network for Africa) steering committee. He will supervise a team consisting of staff of his division, including an agricultural economist and a sociologist, in carrying out research activities.

Since 1986, IRA and the International Council for Research on Agroforestry (ICRAF) have undertaken research on the potential role of agroforestry practices in improving the productivity of the cocoa/food crops/coffee farming system of the southern plateau region. An extensive analysis of this system identified a number of constraints to improving productivity, including declining soil fertility due to reduced fallow, poor response to inorganic fertilizers, labor shortage, and poor livestock control. The IRA/ICRAF project has begun farmer-managed farm trials in two areas on the southern plateau, near Yaounde. Among the interventions under evaluation are fertility-improving trees in mixed inter-cropping and alley cropping arrangements, various labor saving tools, and use of leafy fodder and fruit producing trees as a feed source for confined livestock.

IRA and LTC will carry out research in the area of the IRA/ICRAF farmer-managed trials on the southern plateau. Likely tenure issues include whether farmers have sufficient longevity of tenure over holdings designated for field crop production to justify investment in trees, division of labor among men and women in relationship to use rights over foliage, and livestock control problems. IRA has no institutional expertise in land or tree tenure per se, and the LTC team will provide substantial assistance in this area. A professor of customary law at the University of Yaounde will be contracted to carry out a special study of customary and statutory land laws affecting adoption of alley farming. This study will be completed during the Pilot Study phase of the program. The terms of reference for this study were prepared by the LTC team in Yaounde in November.

Nigeria

LTC received formal proposals from four research institutions or researchers in Nigeria. We have entered into an agreement with Dr. Yakub L. Fabiyi, Professor of Agricultural Economics at Obafemi Awolowo University in Ile-Ife. Dr. Fabiyi is one of Nigeria's leading scholars on problems of land tenure and agricultural development. Dr. Fabiyi will be assisted by Mr. Ezekiel Idowu, an agricultural economist who has carried out research on the economics of cocoa production. Mr. Idowu will be directly responsible for management of field survey activities. A legal scholar and a social scientist specializing in issues of women in agriculture will also be team members. Final decisions on staffing of these positions had not been made by Dr. Fabiyi at the time of writing.

Fieldwork will be carried out in a maximum of three southern states. Research sites will be selected in the Pilot Study phase, however it is expected that farmers participating in ILCA and IITA alley farming trials will be among those surveyed. Previous studies of ILCA-sponsored farm trials concluded, at least provisionally, that tenure was in many settings a constraint to adoption of alley farming. Design of these studies did not anticipate tenure as a major issue, and thus survey instruments were not oriented to collecting adequate tenure-related data. We propose to consider in depth the tenure hypotheses raised by the earlier research by carrying out survey work in the original research areas.

Likely research issues in Nigeria include: the effects on tree planting of collective decision-making over annual field use patterns, commonly practiced in long-term fallow situations; restrictions in tenancy arrangements such as renting, pledging and sharecropping to planting of tree crops; and the effects of differential gender rights to land and trees upon adoption by women farmers of alley farming. The National Livestock Development Project (NLDP) has an extension program which promotes alley farming. Adopters and non-adopters of the NLDP packages may provide an additional source of empirical information on tenure-related adoption problems.

Togo

LTC has entered into an agreement with Dr. Messanvi Foli, Professor of Law at the Universite du Benin, in Lome, to undertake research in Togo. Dr. Foli will head a team consisting of himself and three colleagues from the Ecole Superieure d'Agronomie at the Universite du Benin. They are Dr. Kwami G. Kpakote, forage agronomist, Dr. Kounouho Agbemelo-Tsomafo, animal scientist, and Dr. Gnanri Kenkou, rural sociologist.

Research sites will be selected during the research design phase, in March 1990. They are likely to include areas where FAO and CARE are promoting agroforestry and alley farming practices, in the central plateau and coastal regions.

2. Phasing of Research Activities and Coordination of LTC and Affiliate Activities

LTC and national research affiliates will jointly carry out the research programs. National affiliates are responsible for assembling and managing local research personnel and material support, for carrying out field research activities and data analyses, and for preparation of country Interim and Final Research Reports. The LTC will provide direct assistance to the design of the research programs in each country, and to other activities such as questionnaire design and data analysis. LTC is responsible for preparation of the Final Report to ILCA, which will consist of compilations of the national research reports, edited by LTC, and a general synthesis of research findings and their implications to alley farming research and extension strategies. Agreements with each country affiliate include scopes of work, which describe the research programs, schedule the research activities, and define the division of responsibilities between LTC and the affiliate (country scopes of work are attached as Annex A).

Each country program is divided into five phases: research design, pilot study, field survey, data analysis, and report preparation. We have scheduled activities so that country programs progress more or less in unison. This will facilitate coordination of travel by Dr. Lawry and Mr. Stienbarger, and will permit them to address common issues during each trip. Scheduling and management of country activities within each phase will vary from country to country, depending upon the other duties of national affiliate staff, agricultural cycles, accessibility of field survey sites, etc. It should be noted that the role of the LTC team is not conceived in terms of ensuring adherence among affiliates to a single, tightly structured research plan. However, the team will work to ensure that the country programs address a broadly shared set of issues relating to tenure and alley farming. For instance, we will not attempt to design a common questionnaire, which would be administered in each country. But the LTC team will ensure that questionnaires are designed so as to provide comparability of research results among the three countries.

Activities to be carried out in each phase are summarized below.

a. Research Design (February-March 1990)

LTC and country teams will jointly design the country research programs. Dr. Lawry and Mr. Stienbarger will visit each country for approximately ten days, between mid-February and mid-March 1990. Each research design will consist of a survey of available information on land and tree tenure issues affecting alley farming, a description of existing alley farming or related agroforestry interventions, a statement of tentative research hypotheses, a discussion of research methodologies to be employed, a general plan scheduling staff activities for the duration of the project, and a detailed plan for the pilot study, the next phase of the research program. Short field trips (one or two days) will be made to field trials and possible field survey sites. In Ibadan, the LTC and Ife team will be briefed by scientists at ILCA and IITA on the current status of their respective on-farm research activities.

b. Pilot Studies (March to June 1990)

We conceive the pilot study phase to be of central importance. A substantial amount of qualitative and quantitative information will be gathered and analyzed during this phase, making use of a variety of methodologies. By the end of the pilot study, we expect to achieve a significant understanding of the role of tenure in adoption of alley farming. Our aim here, from the point of view of methodology, is to avoid over-reliance on a large sample survey as the principal instrument for drawing conclusions about a wide range of complex issues. Rather, the pilot study will provide the basis for designing a survey instrument which will help us test tightly constructed research hypotheses which have not already been tested by other means in the course of the pilot study.

Activities to be carried out in the pilot study phase include a review of customary land and tree tenure and the significance of statutory law and administrative codes on adoption of alley farming, key informant interviews in likely research sites, and a small sample survey collecting detailed information on land and tree tenure rules. The questionnaire to be administered in the next phase will be designed and tested during the pilot study. Affiliates will prepare an Interim Research Report, summarizing the findings of the pilot study. The report will provide a tentative outline of subjects to be covered in the Final Research Report. Mr. Stienbarger will visit each country for approximately ten days during the pilot study phase. He will assist especially with questionnaire design.

c. Field Survey (July to September 1990)

As described above, the pilot study will provide the basis for design of a carefully constructed survey questionnaire. We have impressed upon each of our affiliates our concern that survey instruments not be overly long, and that sample size be kept to the minimum necessary to meet statistical testing standards.

d. Data Analysis (September to November 1990)

During this phase, survey data and other information will be analyzed and evaluated. Mr. Stienbarger will visit each affiliate during this period, to assist with technical problems arising in the course of data analysis.

e. Report Preparation (November 1990 to January 1991)

Country affiliates will prepare Draft Final Reports, presenting the findings of their research programs. After completion of the Draft Final Reports, Dr. Lawry and Mr. Stienbarger will visit each country, and will review the reports with the affiliate scientists. Based upon that joint review, affiliates will prepare a Final Report. Affiliate budgets provide a modest grant to fund one-day workshops in each country, where research findings will be presented to policy makers, program staff and the research community.

3. Final Report to ILCA

LTC is responsible for preparing the Final Report to ILCA. This will consist of a comparison and synthesis of research findings and a compilation of national studies, edited by LTC. Dr. Lawry and Mr. Stienbarger propose to do most of the drafting of the final report at ILCA-Ibadan during a three to four week period in March or April 1991. LTC has suggested to ILCA-Ibadan that it sponsor a two-day workshop in Ibadan to bring together one or two members from each national team, as well as the LTC team, at the start of the period set aside by LTC for final report preparation.

II. Research Issues

On the basis of Mr. Stienbarger's literature review, and discussions with our research associates in Cameroon, Nigeria and Togo, some key issues have emerged which will likely be principal subjects of field investigation. These are summarized below.

1. Land Tenure Security

Alley farming requires a long-term production horizon. Farmers will not plant alley crops if they are uncertain about their ability to control the farm holding over a multiple-year production cycle, and probably indefinitely. There are several potential sources of insecurity in West African land tenure arrangements which may reduce farmer incentives to plant alley crops.

The Balance of Rights Between the Lineage and the Farmer.

Lineage authorities may have the right to reallocate or redistribute land among lineage members on the basis of periodic assessments of household land requirements. However, the ability of authorities to exercise such rights may be counterbalanced by various factual and procedural requirements. The right of the lineage authority to reallocate land may be legal acknowledgement of the lineage's original rights over land, but such reallocations may only rarely be carried out in practice. Research will attempt to sort out distinctions between lineage rights in principle, and the exercise of such rights in practice, and what the de facto situation implies for farmer perceptions of tenure security. Research will also consider circumstances under which tree planting may be interpreted by lineage authorities as an assertion by individual lineage members of long-term private rights, and a challenge to lineage control over land.

Long-term Use Rights of Non-lineage Members and Stranger Farmers.

Extensive areas of land are farmed in West Africa by non-lineage members, under a variety of use right arrangements. Lineage members who have secured land through original allocation or inheritance will likely enjoy greater long-term tenure security than non-lineage members, such as stranger farmers, who often have no tenure security beyond the immediate cropping season. Non-lineage members are often prohibited from planting trees. The extent to which alley crops will fall under this general prohibition will be examined in the research program.

Limitations on Tree Planting in Tenancy Arrangements.

Various tenancy arrangements, such as renting, pledging, and sharecropping, will be of such short duration that farmers will often not have sufficiently long-term tenure to engage in alley farming. Likewise, land owners may prohibit tenants from planting permanent tree crops, as this may be interpreted as an assertion of long-term rights. In each research area, rules governing tenancy arrangements will be examined for their implications to adoption of alley farming by tenants.

Research will consider the frequency of the main tenure types (land held and farmed by lineage members, land farmed under various terms by non-lineage members, land farmed under tenancy arrangements), and what the distribution of ownership and use arrangements may imply for general adoption of alley farming. Research will identify tenure arrangements where farmers, by virtue of the balance of rights between lineage authority and landholders, between landholders and tenants, and the extent of collective control over land use, are most likely to have adequate tenure security to adopt alley farming, other factors also being favorable.

2. Tree Tenure Security

In considering tree tenure security, we are concerned with the ability of those who plant alley crops to control their management and use. The literature review has underscored the extent to which rights of ownership and use of trees may differ from those governing land tenure. Tree rights vary with a number of factors, including whether the tree is planted or self-sown, whether its uses are subsistence or commercial in character, and indeed the tenure of the land on which the tree occurs. Rights to such commercial tree crops as cocoa may be highly individualized, and may operate independently of land rights. Often, self-sown trees producing subsistence products, such as firewood or berries and herbs, are treated as communal property. At the same time, known tree tenure rules may offer little analogy for predicting the tenure of alley crops, principally because the culture and uses of alley crops have limited parallels among more common tree crops. Research will examine the bases in tenure by which farmers establish rights to alley crops: On the basis of the planters' tenure to farmland, on the basis of tree tenure rights operating independently from land tenure, or on the basis of a combination of land and tree tenure rights.

3. The Role of Overlying Community Use Rights to Farmland.

There may exist overlying community use rights to farm holdings, for certain purposes and at certain times of year, which may preclude planting of alley crops or other permanent tree crops. A common example is the right of community livestock holders to graze their animals on farms after harvest of field crops. Field holders may be allowed to fence out livestock but the extra costs may significantly reduce returns to alley farming. Likewise, collective decisions affecting long-term cropping and fallow patterns may preclude planting of permanent tree crops on individual farms. (This apparently was a factor in low levels of establishment of alley crops on distant fields in southeast Nigeria, monitored by ILCA.) Research will consider the role of overlying community use rights and collective land use decision-making in adoption of alley farming.

4. Differences in Land and Tree Rights Among Men and Women.

Women rarely have independent rights to land, but derive access to land through tenures held by their husbands. The relationship between women's tree and land tenure rights and the ability to make independent decisions about adoption and use of alley crops is critical, as women are principally responsible for food crop production. The fact that widows have a high adoption rate relative to other groups participating in ILCA trials in Nigeria

may suggest that independent control over farming operations is a factor in adoption by women. Several questions arise. Will men or women decide whether to plant alley crops? If men, will they be as susceptible as women, the food crop manager, to the arguments in favor of alley cropping? If women are able to decide upon adoption, will they have sufficient control over use of the alley crop, especially in relation to competitive uses as green manure or livestock forage, to justify investment of their labor in alley crop establishment and management? Do women have greater control over land use on certain types of holdings, such as compound gardens? If so, how will this be a factor in decisions to adopt?

5. State Regulation of Tree Use.

In West African Francophone countries, including Cameroon and Togo, forestry legislation gives the state sweeping powers to control farmer use and management of trees on farm, including trees planted by farmers themselves. The expectation that the state would in any way regulate cutting and use of alley crop foliage would likely discourage farmers from adopting alley farming. State regulatory policies and practices toward alley cropping as a form of farm forestry will be examined in the course of the research program.

ANNEX 1

Country Research Program

Scopes of Work

Cameroon

Nigeria

Togo

Scope of Work

The Implications of Land and Tree Tenure for the Introduction of Alley Farming in Cameroon

A Research Project of

The Institute de la Recherche Agronomique,
Ministry of Higher Education and Scientific Research and
The Land Tenure Center,
University of Wisconsin-Madison

November 1989

Introduction

In June 1989, the International Livestock Center for Africa (ILCA) and the Land Tenure Center (LTC), University of Wisconsin-Madison, entered into an agreement to undertake research on the implications of land and tree tenure arrangements to the adoption of alley farming technologies in the humid zone of West Africa. The agreement stipulated that LTC carry out the research program in collaboration with national research institutions in three countries in the humid region. This paper describes the program of collaborative research in Cameroon between the Land Tenure Center and the Institute de la Recherche Agronomique (IRA), Ministry of Agriculture.

Alley Farming and Land and Tree Tenure in Cameroon

Since 1986, IRA and the International Council for Research on Agroforestry (ICRAF) have been carrying out research on the potential agroforestry practices for improving the productivity of the cocoa/food crops/coffee farming system of the southern plateau region of Cameroon. An extensive analysis of this system identified a number of constraints to improving productivity, including declining soil fertility due to reduced fallow, poor response to inorganic fertilizers, labor shortage, and poor livestock control (Agroforestry Potential in the Humid Lowlands of Cameroon; IRA/ICRAF Task Force Report No. 12). The IRA/ICRAF Agroforestry Research Project has begun a program of farmer-managed farm trials to evaluate the viability of agroforestry and other interventions in addressing the problems of this farming system. Among the interventions proposed are the introduction of fertility-improving trees in mixed inter-cropping and alley cropping arrangements; introduction of labor-saving tools; and use of leafy fodder and fruit producing trees as a feed source for confined livestock.

Evaluation of on-farm trials conducted in Nigeria by ILCA's Humid Zone Program in Ibadan identified tree and land tenure as important factors affecting farmer adoption of alley farming. Long-term farmer security over land is an important prerequisite to investment in practices such as agroforestry, which yield returns over a relatively long time frame. Farmers' land tenure in the Nigerian research areas varied with a number of factors, including the predominant agricultural and land use system (e.g. in areas farmed under long-term fallow, farmers generally did not have a right to farm the same area of land on a year to year basis), the extent to which the lineage or local authority exercised the right to periodically reallocate land among community members, and the existence of overlying community land use rights, such as those allowing grazing on cropland between annual cropping seasons. Other research by LTC and ICRAF (Trees and Tenure, Fortmann and Riddell, 1985; Land, Trees and Tenure, Raintree, 1987; Whose Trees? Proprietary Dimensions of Forestry, Fortmann and Bruce, 1988) has identified a number of other tenure factors affecting adoption of agroforestry practices, including differential gender rights to land and tree products, the land rights of stranger farmers, and farmer land rights under short-term rental and pledging tenures.

Land and tree tenure could be important factors affecting adoption of alley cropping and other agroforestry technologies in Cameroon. Tenure rules and conventions may limit the introduction of alley farming in certain situations, whereas in other situations tenure may be sufficiently secure to accommodate adoption by farmers. Applied tenure research carried out as part of a broad program of agronomic and socio-economic research can help identify opportunities for the wider introduction of alley farming.

The Research Program

The Institute de la Recherche Agronomique and the Land Tenure Center will jointly carry out the program of research. IRA will be responsible for carrying out field research activities, data analyses, and preparation of Interim and Final Research Reports. LTC will provide assistance to IRA in research design, questionnaire design, data analysis and other activities mutually agreed by IRA and LTC. LTC will work with IRA to ensure that research activities will be undertaken so as to ensure comparability of data and findings with other country programs participating in the ILCA/LTC humid zone research program.

The period of the research program will be from 1 February 1990 to 30 January 1991. The research program will have five phases:

1. Research Design. (15 February to 1 March 1990)

The IRA and LTC team will jointly develop a detailed research design, providing a survey of available information on tree and land tenure issues in Cameroon, and describing the research hypotheses to be tested, methodologies to be employed, and the program of field research activities and data analyses. Also during this phase, a pilot survey will be designed. IRA will enter into an agreement with an expert on customary land law to prepare a report on current land tenure issues in the humid zone. The LTC Principal Investigator and the LTC Field Manager will visit Yaounde during this phase.

2. Pilot Study. (15 April to 30 May 1990)

During this phase, IRA will undertake key informant interviews and a small sample survey as the basis for delineating the major tree and land tenure research issues for further evaluation in subsequent field surveys. The expert report on customary land law will also be completed during this phase. Based upon findings of the pilot study and the report on customary land law, an Interim Report will be prepared summarizing the state of available knowledge on tenure as a factor in the adoption of alley farming. The Interim Report will include a tentative outline of the main subjects to be covered in the Draft Final Report. Information gathered in this phase will be used to design the large sample survey, which will be carried out in the next phase. The LTC Field Manager will visit Cameroon for approximately 10 days during this period.

3. Field Survey. (1 July to 15 August 1990)

IRA will carry out a structured sample survey during this period, as well as other research activities indicated as appropriate by the Pilot Study. Surveys will be carried out in the two areas in the southern Plateau region where IRA will be introducing farmer-managed alley farming trials.

4. Data Analysis. (1 September to 30 October 1989)

IRA will carry out analyses of the field survey and other data collected by mutual agreement of IRA and LTC at its facilities in Yaounde. During this phase, the LTC Field Manager will visit Yaounde to assist IRA with data analyses.

5. Report Preparation. (1 November to 15 December 1990)

IRA will prepare a Draft Final Report, presenting the findings of the research program. A Final Report will be prepared based a review of the Draft Final Report undertaken by the IRA and LTC teams. The LTC Principal Investigator and the LTC Field Manager will visit Yaounde during this period.

IRA will organize a one day workshop to present research findings and recommendations to senior officials and policy makers.

Scope of Work

The Implications of Land and Tree Tenure for the Introduction of Alley Farming in Southern Nigeria

A Research Project of

The Land Tenure Center,
University of Wisconsin-Madison and
Professor Yakub L. Fabiyi,
Department of Agricultural Economics,
Obafemi Awolowo University,
Ile-Ife, Oyo State, Nigeria

Introduction

In June 1989, the International Livestock Center for Africa (ILCA) and the Land Tenure Center (LTC), University of Wisconsin-Madison, entered into an agreement to undertake research on the implications of land and tree tenure arrangements to the adoption of alley farming technologies in the humid zone of West Africa. The agreement stipulated that LTC carry out the research program in collaboration with national research institutions in three countries in the region. This paper describes the program of collaborative research in Nigeria between the Land Tenure Center and Professor Yakub L. Fabiyi, Department of Agricultural Economics, Obafemi Awolowo University.

Alley Farming and Land and Tree Tenure in Nigeria

Alley farming is an agroforestry technology involving production of leguminous trees and shrubs in intercropping arrangements with cereal and tuber crops. Cuttings from the trees are used as a mulch and as a supplementary livestock forage. Alley farming is designed to improve fallow management in areas of declining soil fertility and increasing population pressure. Much of the pioneering agronomic research on alley farming has been carried out by the International Institute for Tropical Agriculture (IITA), at its research station in Ibadan, Nigeria. Similarly, the International Livestock Center for Africa (ILCA), through its Humid Zone program at Ibadan, has carried out many of the initial farmer managed trials testing farmer use and adoption of alley farming practices.

Research carried out by ILCA indicated that land tenure was frequently an important factor in whether farmers became long-term adopters of alley farming. In some participating villages in southeast Nigeria, lineage authorities retained the right to reallocate holdings among individual farmers on an annual basis, reducing incentives for farmers to plant trees which mature over a long period. In distant farm areas subject to long-term fallow, year to year farming decisions were made collectively, contributing to uncertainty over long-term farming patterns on individual

holdings. Although women provide most of the labor for food crop production, they do not have independent rights to land and trees. The extent to which women exercise control over key management decisions, such as the adoption of alley farming as new technology, remains unclear. The ILCA research collected only limited data on land and tree tenure arrangements in southwest Nigeria. Although tenure appears to influence the adoption of alley farming, a more formal research program which specifically addresses tenure issues is needed to better understand the role of tenure in alley farming, and to improve the design of future interventions.

The Research Program

Dr. Yakub L. Fabiyi and the Land Tenure Center will jointly carry out the program of research. Dr. Fabiyi will assemble and manage a team of researchers, and will be responsible for carrying out field research activities, data analyses, and preparation of Interim and Final Research Reports. The LTC will provide assistance to Dr. Fabiyi and his team in research design, questionnaire design, data analysis and other activities mutually agreed by Dr. Fabiyi and the LTC. The LTC will work with Dr. Fabiyi to ensure that the research program provides comparability of data and findings with other country research programs participating in the ILCA/LTC tree and tenure research program.

The period of the research program will be from 1 March 1990 to 28 February 1991. The research program will have five phases:

1. Research Design. (1 March to 10 March 1990)

Dr. Fabiyi and the LTC will jointly develop a detailed research program, based on a survey of available information on tree and land tenure issues in southern Nigeria, and describing the research hypotheses to be tested, research methodologies to be employed, and the program of field research activities and data analyses. A detailed design of the Pilot Study (phase 2 of the program) will be completed as part of this exercise. Dr. Fabiyi and the LTC will request briefings by ILCA and IITA scientists in Ibadan on technical and other features of alley farming technologies, as background to the research design. Short visits will be made to IITA and ILCA farmer managed alley farm trials near Ibadan. The LTC Principal Investigator and the LTC Field Manager will be resident in Ibadan during this phase.

2. Pilot Study. (1 April to 15 June 1990)

During the Pilot Study phase, Dr. Fabiyi and his team will carry out key informant interviews and a small sample survey as the basis for delineating the major tree and land tenure research issues for further evaluation in subsequent field surveys in Phase 3. Dr. Fabiyi will enter into an agreement with a legal scholar to prepare a report on current land tenure issues in selected research areas. The expert's report will be completed during the Pilot Study phase. Based upon findings of the pilot study and the expert's report on land tenure, an Interim Report will be prepared by Dr. Fabiyi which summarizes the state of available knowledge on tenure as a factor in the adoption of alley farming in southern Nigeria.

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The Interim Report will include a tentative outline of the main subjects to be covered in the Draft Final Report, and a draft of the questionnaire to be administered in the next phase of the research program (Phase 3). The LTC Field Manager will visit Nigeria for approximately 10 days during this period, and will assist with the design of the questionnaire to be administered in Phase 3.

3. Field Survey. (1 August to 30 September 1990)

Dr. Fabiyi will carry out a structured sample survey during this period, as well as other research activities indicated by the Pilot Study.

4. Data Analysis. (15 October to 15 November 1990)

Dr. Fabiyi will carry out analyses of the field survey and other data collected by mutual agreement of Dr. Fabiyi and the LTC. During this phase, the LTC Field Manager will visit Nigeria to assist with data analysis.

5. Report Preparation. (16 November to 31 December 1990)

Dr. Fabiyi will prepare a Draft Final Report, presenting the findings of the research program. A Final Report will be prepared based on a review of the Draft Final Report jointly undertaken by Dr. Fabiyi and the LTC. The LTC Principal Investigator and the LTC Field Manager will visit Nigeria during this period, for direct consultations with Dr. Fabiyi.

Dr. Fabiyi will organize a one day workshop to present research findings and recommendations to senior officials and policy makers.

16-

Portée de Recherche
Les Implications du Régime Foncier et de la Propriété des Arbres
sur l'Introduction de la Culture en Couloir au Togo

Un Projet de Recherche de
Foli Messanvi, Faculté du Droit
Université du Benin, Lomé, Togo et le
Land Tenure Center,
University of Wisconsin-Madison

Décembre 1989

Introduction

Au début de juin 1989, le Centre International pour l'Elevage en Afrique, (CIPEA) en collaboration avec le Land Tenure Center (LTC), Université de Wisconsin a formulé un accord pour mettre en marche un projet qui avait pour son but l'identification des implications du régime foncier (la tenure de la terre) et de la propriété des arbres sur l'introduction des technologies de la culture en couloir dans la zone humide de l'Afrique de l'Ouest. L'accord a stipulé que le LTC collaborerait avec les institutions nationales de recherche. Ce document donne des détails sur le programme de recherche qui sera achevé par Dr. Messanvi Foli, Université du Benin, Lomé, Togo en collaboration avec le LTC.

La Culture en Couloir et du Régime Foncier et Propriété des Arbres

Une évaluation des épreuves en fermes au Nigeria menait par CIPEA/Ibadan a déterminé que le mode de tenure des arbres et de la terre sont deux facteurs importants dans l'adoption de ce technologie. La sécurité d'accès à long-terme à la terre est nécessaire pour encourager l'investissement dans des pratiques, tel qu'agroforesterie, qui ne fournissent que des bénéfices à la long-terme. Quelques exemples des aspects de la tenure de la terre au Nigeria qui semblaient avoir une influence sur l'adoption de la culture en couloir y suivent: 1) le système prédominant de l'agriculture et de la utilisation de la terre (par exemple, souvent des cultivateurs n'ont pas le droit de cultiver le même terrain chaque année, surtout si le terrain se trouve loin de la maison); 2) le contrôle que les autorités de lignage exercent sur l'allocation annuel de terre parmi les membres de la communauté; et 3) l'existence des droits communautaires qui s'imposent sur l'utilisation de la terre (par exemple le droit communautaire au fourrage entre les saisons de cultivation)

D'autres recherches menées par LTC et ICRAF (Trees and Tenure, Fortmann and Riddell, 1985; Land, Trees and Tenure, Raintree, 1987; Whose Trees? Proprietary Dimensions of Forestry, Fortmann and Bruce, 1988) ont identifié d'autres éléments qui peuvent empêcher l'adoption d'agroforesterie. Par exemple, on doit considérer aussi les droits des femmes sur la terre et des arbres, les droits des fermiers étrangers, et les droits des cultivateurs qui louent leur terres ou qui les prêtent aux autres.

Au Togo, la tenure des arbres et de la terre peuvent être une contrainte contre l'introduction de la culture en couloir et des autres technologies de agroforesterie dans certaines situations. Dans d'autres situations, cependant, la sécurité de tenure faciliterait l'investissement dans une telle technologie. Si une étude de la tenure est liée avec un programme plus étendu de recherche agronomique et socio-économique, elle peut servir à identifier des circonstances qui favorisent l'introduction très élargie de la culture en couloir.

Le Programme de Recherche

Dr. Messanvi Foli et le LTC achèveront en collaboration le programme de recherche. Dr. Foli sera le responsable pour la mise en place de toutes les activités de recherche sur le terrain, l'analyse des données, et la préparation des rapports préliminaires et finals. LTC aidera avec le développement des méthodologies et des questionnaires, aussi bien qu'avec l'analyse des données et d'autres activités que le LTC et Dr. Foli jugent nécessaire. Le LTC et Dr. Foli travailleront ensemble pour assurer que les données et les conclusions soient comparables à des recherches dans les autres pays impliqués dans le projet.

La période de recherche durera du 11 mars 1990 jusqu'au 31 janvier 1991. Il y aura cinq phases:

1. Développement des Méthodologies. (11 Mars à 22 Mars 1990)

Dr. Foli et le LTC développeront en collaboration les détails du programme de recherche, y compris toute l'information disponible sur les questions de tenure des arbres et de la terre au Togo. On décrira les hypothèses de recherche, les méthodologies de recherche, le programme des activités sur le terrain, et l'analyse des données. En plus, une étude préliminaire sera développée. L'Investigateur Principal et le Coordinateur sur le Terrain de LTC visiteront Lomé pendant cette phase-ci.

2. Etude Préliminaire (25 Mars à 20 Mai/31 Juillet 1990)

Pendant cette phase, Dr. Foli entreprendra les interviews avec les informants clefs aussi bien qu'une enquête à petite échelle qui donneront la base pour identifier les questions les plus importantes de la recherche sur ces questions de tenure. Les données recueillies seront utilisées au développement des enquêtes générales qui suivront l'étude préliminaire. En utilisant les données de l'étude préliminaire, Dr. Foli préparera un Rapport Préliminaire qui résumera la connaissance actuelle des influences de la tenure sur l'adoption de la culture en couloir. Un sommaire des sujets principaux qui seront présentés dans le Rapport Final fera partie du Rapport Préliminaire. En plus, ce rapport décrira le système coutumier de la tenure de la terre et des arbres. Le Coordinateur sur le Terrain visitera Lomé pour à peu près 10 jours pendant cette période.

3. Enquête Général. (1 Aout à 10 Septembre 1990)

Dr. Foli fera une enquête en utilisant un questionnaire structuré aussi bien que d'autres méthodologies indiquées par les résultats de l'Etude Préliminaire. Les régions de travail seront déterminées pendant la première phase.

4. Analyse des Données. (15 Octobre à 30 Novembre 1990)

Dr. Foli fera l'analyse des données recueillies pendant l'enquête général et des autres efforts de recherche établi par l'accord entre LTC et Dr. Foli. Pendant cette phase, le Coordinateur sur le Terrain visitera Lomé pour aider avec l'analyse des données.

5. Preparation du Rapport Final. (1 Decembre à 31 Janvier 1991)

Dr. Foli preparera une Rapport Final Ebauché qui presentera les résultats du programme de recherche. La Rapport Final sera basé sur une revue de la Rapport Final Ebauché entrepris par les équipes du LTC et du Dr. Foli. L'Investigateur Principal et le Coordinateur sur le Terrain de LTC visiteront Lomé pendant cette phase.

Dr. Foli organisera une séminaire d'un jour de duration afin de presenter les résultats et les recommandations aux officiels et (policy makers).