Agroforestry Literature:

A Selected Bibliography on Subsaharan Africa

The International Council for Research in Agroforestry (ICRAF) was established in 1978 with headquarters in Nairobi, Kenya. ICRAF is an autonomous, non-profit international research council governed by a Board of Trustees with equal representation from developed and developing countries. The mandate is to initiate, stimulate and support research leading to more sustainable and productive land use through the integration or better management of trees in land-use systems.

The Council derives its operational funds from voluntary contributions by several bilateral, multilateral and private organizations. In 1989, these included the World Bank (International Bank for Reconstruction and Development – IBRD), the African Development Bank, the International Fund for Agricultural Development (IFAD), the International Development Research Centre (IDRC), the Swedish Agency for Research Cooperation with Developing Countries (SAREC), the Ford Foundation and the Governments of Australia, Canada, Finland, France, the Federal Republic of Germany (BMZ/GTZ), The Netherlands, Norway, Sweden, Switzerland and the United States of America (USA).

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Cover photos: A visiting scientist from the University of Science and Technology in Ghana and a student from Egerton University in Kenya take measurements at ICRAF's field station in Machakos, Kenya. The visiting scientist identifies agroforestry publications in ICRAF's library database.

Agroforestry Literature:

A Selected Bibliography on Subsaharan Africa

Compilers:
H. Munyua, B.M. Bondole and L. Majisu

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INTRODUCTION

Agroforestry, as the term is used at ICRAF, is a collective word for all land-use systems and practices in which woody perennials are deliberately grown on the same land-management unit as crops or animals or both. This can be done in some form of spatial arrangement or in a time sequence. To qualify as agroforestry, a given land-use system or practice must permit significant economic and ecological interactions between the woody and nonwoody components.

Within this broad definition, a wide variety of both traditional and new systems and practices falls under the umbrella concept of agroforestry. Shifting cultivation; taungya afforestation; various types of 'home gardens' in humid tropical areas; silvopastoral systems in dry areas; crop or livestock production under commercial tree crops, such as coconut, rubber, or oil palm; alley cropping; and windbreaks and live fences are some of the host of agroforestry practices found throughout the tropical and subtropical developing world.

Some of these practices have traditionally fallen under the disciplinary mandate of agricultural departments, others under forestry, still others under horticulture or animal husbandry. Most of them, however, have attracted little or no attention from established research, extension, or development institutions.

The structure of information on agroforestry is complex, and there are significant gaps in knowledge and literature on the subject. Even the definition of agroforstry is debatable. There is also controversy between agronomists, foresters, and other specialists about the appropriate institutional niche for agroforestry. In spite of these questions, agroforestry is now clearly established as an area of organized scientific research - the literature in this selected bibliography attests to that.

This bibliography on agroforestry in Subsaharan Africa covers the period from 1961 to early 1988. It contains 244 references and serves as an introduction to the essential readings on the subject. It will complement Agroforestry Abstracts, a quarterly journal copublished since June 1988 by ICRAF and CAB International (CABI). The bibliography has been produced using the Micro CDS/ISIS textual database management software (version 2.0) developed by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Each bibliographic unit has been described according to the ICRAF in-house format and rules. References have been selected from the ICRAF Library database, and entries have been indexed using keywords selected from CABI and AGROVOC (Food and Agriculture Organization of the United Nations) thesauri, as well as our own in-house terms (see in particular ICRAF Working Paper No.8).

Entries in the bibliography are listed sequentially by a master file number, which is a unique number assigned to each record by the computer. Four indexes appear at the end of the bibliography: one each for author, species, subject, and country/geographic area. The country index is based on the two-letter country codes provided by the International Standards Organization (ISO).

All documents listed in the bibliography are available from ICRAF. They can also be consulted in the ICRAF Library. Individual photocopies of documents for scientific research are available at a charge of US$0.20 per page. Books will usually not be photocopied for reasons of copyright. Requests for photocopies of documents cited in the bibliography may be referred to: INFODOC/ICRAF, P.O. Box 30677, Nairobi, Kenya.

The support of the Information Sciences Division of the International Development Research Centre (IDRC) is gratefully acknowledged.

Richard Labelle
Head, Information and
Documentation Unit
ICRAF

INTRODUCTION

L'agroforesterie, au sens où l'entend l'ICRAF, est un terme collectif désignant tous les systèmes et techniques d'utilisation des terres où des ligneux pérennes sont cultivés délibérément sur des terrains utilisés par ailleurs pour la culture et/ou l'élevage dans un arrangement temporel ou spatial. Ce terme se rapporte uniquement aux systèmes et modes d'utilisation des terres où les interactions écologiques et économiques entre les ligneux et les autres composantes du système sont significatives.

Selon cette définition large, l'agroforesterie englobe tout un éventail de systèmes d'utilisation des terres nouveaux et traditionnels - tels que la culture itinérante, le système taungya, divers types de jardins de case dans les zones tropicales humides, les systèmes sylvo-pastoraux des zones sèches, la culture ou l'élevage sous des plantations commerciales d'arbres tels que le cocotier, l'hévéa ou le palmier à huile, la culture en couloirs, les brise-vent et les haies vives - pour ne citer que quelques exemples de technologies agroforestières rencontrées dans les pays en développement des zones tropicales et subtropicales.

Traditionnellement, certaines de ces technologies relèvent du mandat des services agronomiques, d'autres des services forestiers, et d'autres encore sont assimilées à l'horticulture ou à la zootechnie. Dans la plupart des cas, les institutions officielles de recherche, de vulgarisation ou de développement ne leur ont pourtant guère accordé d'importance.

La structure de l'information agroforestière est complexe, et il existe des lacunes considérables dans les connaissances et dans la littérature publiée sur ce sujet. La définition même de l'agroforesterie prête à controverse, ainsi que son appartenance à tel ou tel secteur ou discipline. En dépit des ces tiraillements, l'agroforesterie constitue désormais un domaine scientifique bien établi, comme le prouve l'information contenue dans cette bibliographie.

La bibliographie sur l'agroforesterie en Afrique au sud du Sahara couvre la période qui va de 1961 au début de l'année 1988. Elle contient 244 références et constitue une introduction aux ouvrages de base en la matière. Elle complète la revue "Agroforestry Abstracts", publication trimestrielle coproduite depuis juin 1988 par l'ICRAF et le "Commonwealth Agricultural Bureaux International" (CABI). Cette bibliographie a été réalisée à l'aide du logiciel de gestion de bases de données CDS/ISIS (version 2.0) mis au point par l'UNESCO.

Les règles adoptées pour la présentation des unités bibliographiques sont celles de l'ICRAF. Les références ont été sélectionnées à partir de la base de données de la bibliothèque du Conseil, et indexées en utilisant les mots clés contenus dans les thesaurus publiés par CABI et AGROVOC (FAO), ainsi que ceux propres à l'ICRAF (voir le Document de travail ICRAF n° 8).

L'ordre de présentation des références est celui du fichier maître et suit le numéro assigné par l'ordinateur. Les quatre index qui figurent à la fin de la bibliographie donnent la liste des auteurs, des espèces, des sujets et des pays/régions géographiques. L'index des pays est basé sur un code à deux lettres mis au point par l'ISO (International Standards Organization).

Les documents contenus dans cette bibliographie sont tous disponibles à l'ICRAF et peuvent être consultés sur place. Des photocopies peuvent être obtenues au tarif de 0,20 dollars E.-U. par page (sauf pour les livres protégés par des droits d'auteur) auprès de: INFODOC/ICRAF, P.O. Box 30677, Nairobi, Kenya.

Cette bibliographie a pu être réalisée grâce à l'appui de la Division des sciences de l'information du Centre de recherches pour le développement international (CRDI), à laquelle nous adressons nos vifs remerciements.

SAMPLE ENTRY

1. _____ 00088

2. _____ 04340

3. _____ FERNANDES, E. C. M.; O'KTIN'GATI, A.; MAGHEMBE. J.A.

4. _____

5. _____ THE CHAGGA HOMEGARDENS: A MULTISTORIED AGROFORESTRY CROPPING SYSTEM ON MT. KILIMANJARO (NORTHERN TANZANIA)

6. _____

7. _____ AGROFORESTRY SYSTEMS

8,9.10,11 (1984) VOL 2 pg 73-86 (EN)

12. _____ 8 REF,; 4 FIG. SUMMARY (EN)

13. _____ XA; TZ

14. _____ ABSTRACT The Chagga homegardens (an agroforestry system) is described in detail. The homegardens are characterized by an intensive simultaneous integration of numerous multipurpose trees and shrubs with food crops and animals on the same land. The Chaggas are skilled farmers with an intimate knowledge of the crops and their ecological requirements. The paper identifies the major components, describes their interactions and management aspects and presents an evaluation of the system's ecological stability, productivity and sustainability.

15. _____ AGROFORESTRY; HOME GARDENS; MULTIPURPOSE TREES; LIVESTOCK; ZERO GRAZING; TENURE; FOOD CROPS; ECONOMICS; SOIL TYPES; CASH CROPS

1. Master File Number
2. Accession Number
3. Author
4. Corporate Author
5. English Title
6. Other Title (in original language)
7. Source
8. Date of Publication
9. Volume and Issue Number
10. Pagination
11. Language of the Text
12. Notes
13. Geographic/Country Location
14. Abstract
15. Species and Subject descriptors

EXEMPLE DE REFERENCE BIBLIOGRAPHIQUE

1._____ 0185
2._____ 0900
3._____ GODEFROY, J.; JACQUIN, F.
4._____ UNIV. OF NANCY (FRANCE)
5._____ RELATION BETWEEN THE STRUCTURAL STABILITY OF CULTIVATED SOILS AND ORGANIC FERTILISER APPLICATION UNDER TROPICAL CONDITIONS. COMPARISON WITH FOREST SOILS
6._____ (RELATION ENTRE LA STABILITE STRUCTURALE DES SOLS CULTIVES ET LES APPORTS ORGANIQUES EN CONDITIONS TROPICALES. COMPARAISON AVEC LES SOLS FORESTIERS)
7._____ FRUITS
8,9,10,11,12(1975) VOL 30 NO 10 pg 595-612 FR 17 FIG.
13._____ XA; CI
14._____ Analyse les résultats des expériences sur l'application de fumures organiques sur des sols ferralitiques hydromorphes. L'auteur démontre les effets négatifs de la mise en culture sur la teneur en matière organique et la stabilité structurale des sols. Ces essais démontrent aussi l'action améliorante des amendements organiques sur la structure des sols forestiers, plus précisément sur la cohésion et la mouillabilité des agrégats.
15._____ MUSA; ANANAS COMOSUS; SOIL FERTILITY; SOIL STRUCTURE; ORGANIC MATTER; FOREST SOILS; MANURES; TROPICS

1. Numéro du fichier maître
2. Numéro d'accession
3. Auteur(s)
4. Auteur collectif
5. Titre anglais
6. Autre titre (dans la langue originale)
7. Source
8. Date de publication
9. Volume et numéro
10. Pagination
11. Langue du document
12. Notes
13. Index géographique/pays
14. Résumé
15. Espèces et mots clés

LITTERATURE AGROFORESTIERE:

Bibliographie sélective sur l'Afrique au sud du Sahara

Cette bibliographie a été réalisée par
H. Munyua, B.M. Bondole et L. Majisu

ABSTRACTS

00001
04245
KANG, B.T.; DUGUMA, B.
IITA, IBADAN (NIGERIA)
NITROGEN MANAGEMENT IN ALLEY CROPPING SYSTEMS
(1984) EN
IITA
XA;NG pg 1-25
Describes the use of Leucaena leucocephala and Gliricidia sepium in alley cropping in Nigeria, a system where food crops are grown in alleys formed by hedgerows of trees or shrubs. It highlights the use of woody legumes as a potential for nitrogen due to their nitrogen fixing capacity, and the use of their leaves as green manure. The alley cropping system has an advantage over the traditional shifting cultivation system, which has become less productive due to shortened fallow periods caused by population pressure, in that cropping is continuous and soil fertility is enhanced. It is concluded that, despite the very promising results obtained, further investigations are needed to evaluate the nitrogen contribution of a wide variety of woody legumes.
5 TABLES; 2 FIG.; 43 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; GLIRICIDIA SEPIUM; GREEN MANURES; WOODY LEGUMES; NITROGEN; YIELDS; CROPS; FOOD CROPS; ALLEY CROPPING

00002
01950
OJENIYI, S.O.; AGBEDE, O.O.
COCOA RESEARCH INSTITUTE, IBADAN (NIGERIA); FORESTRY RESEARCH INSTITUTE, IBADAN (NIGERIA)
EFFECTS OF SINGLE-CROP AGRI-SILVICULTURE ON SOIL ANALYSIS
EXPL AGRIC Vol 16 (1980) EN
NG;XA pg 371-375
Describes experiments carried out to examine the effects of agrisilviculture in three different ecological zones of Southern Nigeria. Considers Gmelina arborea, Gmelina + maize, Gmelina + yam and Gmelina + cassava. Analyses surface layer soils from the experimental plots for nitrogen, phosphorus and other minerals.
3 TABLES; 14 REF. SUMMARY (EN)
GMELINA ARBOREA ; FOOD CROPS; SOIL FERTILITY; AGRISILVICULTURE; INTERCROPPING; SOIL PHYSICOCHEMICAL PROPERTIES; HUMID TROPICS

00003
01434
OLAWOYE, O.O.
IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT FOOD PRODUCTION IN FOREST AREAS: AN ECONOMIC INVESTIGATION
(1977) EN
IBADAN UNIV.
NG;XA pg 1-55
Reviews the causes of food shortage in Nigeria and examines ways of overcoming the problems. Identifies the multiple use of land resources and places emphasis on food production within forest areas. Examines different types of agrisilviculture and their locations and highlights the details of management and organization of the schemes. Discusses the magnitude and types of food produced, as well as the number of farmers and size of farms involved. Considers the cost items of plantation establishment with particular emphasis on advantages of agrisilviculture as a development agent in rural areas. Outlines the policy issues and problems confronting the future of the scheme.
18 TABLES; 15 REF.

AGRISILVICULTURE; FOOD STOCKS; FOREST TREES; CROPS; RURAL DEVELOPMENT; FOOD PRODUCTION; ECONOMIC ANALYSIS; POLICIES; HUMID TROPICS; MANAGEMENT

00004
03285
NWOBOSHI, L.C.
IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT
SOIL PRODUCTIVITY ASPECTS OF AGRI-SILVICULTURE IN THE WEST AFRICAN RAIN FOREST ZONE
AGRO ECOSYSTEMS Vol 7 (1981) EN
NG;XA pg 263-270
Examines the impact of clearing and burning, cultivation and cropping as well as the monospecific tree fallows on the productive potential of the soils of the West African tropical rain forest zone. Gives information on the restoration of soil fertility under short rotation crops, loss of nutrients during cropping and the behaviour and response of ferralitic soils to various intensities of cropping and management methods. Suggests topics for research.
3 TABLES; 12 REF. SUMMARY (EN)
TROPICAL RAIN FOREST; AGRISILVICULTURE; SOIL FERTILITY; CROPS; FALLOW SYSTEMS; RESEARCH; FERRALITIC SOILS; FOREST SOILS; WEST AFRICA; CROPPING PATTERNS

00005
05023
KANG, B.T.; GRIMME, H.; LAWSON, T.L.
IITA, IBADAN (NIGERIA)
ALLEY CROPPING SEQUENTIALLY CROPPED MAIZE AND COWPEA WITH LEUCAENA ON A SANDY SOIL IN SOUTHERN NIGERIA
PLANT SOIL Vol 85 (1985) EN
XA;NG pg 267-277
Results of a 3 year alley cropping investigation of maize and cowpeas with giant Leucaena leucocephala on a sandy soil in southern Nigeria are reported.
8 TABLES; 6 REF.
LEUCAENA LEUCOCEPHALA; VIGNA UNGUICULATA; ZEA MAYS; ALLEY CROPPING; SANDY SOILS

00006
03612
OJENIYI, S.O.; AGBEDE, O.O.
COCOA RESEARCH INSTITUTE, IBADAN (NIGERIA); FORESTRY RESEARCH INSTITUTE, IBADAN (NIGERIA)
SOIL ORGANIC MATTER AND YIELD OF FOREST AND TREE CROPS
PLANT SOIL Vol 57 (1980) EN
NG;XA pg 61-67
Describes an experiment that analyses organic carbon, total nitrogen and 'loss-on-iginition'. Investigates the influence of soil organic matter in forest husbandry and plantation agriculture with special reference to the direct influence of soil organic matter on the yield of tree crops like coffee and Gmelina in different ecological zones of Nigeria. Records regressions of total coffee yield on organic carbon content and correlations between indicators of soil organic matter and growth of Gmelina arborea. Shows the relationship between carbon and Nitrogen ratio and performance of Gmelina.
4 TABLES; 14 REF. SUMMARY (EN)

GMELINA ARBOREA; COFFEA ROBUSTA; COFFEA ARABICA; MANIHOT; ZEA MAYS; SOILS; ORGANIC MATTER; NITROGEN; CARBON; TREE CROPS; YIELDS; AGRISILVICULTURE; FOOD CROPS; SOIL FERTILITY; FORESTS

00007
01946
OJENIYI, S.O.; AGBEDE, O.O.; FAGBENRO, J.A.
COCOA RESEARCH INSTITUTE, IBADAN (NIGERIA). DIV. OF SOIL AND CHEMISTRY; FORESTRY RESEARCH INSTITUTE, IBADAN (NIGERIA)
INCREASING FOOD PRODUCTION IN NIGERIA: 1. EFFECT OF AGRISILVICULTURE ON SOIL CHEMICAL PROPERTIES
SOIL SCIENCE Vol 130 No 2 (1980) EN
NG;XA pg 76-82
Investigates the effect of interplanting a forest tree crop with food crops on the fertility of soil. The investigations cover different ecological zones of Southern Nigeria. Presents data on the chemical analysis of soil samples collected from surface layers of plots planted with Gmelina arborea alone and interplanted with single and multiple food crops. Conclusions are also drawn.
7 TABLES; 24 REF. SUMMARY (EN)
GMELINA ARBOREA; AGRISILVICULTURE; TAUNGYA SYSTEM; INTERCROPPING; FARM FORESTRY; SOIL FERTILITY; SOIL PHYSICOCHEMICAL PROPERTIES

00008
02916
OKALI, D.U.U.; NWOBOSHI, L.C.
IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT
A PRELIMINARY STUDY OF THE PERFORMANCE OF MAIZE PLANTED AMONG COPPICED TEAK
(1977) EN
NG;XA pg 1-8
Describes agrisilviculture and studies the performance of food crops after a planted tree fallow when grown among regenerating tree coppice. Describes an experiment at the University of Ibadan teak plantation in Nigeria where the teak was coppiced and maize was planted among the regenerating teak coppice. Results are detailed.
3 REF.
TECTONA GRANDIS; ZEA MAYS; AGRISILVICULTURE; FOOD CROPS; TREE CROPS; FALLOW SYSTEMS; HUMID TROPICS

00009
B01383
634.0.26(66)
NATIONAL RESEARCH COUNCIL, WASHINGTON (USA)
AGROFORESTRY IN THE WEST AFRICAN SAHEL
(1983) EN
NATIONAL ACADEMY PRESS
XA pg 1-86
Provides an overview of traditional Sahelian agricultural production systems. Approaches are detailed by which modern science and technology can complement the knowledge and experience of the rural Sahelian population in developing more dependable, resilient and socially acceptable agricultural systems. Looks into the theory, principles and potential of agroforestry. Recommends tree/shrub species appropriate for agroforestry systems in the region to combat desertification. Some background information is given on social and institutional factors considered in the design and implementation of agroforestry projects. A systematic approach to project identification is also provided.
25 REF.

ACACIA ALBIDA; SAHEL; AGROFORESTRY; WEST AFRICA; LAND USE; DESERTIFICATION; AGROSILVOPASTORAL SYSTEMS; SILVOPASTORAL SYSTEMS; TRADITIONAL FARMING

00010
04248
NGAMBEKI, D.S.
IITA, IBADAN (NIGERIA)
ECONOMIC EVALUATION OF ALLEY CROPPING LEUCAENA WITH MAIZE-MAIZE AND MAIZE-COWPEA IN SOUTHERN NIGERIA
AGRICULTURAL SYSTEMS Vol 17 No 4 (1985) EN
NG;XA pg 243-258
Assesses the economic implications on labour utilization for the management of Leucaena hedgerows on crop yields and the overall benefits from alley cropping with Leucaena among small farmers in the sub-humid tropics of Southern Nigeria. Presents results showing the main and interaction effects of Leucaena, herbicides and nitrogen on crop yields. The agro-economic experiments included maize-maize and maize-cowpea alley cropped with Leucaena.
6 TABLES; 16 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; VIGNA UNGUICULATA; ZEA MAYS; ALLEY CROPPING; AGROFORESTRY; ECONOMICS; WOODY LEGUMES; GREEN MANURES; YIELDS; HUMID TROPICS

00011
02919
MAGHEMBE, J.A.; REDHEAD, J.F.
DAR ES SALAAM UNIV., MOROGORO (TANZANIA). DIV. OF FORESTRY
AGROFORESTRY: PRELIMINARY RESULTS OF INTERCROPPING ACACIA, EUCALYPTUS AND LEUCAENA WITH MAIZE AND BEANS
(1980) EN
TZ;XA pg 1-17
Gives results of an agroforestry experiment conducted in Morogoro, Tanzania from 1978 to 1980. A stage-by-stage analysis is detailed of the intercropping systems involved in the experiment, with Leucaena leucocephala, Acacia albida and Eucalyptus melliodora being the main tree species under test. Presents results and discusses the importance of intercropping.
20 REF; 5 TABLES
ACACIA ALBIDA; LEUCAENA LEUCOCEPHALA; EUCALYPTUS CAMALDULENSIS; ZEA MAYS; PHASEOLUS VULGARIS; FOOD CROPS; INTERCROPPING; FODDER; FUELWOOD; AGROFORESTRY; MULTIPLE USE; SOCIOECONOMICS; FOODS

00012
01986
MAGHEMBE, J.A.; CHINGAIPE, T.M.; LULANDALA, L.L.L.
DAR ES SALAAM UNIV., MOROGORO (TANZANIA). DIV. OF FORESTRY
AGROFORESTRY AND FARMING SYSTEMS: ROLE IN MARGINAL AGRICULTURAL AREAS
(1981) EN
UNIV. DAR ES SALAAM
TZ;XA pg 1-14
Reviews a few case studies that have demonstrated the potential of agroforestry systems in marginal lands. Presents an intercropping trial that involves Leucaena leucocephala with maize and beans. Gives results of crop yield and establishes further trials to find suitable tree espacements that can allow continuous crop production and provide good fuelwood and/or fodder. Presents results of the second trials with emphasis on tree performance and gives future considerations.

17 REF.; 3 TABLES
LEUCAENA LEUCOCEPHALA; ACACIA ALBIDA; EUCALYPTUS; AGROFORESTRY; FARMING SYSTEMS; FOOD PRODUCTION; SOIL FERTILITY; ENERGY REQUIREMENTS; MARGINAL LANDS; LAND USE

00013
03810
NAIR, P.K.R.
TREE INTEGRATION ON FARMLANDS FOR SUSTAINED PRODUCTIVITY OF SMALLHOLDINGS
ENVIRONMENTALLY SOUND AGRICULTURE (LOCKERET, W. ED.) (1983) EN
PRAEGER PUBL
XA;XL;XP pg 333-350
Defines agroforestry and shows the interface between agriculture and forestry. Discusses examples of some agroforestry systems, like the taungya, cropping systems involving tree crops and herbaceous crops and smallholder systems giving examples in West Africa and Rwanda. Gives information on multipurpose trees and silvopastoral systems. Touches on plant arrangement patterns in agroforestry as well as soil productivity and management.
31 REF.
ACACIA ALBIDA; PROSOPIS CINERARIA; DEVELOPING COUNTRIES; LAND USE; SMALL SCALE FARMING; AGROFORESTRY; PLANT INTERACTIONS; TROPICS; AGROSILVOPASTORAL SYSTEMS; INTERCROPPING; SOIL FERTILITY

00014
02789
GRITZNER, J.
NATIONAL ACADEMY OF SCIENCES, WASHINGTON (USA). ADVISORY COMMITTEE ON THE SAHEL
NOTES AND COMMENTS REGARDING PROPOSED USAID/NOUKAKCHOTT EFFORTS IN REAFFORESTATION
(1980) EN
NATIONAL ACADEMY OF SCIENCES
MR;XA pg 1-19
Presents notes and comments on the establishment of an irrigated urban plantation to provide charcoal and poles for Nouakchott, Mauritania. Recommends Eucalyptus camaldulensis and Leucaena leucocephala and describes their uses in the provision of poles and charcoal and in the case of Leucaena leucocephala, the provision of fodder and soil amelioration. Gives other multipurpose species including acacia and prosopis and shows their place in agroforestry.
ACACIA SCORPIOIDES; LEUCAENA LEUCOCEPHALA; EUCALYPTUS CAMALDULENSIS; AGROFORESTRY; REFORESTATION; CHARCOAL; ARID ZONES

00015
01870
ICRAF, NAIROBI (KENYA); ISRA, DAKAR (SENEGAL)
DEVELOPMENT OF SUITABLE AGROFORESTRY SYSTEMS FOR SENEGAL
(1979) EN
SN;XA pg 1-50
Presents an agroforestry research project prepared by ICRAF and the Institut Senegalais de Recherches Agricoles (ISRA). Gives background information on Senegal's economy and agricultural production. Describes the traditional farming systems in Senegal that integrate multipurpose woody species. Indicates the need for further improvement of these systems to sustain the increasing human and livestock populations. It covers the design and layout of the project and touches on the involvement of

Senegalese organizations and ICRAF in recruiting external, scientific and support staff and consultants, respectively. Also gives notes on some of the proposed woody species.
FARMING SYSTEMS; CLIMATE; MULTIPURPOSE TREES; AGROFORESTRY; SEMI ARID ZONES

00016
01224
HOFSTAD, O.
DAR ES SALAAM UNIV., MOROGORO (TANZANIA). DIV. OF FORESTRY
PRELIMINARY EVALUATION OF THE TAUNGYA SYSTEMS FOR COMBINED WOOD AND FOOD PRODUCTION IN NORTH EASTERN TANZANIA
FORESTRY DIV UNIV OF DAR ES SALAAM RECORD NO 2 (1978) EN
UNIV. DAR ES SALAAM
TZ;XA pg 1-14
Discusses the economics of the taungya system in Tanzania and gives arguments for and against the system. Shows the effect of the system on permanent settlement, soil erosion, politics and fuelwood production. Presents a quantitative analysis of both forestry and taungya, extrapolating to a 24-year rotation. Recommends the taungya system and some few modifications.
6 REF. SUMMARY (EN)
PINUS PATULA; ZEA MAYS; TAUNGYA SYSTEM; ECONOMIC ANALYSIS; SOFTWOOD; FOOD PRODUCTION

00017
01683
ICRAF, NAIROBI (KENYA); NATIONAL RANGE AGENCY, MOGADISHU (SOMALI)
PRELIMINARY TRIALS OF WOODY SPECIES FOR USE IN AGROFORESTRY SYSTEMS IN SOMALIA
(1979) EN
ICRAF
SO;XA pg 43
Emphasises the importance of agroforestry in increasing food supply, improving productivity of rangelands and preventing land degradation. Presents some indigenous multipurpose trees and lists species that merit consideration for multiple land use systems in Somalia. Outlines a programme to evaluate the certain potential of woody species, and gives terms of reference for project personnel.
SUMMARY (EN)
BOSWELLIA; CORDEAUXIA EDULIS; TREES; TRAINING; PASTORALISTS; AGROFORESTRY; MULTIPURPOSE TREES; SEMI ARID ZONES; MULTIPLE USE; LAND USE

00018
01545
IYAMABO, D.E.
ECOLOGICAL ASPECTS OF AGROFORESTRY IN LOWLAND HUMID TROPICS
(1979) EN
XA;NG pg 1-16
Describes agroforestry in the lowland humid tropics of Africa with particular reference to Nigeria. Discusses the ecological basis for agroforestry and examines current agroforestry practices in the zone, including the problems and constraints. Makes recommendations for the future.
8 REF.
LAND USE; ECOLOGICAL FACTORS; DEFORESTATION; TRADITIONAL FARMING; TAUNGYA SYSTEM, AFFORESTATION; HUMID TROPICS

00019
01882
ESBENSHADE, H.W.
INTERNATIONAL TREE CROPS INSTITUTE, ESSEX (UK)
RECOMMENDATIONS FOR A COMMUNITY DEVELOPMENT PROGRAMME OF AGROFORESTRY FOR COMBATING GULLY EROSION IN LESOTHO
(1977) EN
LS;XA pg 11
Gives recommendations for an agroforestry programme for gully control and reclamation as well as for providing fuel, fodder, food-stuffs and building materials. Outlines the programme in its various phases up to a period of 3 years and shows how this community-development programme can be implemented.
23 REF.
AGROFORESTRY; RURAL DEVELOPMENT; EROSION CONTROL; EROSION; FUELWOOD; FODDER; FOOD; SOIL CONSERVATION

00020
0985
BALL, J.
FAO, ROME (ITALY)
TAUNGYA IN SOUTHERN NIGERIA
(1977) EN
FAO
NG;XA pg 1-24
Presents results of a survey of taungya farmers working in forest reserves of the high forest zone of Southern Nigeria. Also gives the present state of taungya in Southern Nigeria, the yields of agricultural crops and discusses ways of improving traditional and departmental taungya. Makes recommendations for the development of the taungya systems based on experiences gained elsewhere and from the survey results.
14 TABLES; SUMMARY (EN)
GMELINA ARBOREA; FOOD CROPS; TREES; AGRISILVICULTURE; RURAL DEVELOPMENT; TAUNGYA SYSTEM; ECONOMICS; FARMING SYSTEMS; ECONOMICS; HUMID TROPICS

00021
01865
ADEYOJU, S.K.
IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT
THE FUTURE OF TROPICAL AGROFORESTRY SYSTEMS
COMMONW FOR REV Vol 59 No 2 (1980) EN
NG;XA pg 155-161
Describes agroforestry as an old enterprise that has been practiced for more than a century. Gives the history of agroforestry and the various varieties of agroforestry systems that exist. Shows how agroforestry originated in Burma and how it has spread to Asia, Latin America and Africa under different names. Gives reasons for the popularity of agroforestry with emphasis on regeneration techniques and on the system's comprehensiveness in rural development programmes. Also discusses the future of agroforestry.
8 REF. SUMMARIES (EN, FR)
LAND USE; FORESTRY; AGRICULTURE; AGROFORESTRY; FRAGILE ECOSYSTEMS; RESOURCE MANAGEMENT

00022
0747
BENE, J.G.; BEAL, H.W.; COTE, A.
IDRC, OTTAWA (CANADA)
THE TROPICAL FOREST-OVEREXPLOITED AND UNDERUSED RESEARCH PRIORITIES IN TROPICAL FORESTRY
(1976) EN
XA pg 1-69
Briefly describes the tropical rain forests that provide various resources on which the livelihood of the population depends. Gives the extent and diversity of the forest and some uses of the forests, including wood food and other non-consumptive uses like environmental, recreational, cultural and scientific. Describes some production systems that combine trees, agricultural crops and/or cultivation. Shows how the tropical forests are threatened by the deterioration of the savanna into the desert and emphasises the need for further research in tropical forests and agroforestry.
55 REF.
TROPICAL FORESTS; RESEARCH; AGROFORESTRY; TAUNGYA SYSTEM; SHIFTING CULTIVATION; FUELWOOD; HUMID TROPICS

00023
01506
GRINNELL, H.R.
IDRC, OTTAWA (CANADA)
A STUDY OF AGRI-SILVICULTURE POTENTIAL IN WEST AFRICA
(1977) EN
IDRC
XA pg 1-52
Examines agrisilviculture and its potentials in maintaining or improving the economic, social and physical environment of West Africa and attempts to analyse the ecological, economic and social factors behind current farming practices in the humid tropics. Analyses three main cropping systems namely shifting cultivation, shifting cultivation with tree crops and taungya. Discusses the role of forests in small-farm agriculture and identifies research priorities needed to realise the full potentials of agrisilviculture.
44 REF.
HUMID TROPICS; SHIFTING CULTIVATION; FOREST PRODUCTS; AGRISILVICULTURE; TAUNGYA SYSTEM; LAND USE; FALLOW SYSTEMS; FOOD PRODUCTION; FOREST PRODUCTS; WEST AFRICA

00024
01163
DOUGLAS, J.S.
FOREST-FARMING: AN ECOLOGICAL APPROACH TO INCREASE NATURE'S FOOD PRODUCTIVITY
IMPACT SCI SOC Vol 23 No 2 (1973) EN
XA pg 117-132
Predicts a population of 6.5 billion by the year 3000 and shows the consequences that may follow like insufficient foodstuffs, resulting in malnutrition and disease, and presents an innovative approach to raising the current standards of nourishment and feeding tomorrow's larger population. These include forest farming and agrisilviculture, which are two of the promising and effective methods of land utilization. Also gives a short history of forest farming.
8 REF.; 3 FIG.
CERATONIA SILIQUA; PROSOPIS; FARM FORESTRY; ECOLOGY; FOOD PRODUCTION; FOREST TREES; AGRISILVICULTURE; FODDER; TROPICS

00025
01543
AMARE GETAHUN
IITA, IBADAN (NIGERIA)
ECOLOGICAL ASPECTS OF AGROFORESTRY IN THE HIGHLAND ECOSYSTEMS OF TROPICAL AFRICA
(1979) EN
XA pg 1-21
Presents survey results and a regional land-use analysis of the highland of tropical Africa, as well as the general characteristics of the highlands; with special reference to the Ethiopian and East African highlands. Shows the effect of the ecosystems on climate and how the latter influences land use and attempts to relate ecological factors to land-use systems like agriculture, forestry and agroforestry.
5 TABLES; 2 MAPS, SCALE 1:6,000,000. SUMMARY (EN)
LAND USE; HIGHLANDS; CLASSIFICATION; CLIMATE; AGRICULTURE; AGROFORESTRY

00026
01493
AFRICAN FORESTRY COMMISSION, ACCRA (GHANA)
NATIONAL PROGRESS REPORT ON FORESTRY - GHANA (1976-1977) AFRICAN FORESTRY COMMISSION FIFTH SESSION
(1978) EN
GH;XA pg 1-24
This report describes the forest industry in Africa. It covers forest resources and management, watershed management, forest products, forest education and employment, forest research as well as agrisilviculture. Also gives some salient features of forest policy and institutions for forest development in Africa.
SAHEL; AGRISILVICULTURE; FOREST POLICY; WILDLIFE; RESEARCH; RURAL DEVELOPMENT; WATERSHED MANAGEMENT; FOREST INDUSTRY

00027
01346
BUDOWSKI, G.
AGRO-FORESTRY IN THE HUMID TROPICS. A PROGRAMME OF WORK - REPORT TO IDRC
(1977) EN
XA;XL;XP pg 1-25
Reports on agroforestry activities and gives general guidelines for a strategy to develop agroforestry in the humid tropics. Describes research lines in agroforestry with special reference to permanent mixtures of trees with domestic animals and food-producing plants, productive rotation and temporary combinations of trees with crops and/or animals, live fence posts, valuable trees intermixed in coffee and cocoa plantations, timber trees that improve pastures, fodder, soil and climate. The report also proposes the establishment of an International Support Unit for Agroforestry (ISUAF) and spells out the role of ISUAF and ideas on how to induce countries to cooperate.
LEUCAENA LEUCOCEPHALA; AGROFORESTRY; HUMID TROPICS; AGROSILVOPASTORAL SYSTEMS; ANIMALS; SOILS; IMPROVEMENT; LAND USE; TREES; CROPS

00028
02908
AMARE GETAHUN
IITA, IBADAN (NIGERIA)
IITA ALLEY CROPPING IN THE HUMID AND SUB TROPICS: STATE OF THE ART AND RECOMMENDATIONS

(1980) EN
IITA
NG;XA pg 1-23
Investigates the problems being experienced in the humid ecoclimatic zone of Southern Nigeria in relation to traditional agricultural land-use. Examines the possibilities of introducing a more stable type of land use system that incorporates a tree component. Defines alley cropping and lists tree sepecies.
8 REF.; 4 TABLES
LEUCAENA LEUCOCEPHALA; ALLEY CROPPING; FALLOW SYSTEMS; TROPICS; HUMID TROPICS; FARMING SYSTEMS

00029
02855
AMARE GETAHUN
IITA, IBADAN (NIGERIA)
IITA/IDRC AGRO-FORESTRY TRIALS. PROGRESS REPORT
(1981) EN
IITA
NG;XA pg 1-41
Reviews agroforestry research activities and gives an inventory of appropriate tree species, shrubs and fodder crops. It also gives examples from Onne, Ibadan and Ife, Nigeria. The experiments include monitoring changes in soil fertility and species performance, light interception and biological weed control. Singles out useful agroforestry tree species suitable to the various ecological zones.
13 TABLES; 6 FIG. SUMMARY (EN)
FARMING SYSTEMS; AGROFORESTRY; LAND USE; TREES; HUMID TROPICS

00030
02918
AMARE GETAHUN
RESEARCH NEEDS IN AGRO-FORESTRY SYSTEMS IN THE COAST (KENYA)
(1982) EN
KE;XA pg 1-12
Defines agroforestry and describes the physical and environmental conditions of the Kenyan Coast. Spells out the research needs of agroforestry systems and shows the importance of tree-crop based land-use systems. Lists the important agricultural tree crops and their acreages. Gives a description of fuelwood/agroforestry research and demonstration and covers forestry.
10 REF.; 3 TABLES; 4 FIG.
AGROFORESTRY; LAND USE; FARMING SYSTEMS; FUELWOOD; MULTIPURPOSE TREES; SHRUBS; RESEARCH

00031
01913
HUXLEY, P.A.
DAR ES SALAAM UNIV., MOROGORO (TANZANIA). FACULTY OF AGRICULTURE
ZERO-TILLAGE AT MOROGORO, TANZANIA. 3. A DISCUSSION OF POSSIBILITIES
(1981) EN
XA;TZ pg 1-17
Briefly discusses some possibilities of zero tillage in the promotion of soil conservation and improvement in the tropics. Covers both short and long-term measures of soil improvement. Describes some aspects of using mulch and other possibilities like minimum tillage and agroforestry.
14 REF. SUMMARY (EN)
ZERO TILLAGE; AGROFORESTRY; LAND USE; SOIL FERTILITY; MULCHING; FARMING SYSTEMS; TROPICS

00032
02036
HOSKINS, M.W.
AGROFORESTRY EXTENSION: COMMUNICATIONS FOR ACTION
(1982) EN
XA pg 1-14
Examines the problems and tasks of selected villages before designing technical and people-related aspects of a community forestry project. Also defines goals for solving the identified problems. Looks into the factors to be considered in agroforestry extension and cautions on communicating unproven agroforestry ideas as solutions to farmers problems. Presents some communication methods and their problems and lists some possible research topics in agroforestry extension.
AGROFORESTRY; EXTENSION ACTIVITIES; FARMERS; INNOVATION ADOPTION; RESEARCH; LAND USE; INFORMATION FLOW

00033
02882
BURLEY, J.
UNITED NATIONS UNIV., TOKYO (JAPAN)
OBSTACLES TO TREE PLANTING IN ARID AND SEMI ARID LANDS: COMPARATIVE CASE STUDIES FROM INDIA AND KENYA
(1982) EN
UNITED NATIONS UNIV.
XA;KE;XP;IN pg 1-52
Looks into the tree planting experiences and problems of Kenya's and India's arid zones. Compares and contrasts the environmental, technical, social and economic factors of the two countries and identifies constraints to tree planting in arid and semi-arid lands. Gives some of the most promising multipurpose species and their importance in agroforestry. Presents case studies and gives a proposal for a course in agroforestry for agricultural students and outlines a training course in community forestry and extension. 165 REF.
ACACIA; LEUCAENA; EUCALYPTUS; ARID ZONES; SEMI ARID ZONES; CASE STUDIES; AGROFORESTRY; FUELWOOD; RURAL DEVELOPMENT; SOCIOECONOMIC FACTORS; TECHNOLOGY; TREE PLANTING

00034
01869
ICRAF, NAIROBI (KENYA)
TREE BASED FARMING SYSTEMS FOR SOME ECOLOGICAL REGIONS OF TANZANIA
(1979) EN
XA;TZ pg 98
Identifies land-use systems that could increase the production of both food and wood and conserve the ecosystem and shows the potential of an integrated tree-based land-use system. Describes projects identified and prepared by ICRAF in collaboration with the Government of Tanzania of implementing agroforestry. The projects embrace agroforestry in village schemes in semi-arid areas, nursery techniques and agroforestry for environmental protection, agroforestry for soil conservation and increased productivity in mountain ecosystems, improvement of the taungya system and agroforestry in semi-humid ecosystems.
SUMMARY (EN)
DEGRADATION; ECOSYSTEMS; AGROFORESTRY; LAND PRODUCTIVITY; SOCIOECONOMIC FACTORS; LAND USE; TAUNGYA SYSTEM

00035
02182
HOSKINS, M.W.
OBSERVATIONS ON INDIGENOUS AND MODERN AGROFORESTRY ACTIVITIES IN WEST AFRICA
(1982) EN
XA pg 1-16
Describes traditional agroforestry systems in West Africa. Castigates the modern approach aimed at improving the situation of the farmer, which tends to concentrate on those farmers with easy access to resources at the expense of smallholders with low capital input. Describes the new agroforestry approach that offers special advantages over traditional practices. The paper also gives some multipurpose trees and describe shifting cultivation and the taungya system in West Africa.
ADANSONIA DIGITATA; VITELLARIA PARADOXA; ACACIA ALBIDA; PARKIA; MORINGA OLEIFERA; AGROFORESTRY; SHIFTING CULTIVATION; RESOURCE MANAGEMENT; TAUNGYA SYSTEM; TREES; FUELWOOD; SOCIOECONOMIC FACTORS; WEST AFRICA; TROPICS

00036
BOO674
634.026
HOEKSTRA, D.A. (ED.); KUGURU, F.M. (ED.)
ICRAF, NAIROBI (KENYA); BAT, NAIROBI (KENYA)
AGROFORESTRY SYSTEMS FOR SMALL-SCALE FARMERS: PROCEEDINGS OF AN ICRAF/BAT WORKSHOP HELD IN NAIROBI
(1983) EN
ICRAF
KE;XA pg 283
Presents the proceedings of the 'Agroforestry Systems for Small Scale Farmers' workshop. Discussion papers emphasise the potential role of agroforestry on small farms where fuelwood is required for domestic use and for curing tobacco. Section one gives a general introduction to agroforestry, whereas section two covers selected topics in agroforestry, including tree seed availability, nursery techniques and tree establishment, erosion control and soil conservation, fuelwood and silvopastoral systems. Case studies are also presented on tobacco growing areas of Kenya.
NICOTIANA TABACUM; AZADIRACHTA INDICA; DERRIS INDICA; PROSOPIS TAMARUGO; GLEDITSIA TRIACANTHOS; ZIZIPHUS SATIVA; AGROFORESTRY; SMALL SCALE FARMING; TREE PLANTING; FUELWOOD; TOBACCO CURING; SOIL FERTILITY; FARMING SYSTEMS; CASH CROPS

00037
05870
TEMU, A.B. (ED.); PHILIP, M.S. (ED.)
DAR ES SALAAM UNIV., MOROGORO (TANZANIA). DIV. OF FORESTRY SUMMARY OF THE PROCEEDINGS OF AN INTERNATIONAL WORKSHOP ON PLANNING FORESTRY FOR COMMUNITY DEVELOPMENT
FORESTRY DIV UNIV OF DAR ES SALAAM RECORD NO 20 (1981) EN
UNIV. DAR ES SALAAM
TZ;XA pg 1-35
Summarises the activities of a workshop on 'planning forestry for community development'. Discusses the problems, constraints and successes in rural community forestry in Eastern and Central African countries and presents a model of a forestry-planning system. Touches on resource availability like land, labour, knowledge and finances. Also mentions the kind of information needed for planning rural community forestry and describes the factors to be considered in species selection for afforestation and agroforestry. Case studies of some projects in Tanzania are also given.

FORESTRY; PLANNING; COMMUNITY DEVELOPMENT; RURAL POPULATION; FOREST PLANTATIONS; AGROFORESTRY; TROPICS; SPECIES LIST

00038
05862
POULSEN, G.
TREES ON CROPLAND: PRESERVING AN AFRICAN HERITAGE
CERES Vol 18 No 2 (1985) EN
XA pg 24-28
Describes the traditional farming system practiced by most African farmers of cultivating crops and grazing livestock under and among trees. Gives the main tree species grown with special reference to Acacia albida, Butyrospermum paradoxum, Parkia biglobosa and Cassia siamea. Describes the functions of these trees and stresses the importance of shelterbelts and their influence on climate.
4 PHOTOS
ACACIA ALBIDA; VITELLARIA PARADOXA; PARKIA BIGLOBOSA; CASSIA SIAMEA; TREES; CULTURAL HERITAGE; FARMING SYSTEMS; AGROFORESTRY; TROPICS; SPECIES LIST

00039
05872
CASHMAN, K.
IITA, IBADAN (NIGERIA)
THE BENEFITS OF ALLEY FARMING FOR THE AFRICAN FARMER AND HER HOUSEHOLD
(1986) EN
XA;NG pg 1-20
Presents the findings from a study funded by the Ford Foundation to encourage and document Yoruba women's (Nigeria) involvement in alley farming. Presents the benefits of alley farming with emphasis on generating income, livestock production and production of fuel.
12 REF. SUMMARY (EN)
LEUCAENA; GLIRICIDIA; ALLEY CROPPING; FARMERS; HOUSEHOLDS; WOMEN; AGROFORESTRY; LEGUMES; MULTIPURPOSE TREES; SHRUBS; HUMID TROPICS

00040
06056
POSCHEN, P.
FREIBURG UNIV., (F.R. GERMANY)
AN EVALUATION OF THE ACACIA ALBIDA-BASED AGROFORESTRY PRACTICES IN THE HARARGHE HIGHLANDS OF EASTERN ETHIOPIA
AGROFORESTRY SYSTEMS Vol 4 No 2 (1986) EN
ET;XA pg 129-143
Evaluates the growing of Acacia albida as a permanent crop on farmlands with cereals, vegetables and coffee in an indigenous agroforestry system in the Hararghe highlands of Eastern Ethiopia. Presents results of an investigation into the effect of the presence of Acacia albida on the yield of maize and sorghum. Discusses the prospects for an extension of this promising agroforestry technique in the area, based on results of an enquiry about farmers altitudes toward Acacia albida.
1 TABLES; 16 REF. SUMMARY (EN)
ACACIA ALBIDA; ZEA MAYS; SORGHUM BICOLOR; AGROFORESTRY; FUELWOOD; HIGHLANDS; FODDER; FOOD CROPS; LAND USE; CEREALS

00041
06046
O'KTING'ATI, A.; MAGHEMBE, J.A.; FERNANDES, E.C.M.; WEAVER, G.H.
PLANT SPECIES IN THE KILIMANJARO AGROFORESTRY SYSTEM
AGROFORESTRY SYSTEMS Vol 2 (1984) EN
TZ;XA pg 177-186
Presents survey results of an inventory of plant species that was conducted on farms, farm boundaries and homesteads in the Kilimanjaro (Tanzania) agroforestry system. Indentifies over 100 plant species, spread over 40 families, and gives the uses, which include tree, food-crop, non-woody and weed species. Shows the criteria used for the selection of trees and other economically useful plants that are intercropped with food crops on the same land unit.
16 REF. SUMMARY (EN)
AGROFORESTRY; MULTIPURPOSE TREES; MULTIPLE CROPPING; HOME GARDENS; SPECIES LIST; USES; PLANTS

00042
06067
STEPPLER, H.A.; RAINTREE, J.B.
ICRAF, NAIROBI (KENYA)
THE ICRAF RESEARCH STRATEGY IN RELATION TO PLANT SCIENCE RESEARCH IN AGROFORESTRY
PLANT RESEARCH AND AGROFORESTRY (HUXLEY, P.A. ED.) (1984) EN
KE;XA pg 297-365
Outlines ICRAF's multidisciplinary methodology and explores its relationship to international plant science research. Gives a set of tactical principles and methodology to implement ICRAF's strategy obtained from agroforestry research conducted in Kenya. Indentifies local problems and agroforestry potentials through diagnostic methodology.
SUMMARY (EN)
AGROFORESTRY; RESEARCH; PLANT SCIENCE; METHODS

00043
06092
FORTMAN, L.
CALIFORNIA UNIV., BERKELEY (USA). DEPT. OF FORESTRY AND RESOURCE MANAGEMENT
THE TREE TENURE FACTOR IN AGROFORESTRY WITH PARTICULAR REFERENCE TO AFRICA
AGROFORESTRY SYSTEMS Vol 2 No 4 (1985) EN
XA pg 229-251
Briefly presents the tree tenure rights in Africa. These include the right to own or inherit trees, plant trees, use trees and tree products, the right to dispose of trees and the right to exclude others from the use of trees and tree products. Describes the factors affecting who has what rights, like the nature and use of the tree and the nature of the person or group. Also discusses the implication of tree tenure issues for the design of agroforestry projects.
86 REF. SUMMARIES (EN, FR)
AGROFORESTRY; TREES; TENURE; SOCIAL SCIENCES

00044
06055
MIEHE, S.
ACACIA ALBIDA AND OTHER MULTIPURPOSE TREES ON THE FUR FARMLANDS IN THE JEBEL MARRA HIGHLANDS, WESTERN DARFUR, SUDAN
AGROFORESTRY SYSTEMS Vol 4 No 2 (1986) EN

SD;XA pg 89-119
Describes the traditional agroforestry systems based on Acacia albida and other multipurpose trees as practiced by the sedentary Fur people on the lower slopes and highlands of the Jebel Marra massif, Sudan. Also describes the agrosilvopastoral system in the area and gives some multipurpose tree species grown. Shows how the system has been able to sustain self-sufficiency of a densely settled population by providing food, wood, fodder and fencing material.
4 TABLES; 8 FIG.; 36 REF. SUMMARY (EN)
ACACIA ALBIDA; CORDIA ABYSSINICA; ZIZIPHUS SPINA CRISTI; TROPICS; HIGHLANDS; AGROSILVOPASTORAL SYSTEMS; AGROFORESTRY; MULTIPURPOSE TREES; FARMLAND

00045
06075
NAIR, P.K.R.; FERNANDES, E.C.M.; WAMBUGU, P.N.
ICRAF, NAIROBI (KENYA)
MULTIPURPOSE LEGUMINOUS TREES AND SHRUBS FOR AGROFORESTRY
AGROFORESTRY SYSTEMS Vol 2 No 3 (1985) EN
KE;XA pg 145-163
This paper presents the various ways in which farmers incorporate trees and shrubs, most of which are leguminous, in their farms. Gives the role of such woody perennials in agroforestry systems and evaluates the agroforestry potential of some leguminous species. Touches on the species growth characteristics, ecological adaptability, ability to grow in combination with other species and their uses and functions. Gives initial results of trials of several multipurpose trees and shrubs that are established at ICRAF's field station in Machakos, Kenya.
5 TABLES; 35 REF. SUMMARY (EN)
MULTIPURPOSE TREES; SHRUBS; AGROFORESTRY; LEGUMES; TREES; TRIALS

00046
06099
BUCK, L.E.; TEEL, W.
ICRAF, NAIROBI (KENYA)
KENYA AGROFORESTRY TREE SEED PROJECT REPORT
ICRAF WORKING PAPER NO. 4 (1985) EN
ICRAF
KE;XA pg 159
Describes the activities and findings of ICRAF's Kenya agroforestry tree project and presents background information on the purpose and organizational structure of the seed project. Also presents functional relationships between participating institutions. Provides a brief overview on the issue of NGO's accessability to tree seed. Describes the plant propagation techniques, current projects and experiments and seed distribution activities and emphasises the issue of seed requirements, sources and storage.
BIBLIOGRAPHY P. 57-58. SUMMARY (EN)
SEEDS; MULTIPURPOSE TREES; SPECIES LIST; PROJECTS; SEED COLLECTION; SEED STORAGE

00047
02948
GIELEN, H.
WAGENINGEN UNIV., (NETHERLANDS); ICRAF, NAIROBI (KENYA)
REPORT ON AN AGROFORESTRY SURVEY IN THREE VILLAGES OF NORTHERN MACHAKOS, KENYA
(1982) EN
KE;XA pg 114

Presents survey results of households in the Northern Machakos district ofin Kenya giving characteristics of households, farming systems and existing conditions on labour availability. Identifies the constraints of the Machakos people, the major ones being insufficient grazing area, insufficient firewood and the consequences of the increasing population pressure on the land, leading to degradation of the natural environment. Gives the major annual and perennial crops grown and animal husbandry practices in the district. Stresses the importance of agroforestry in alleviating the identified constraints.
14 REF.; 34 TABLES. SUMMARY (EN)
AGROFORESTRY; GRAZING; LIVESTOCK; CROP RESIDUES; FUELWOOD; CHARCOAL; TREE PLANTING; FOOD CROPS; SEMI ARID ZONES; SURVEYS

00048
02231
BOUDET, G.C.; TOUTAIN, B.
AGROSTOLOGIE INSTITUT D'ELEVAGE ET DE MEDECINE VETERINAIRE DES PAYS TROPICAUX, MAISONS-ALFORT (FRANCE)
THE INTEGRATION OF BROWSE PLANTS WITHIN PASTORAL AND AGROPASTORAL SYSTEMS IN AFRICA
BROWSE IN AFRICA: THE CURRENT STATE OF KNOWLEDGE (LE HOUEROU, H.N. ED.) (1980) EN
XA pg 427-432
Describes the practice of integrating browse plants within pastoral and silvopastoral systems and emphasises the necessity of planting browse species and maintaining the necessary balance between species present by selective bush clearance. Gives some browse plant species used to feed animals like goats and cattle in dry and humid tropical Africa. Also describes the state of agroforestry in Africa and outlines the future of browse plants in Africa.
19 REF.; 3 TABLES
AGROFORESTRY; BROWSING; PASTORALISM; AGROSILVOPASTORAL SYSTEMS; ANIMALS

00049
00506
OLAWOYE, O.O.
THE AGRI-SILVICULTURAL SYSTEM IN NIGERIA
COMMONW FOR REV Vol 54 No 3-4 (1975) EN
NG;XA pg 229-236
Briefly describes two types of agrisilvicultural systems in Nigeria and their roles in improving the standard of living of the rural people and providing labour for clearing of the forest for plantations. Also gives the contribution of agrisilvicultural systems to the Nigerian economy.
9 REF. SUMMARY (EN)
AGRISILVICULTURE; CROPS; FOOD PRODUCTION; TREE CROPS; SOILS; LABOUR; AGROFORESTRY; SOCIAL STRUCTURE; TAUNGYA SYSTEM

00050
00962
OLAWOYE, O.O.
IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT
FOOD PRODUCTION FROM TROPICAL MOIST FORESTS
(1975) EN
NG;XA pg 1-14
Deals with the problems of food shortage in the tropics, laying emphasis on the factors militating against increased food production. Draws attention to the weakness of such measures as food aid programmes and importation of food as a means of solving the problems of shortage of food in the developing countries. Highlights some means by which food production can be increased in the tropics. Deals with

ways in which forestry can contribute to increased food production in the tropics in general and in Nigeria in particular.
5 TABLES; 21 REF. SUMMARY (EN)
ELAEIS GUINEENSIS; IRVINGIA GABONENSIS; FOOD PRODUCTION; TROPICAL RAIN FOREST; AGRISILVICULTURE; FOREST RESOURCES; HUMID TROPICS

00051
06088
AKACHUKU, A.E.
IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT
COST-BENEFIT ANALYSIS OF WOOD AND FOOD COMPONENTS OF AGRI-SILVICULTURE IN NIGERIAN FOREST ZONE
AGROFORESTRY SYSTEMS Vol 3 No 4 (1985) EN
NG;XA pg 307-316
Estimates the costs and revenue of agrisilviculture in a forest zone in Nigeria. Considers Gmelina arborea, interplanted with yams and maize and cassava and maize. Outlines some advantages of practicing agrisilviculture in terms of food and fuelwood production.
4 REF. SUMMARY (EN)
GMELINA ARBOREA; DIOSCOREA ROTUNDATA; ZEA MAYS; MANIHOT ESCULENTA; AGRISILVICULTURE; WOOD; FOOD; COST BENEFIT ANALYSIS

00052
03517
WEBER, F.R.; HOSKINS, M.W.
VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIV., (USA). DEPT. OF SOCIOLOGY
AGROFORESTRY IN THE SAHEL
(1983) EN
VIRGINIA POLYTECHNIC INST.
XA pg 1-102
Summarises the basic findings of the 1983 Niamey Agroforestry Seminar. Presents the state-of-the-art of agroforestry in the Sahel and assesses the future of agroforestry. Touches on the Sahelian ecology, land tenure experience and the use and rights of trees. Describes the traditional agroforestry systems as well as some modern agroforestry techniques in the Sahel. Looks into the present day problems and gives criteria for further agroforestry activities in the Sahel. Gives a framework and basic approach for a proposed agroforestry strategy.
17 REF.
ACACIA ALBIDA; VITELLARIA PARADOXA; AGROFORESTRY; SAHEL; ARID ZONES; LAND USE; LIVESTOCK; GRAZING; SOCIAL FORESTRY; FARMING SYSTEMS; CASH CROPS

00053
01754
VON MAYDELL, H.J.
INSTITUTE OF WORLD FORESTRY, HAMBURG (F.R. GERMANY)
TREE AND SHRUB SPECIES FOR AGROFORESTRY SYSTEMS IN THE SAHELIAN ZONE OF AFRICA
PLANT RES DEV Vol 7 (1978) EN
XA pg 44-59
Gives some general remarks on the choice of tree/shrub species for agroforestry systems in the African Sahel. Recommends some species selection criteria: selection based on the local demands of the community; selection based on the establishment of fuel, pasture or shelter; selection based on adaptability to site conditions and selection based on the ecological effects of the plantations. Presents some promising examples of indigenous and exotic multipurpose woody plant species that could be used

to combat desertification in the Sahel with special reference to Acacia, Eucalyptus, Prosopis and Azadirachta.
16 REF.
ACACIA ALBIDA; ACACIA; EUCALYPTUS; PROSOPIS; AZADIRACHTA; DESERTIFICATION; LAND USE; MULTIPURPOSE TREES; WOODY PLANTS; SAHEL; AGROSILVOPASTORAL SYSTEMS; ARID ZONES; AGROFORESTRY; SPECIES SELECTION

00054
02923
VERINUMBE, I.; KNIPSCHEER, H.C.; ENABOR, E.E.
IITA, IBADAN (NIGERIA); IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT
THE ECONOMIC POTENTIAL OF LEGUMINOUS TREE CROPS IN ZERO-TILLAGE CROPPING IN NIGERIA: A LINEAR PROGRAMMING MODEL
(1981) EN
NG;XA pg 1-22
Presents an economic evaluation of a zero-tillage farming system against the background of small-scale farmers in South West Nigeria undertaken using the linear programming method. Considers crop rotation systems of maize-maize, maize-stylo, maize-maize/stylo, maize pigeon pea, maize-maize/pigeon pea and maize/leucaena-maize/leucaena. Shows the maximum net profit farm plan for the respective farmers and recommends the maize/leucaena alley cropping system as the most promising package.
7 TABLES; 10 REF. SUMMARY (EN)
CAJANUS CAJAN; LEUCAENA LEUCOCEPHALA; SMALL SCALE FARMING; ALLEY CROPPING; FARMING SYSTEMS; TREE CROPS; LEGUMES; ECONOMICS; HUMID TROPICS; EVALUATION

00055
02945
WATSON, G.A.
A STUDY OF TREE CROP FARMING SYSTEMS IN THE LOWLAND HUMID TROPICS
WORLD BANK AGRIC TECH NOTE NO. 2 (1980) EN
THE WORLD BANK
XA;XL;XP;NG pg 1-191
Presents a review of the current technical situation regarding tree crop farming systems in the humid tropics. Considers policies and trends in the cultivation of rubber, oil palm, coconut, cocoa and coffee together with food crops in industrial plantations, land-development schemes and smallholders in Asia, Latin America and West Africa. Lays emphasis on indigenous food tree species and suggests some tree-crop system models. Touches upon some aspects of forestry and agroforestry and describes the compound farm of West Africa as well as the indigenous food/tree species - oil bean, bread fruit, star apple and mango in Nigeria.
145 REF. SUMMARY (EN)
COCOS NUCIFERA; ELAEIS GUINEENSIS; COFFEA; HEVEA; THEOBROMA CACAO; AGROFORESTRY; HUMID TROPICS; TREE CROPS; FARMING SYSTEMS; TAUNGYA SYSTEM; FOOD CROPS; ZERO TILLAGE; WEST AFRICA

00056
06108
HOEKSTRA, D.A.; TORRES, F.; RAINTREE, J.B.; DARNHOFER, T.; KARIUKI, E.
ICRAF, NAIROBI (KENYA)
AGROFORESTRY SYSTEMS FOR THE SEMIARID AREAS OF MACHAKOS DISTRICT, KENYA
ICRAF WORKING PAPER NO. 19 (1984) EN
ICRAF

KE;XA pg 1-28
Presents a case study resulting from collaborative activities between scientists from ICRAF, the National Dryland Farming Station in Katumani and the Machakos Integrated Development Programme. The study aims at developing improved systems of agroforestry and land management appropriate to mixed farming systems in semi-arid zones. Discusses the research plan and proposes the refinement of results of on-farm species and provenance studies carried out in the semi-arid zones of Kenya. Identifies the appropriate agroforestry systems and research needs for Machakos based on ICRAF's diagnostic and design methodology. The report is laid out under four headings: biophysical and socioeconomic characteristics of Machakos; diagnosis of the farming systems; appropriate technologies and research programmes.
11 REF.
AGROFORESTRY; SEMI ARID ZONES; LAND MANAGEMENT; MIXED FARMING; TECHNOLOGY

00057
06123
ROCHELEAU, D.E.
ICRAF, NAIROBI (KENYA)
LAND USE PLANNING WITH RURAL FARM HOUSEHOLDS AND COMMUNITIES: PARTICIPATORY AGROFORESTRY RESEARCH
ICRAF WORKING PAPER NO. 36 (1985) EN
ICRAF
KE;XA pg 1-43
Describes the existing agroforestry systems in rural farm households and communities and stresses the need for adjusting to changing conditions and developing new agroforestry practices and land-use systems to stabilize and/or increase total food production. Looks at recent agroforestry research and emphasises the need for identifying and acting upon farming systems opportunities and limitations in subunits on the farm household. Gives the significance of the diagnosis and design methodology at the farm and community levels and lists the lessons learned from the Kathama project in Machakos, Kenya.
43 REF.
LAND USE; PLANNING; RURAL COMMUNITIES; AGROFORESTRY; RESEARCH; FARMS

00058
06081
HOEKSTRA, D.A.
ICRAF, NAIROBI (KENYA)
AN ECONOMIC ANALYSIS OF A SIMULATED ALLEY CROPPING SYSTEM FOR SEMI-ARID CONDITIONS, USING MICRO-COMPUTERS
AGROFORESTRY SYSTEMS Vol 1 No 4 (1983) EN
KE;XA pg 335-345
Compares two models: traditional maize and beans and Leucaena alley cropping with maize and beans in a semi-arid area in Machakos, Kenya. Uses MULBUD - a microcomputer program for agroforestry systems for simulations and analyses. Presents results of the two models and graphical displays produced by MULBUD. Illustrates the differences in labour use and flow of net revenue between the models
8 FIG.; 4 REF.
LEUCAENA LEUCOCEPHALA; ALLEY CROPPING; SEMI ARID ZONES; MICROCOMPUTERS; ECONOMIC ANALYSIS

00059
06124
ROCHELEAU, D.E.
ICRAF, NAIROBI (KENYA)
CRITERIA FOR RE-APPRAISAL AND RE-DESIGN: INTRA HOUSEHOLD AND BETWEEN-HOUSEHOLD ASPECTS OF FSRE IN THREE KENYAN AGROFORESTRY PROJECTS
ICRAF WORKING PAPER NO. 37 (1985) EN
ICRAF
KE;XA pg 1-24
Briefly describes three Kenyan agroforestry projects: the Kathama project, the Kakuyuni project (both in the Machakos district) and the Siaya project. Gives project definitions, technology designs and design approach. Studies the households and the 'larger-than-farm' communities of the project sites with the aim of refining the diagnosis and redesigning technology trials within the household and community. Presents results of the case studies and the farm trials, stressing the important lessons learned from each project.
40 REF.
FARMING SYSTEMS RESEARCH; AGROFORESTRY; HOUSEHOLDS; RESEARCH; PROJECTS

00060
06040
KIRMSE, R.D.; NORTON, B.E.
UTAH STATE UNIV., LOGAN (USA). DEPT. OF RANGE SCIENCE
THE POTENTIAL OF ACACIA ALBIDA FOR DESERTIFICATION CONTROL AND INCREASED PRODUCTIVITY IN CHAD
BIOL CONSERV Vol 29 (1984) EN
TD;XA pg 121-141
Briefly presents the desertification problem in the Sahel and looks into an integrated development approach to ecological stability. Gives some characteristics of Acacia albida and describes an agrosilvopastoral project by CARE that uses the fast-growing multipurpose tree to combat desertification.
36 REF.; 6FIG. SUMMARY (EN)
ACACIA ALBIDA; DESERTIFICATION; AGROSILVOPASTORAL SYSTEM; SEMI ARID ZONES; LAND PRODUCTIVITY; REFORESTATION; PLANT ESTABLISHMENT

00061
05991
UPTON, M.
READING UNIV., (UK). DEPT. OF AGRICULTURAL ECONOMICS AND MANAGEMENT
RETURNS FROM SMALL RUMINANT PRODUCTION IN SOUTH WEST NIGERIA
AGRICULTURAL SYSTEMS Vol 17 (1985) EN
NG;XA pg 65-83
Describes the traditional production system for small ruminants in South West Nigeria. Presents estimates of returns obtained from sheep and goats and the variability of these returns. Discusses alternative approaches to raising productivity, including improvement of nutrition, disease control and alley cropping.
7 TABLES; 32 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; GLIRICIDIA SEPIUM; ZEA MAYS; RUMINANTS; GOATS; SHEEP; HUMID ZONES; ALLEY CROPPING; FOOD CROPS; FARMING SYSTEMS

00062
06127
VON CARLOWITZ, P.G.
ICRAF, NAIROBI (KENYA)
RECOMMENDATIONS FOR THE DESIGN AND ESTABLISHMENT OF DEMONSTRATION TRIALS AT THE ETHIOPIAN CENTRE FOR COMMUNITY FORESTRY AND SOIL CONSERVATION. A MODEL FOR THE APPLICATION OF AGROFORESTRY AND SOIL CONSERVATION TECHNIQUES IN TROPICAL HIGHLANDS
ICRAF WORKING PAPER NO. 41 (1986) EN
ICRAF
ET;XA pg 1-89
Reports on the Ethiopian centre for community forestry and gives recommendations for the design and establishment of demonstration trials of agroforestry and soil conservation techniques. Categorises the recommended interventions and demonstrations described by altitudes between 2,000 m.a.s.l. and 3,200 m.a.s.l. These relate to: pasture improvement; cropland improvement; grassland improvement; riverbank fixation by planting trees; rehabilitation of water-logged depressions by planting trees; fuelwood production by planting multipurpose trees and live fences. Also presents a workplan including inputs in terms of seedlings or weight of seeds and labour. Gives guidelines for the establishment of community nurseries.
20 REF.
SOIL CONSERVATION; COMMUNITY FORESTRY; AGROFORESTRY; HIGHLANDS; TRIALS; DESIGN; MODELS; TROPICS

00063
06560
KILAHAMA, F.B.R.
FOREST DIVISION, DAR ES SALAAM (TANZANIA)
FORESTRY FOR COMMUNITY DEVELOPMENT (A GENERAL REVIEW)
(1985) EN
XA;TZ pg 1-21
This essay discusses community forestry in two parts. Part one concentrates on agroforestry, which is considered appropriate for rural communities in developing countries. Also, some of the factors necessary for community forestry development are discussed including land, labour, capital and socioeconomic aspects. Part two discusses some silvicultural options and management strategies that are relevant to community forestry.
45 REF.
COMMUNITY FORESTRY; AGROFORESTRY; AGRISILVICULTURE; RURAL DEVELOPMENT; RURAL COMMUNITIES; ECONOMIC ANALYSIS

00064
06270
BAUM, E.
KASSEL UNIV., WITZENHAUSEN (F.R. GERMANY). DEPT. OF INTERNATIONAL AGRICULTURE
OPPORTUNITIES AND CONSTRAINTS OF SMALL SCALE FARMS TO ADOPT AGROFORESTRY METHODS IN THE WESTERN USAMBARAS OF TANZANIA
TROP ZEITSCH LANDWIRT Vol 85 (1984) EN
XA;TZ pg 67-76
The paper discusses the use of various agroforestry innovations in the context of the small farmer in soil erosion control in hillside farming areas. The main factors limiting the diffusion of these practices, i.e., the local farming systems, are highlighted.
10 REF; 4 TABLES. SUMMARIES (DE, EN)
AGROFORESTRY; HIGHLANDS; EROSION CONTROL; SMALL SCALE FARMING

00065
06453
BAUMER, M. (ED.)
ICRAF, NAIROBI (KENYA)
AGROFORESTRY AND BEEKEEPING IN THE JEBEL MARRA RURAL DEVELOPMENT PROJECT (J.M.R.D.P.)
(1986) EN
XA;SD pg 1-58
A report on a mission to the Jebel Marra Rural Development Project area (Sudan) to evaluate the possibilities of agroforestry and apiculture ventures is presented. The aims were to identify woody melliferous plants, establish the flowering calendar, recommend ligneous plants to be introduced to elongate the foraging period and increase honey quality and provide general advice on beekeeping.
33 REF.
AGROFORESTRY; APICULTURE; PROJECTS; BEE PLANTS

00066
06349
SONGWE, N.
CTFT, YAOUNDE (CAMEROON)
THE SHIFT FROM TAUNGYA TO THE REGROWTH METHOD IN SOUTHERN BAKUNDU FOREST RESERVE
(1972) EN
CTFT
XA;CM pg 1-6
The author examines the problems that limit the employment of the taungya system in Southern Bakundu Forest Reserve (Cameroon) and how these problems are tackled in the regrowth method.
11 REF.
TAUNGYA SYSTEM; AGRISILVICULTURE; FOOD CROPS

00067
06385
YAMOAH, C.F.; AGBOOLA, A.A.; WILSON, G.F.
IITA, IBADAN (NIGERIA)
NUTRIENT CONTRIBUTION AND MAIZE PERFORMANCE IN ALLEY CROPPING SYSTEMS
AGROFORESTRY SYSTEMS Vol 4 (1986) EN
XA;NG pg 247-254
Presents details of a study conducted at IITA, Ibadan, Nigeria, to determine the dry matter yields and nutrient (N,P&K) contribution of some leguminous woody perennials as well as the performance of maize in an alley cropping system. The trees were Cassia siamea, Gliricidia sepium and Flemingia. It is reported that dry matter yield was highest in Cassia followed by Gliricidia and Flemingia. Gliricidia contributed the highest amount of N, but maize height, stover and cob weights were insignificantly reduced for the maize rows close to the shrub hedgerows compared to those in the middle of the alleys.
3 FIG.; 5 TABLES; 10 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; GLIRICIDIA SEPIUM; SESBANIA ROSTRATA; CASSIA SIAMEA; FLEMINGIA CONGESTA; WOODY PLANTS; PERENNIALS; CROPPING SYSTEMS; NITROGEN; PHOSPHORUS; POTASSIUM

00068
03602
KIRIINYA, C.K.
A STUDY OF ACACIA ALBIDA DEL. WITH REFERENCE TO COMMUNITY AFFORESTATION

(1983) EN
UNIV. DAR-ES-SALAAM
XA;TZ pg 1-125
This thesis presents a study on the potential of Acacia albida for agroforestry in semi-arid areas of the tropics. The study was conducted in Morogoro, Tanzania and has six main objectives: to develop seed pretreatment procedures that will ensure even and high-percentage germination; ascertain the most appropriate plant size and age for transfer to the field from the nursery; assess survival and early growth performance; monitor early biomass production; check the development of nitrogen fixation during the early months of growth; and evaluate the yields of food crops (maize and beans) grown among the young trees of this species. The results will assist in the promotion of Acacia albida for use in afforestation in areas where there are shortages of fuelwood and other tree products.
28 TABLES; 53 REF.
ACACIA ALBIDA; NITROGEN FIXATION; EXPERIMENTS; AGROFORESTRY; SEED TREATMENT; PLANT ESTABLISHMENT; SEMI ARID ZONES

00069
B02261
634.0.2.26(676.2)
KENYA GOVERNMENT
AGROFORESTRY SYSTEMS EVALUATION IN KENYA
(1983) EN
ADEC
XA;KE pg 204
A report for the agroforestry centre baseline studies for Bukura, Wambugu, Kitui and Mtwapa is presented. The main objective of the study was to generate data on existing agroforestry practices in Kenya. The report is presented in nine chapters: introduction; literature review; general characteristics of the areas surveyed; socioeconomic appraisal; soils, slopes and soil erosion; cropping systems and crop yields; forest (non-fruit) trees; agroforestry practices; and conclusions and recommendations.
72 TABLES. SUMMARY (EN)
AGROFORESTRY; SOCIOECONOMIC ASPECTS; SOILS; EROSION; CROPPING SYSTEMS; FOREST TREES; YIELDS

00070
01778
KING, K.F.S.
AGROFORESTRY AND THE UTILIZATION OF FRAGILE ECOSYSTEMS
FOR ECOL MANAGE Vol 2 (1979) EN
XA;XL;XZ pg 161-168
Fragile ecosystems are termed as the arid and semi-arid zones, the arid savannas as well as the slopes of mountains of the tropics and subtropics and the forest areas where shifting cultivation is practiced. The plight of the poor in these ecosystems and the degradation of land due to mismanagement and population pressure leads to poor food production are discussed. Agroforestry, which is seen as a land-use system that could provide one of the answers to the utilization of these fragile ecosystems, is described with examples of various systems. The systems include agrisilviculture, silvopastoral systems, agrosilvopastoral systems and the multipurpose forest tree production systems. The author concludes with a note on further research into these systems.
16 REF. SUMMARY (EN)
AGROFORESTRY; ECOSYSTEMS; WASTE LAND

00071
04270
KOLJONEN, K.
PELLERVO ECONOMIC RESEARCH INSTITUTE, ESPOO (FINLAND)
ADOPTION OF AGROFORESTRY - A DECISION MAKING PROBLEM OF THE TANZANIAN PEASANTS
REPORTS AND DISCUSSION PAPERS NO. 40 (1984) EN
XA;TZ pg 50
A study on the adoption of agroforestry practices in connection with decision-making in Tanzania is presented. The objectives discussed in this study are: to develop a model (theoretical) for the decision-making; to compare the profitability of selected agroforestry combinations as a component of a peasant farmers' farming systems and the analysis is used to study how vulnerable the profit criteria are to changes in quantities and values of selected inputs and outputs. Some policy recommendations are also presented.
18 REF.
AGROFORESTRY; DECISION MAKING; RURAL COMMUNITIES; DEVELOPING COUNTRIES; EXTENSION ACTIVITIES; FARMING SYSTEMS; PEASANT FARMING; INNOVATION ADOPTION; ECONOMIC ANALYSIS

00072
03009
MACDONALD, L.H.
AGROFORESTRY IN THE AFRICAN HUMID TROPICS
COMMNW FOR REV Vol 61 No 1 (1982) EN
XA pg 43-45
Papers and major themes that were given at a workshop held in Ibadan, Nigeria are presented. Traditional agroforestry practices, current research and possibilities for development in humid tropical Africa are highlighted.
4 REF.
AGROFORESTRY; HUMID TROPICS

00073
04057
KUNZEL, W.
FREIBURG UNIV., (F.R. GERMANY). INST. OF GEOGRAPHY AND SOCIAL ANTHROPOLOGY
ASSESSMENT OF AGROFORESTRY POTENTIALS IN THE MAGARINI LAND SETTLEMENT AREA, REPUBLIC OF KENYA
(1984) EN
UNIV. FREIBURG
XA;KE pg 1-56
A report on a preliminary assessment of agroforestry potentials in the Magarini settlement scheme, an area on the coast of Kenya, is presented. A detailed account of the environmental setting is given. The general agricultural situation is highlighted and a long discussion on the potential of agroforestry in this area forms the concluding section. There are five appendices on: farming systems, crop names, trees used for afforestation and a diagnostic questionnaire.
21 REF.; 5 TABLES
CANTHIUM BIBRACTEATUM; DIOSPYROS CORNII; SALVADORA; STRYCHNOS MITIS; TERMINALIA BREVIPES; AFZELIA QUANZENSIS; BRACHYSTEGIA EDULIS; CASSIA ABBREVIATA; AGROFORESTRY; FARMING SYSTEMS; SPECIES LIST; FOOD CROPS; CASH CROPS; TRADITIONAL FARMING; LAND USE; HUMID TROPICS

00074
04879
LENTON, R.
FORD FOUNDATION, NEW YORK (USA)
PEOPLE AND FORESTS: A REPORT OF A FORD FOUNDATION MEETING ON SOCIAL FORESTRY AND AGROFORESTRY
(1985) EN
XA pg 57
A small internal meeting on social forestry and agroforestry is reported. The participants' discussions were based on the target groups for social forestry and agroforestry programmes, research and information needs, performance criteria and evaluation and experiences with government programmes.
6 FIG.
SOCIAL FORESTRY; AGROFORESTRY; PROGRAMMES; DEVELOPMENT AID; RESOURCE MANAGEMENT

00075
05115
CHAVANGI, N.A.; ENGELHARD, R.J.; JONES, V.
BEIJER INSTITUTE, NAIROBI (KENYA)
CULTURE AS THE BASIS FOR IMPLEMENTING SELF-SUSTAINING WOODFUEL DEVELOPMENT PROGRAMMES
(1985) EN
XA;KE pg 1-25
The study deals with the work being undertaken by the Kenya Woodfuel Development Programme (KWDP) to develop a self-sustaining system of tree planting to contribute to fuelwood supplies in the Kakamega district of Kenya. A discussion is presented of the approach of this programme, which is mainly to identify the major factors that have acted as constraints to the acceptance and implementation of projects aiming at improving the fuelwood supply in many developing countries. Agroforestry activities in the area are also described.
20 REF. SUMMARY (EN)
FUELWOOD; AGROFORESTRY; SOCIOLOGY; INFORMATION FLOW; EXTENSION ACTIVITIES; INNOVATION ADOPTION; RURAL AREAS; FARMERS

00076
03159
BALASUBRAMANIAN, V.
IITA, IBADAN (NIGERIA)
ALLEY CROPPING: CAN IT BE AN ALTERNATIVE TO CHEMICAL FERTILIZERS IN GHANA
(1983) EN
XA;GH pg 1-21
Alley cropping is described as a system that integrates arable crops with trees. Food crops are planted in the spaces between rows of trees or woody shrubs that are pruned periodically during the cropping season to prevent shading. The woody perennials being tried are Leucaena leucocephala, Gliricidia sepium, Sesbania grandiflora, Alchornea cordifolia, Acioa barteri and Tephrosia candida. Short descriptions of these species as well as their establishment and their potential in alley cropping are given.
4 TABLES; 15 REF.
LEUCAENA LEUCOCEPHALA; GLIRICIDIA SEPIUM; SESBANIA GRANDIFLORA; ALCHORNEA CORDIFOLIA; ACIOA BARTERI; TEPHROSIA CANDIDA; ALLEY CROPPING; CROP PRODUCTION; AGROFORESTRY; FALLOW SYSTEMS; SOIL FERTILITY; FERTILIZERS; GREEN MANURES

00077
03520
FOREST PRODUCTS RESEARCH INSTITUTE, KUMASI (GHANA)
A REPORT ON SOCIO-ECONOMIC STUDY OF DWOMO AND NCHIRAA VILLAGES IN CONNECTION WITH AGRISILVICULTURAL RESEARCH PROJECT
(1978) EN
XA;GH pg 1-8
A socioeconomic study of two villages in Ghana (which were selected to carry out agrisilviculture trials) is presented. The main objectives of the study were to obtain information on the social characteristics of the two villages, the labour availability, land-use system and agricultural production, land tenure systems, constraints to agricultural production and prospects for instituting agrisilvicultural systems.
AGRISILVICULTURE; RESEARCH; LAND USE; AGRICULTURE; TENURE; FUELWOOD; LABOUR

00078
02819
LAZIER, J.; AMARE GETAHUN; VELEZ, M.
ILCA, ADDIS ABABA (ETHIOPIA); IITA, IBADAN (NIGERIA)
THE INTEGRATION OF LIVESTOCK PRODUCTION WITH AGROFORESTRY (1981) EN
XA;NG pg 18
The study deals with the integration of ruminants, mainly the West Africa dwarf sheep and goats, in the agricultural production systems of the humid lowlands of West Africa. A discussion is given on the management of these ruminants, which includes the use of household scraps for feeding as well as browsing or grazing on various feed crops, particularly those of leguminous nature and the integration o livestock with forestry in a silvopastoral system.
19 REF.
ALBIZIA ADIANTHIFOLIA; ALBIZIA LEBBECK; ALBIZIA ZYGIA; DALBERGIA SISSOO; DANIELLIA OLIVERI; AGROFORESTRY; LIVESTOCK; RUMINANTS; WEST AFRICA; BROWSE; FEED CROPS; LEGUMES; SILVOPASTORAL SYSTEMS

00079
03932
CHACHU, E.O.; ASABERE, P.K.
FORESTRY DEPARTMENT, KUMASI (GHANA)
GUIDELINES FOR COMMUNITY FORESTRY AND ITS INTEGRATION WITH AGRISILVICULTURE IN GHANA
(1984) EN
XA;GH pg 1-11
The necessity of and guidelines for community forestry in Ghana are examined. The criteria for selecting sites on a priority basis for the project and the choice of tree species to plant is also reviewed. The site for the programme should include watersheds and river banks, areas of high population density and degraded sites. Tree species to be chosenfor the community forestry programme should be fast growing and possibly nitrogen fixing. The use of legumes as fallow tree crops to enhance soil fertility is described.
14 REF.
GMELINA ARBOREA; TECTONA GRANDIS; ALBIZIA LEBBECK; CALLIANDRA CALOTHYRSUS; ACACIA MANGIUM; LEUCAENA LEUCOCEPHALA ; TROPICAL RAIN FORESTS; COMMUNITY FORESTRY; FAST GROWING TREES; NITROGEN FIXATION; ZERO TILLAGE; FOOD PRODUCTION; AGRISILVICULTURE

00080
04852
BROKENSHA, D.; CASTRO, A.P.
FUELWOOD, AGROFORESTRY AND NATURAL RESOURCE MANAGEMENT: THE DEVELOPMENT SIGNIFICANCE OF LAND TENURE AND OTHER RESOURCE MANAGEMENT/UTILIZATION SYSTEMS
(1984) EN
XA pg 1-64
The problem of fuelwood shortages and its solution through agroforestry practices and natural resource management is discussed. It is indicated that signficant resources and relationships for tree management and wood fuel use should be understood within the context of their own ecosystem. Land tenure and modes of livelihood as resource management strategies are discussed.
136 REF.
FUELWOOD; AGROFORESTRY; NATURAL RESOURCES; LAND TENURE; RESOURCE MANAGEMENT; USES

00081
03682
BEIJER INSTITUTE, NAIROBI (KENYA)
PROJECT IDENTIFICATION PAPER: RURAL ENERGY DEVELOPMENT IN KENYA: EXECUTIVE SUMMARY
(1982) EN
XA;KE pg 1-36
The paper outlines three proposals for the improvement of Kenya's rural energy (basically fuelwood) requirements. The proposals are the development of rural energy centres that will become an important area of the district level administration; a proposal for rescue missions, especially on rural settlement schemes where the problems of fuelwood procurement are acute; and the current agroforestry practices and other energy related activities. These proposals are discussed in detail and the estimated costs are indicated.
RURAL AREAS; FUELWOOD; AGROFORESTRY; ENERGY SOURCES; PROJECTS

00082
03721
BENGE, M.D. (COMP.)
USAID, WASHINGTON (USA)
SOLAR CURING BURNS, FAST-GROWING TREES AND AGROFORESTRY OFFER A SOLUTION TO THE DEFORESTATION CAUSED BY TOBACCO PRODUCTION IN THAILAND, TANZANIA, SRI LANKA, NEPAL, PHILIPPINES AND OTHER DEVELOPING COUNTRIES
USAID TECHNICAL SERIES NO. 15 (1983) EN
TZ;TH;LK;NP;PH pg 53
Cutting down of trees for fuelwood for tobacco curing is a major cause of deforestation in the tobacco-growing areas of many developing countries. The most cited are Tanzania, Thailand, Sri Lanka, Nepal and the Philippines. However, solar heat for tobacco curing, planting fast growing trees and agroforestry show great promise as solutions to this problem. The subjects covered include plant production, automating transplanting and greenhouse solar systems, smallholder tree farming, effect of shade trees on yields of crops, fuelwood and charcoal in developing countries, deforestation, greenhouses for curing tobacco, greenhouse-bulk curing solar burn and solar-curing burn that cuts fuel.
9 PAPERS ON THE USE OF FUELWOOD FOR TOBACCO CURING
TOBACCO CURING; FUELWOOD; DEFORESTATION; FAST GROWING TREES; AGROFORESTRY; DEVELOPING COUNTRIES; SOLAR ACTIVITY; SMALL SCALE FARMING; TREE PLANTING; SHADE TREES

00083
04697
CHAUDHRY, M.A.; SILIM, S.
AGRI-SILVICULTURE IN UGANDA
UNASYLVA Vol 32 No 128 (1980) EN
XA;UG pg 21-25
Agrisilviculture, which is defined as the system of food crop production with simultaneously raised and protected forest crops, is discussed. The various forms and names used in different countries in the tropics are also mentioned. The effects of the taungya system on the ecosystem and aspects of labour, ecology and socioeconomics are examined. The impact of the system on the Ugandan forest and on agricultural development is detailed.
MAESOPSIS EMINII; PINUS CARIBAEA; IMPERATA CYLINDRICA; FOOD PRODUCTION; FOOD CROPS; AGRISILVICULTURE; GRAZING; TAUNGYA SYSTEM

00084
03916
AMARE GETAHUN
IITA, IBADAN (NIGERIA)
INCREASING FOOD PRODUCTION IN THE AGROFORESTRY SYSTEMS OF THE HUMID AND TROPICAL LOWLANDS
IITA RESEARCH BRIEFS Vol 2 No 3 (1981) EN
XA;NG pg 2-7
IITA carried out agroforestry studies that have the potential for increasing food production for small farmers. The use of leguminous trees in various agroforestry practices is discussed. Thirty-eight woody species were evaluated and screened in southern Nigeria where the climate is humid. Species like Leucaena leucocephala, Acioa barteri and Parkia clappertoniana among others were evaluated in alley cropping, planted fallows or multi-storey plant association. The results are presented in two graphs and three tables.
5 REF.; 3 FIG.; 3 TABLES
LEUCAENA LEUCOCEPHALA; PARKIA CLAPPERTONIANA; FOOD PRODUCTION; AGROFORESTRY; SHADE TREES; ALLEY CROPPING; FALLOW SYSTEMS; TRADITIONAL FARMING; HUMID TROPICS

00085
03899
DYKSTRA, D.P.
FORESTRY IN TANZANIA
J FOR Vol 81 No 11 (1983) EN
XA;TZ pg 742-746
Most of the forest land in Tanzania, which is almost half the country's land area, is classified as woodland with small areas of high forests, mangroves and plantations. More than 90 percent of total round wood consumption is for fuelwood and charcoal and the country's current emphasis in forestry is on the establishment of village woodlots and agroforestry plots because of the alarming rate of forest degradation. Village afforestation and agroforestry in various forms are highlighted.
18 REF.
MIOMBO WOODLANDS; FOREST PLANTATIONS; FUELWOOD; AFFORESTATION; AGROFORESTRY; TAUNGYA SYSTEM; WILDLIFE; TROPICS

00086
04770
MINISTRY OF NATURAL RESOURCES AND TOURISM, DAR ES SALAAM (TANZANIA). FORESTRY DIV.
MANAGEMENT PRACTICES IN CONIFER PLANTATIONS IN TANZANIA: NOTES ON FORESTRY OPERATIONS
(1982) EN
XA;TZ pg 1-73
The booklet covers the forestry operations in Tanzania. The major operations include selection and description of afforestation sites; choice of tree species for afforestation; seed supply and production of planting stock; establishment of plantations; tending the plantations; protection and harvesting. The taungya system of plantation establishment is also described. Data is presented in various figures and tables.
16 FIG.; 73 REF.; 17 TABLES
PINUS; CUPRESSUS LUSITANICA; AFFORESTATION; TAUNGYA SYSTEM; FORESTRY OPERATIONS

00087
04247
HARTMANS, E.H.
IITA, IBADAN (NIGERIA)
LAND DEVELOPMENT AND MANAGEMENT IN TROPICAL AFRICA
(1981) EN
XA pg 1-21
The paper discusses ways and means of improving the traditional farming systems of the tropics in general and of Africa in particular. Because of population pressure, the ratio of fallow to cultivation periods in shifting cultivation declines, so does the fertility and productivity of the soil. The development of agricultural land in Africa can, therefore, be based on soil and land suitability, the kind of farming systems to be adopted and the socioeconomic implications. These three factors are discussed in detail for the various ecological zones. Alley and live mulch cropping systems are also detailed.
20 REF.; 7 TABLES
LEUCAENA LEUCOCEPHALA; SHIFTING CULTIVATION; SOILS; LAND USE; CLEARING; CROPPING SYSTEMS; TROPICS; BUSH FALLOW; ZERO TILLAGE; ALLEY CROPPING; HUMID ZONES

00088
04340
FERNANDES, E.C.M.; O'KTING'ATI, A.; MAGHEMBE, J.A.
THE CHAGGA HOMEGARDENS: A MULTISTORIED AGROFORESTRY CROPPING SYSTEM ON MT. KILIMANJARO (NORTHERN TANZANIA)
AGROFORESTRY SYSTEMS Vol 2 (1984) EN
XA;TZ pg 73-86
The Chagga homegardens (an agroforestry system) is described in detail. The homegardens are characterized by an intensive simultaneous integration of numerous multipurpose trees and shrubs with food crops and animals on the same unit of land. The Chaggas are skilled farmers with an intimate knowledge of the crops and their ecological requirements. The paper identifies the major components, describes their interactions and management aspects and presents an evaluation of the system's ecological stability, productivity and sustainability.
8 REF.; 4 FIG. SUMMARY (EN)
AGROFORESTRY; HOME GARDENS; MULTIPURPOSE TREES; LIVESTOCK; ZERO GRAZING; TENURE; FOOD CROPS; ECONOMICS; SOIL TYPES; CASH CROPS

00089
04317
ADEYOJU, S.K.
IBADAN UNIV., (NIGERIA). DEPT. OF FOREST RESOURCES MANAGEMENT
SOME TENURIAL AND LEGAL ASPECTS OF AGROFORESTRY
(1982) EN
XA;NG pg 1-16
The paper describes the way in which land is held, inherited, acquired or disposed of, as well as the conditions enabling the farmer to transfer the use of land from agriculture to forestry and vice versa or a mixture of the two. It explains how the extent of agroforestry and the involvement of local farmers are directly related to the flexibility of the prevailing land tenure. It presents a table of about 10 types of forest land tenure and highlights certain preconditions for meaningful agroforestry tenure.
9 REF.
AGROFORESTRY; RURAL POOR; TRADITIONAL FARMING; TENURE; FORESTS; RURAL DEVELOPMENT; LAND

00090
04146
HAMMER, T.
CHR MICHELSEN INSTITUTE, BERGEN (NORWAY)
REFORESTATION AND COMMUNITY DEVELOPMENT IN THE SUDAN
DERAP PUBLICATIONS NO. 150 (1982) EN
THE CHR MICHELSEN INSTITUTE
XA;SD pg 1-84
The study describes nomads' and cultivators' adaptation to the semi-arid savanna of north Sudan and gives an account of policies and measures aiming at protection of the natural resources. The description of traditional uses and rights of land concludes that the utilization of the Savanna until the middle of this century was well adapted to the environment. Since then, various factors, mainly of external nature, have disturbed this balance. The study details one measure that aims at assisting farmers in reviving the traditional agroforestry system that combines tending the tree species Acacia senegal on a rotational basis with a fallow period by far exceeding the cultivation period.
9 TABLES; 19 REF. SUMMARIES (EN, SV)
ACACIA SENEGAL; SEMI ARID ZONES; SAVANNA; NOMADISM; NATURAL RESOURCES; REFORESTATION; LAND USE; AGROFORESTRY; FARMERS; RURAL DEVELOPMENT; PEOPLE'S PARTICIPATION

00091
04218
ARNBORG, T.
AGROFORESTRY
(1984) EN
XA;NG pg 1-15
The paper discusses natural resources in the tropics, with special references to Nigeria and their quick depletion due to population growth. Agroforestry, which is defined as a management system that combines the production of crops and trees and/or animals in space and time on the same unit of land is described as the system that can be used for the protection of land as well as for food and wood production in the Savanna zone of Nigeria. Various agroforestry combinations to be tried in this region are mentioned including the planting of windbreaks using multipurpose trees, the planting of sand dune fixing plants and the use of the wonder tree (Acacia albida) for protection, shade, food and wood production.
27 REF.
ACACIA ALBIDA; AGROFORESTRY; FUELWOOD; SAVANNA; TREE PLANTING; MULTIPURPOSE TREES; FODDER CROPS

00092
03089
BIJTTEBIER, F.J.
RAMO, SINT-PIETERS-LEEUW (BELGIUM)
AGROFORESTRY AND FIGHT AGAINST THE PENURY OF FOOD IN THE THIRD WORLD: RATIONALISATION OF THE PICKING BY THE PYGMIES
(1981) EN
XA pg 1-74
An essay discussing the causes of food scarcity and possible remedies is presented. Part one discusses the causes of food scarcity with traditional agriculture (shifting cultivation), population change and other socioeconomics aspects as well as the introduction of agronomic sciences. Part two presents a detailed discussion on Treculia africana for people in the Congo, Zaire and Madagascar. The adoption of this tree into agroforestry practices alongside conventional crops like rice, maize, cassava and other traditional vegetables is also discussed.
27 REF.; 10 TABLES; 3 FIG. SUMMARY (EN)
TRECULIA AFRICANA; ORYZA SATIVA; ZEA MAYS; MANIHOT ESCULENTA; AGROFORESTRY; FARMING SYSTEMS; CROPS; FOOD PRODUCTION; FRUIT TREES; HARVESTING

00093
03201
ENABOR, E.E.
IBADAN UNIV., (NIGERIA). DEPT. OF FORESTRY
SOCIO-ECONOMIC ASPECTS OF TAUNGYA IN RELATION TO TRADITIONAL SHIFTING CULTIVATION IN TROPICAL DEVELOPING COUNTRIES
FAO SOILS BULLETIN NO. 24 (1974) EN
FAO
XA;NG pg 191-202
The nature and consequences of shifting cultivation in tropical developing countries is discussed. The taungya system, which involves the planting of food crops in rows between trees during early establishment has the potential of controlling traditional shifting cultivation. The development of the taungya system and its socioeconomic aspects, as well as the implications for its success are discussed.
14 REF.
DEVELOPING COUNTRIES; RURAL POPULATION; TAUNGYA SYSTEM; SHIFTING CULTIVATION; LAND USE; AGRICULTURE; SOCIOECONOMIC ASPECTS

00094
03631
BUDOWSKI, G.
CATIE, TURRIALBA (COSTA RICA)
THE ROLE OF TROPICAL FORESTRY IN CONSERVATION AND RURAL DEVELOPMENT
(1982) EN
XA;XP;XL pg 1-11
Land use, which is the key factor in the fast disappearance of tropical forests, is analysed especially in light of the growing population and export markets for tropical timber. The forestry profession is criticized for its emphasis on timber production. The role of foresters and the disappearance of tropical forests is also discussed. It is suggested that conservation of the remnant tropical forests should become an ultimate goal. Some practical ways to achieve this on an ongoing basis involving planned colonisation schemes and greater emphasis on increasing production from good soils are also discussed. Among other issues raised are the greater concern with the plight of rural communities through the promotion of agroforestry and fuelwood production, the promotion of tree planting on degraded lands, management of secondary forests for wood production, and the establishment of forested buffer zones around protected area, e.g., national parks.

17 REF.
RURAL DEVELOPMENT; TROPICAL RAIN FORESTS; LAND USE; AGROFORESTRY; MANGROVES; RESOURCE CONSERVATION; FUELWOOD; RURAL COMMUNITIES

00095
03105
BANKS, P.F.
FORESTRY COMMISSION, SALISBURY (ZIMBABWE)
THE INDIGENOUS WOODLANDS - A DIMINISHING SOURCE OF FUELWOOD
(1980) EN
XA;ZW pg 1-7
A brief outline is given of the conservation role of indigenous woodland and its characteristics in relation to distribution and use. Woodlands are diminishing because of mismanagement and agroforestry is seen as one method of preventing further degradation of the environment while providing a renewable source of wood and other forest products. The need to reserve further areas of indigenous woodland for sustained wood production and the protection of catchment areas is stressed as well as the necessity for integrated planning.
8 REF.; SUMMARY (EN)
AGROFORESTRY; WOODLANDS; INDIGENOUS PLANTS; FUELWOOD; FARMLAND; FORESTS; CONSERVATION; AGRICULTURE

00096
03104
BANKS, P.F.
FORESTRY COMMISSION, CAUSEWAY (ZIMBABWE)
THE POTENTIAL FOR AGRO-FORESTRY ON FOREST LAND IN THE SEBUNGWE REGION
ZIMBABWE AGRIC J Vol 79 No 5 (1982) EN
XA;ZW pg 161-163
The paper defines agroforestry and briefly discusses an agroforestry scheme located in the Lutope valley area of Mafungabusi forest in Zimbabwe. The objectives are to stop shifting cultivation, improve and maintain soil fertility, plant multipurpose trees for windbreaks, establish fodder bands and conserve indigenous vegetation by local families.
ACACIA ALBIDA; CASUARINA; AGROFORESTRY; SHIFTING CULTIVATION; FODDER; NITROGEN FIXATION; LEGUMES; GRAZING; FUELWOOD

00097
05318
ALIEU, E.K.
AGRO-FORESTRY PRACTICES IN SIERRA LEONE
(1983) EN
SL;XA pg 1-7
The paper presents a discussion on agroforestry practices in Sierra Leone. The presentation is in five major parts: extent of agroforestry practices in Sierra Leone, extent of agroforestry in various conservancies, factors militating against the successful implementation of agroforestry, the need for research and implementation of results and future prospects for agroforestry in Sierra Leone.
THEOBROMA CACAO; CORDIA ALLIODORA; TERMINALIA IVORENSIS; GMELINA ARBOREA; AGROFORESTRY; TRADITIONAL FARMING; POPULATION CHANGE; TAUNGYA SYSTEM; SHADE PLANTS; FOOD PRODUCTION; TROPICS

00098
01866
ROCHE, L.; COOPER, R.
UNIV. COLL. OF NORTH WALES, BANGOR (UK). DEPT. OF FORESTRY AND WOOD SCIENCE
FORESTRY FOR LOCAL COMMUNITY DEVELOPMENT: MANPOWER, TRAINING AND EDUCATION REQUIREMENTS
COMMONW FOR REV Vol 59 No 2 (1980) EN
XA pg 163-179
In this paper the concepts of forestry as an instrument of rural development is examined in relation to specified needs of the local community and in relation to externally aided agroforestry and community forestry projects. It is suggested that agroforestry and community forestry projects have little or no lasting effect in the absence of a government commitment to forestry as an instrument for rural development and in the absence of an appropriately trained indigenous manpower. On the basis of these assumptions current manpower requirements are estimated and projected to the year 2000 for seven East and North East African countries. The prevailing situation in each country in regard to training and education in forestry is discussed, and it appears that there are some shortfalls in the current professional forestry requirements in this region. It is, however, suggested that the region has the potential to meet the required manpower on both the technical and professional levels, but external support will be required. The weaknesses of the basic data and methodology used in estimating manpower requirements are emphasized.
6 TABLES; 9 REF. SUMMARIES (EN, ES, FR)
EASTERN AFRICA; RURAL DEVELOPMENT; FORESTRY; AGROFORESTRY; RURAL COMMUNITIES, MANPOWER; TRAINING

00099
02064
RIDDELL, J.C.
WISCONSIN UNIV., MADISON (USA). LAND TENURE CENTRE
CAUSES OF DEFORESTATION AND FOREST AND WOODLAND DEGRADATION IN TROPICAL AFRICA
(1982) EN
XA pg 1-52
The paper discusses the causes of deforestation in the tropical forests. A combination of demographic, cultural, political and economic processes in the struggle for agricultural development are described as the major causes of woodland degradation. Forest data for Africa, estimates of forest resources, rural social economics, uses of the environment, logging, the concept of forest and implications of all these are highlighted. The author concludes that it is not trees that cause the conversion of tropical forests, it is the people, and until the human problems associated with food shortages, overextended agricultural systems and rural poverty in absolute terms are solved, the human-forest interaction will continue to the detriment of the forests.
15 TABLES; 103 REF. SUMMARY (EN)
DEFORESTATION; AGRISILVICULTURE; TRADITIONAL FARMING; AGRICULTURAL DEVELOPMENT

00100
02917
REDHEAD, J.F.; MAGHEMBE, J.A.
DAR ES SALAAM UNIV., MOROGORO (TANZANIA). DIV. OF FORESTRY
AGROFORESTRY: INTEGRATED LAND USE FOR RURAL COMMUNITIES IN TROPICAL AFRICA
(1981) EN
XA;TZ pg 1-19

Results of various tree/crop combination trials (termed as agroforestry research intiations) at Morogoro in Tanzania are presented. The major tree species used in these trials were Eucalyptus camaldulensis, Eucalyptus melliodora, Acacia albida and Leucaena leucocephala. These were intercropped with food crops such as maize, sorghum and beans. The experiments are described and the results analysed with the aid of five figures at the end of the text. It is concluded that it is possible to obtain food, fodder and fuelwood from the same unit of land under the same management system.
7 FIG; 5 REF.
EUCALYPTUS MELLIODORA; EUCALYPTUS CAMALDULENSIS; ACACIA ALBIDA; LEUCAENA LEUCOCEPHALA; AGROFORESTRY; LAND USE; TROPICS; RURAL COMMUNITIES

00101
02920
RAINTREE, J.B.
IITA, IBADAN (NIGERIA)
CONSERVATION FARMING WITH SOIL-IMPROVING TREE LEGUMES: A FARMING SYSTEMS APPROACH TO TROPICAL AGROFORESTRY
IITA AGRICULTURAL ECONOMICS DISCUSSION PAPER NO. 9/80 (1980) EN
XA;NG pg 1-18
The paper explores the advantages of arable crop farming with soil-improving tree legumes as a branch of agroforestry research and development. Agroforestry research for the tropical countries was prompted by the declining productivity and sustainability of the small farmer because of population pressure. Other reasons cited include the inability of diminishing forest resources to keep pace with the increased demands for fuelwood; environmental deterioration resulting from overexploitation of agricultural and forestry resources and the low adoption rates for conservation-oriented agricultural innovations. Solutions to these problems, which include the integration of multipurpose leguminous trees in smallholder farming systems in terms of alley cropping, multistorey intercropping and planted fallow systems, are discussed. Examples and characteristics of promising species for trial and evaluation are given.
4 FIG.; 28 REF.
LEUCAENA LEUCOCEPHALA; SESBANIA GRANDIFLORA; AGROFORESTRY; CROPS; WOODY LEGUMES; FARMING SYSTEMS; SMALL SCALE FARMING; SOIL FERTILITY; TROPICS; LAND USE; MULTIPURPOSE TREES

00102
04343
VERINUMBE, I.; KNIPSCHEER, H.C.; ENABOR, E.E.
THE ECONOMIC POTENTIAL OF LEGUMINOUS TREE CROPS IN ZERO-TILLAGE CROPPING IN NIGERIA: A LINEAR PROGRAMMING MODEL
AGROFORESTRY SYSTEMS Vol 2 No 2 (1984) EN
XA;NG pg 129-138
An economic evaluation is presented of the zero-tillage farming system against the background of small-scale farmers in the humid zone of southwest Nigeria, where the soils are mainly alfisol, using a linear programming method. The two most promising cropping systems, zero-tillage and alley cropping, are evaluated with the aim of finding the most promising land-management system and determining how it will perform under various farming conditions. The crops for the alternative crop-rotation systems were maize, cowpeas, stylo, pigeon pea and Leucaena.
6 TABLES; 10 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; CAJANUS CAJAN; ZEA MAYS; VIGNA UNGUICULATA; STYLOSANTHES ; ZERO TILLAGE; FARMING SYSTEMS; ALLEY CROPPING; ECONOMIC ANALYSIS; ALFISOLS; HUMID TROPICS

00103
05257
STROMGAARD, P.
COPENHAGEN UNIV., (DENMARK). INST. OF GEOGRAPHY
BIOMASS ESTIMATION EQUATIONS FOR MIOMBO WOODLAND, ZAMBIA
AGROFORESTRY SYSTEMS Vol 3 No 1 (1985) EN
XA;ZM pg 3-13
A study to determine the above ground tree biomass in Zambian miombo woodland is presented. The study area was dominated by shifting cultivators who do not clear-fell the trees but lop and chop them to allow fast regrowth. Obviously, the carrying capacity of this system depends on the amount of vegetation available and monitoring of the forest resources is, therefore, very important. In this study, after investigations of clear-cutting and measuring trees from several sample plots, a multiple analysis gave a set of equations that can be used to predict the aboveground biomass of a single tree acurately. This is important for monitoring the forest resources in the miombo woodland and has relevance for the study of agroforestry and shifting cultivation in such areas.
6 FIG.; 63 REF. SUMMARY (EN)
BIOMASS; MIOMBO WOODLANDS; SHIFTING CULTIVATION; AGROFORESTRY

00104
03947
SUMBERG, J.E.
ILCA, IBADAN (NIGERIA)
ALLEY FARMING IN THE HUMID ZONE: LINKING CROP AND LIVESTOCK PRODUCTION
ILCA BULL Vol No 18 (1984) EN
ILCA
XA;NG pg 2-6
The paper gives the background to small ruminant production in the humid zone of West Africa and describes the alley farming techniques being evaluated by ILCA. The importance of crops in this zone is emphasised to the extent that any improvement in livestock should also show a positive effect on crop production. Alley cropping employs the fast-growing leguminous trees Leucaena leucocephala and Gliricidia sepium, which provide cut-and-carry fodder for the ruminants and mulch for the crops that are grown in the alleys of these trees. Alley farming also offers the possibility of allowing sheep to graze the fallow areas during periodic fallow years. A budget analysis of the two systems is also given.
3 TABLES; 5 REF. SUMMARY (EN)
GLIRICIDIA SEPIUM; LEUCAENA LEUCOCEPHALA ; ALLEY CROPPING; FODDER CROPS; SHEEP; RUMINANTS; CROP PRODUCTION; NITROGEN; HUMID TROPICS; GOATS

00105
05581
KENYA RENEWABLE ENERGY DEVELOPMENT, NAIROBI (KENYA)
KISII AGROFORESTRY/ENERGY CENTRE
KREDP KISII INFORMATION BULL NO. 1 (1987) EN
KREDP
XA;KE pg 1-31
A description of the Kisii Agroforestry Centre is presented under location, objectives, present programme components, cooperation and administration, physical developments completed and the agroforestry, biogas and cookstove programmes. Pictures are included to illustrate various activities at the Centre.
7 TABLES
CALLIANDRA CALOTHYRSUS ; AGROFORESTRY; FUELWOOD; EXPERIMENTS; FODDER CROPS

00106
03638
WINTERBOTTOM, R.T.
REFORESTATION IN THE SAHEL: PROBLEMS AND STRATEGIES
(1980) EN
WORLD BANK
XA pg 1-32
The first part of this paper deals with the context of reforestation and natural resource conservation projects in the Sahel region of West Africa. Background information on the cost of fuelwood, the problem of deforestation and necessary responses to the problem are presented. The second part discusses the impact of a number of forestry projects undertaken in Burkina Faso, and the information related to the projects success or failure is highlighted. The third and final section analyses what can be learned from past efforts in the forestry/ecology sector and concludes with several guidelines for the design of future forestry projects.
6 TABLES; 27 REF.
REFORESTATION; SAHEL; DEFORESTATION; FUELWOOD; WEST AFRICA

00107
03668
WISNER, B.
BEIJER INSTITUTE, STOCKHOLM (SWEDEN)
SOCIAL FACTORS AFFECTING FUELWOOD PLANNING IN KENYA. PRELIMINARY FIELD REPORT
(1981) EN
XA;KE pg 57
A two part report of the Beijer Institute/Ministry of Energy (MOE) in Kenya fuelwood project is presented. It focuses on the evaluation of the social framework of energy use and analysis and implications of fieldwork data within that framework. The report is divided into two parts. Part one addresses the issue of relevant social factors, first as they seem to interrelate in energy issues and second, as they relate to the developmental priorities the Beijer/MOE shares with other projects in the rural areas, i.e., satisfaction and participation. The second part discusses the actual utilization of the social process data generated and systematized.
58 REF.; 3 MAPS
FUELWOOD; SOCIOECONOMIC ASPECTS; HOUSEHOLD CONSUMPTION; LAND TENURE; PROJECTS

00108
04482
WATSON, G.A.
TREE CROPS IN THE LOWLAND HUMID TROPICS - A TIME OF CHANGE
OUTLOOK ON AGRICULTURE Vol 11 No 1 (1982) EN
XA;XL;XP pg 10-15
Causes of deforestation in the humid tropics of Africa, Latin America and Asia are outlined. The importance of the tropical tree crops (rubber, coconut, oil palm and cocoa) in the improvement of the economic situation of these countries is also stressed. Agroforestry, which is seen as a system with low input, productive and particularly suited to overpopulated areas is discussed.
5 FIG.; 62 REF.
HEVEA BRASILIENSIS; ELAEIS GUINEENSIS; COCOS NUCIFERA; TREE CROPS; HUMID TROPICS; AGROFORESTRY; DEFORESTATION

00109
05600
ARAP SANG, F.K.; HOEKSTRA, D.A.
KENYA AGRICULTURAL RESEARCH INSTITUTE, NAIROBI (KENYA)
ONE-STATION HEDGEROW TRIAL RESULTS OF THE DEVELOPMENT PHASE DRYLAND AGROFORESTRY RESEARCH PROJECT RESEARCH REPORT NO. 3 (1986) EN
XA;KE pg 1-13
Results of experiments to examine the possibilities of maintaining and increasing the productivity of the cropping system by establishing alley cropping in a cropland are presented. Cassia siamea was the selected tree species for the hedgerows and maize was the food crop planted between the rows. The yields for the maize crop are tabulated.
6 TABLES
ACACIA SIAMEA; HEDGEROWS; EXPERIMENTS; ALLEY CROPPING

00110
B02894
574(66)
WORLD BANK, WASHINGTON D.C. (USA)
DESERTIFICATION IN THE SAHELIAN AND SUDANIAN ZONES OF WEST AFRICA (1985) EN
WORLD BANK
XA pg 1-65
The desertification process, its problems and measures to alleviate these problems in the West African Sahelian and Sudanian zones are discussed. These discussions are presented as the desertification problem, traditional production systems and the pressures on them, review of past development activities, elements of a strategy for better resource management and implications for action. Tables provide some analytical data on these issues and a climatic zone map is included.
13 TABLES; 7 REF. SUMMARY (EN)
DESERTIFICATION; PRODUCTION SYSTEMS; AGRISILVICULTURE; AGROSILVOPASTORAL SYSTEMS; SILVOPASTORAL SYSTEMS; RESOURCE MANAGEMENT; DEVELOPMENT; AGRICULTURE; LIVESTOCK; FORESTRY; SEMI ARID ZONES; SAHEL

00111
B02699
634.0(6)
WIERSUM, K.F.
WAGENINGEN AGRICULTURAL UNIV., (NETHERLANDS). FOREST DEPT.
FORESTRY ASPECTS OF STABILIZING SHIFTING CULTIVATION IN AFRICA (1985) EN
WAGENINGEN AGRIC. UNIV.
XA;SL;MG;TZ;CI pg 19-196
The aspects of forests in the improvement of shifting cultivation are discussed. Four case studies on the effects and improvements of shifting cultivation are presented: alternatives and improvements to shifting cultivation on the east coast of Madagascar; development of ecological methods of upland farming in the Western Usambara mountains, Tanzania; smallholder plantation agriculture of immigrant Baoule farmers in Southwest Ivory Coast and the integrated agricultural development project, Eastern Province, Sierra Leone.
32 FIG.; 100 REF.; 27 TABLES
SHIFTING CULTIVATION; FORESTRY; AGRICULTURAL DEVELOPMENT; HILLSIDE FARMING; SMALL SCALE FARMING; ECOLOGY

00112
05630
OWUSU-BEMPAH, K.
THE ROLE OF WOMEN FARMERS IN THE CHOOSING OF SPECIES FOR AGROFORESTRY FARMING SYSTEMS IN RURAL AREAS OF GHANA
(1986) EN
XA;GN pg 1-19
The paper presents a case study survey conducted to identify useful local species for the agroforestry farming system research and development (AFSR&D) program in the forest savanna zone of Ghana. The role of women in the conservation and identification of agroforestry species is highlighted. The author recommends that researchers work directly with women subsistence farmers when identifying agroforestry species. Projects initiated by the AFSR&D program to plan, design and implement strategies outlined in the survey are discussed.
6 TABLES; 3 FIG.; 34 REF. SUMMARY (EN)
FUELWOOD; FOOD; WOMEN; AGROFORESTRY; FARMING SYSTEMS

00113
06456
O'KTING'ATI, A.; MONGI, H.O
SOKOINE UNIV. AGRICULTURE, MOROGORO (TANZANIA). FACULTY OF FORESTRY
AGROFORESTRY AND THE SMALL FARMER: A CASE STUDY OF KILEMA AND KIRUA VUNJO IN KILIMANJARO
INT TREE CROPS J Vol 3 (1986) EN
XA;TZ pg 257-265
An agroforestry system is described that involves multiple cropping of coffee, bananas and timber, fruit, fodder, ornamental and shade trees together with understorey annual and perennial food crops on the slopes of Mount Kilimanjaro in Tanzania.
4 TABLES; 4 REF. SUMMARIES (EN, ES, FR)
AGROFORESTRY; SMALL SCALE FARMING

00114
06129
OKALI, C.; BERRY, S.
AFRICAN-AMERICAN ISSUES CENTRE, BOSTON (USA)
ALLEY FARMING IN WEST AFRICA IN COMPARATIVE PERSPECTIVE
AFRICAN-AMERICAN ISSUES CENTRE, DISCUSSION PAPER NO 11 (1986) EN
XA pg 1-17
The paper examines ways in which leguminous fodder trees can be integrated into the existing farming systems in the humid zone of West Africa. Three models using leguminous trees - alley farming, specialized feed lots, and alley grazing are detailed, and then they are examined in the light of experience already gained with farmers in Southern Nigeria. Leguminous trees are compared with other tree crops such as cocoa, coffee, kola and oil palm in terms of tenure and labour arrangements. Issues warranting further investigations in ongoing experiments with leguminous trees are suggested.
35 REF.
LEUCAENA; GLIRICIDIA; ALLEY CROPPING; WEST AFRICA; FODDER CROPS; LEGUMES; MIXED FARMING; TREE CROPS; TENURE

00115
05701
MCGAHUEY, M.
CHEMONICS INTERNATIONAL, WASHINGTON (USA)
IMPACT OF FORESTRY INITIATIVES IN THE SAHEL ON PRODUCTION OF FOOD, FODDER AND WOOD

(1986) EN
XA;NE;TD;SO pg 1-25
Strategies to increase productivity in the Sahel are discussed. The approaches being taken to increase productivity are given starting with the bush fallow system where Acacia albida trees are intercropped with food crops and impact on fragile soils as well as the climate. Agroforestry initiatives in Chad and Somalia aimed at increasing food, fodder and wood on a sustainable basis are highlighted and the need to quantify these intiatives is addressed.
3 TABLES; 35 REF. SUMMARY (EN)
ACACIA ALBIDA; FORESTRY; SAHEL; SMALL SCALE FARMING; TRADITIONAL FARMING; AGROFORESTRY; ARID ZONES

00116
05699
VON MAYDELL, H.J.
INSTITUTE OF WORLD FORESTRY, HAMBURG (F.R. GERMANY). FEDERAL RESEARCH CENTRE OF FORESTS & FOREST PRODUCTS
FORESTRY IN SENEGAL - PROBLEMS AND PROSPECTS FOR DEVELOPMENT
PLANT RES DEV Vol 14 (1981) EN
XA;SN pg 7-20
Problems and prospects for development of forestry in Senegal are discussed. The vegetation is described and the problems resulting from drought and overuse are discussed. Analyses the challenges of forestry in solving some of these problems and describes the German-Senegalese project on afforestation, which aims at developing agrosilvopastoral, creating permanent gum arabic, improvement of regional bush fires protection and improve forestry services. The tasks for forestry research are also highlighted.
11 REF.
ACACIA NILOTICA; ACACIA SENEGAL; SAHEL; FORESTRY; DROUGHT; AFFORESTATION; AGROFORESTRY

00117
06380
YAMOAH, C.F.; AGBOOLA, A.A.; MULONGOY, K.
IITA, IBADAN (NIGERIA)
AGROFORESTRY SYSTEMS Vol (1986) EN
XA;NG pg 239-246
Studies are detailed of the monitoring of the decomposition of prunings and weeds conducted in an alley cropping field, with hedgerows of Cassia siamea, Flemingia congesta and Gliricidia sepium at the International Institute of Tropical Agriculture, Ibadan, Nigeria. Decomposition of cutbacks and subsequent prunings ranged from 2.7 to 5.8 dry matter loss per week and Gliricidia cutbacks released 71 of the total N required by the maize planted in the alley (Flemingia 26 and Cassia 77). It is also reported that during the fallow period, weed control was most effective under Cassia, followed by Gliricidia and Flemingia. During the cropping period Cassia mulch still maintained a fairly good weed control.
6 FIG.; 11 REF. SUMMARY (EN)
CASSIA SIAMEA; FLEMINGIA CONGESTA; GLIRICIDIA SEPIUM; WEED CONTROL; ALLEY CROPPING; DECOMPOSITION; HEDGEROWS; NITROGEN

00118
B03550
631.459
GOSSAGE, S.J.
PROCEEDINGS OF THE EASTERN PROVINCE SOIL CONSERVATION AND AGROFORESTRY WORKSHOP CHIPATA 26-27, SEPTEMBER 1984

(1985) EN
XA;ZM pg 1-90
In this proceedings of a workshop on soil conservation and agroforestry in Eastern Province of Zambia, the papers presented were on soil erosion, erosion control, soil survey and soil conservation. The use of various agroforestry practices for soil conservation is stressed in all of the papers.
SOIL CONSERVATION; AGROFORESTRY; EROSION CONTROL; EROSION

00119
B03695
63(678)
SCHEINMAN, D.
TANGA INTEGRATED RURAL DEVELOPMENT PROJECT, LUSHOTO (TANZANIA) CARING FOR THE LAND OF THE USAMBARAS: A GUIDE TO PRESERVING THE ENVIRONMENT THROUGH AGRICULTURE, AGROFORESTRY AND ZERO GRAZING (1986) EN
GTZ, ESCHBORN, WEST GERMANY
XA;TZ pg 1-306
This is a guide for village extension workers assigned to the Soil Erosion Control and Agroforestry Project (SECAP) in Tanga, Tanzania. SECAP's activities are thoroughly documented and explained in this four-part guide. It covers erosion and soils, agriculture, agroforestry, and agricultural extension and human nutrition. Although the book is about farming in the Usambara Mountains in Tanzania, the suggested techniques are applicable to similar situations in other developing countries.
49 FIG; 47 REF.
EROSION; SOILS; EROSION CONTROL; AGRICULTURE; EXTENSION ACTIVITIES; CROPS; FRUIT TREES; AGROFORESTRY; NUTRITION; LIVESTOCK

00120
06970
RAINTREE, J.B.
ICRAF, NAIROBI (KENYA)
PRELIMINARY DIAGNOSIS OF AGROFORESTRY RELATED LAND USE CONSTRAINTS AND POTENTIALS IN THE EASTERN KANZALU AREA OF MACHAKOS
ICRAF WORKING PAPER NO. 5 (1981) EN
ICRAF
XA;KE pg 1-24
In this paper, a brief preliminary analysis of land-use constraints and agroforestry potential to guide further research in ICRAF's field research in Machakos is presented. Previous research projects and interviews with qualified informants are also reported. The diagnosis is limited to household food and cash subsystems.
4 TABLES; 8 FIG.; 9 REF.
AGROFORESTRY; FARMING SYSTEMS; HOUSEHOLDS

00121
06793
YAMOAH, C.F.; AY, P.; AGBOOLA, A.A.
IITA, IBADAN (NIGERIA); IBADAN UNIV., (NIGERIA)
THE EFFECTS OF SOME METHODS OF ESTABLISHING GLIRICIDIA SEPIUM ON FOOD CROP PERFORMANCE, GROWTH AND SURVIVAL RATE OF GLIRICIDIA
INT TREE CROPS J Vol 4 (1986) EN
XA;NG pg 17-31
The paper reports on some methods of establishing Gliricidia and food crops in an alley farming system. It discusses the effects of these methods on the performance of the food crops and the survival of Gliricidia in the southern savanna zone of Nigeria.
6 TABLES; 7 REF. SUMMARY (EN)

GLIRICIDIA SEPIUM; ZEA MAYS; ALLEY CROPPING; AGROFORESTRY; SAVANNA

00122
06577
KARANI, P.K.
MINISTRY OF AGRICULTURE AND FORESTRY, ENTEBBE (UGANDA)
OBSERVATIONS ON THE PRODUCTIVITY OF MATOKE (BANANAS) (MUSA SPP) UNDER AGROFORESTRY AT ENTEBBE, UGANDA
COMMONW FOR REV Vol 65 No 3 (1986) EN
XA;UG pg 241-250
The economic and cultural importance in Uganda of growing bananas and trees on the same piece of land is discussed. A study to quantify information regarding the interactive relationship between matoke and trees and the sustainable productivity of matoke is described. Other food crops included in this agroforestry practice, as well as their cultural requirements are addressed.
7 REF.; 2 FIG. SUMMARIES (EN, ES, FR)
MUSA; FICUS NATALENSIS; AGROFORESTRY; FOOD CROPS; WEED CONTROL

00123
06986
RAINTREE, J.B.
ICRAF, NAIROBI (KENYA)
AGROFORESTRY PATHWAYS: LAND TENURE, SHIFTING CULTIVATION AND SUSTAINABLE AGRICULTURE
UNASYLVA Vol 38 No 154 (1986) EN
XA;XL;XP pg 2-15
Agroforestry is defined and its impact on various tropical land-use systems are highlighted. The effects of agroforestry practices on land-tenure systems in the regions are discussed in detail.
72 REF.
AGROFORESTRY; LAND TENURE; SUSTAINABILITY; AGRICULTURE; SHIFTING CULTIVATION; LAND USE

00124
B03590
631.582(6)
BUNTING, A.H.; BUNTING, E.
FAO, ROME (ITALY)
THE FUTURE OF SHIFTING CULTIVATION IN AFRICA AND THE TASK OF UNIVERSITIES (1984) EN
FAO
XA pg 198
This volume is a product of an international workshop on shifting cultivation in Africa, with particular reference to teaching and research at the university level and is a joint effort of the FAO and Faculty of Agriculture and Forestry of the University of Ibadan, Nigeria. It contains the edited text of 22 of the papers. It is divided into recommendations of the workshop,; position papers, environmental aspect, technical aspects, social and economic aspects, and the tasks and role of the universities. The need to examine the appropriateness of the present training and skills of agricultural extension agents in Africa, particularly those working in shifting cultivation areas, is stressed.
36 TABLES; 5 FIG.; 334 REF.
SHIFTING CULTIVATION; ENVIRONMENT; EXTENSION ACTIVITIES; ANIMAL PRODUCTION; AGRICULTURE; EDUCATION; FARMING SYSTEMS; UNIVERSITIES; ECOLOGICAL FACTORS; RESEARCH; ECONOMICS; AGRISILVICULTURE

00125
06973
KUYPER, J.B.H.; BRADLEY, P.N.
BEIJER INSTITUTE, NAIROBI (KENYA)
WOODFUEL AND AGROFORESTRY IN KISII DISTRICT
KENYA WOODFUEL DEVELOPMENT PROGRAMME WORKING PAPER NO. 7 (1985) EN
BEIJER INSTITUTE
XA;KE pg 1-81
The paper describes the results of a district resource inventory and woodfuel agroforestry field survey conducted in Kisii District in the Nyanza Province of Kenya. Filed investigations on ongoing agroforestry practices, fuelwood consumption and supply, as well as socioeconomic aspects are discussed. The surveys were conducted in 21 areas and 279 households were surveyed with the aid of questionnaires, which are also detailed.
SUMMARY (EN)
FUELWOOD; AGROFORESTRY; RURAL AREAS; HOUSEHOLDS

00126
07452
BONKOUNGOU, E.G.; CATINOT, R.
IRBET, OUGADOUGOU (BURKINA FASO)
RESEARCH ON AND DEVELOPMENT OF NATURAL REGENERATION TECHNIQUES FOR THE SILVO-PASTORAL MANAGEMENT OF EXISTING FOREST RESOURCES INCREASING PRODUCTIVITY OF MULTIPURPOSE LANDS PROC. (CARLSON, L.W. AND SHEA, K.R. EDS.)
(1986) EN
IUFRO
XA;BF pg 89-124
A silvopastoral management project based on natural regeneration, planned for the countries that lie in the Sahelian and Sudanian zones, is discussed. The long-term and immediate objectives, expected results, plan of action and funding are highlighted.
SILVOPASTORAL SYSTEMS; RESEARCH; FOREST RESOURCES; REGENERATION

00127
07437
OKAFOR, J.C.; FERNANDES, E.C.M.
FORESTRY COMMISSION, ENUGU (NIGERIA). FORESTRY DEVELOPMENT AND INVESTIGATION BRANCH; ICRAF, NAIROBI (KENYA)
COMPOUND FARMS OF SOUTHERN NIGERIA: A PREDOMINANT AGROFORESTRY HOMEGARDEN SYSTEM WITH CROPS AND SMALL LIVESTOCK
AGROFORESTRY SYSTEMS Vol 5 No 2 (1987) EN
XA;NG pg 153-168
Compound farms (home garden type) are described as types of agroforestry practices involving deliberate management of multipurpose trees and shrubs in a multistoried association with agricultural crops and small livestock within the compounds of homesteads. Major components of compound farms are identified and their uses, environmental variation, interactions and management practices are described. Prospects for and the implications of improvements to the system are examined.
4 FIG.; 17 REF. SUMMARY (EN)
AGROFORESTRY; HOME GARDENS; GERMPLASM CONSERVATION

00128
07440
GASMSER, M.S.
INTERMEDIATE TECHNOLOGY DEVELOPMENT GROUP, RUGBY (UK)
LETTING THE PIPER CALL THE TUNE: EXPERIMENTING WITH DIFFERENT FORESTRY EXTENSION METHODS IN THE NORTHERN SUDAN
ODI NETWORK PAPER 4A (1987) EN
ODI
XA;SD pg 1-19
The paper presents examples of the outcome of some of the grants made by the Energy Council (ERC) and within it the Government of Sudan/USAID-sponsored Sudan Renewable Energy Project (SREP) examining the impact of institutional innovations upon social forestry development. The importance of peoples' participation in social forestry projects is described as the most important component and is discussed in detail.
12 REF.
ACACIA SENEGAL; AZADIRACHTA INDICA; PROSOPIS; COMMUNITY FORESTRY; SEMI ARID ZONES; FUELWOOD

00129
07352
ARAP SANG, F.K.; HOEKSTRA, D.A.; OKUMU, R.
PRELIMINARY RESULTS OF ON-STATION GREEN MANURE TRIALS WITH LEAVES FROM LEUCAENA LEUCOCEPHALA, CASSIA SIAMEA AND TERMINALIA BROWNII KENYA DRYLAND AGROFORESTRY RESEARCH PROJECT - REPORT NO. 1 (1985) EN
XA;KE pg 1-26
The paper reports on the results of an experiment on alley cropping aimed at examining the possibilities of maintaining and increasing the productivity of such a cropping system in a cropland in a semi-arid area of Kenya. The alley farming trials, described in detail consisted of Cassia siamea, Leucaena leucocephala and Terminalia brownii with maize and beans as the crops planted in the alley of these trees.
12 TABLES
CASSIA SIAMEA; LEUCAENA LEUCOCEPHALA; TERMINALIA BROWNII; ZEA MAYS; PHASEOLUS; GREEN MANURES; CROPPING SYSTEMS; EXPERIMENTS; LAND USE

00130
07360
SUMBERG, J.E.; MCINTIRE, J.; OKALI, C.; ATTA-KRAH, A.
ILCA, ADDIS ABABA (ETHIOPIA)
AN ECONOMIC ANALYSIS OF ALLEY FARMING WITH SMALL RUMINANTS (1985) EN
XA;ET pg 1-25
An evaluation is presented of the economics of several alley farming models incoporating small ruminants based on field data and experiences in southwest Nigeria. The potential benefits from the inclusion of small ruminants in the system is emphasised. Key management areas within alley farming, as well as areas where further information is needed, are pinpointed.
19 REF.; 7 TABLES
LEUCAENA LEUCOCEPHALA; GLIRICIDIA SEPIUM; ALLEY CROPPING; SHEEP; GOATS

00131
07344
WEBER, F.R.; STONEY, C.
AGROFORESTRY METHODS
REFORESTATION IN ARID LANDS (WEBER, F.R. AND STONEY, C. EDS.) (1986) EN
VITA

XA pg 113-152
Various agroforestry systems practiced in Africa are described. The agroforestry and soil conservation techniques are given in detail. The techniques include; alley cropping, on-farm dispersed trees, on-farm line plantations, on-farm borderline trees, live fencing, off-farm road and trail alignment, water course alignment, shade trees (off-farm as well as on-farm), windbreaks for soil conservation, sand and soil stabilization and trees planted along contour ridges for erosion control. Species for various techniques are listed.
AGROFORESTRY; FARMING SYSTEMS; SOIL CONSERVATION; WINDBREAKS; TREE PLANTING

00132
B03913
634.0
CARLSON, L.W. (COMP.); SHEA, K.R. (COMP.)
CANADIAN FORESTRY SERVICE, HULL (CANADA)
INCREASING PRODUCTIVITY ON MULTIPURPOSE LANDS. PROCEEDINGS OF IUFRO RESEARCH PLANNING WORKSHOP FOR AFRICA SAHELIAN AND NORTH SUDANIAN ZONES
(1986) EN
IUFRO
XA pg 337
The book presents the papers discussed at an IUFRO workshop on increasing productivity of multipurpose lands of the arid and semi-arid zones of Africa. The papers discuss seven proposals: agroforestry research and development; research and development of techniques for natural regeneration for silvopastoral management; management of indigenous trees and shrubs for rehabilitation of degraded rangelands; developing and using biotechnologies in forestry and agroforestry in the Sahel; research and development of nursery practices and techniques for the establishment and management of fuelwood plantations and nursery practices in arid and semi-arid zones of northeast Africa.
AGROFORESTRY; RESEARCH; DEVELOPMENT; SILVOPASTORAL SYSTEMS; MANAGEMENT; ARID ZONES; SEMI ARID ZONES; NURSERIES; PRODUCTIVITY; SAHEL; FOOD; FUELWOOD

00133
07311
CHAVANGI, A.H.; ZIMMERMANN, R.
GUIDE TO FARM FORESTRY IN KENYA
(1987) EN
XA;KE pg 1-93
Farm forestry is described as a form of agroforestry in which shrubs are planted on farms and on other rural lands to supply households and markets with fuelwood, poles, timber, fodder and other direct or indirect tree products. This book outlines the basic principles and methods of farm forestry for extension foresters and farmers or self-help groups who want to become their own foresters in Kenya.
20 FIG.; 32 REF.
FARM FORESTRY; FUELWOOD; FOREST PRODUCTS; EXTENSION ACTIVITIES; FOREST MANAGEMENT

00134
07453
BAUMER, M.; WOOD, P.J.
ICRAF, NAIROBI (KENYA)
AGROFORESTRY RESEARCH AND DEVELOPMENT: AGROFORESTRY PRACTICES FOR THE SOLUTION OF FOOD, FODDER AND FUEL SHORTAGES

INCREASING PRODUCTIVITY OF MULTIPURPOSE LANDS, PROC. (CARLSON, L.W. SHEA, K.R. EDS.) (1986) EN
IUFRO
XA pg 22-88
The need for agroforestry research and development in dryland Africa is examined, and the following key issues are addressed: ecological constraints, identification of problems and their causes, potential role for agroforestry practices and the research priorities. Four project proposals for the development of agroforestry practices are discussed: agroforestry fodder species for arid lands; agroforestry management for fodder in dry zones; agroforestry management for fuelwood and fodder production in arid zones; and the impact of agroforestry on food production.
14 REF.
AGROFORESTRY; ARID ZONES; FOOD PRODUCTION; FUELWOOD; FODDER

00135
07351
FRANCIS, P.
ILCA, IBADAN (NIGERIA). HUMID ZONE PROGRAMME
LAND TENURE SYSTEMS AND AGRICULTURAL INNOVATION: THE CASE OF ALLEY FARMING IN NIGERIA
LAND USE POLICY Vol 4 No 3 (1987) EN
XA;NG pg 305-319
Alley farming as an agroforestry technology is defined as a practice in which crops are planted between rows of fast-growing leguminous trees. The implications of land tenure systems in southeast and southwest Nigeria for the viability and acceptability of alley farming are considered. The rules governing the use and control of land (land tenure) in these two regions are described in detail.
ALLEY CROPPING; LAND TENURE; INNOVATIONS; FARMING SYSTEMS

00136
07469
MERGEN, F.
YALE UNIV., NEW HAVEN (USA). SCHOOL OF FORESTRY AND ENVIRONMENTAL STUDIES
RESEARCH OPPORTUNITIES TO IMPROVE THE PRODUCTION OF HOMEGARDENS
AGROFORESTRY SYSTEMS Vol 5 No 1 (1987) EN
XA;XL;XP pg 57-67
The management of home gardens on a wide scale basis is reviewed and examples of specific systems are presented. Opportunities for improvement and recommendations for research are given.
19 REF. SUMMARY (EN)
HOME GARDENS; RESEARCH; LAND USE

00137
07471
CHIDUMAYO, E.N.
NATURAL RESOURCES DEPT., LUSAKA (ZAMBIA)
A SHIFTING CULTIVATION LAND USE SYSTEM UNDER POPULATION PRESSURE IN ZAMBIA
AGROFORESTRY SYSTEMS Vol 5 No 1 (1987) EN
XA;ZM pg 15-25
The chitemene shifting cultivation system is described as a cropping system in Zambia where crops are grown in small ash gardens made by burning a pile of wood cleared from a larger area. The paper presents results of an investigation on the status of the system regarding changes in soil nutrients under chitemene, the relationship between population density and deforestation and how the system has survived under conditions of overpopulation relative to the critical population density.

3 FIG.; 17 REF. SUMMARY (EN)
SHIFTING CULTIVATION; DEFORESTATION; NUTRIENTS; LAND USE; POPULATION CHANGE

00138
07487
SEIF EL DIN, A.G.
AGROFORESTRY PRACTICES IN THE DRY REGIONS
KENYA NATIONAL SEMINAR ON AGROFORESTRY (BUCK, L. ED.) (1981) EN
XA;SD;NE pg 419-434
Agroforestry practices found in dry regions of Africa mainly characterized by long dry seasons (8 to 10 months) are presented. The rainfall in these regions is very low at 200 to 600 mm with high yearly fluctuations and temperatures up to and above 40 degrees centigrade. The traditional land-use systems are described.
5 FIG.; 5 REF.
ACACIA SENEGAL; ACACIA ALBIDA; ADANSONIA DIGITATA; BORASSUS AETHIOPICUM; AGROFORESTRY; LAND USE; ARID ZONES; MULTIPURPOSE TREES

00139
07569
VON MAYDELL, H.J.
INSTITUTE FOR WORLD FORESTRY, HAMBURG (F.R. GERMANY)
AGROFORESTRY TO COMBAT DESERTIFICATION (A CASE STUDY OF THE SAHEL)
AGROFORESTRY PROC. OF 50TH 'TROPISCHE LANDBOUWDAG' (SYMPOSIUM ON TROPICAL AGRICULTURE) RTI (THE NETHERLANDS) (1978) EN
XA pg 11-24
The forestry situation in the Sahel and its contribution to combat desertification is discussed. Desertification in the Sahel, the demands of the local rural people and the different ways to avoid the widening gap between demand and supply are reviewed. Selected agroforestry projects in the Sahel and its neighbouring region of Sudan savanna are described. Emphasis is given to the importance of Acacia albida and Acacia senegal in some agroforestry practices.
12 REF.
ACACIA ALBIDA; ACACIA SENEGAL; FORESTRY; SEMI ARID ZONES; SAHEL; RURAL POPULATION; LAND USE

00140
06538
VONK, R.B.
ICRAF, NAIROBI (KENYA); WAGENINGEN AGRIC. UNIV., (NETHERLANDS) A STUDY ON POSSIBLE AGROFORESTRY TREE SPECIES FOR THE KATHAMA AREA (1984) EN
XA;KE pg 1-76
The report gives an account of the tree component in the agroforestry interventions in Kathama, Kenya aimed at solving the land-use problems of this area. The report is presented in six chapters: the description of the area; problem diagnosis and agroforestry design; methodology and monitoring; nursery and tree establishment; and results, conclusions and discussions.
9 TABLES; 11 FIG.; 22 REF.
AGROFORESTRY; PLANT ESTABLISHMENT; DESIGN; DIAGNOSIS; NURSERIES; ALLEY CROPPING; GRAZING; LIVE FENCES

00141
07540
VONK, R.B.
CARE, NAIROBI (KENYA)
REPORT ON A METHODOLOGY AND TECHNOLOGY GENERATING EXERCISE: THE AGROFORESTRY EXTENSION PROJECT 1982-1986
(1986) EN
CARE
XA;KE pg 1-80
An agroforestry extension project initiated by CARE International in Kenya is presented. The project's past and present is reviewed and recommendations for the future are given. Part one gives the historical background; part two describes in detail the procedures currently being followed; and finally part three outlines a strategy for the future. A summary and recommendations from part two are included.
AGROFORESTRY; EXTENSION ACTIVITIES

00142
07506
KEDIR, R.; BASHIR, J.A.; AMARE GETAHUN
ENERGY DEVELOPMENT INTERNATIONAL, NAIROBI (KENYA)
THE INFLUENCE OF RAINFALL DISTRIBUTION ON THE YIELD OF MAIZE UNDER LEUCAENA LEUCOCEPHALA
(1987) EN
XA;KE pg 1-14
A study conducted at Mtwapa, at the coast region of Kenya on the influence of the rainfall distribution pattern on the yield of maize under Leucaena leucocephala alley cropping is presented. The experiments conducted during the 2-year trial period are discussed.
4 FIG.; 9 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; ZEA MAYS; ALLEY CROPPING; YIELDS; SPACING; RAIN

00143
07505
BASHIR, J.A.; KEDIR, R.; AMARE GETAHUN
ENERGY DEVELOPMENT INTERNATIONAL, NAIROBI (KENYA)
LEUCAENA ALLEY CROPPING WITH MAIZE AT THE COASTAL SANDY STRIP OF KENYA
(1987) EN
XA;KE pg 1-19
Results are presented of some trials to investigate the effect of Leucaena leucocephala and maize alley cropping as opposed to the use of chemical fertilizers at the coast of Kenya. Green leaf manure yields are also analysed.
4 TABLES; 11 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; ZEA MAYS; GREEN MANURES; SANDY SOILS; YIELDS; HEDGEROWS

00144
07181
KEITA, J.D.
FAO, ACCRA (GHANA)
INCENTIVES FOR INCREASED FOOD PRODUCTION THROUGH FORESTRY ACTIVITIES IN THE WEST AFRICAN REGION
(1982) EN
XA pg 1-13
Brings out the fundamental protection role of forestry, which guarantees high productivity for the whole farming environment in the West African region. Highlights the special contribution of forestry to the

whole economy, with reference to food production, energy production and raw material production for industry, handicraft and drugs. Describes the benefits of agroforestry and discusses the problems of incentives for increased food production and how these problems can be overcome.
8 REF.
WEST AFRICA; FOOD PRODUCTION; FORESTRY; AGROFORESTRY; INCENTIVES

00145
02912
POULSEN, G.
TREES AND INTEGRATED LAND USE IN ARID AND SEMI-ARID AREAS OF AFRICA
(1977) EN
XA pg 1-6
Looks into the problems of cultivation of cash crops, ranching of livestock and production of wood for fuel and construction. Discusses the need for an integrated approach to land use like agrosilvopastoralism. Also discusses the importance of conserving the environment with special reference to soils and gives the role of trees in improving the arid and semi-arid zones of Africa. Outlines some possible solutions to these problems and stresses the need of putting such ideas and principles into action.
ARID ZONES; SEMI ARID ZONES; TREES; LAND USE; AGROSILVOPASTORAL SYSTEMS; SOILS; ENVIRONMENT CONSERVATION

00146
07247
SCHERR, S.J.
ICRAF, NAIROBI (KENYA)
DESIGNING AGROFORESTRY RESEARCH PROGRAMMES: A CASE STUDY FROM THE HUMID LOWLANDS OF CAMEROON
(1987) EN
CM;XA pg 1-16
Reviews the results of land-use system diagnosis and technology in the Southern Cameroon plateau. Concentrates on the process of selecting priority technoligies, research tropics and experimental trials. Gives specifications of a hedgerow intercropping system for the plateau and lists the basic types of information required by extension workers to disseminate hedgerow intercropping technology.
PAPER PRESENTED TO TECHNICAL SEMINAR ON ICRAF'S APPROACH TO MULTIPURPOSE TREE RESEARCH - AN EVALUATION. 8 TABLES
AGROFORESTRY; RESEARCH; DESIGN; HUMID TROPICS; LOWLAND; LAND USE; TECHNOLOGY; SELECTION; HEDGEROWS

00147
7244
HOEKSTRA, D.A.
ICRAF, NAIROBI (KENYA)
SPECIES SELECTION FOR THE FOOD CROP PLOTS IN THE EASTERN AND WESTERN PLATEAU SYSTEM, BURUNDI - A CASE STUDY PART B - SPECIFICATION TREE CHARACTERISTICS (ENVIRONMENT, TECHNOLOGY)
(1987) EN
BI;XA pg 1-6
Briefly describes the 'plateau central a cafeir' land-use system in Eastern and Western Burundi. This system is characterised by small-scale crop/livestock farms and the main crops grown are bananas, cereals, tubes, legumes and coffee. Diagnoses the main problems in the plateau and proposes some agroforestry technologies. Gives the desired tree characteristics for appropriate species selection.
PAPER PRESENTED TO TECHNICAL SEMINAR ON ICRAF'S APPROACH TO MULTIPURPOSE TREE RESEARCH - AN EVALUATION

ENVIRONMENT; TECHNOLOGY; SPECIES SELECTION; FOOD CROPS; AGROFORESTRY; CASE STUDIES; SMALL SCALE FARMING; LIVESTOCK

00148
07246
DUGUMA, B.
ICRAF, NAIROBI (KENYA)
DESIGNING AGROFORESTRY RESEARCH PROGRAMMES. A CASE STUDY FROM THE HUMID LOWLAND OF CAMEROUN
(1987) EN
CM;XA pg 1-5
Briefly describes field activities at the Nkikolbisson research station in Younde, Cameroon. Activities include germplasm acquisition, germination tests and nursery establishment, vigour/phenology trials, management trials and hedgerow intercropping. Other activities to be considered in future include improved fallow, fodder banks and mixed cropping.
PAPER PRESENTED TO TECHNICAL SEMINAR ON ICRAF'S APPROACH TO MULTIPURPOSE TREE RESEARCH - AN EVALUATION
AGROFORESTRY; RESEARCH; DESIGN; HUMID TROPICS; LOWLAND; CASE STUDIES

00149
07034
ODUOL, P.A.
ICRAF, NAIROBI (KENYA)
THE SHAMBA SYSTEM: AN INDIGENOUS SYSTEM OF FOOD PRODUCTION FROM FOREST AREAS IN KENYA
AGROFORESTRY SYSTEMS Vol 4 (1986) EN
KE;XA pg 365-373
Briefly describes the shamba system's productivity and functioning in Kenya. The shamba system is a form of taungya, where agricultural crops are grown together with forest tree species. The system allows sustained optimum production of food crops along with forestry species from the same land. Analyses the ecological and socioeconomic characteristics.
4 TABLES; 3 FIG.; 6 REF. SUMMARY (EN)
TAUNGYA SYSTEM; INTERCROPPING; FOREST PLANTATIONS; FOOD PRODUCTION

00150
07072
MAIMO, A.M.
IRAF, DOUALA (CAMEROON). CENTRE FOR FORESTRY RESEARCH
AGROFORESTRY PROJECT-CAMEROON: REPORT OF PROGRESS FOR PERIOD MAY 1977 TO NOV 1979
(1979) EN
CM;XA pg 1-24
Outlines the main objectives for the Cameroon agroforestry project. Discusses the personnel carrying out the agroforestry project, the methodology and preliminary results already found. Gives an account of the study programme to be undertaken in the immediate future and furnishes broad outlines on how the programme will be organised. Describes the climate, soils, ecological factors and the selection of leguminous species in Cameroon.
AGROFORESTRY; PROJECTS; FARMING SYSTEMS; LEGUMES; ECOLOGICAL FACTORS; CLIMATE; SOIL PHYSICOCHEMICAL PROPERTIES

00151
07788
HOLDEN, S.T.
SOIL PRODUCTIVITY RESEARCH PROGRAMME, KASAMA (ZAMBIA)
AN IMPROVED ALLEY CROPPING SYSTEM FOR AREAS WITH SHORT UNIMODAL RAINY SEASON
(1986) EN
ZM;XA pg 1-6
Describes an improved alley cropping system suitable for areas with short, unimodal rainfall. The system involves intercropping of two or more crops every year and a crop rotation from year to year. It also integrates tree hedgerows. The tree prunings are used for a cereal crop every year.
SUMMARY (EN)
ALLEY CROPPING; RAIN; FOOD PRODUCTION; ULTISOLS; OXISOLS; ROTATIONAL CROPPING

00152
07785
SELENJE, M.B.
AGROFORESTRY IN LILONGWE AGRICULTURAL DEVELOPMENT DIVISION - AS A SOIL CONSERVING AND IMPROVING APPROACH
(1984) EN
MW;XA pg 1-9
Describes an integrated land-use approach with crop ridges on contours, food crop husbandry, buffer strips of perennial crops and integration of livestock in the farming system. Gives suitable agroforestry trees in Malawi, including Acacia albida, Sesbania, Cajanus cajan and Leucaena, which are used on the raised contour ridges to abate the declining land productivity caused by erosion. Tests the effectiveness of some forms of agroforestry in Lilongwe, like maize-Leucaena alley cropping. Also studies the effect of Leucaena leaf as a nitrogen source for maize.
8 REF. SUMMARY (EN)
ACACIA ALBIDA; SESBANIA; LEUCAENA LEUCOCEPHALA; CAJANUS CAJAN; AGROFORESTRY; ALLEY CROPPING; NITROGEN FIXATION; YIELDS; AGROSILVOPASTORAL SYSTEMS

00153
07811
LUNDGREN, B.
ICRAF, NAIROBI (KENYA)
ON AGROFORESTRY, ITS POTENTIAL AND CONSTRAINTS
MANAGEMENT Vol 11 No 12 (1987) EN
KE;XA pg 6-11
This lecture defines agroforestry and presents the potential of agroforestry. Discusses the constraints that prevent agroforestry potential from being realised and shows how they can be overcome. Also presents the potential leadership role in agroforestry research and development for Kenya.
AGROFORESTRY; LAND USE; FARMING SYSTEMS; TREES

00154
07828
SCHERR, S.J.
ICRAF, NAIROBI (KENYA)
PLANNING NATIONAL AGROFORESTRY RESEARCH GUIDELINES FOR LAND SYSTEM DESCRIPTION
ICRAF WORKING PAPER NO. 48 (1987) EN
ICRAF

XA pg 1-82
Discusses the Agroforestry Research Networks for Africa (AFRENA) objectives and approaches to agroforestry research planning. Provides an overview of the AFRENA research planning process. Describes the land-use systems in the targeted ecological zone of the country and identifies priority systems, problems and producers for subsequent research. Presents detailed guidelines for carrying out the land-use system description using AFRENA worksheets. Explains the conceptual basis of land-use system evaluation for agroforestry purposes.
9 TABLES; 22 REF.
AGROFORESTRY; LAND USE; FARMING SYSTEMS; DATA COLLECTION; DATA ANALYSIS, INFORMATION SERVICES

00155
07783
KANANJI, B.
FORESTRY RESEARCH INSTITUTE, ZOMBA (MALAWI)
AGROFORESTRY: FIRST YEAR RESULTS OF INTERPLANTING E. CAMALDULENSIS DEHN. WITH BEANS, MAIZE, CASSAVA AND GROUNDNUTS
(1987) EN
MW;XA pg 1-12
Briefly describes an experiment where Eucalyptus camaldulensis was interplanted with beans, maize, cassava and groundnuts at Makoka in Zomba, Malawi. Assesses tree height and survival, termite attack on trees as well as crop yields and discusses the results.
8 REF. SUMMARY (EN)
EUCALYPTUS CAMALDULENSIS; PHASEOLUS VULGARIS; ZEA MAYS; MANIHOT ESCULENTA; ARACHIS HYPOGAEA; AGROFORESTRY; FOOD CROPS; GROWTH; INTERCROPPING

00156
07661
MAGHEMBE, J.A.; KAONEKA, A.R.S.; LULANDALA, L.L.L.
SOKOINE UNIV. OF AGRICULTURE, MOROGORO (TANZANIA). DEPT. OF FOREST BIOLOGY
INTERCROPPING, WEEDING AND SPACING EFFECTS ON GROWTH AND NUTRIENT CONTENT IN LEUCAENA LEUCOCEPHALA AT MOROGORO, TANZANIA
FOR ECOL MANAGE Vol 16 (1986) EN
TZ;XA pg 269-279
Describes an experiment conducted to evaluate the suitability of Leucaena leucocephala for fuelwood and pole production, using agroforestry in Morogoro, Tanzania. Discusses the effects of intercropping Leucaena with maize and beans, weeding and spacing on growth, yield and nutrient content and presents data.
6 TABLES; 36 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; AGROFORESTRY; FUELWOOD; SEMI ARID ZONES; SPACING; INTERCROPPING; FOOD CROPS; NUTRIENT CONTENT; BIOMASS

00157
07031
BALASUBRAMANIAN, V.; EGLI, A.
IITA, IBADAN (NIGERIA); SWISS INTERNATIONAL COOPERATION, BERN (SWITZERLAND)
THE ROLE OF AGROFORESTRY IN THE FARMING SYSTEMS IN RWANDA WITH SPECIAL REFERENCE TO THE BUGESERA-GISAKA-MIGONGO (BGM) REGION
AGROFORESTRY SYSTEMS Vol 4 No 3 (1986) EN
RW;XA pg 271-289

Evaluates the existing land-use systems of Rwanda giving special emphasis to the Bugesta Gisaka-Migongo region, with a view to identifying the possibilities of agroforestry interventions and other improvements. Describes the 'homestead' farming system that involves the combination of food, fodder and tree crops. Presents some multipurpose, low-input technologies and agroforestry approaches that have been designed to improve the productivity of these traditional systems and discusses the essential aspects of these technologies.
6 TABLES; 19 REF. SUMMARY (EN)
AGROFORESTRY; HOME GARDENS; LAND TENURE; FARM INPUTS; APPROPRIATE TECHNOLOGY; TRADITIONAL FARMING; FARMING SYSTEMS

00158
07113
IGBOANUGO, A.B.I.
FORESTRY RESEARCH INSTITUTE, ZARIA (NIGERIA)
EFFECTS OF SOME EUCALYPTS ON GROWTH AND YIELD OF AMARANTHUS CAUDATUS AND ABELMOSCHUS ESCULENTUS
ARIC ECOSYSTEMS ENVIRON Vol 18 (1987) EN
NG;XA pg 243-249
Reports on work carried out to assess the performance of Abelmoschus esculentus L. and Amaranthus Caudatus L. grown in a savanna grassland and an agrosilvicultural system in a small eucalyptus plantation in Samaru, Zaria, Nigeria. Presents results of the soil characteristics, morphological studies, shoot height, total leaf number and total flower abortion of the two plants. Gives conclusions on the compatibility of the two crop species with eucalypts in agrosilvicultural practices.
4 TABLES; 16 REF. SUMMARY (EN)
HIBISCUS ESCULENTUS; AMARANTHUS CAUDATUS; EUCALYPTUS; AGRISILVICULTURE; GROWTH; YIELDS

00159
07171
VAN BERGEN, T.
JOSEPH MOGAKA'S FARM: DIVERSIFIED BIOMASS PRODUCTION
ILEIA NEWSLETTER Vol 3 No 2 (1987) EN
KE;XA pg 16-17
Briefly describes the farm of Joseph Mogaka in Kisii, Kenya and shows how it serves as an example of a small scale farmers' strategy for biomass production. Also shows how the demands for fodder, firewood and organic fertilizers are met and lists the various multipurpose trees grown.
BIOMASS; AGROFORESTRY; FODDER; FUELWOOD; SPECIES LIST

00160
07239
NANA-SINKAM, S.C.
PRESENT AND POTENTIAL ROLE OF AGROFORESTRY IN AFRICA
(1987) EN
XA pg 1-11
Describes various farming systems and analyses some agroforestry systems in Africa. Mentions some examples of traditional farming systems that provide models for integrated water, soil and forest utilization in Africa. States how these zones could maximise productivity and integrate agroforestry, sustainable forests, soil and water management with land use. Stresses the need to revise and update the legislation on agroforestry and livestock rearing and emphasises the urgent need for cooperation among institutions.
AN ADDRESS PRESENTED AT ICRAF'S TENTH ANNIVERSARY CONFERENCE ON THE ROLE OF AGROFORESTRY IN IMPROVED LAND USE, NAIROBI, 7-8 SEP 1987
AGROFORESTRY; LAND USE; IMPROVEMENT

00161
06128
OKALI, C.; CASSADAY, K.
AFRICAN-AMERICAN ISSUES CENTER, BOSTON (USA)
COMMUNITY RESPONSE TO A PILOT FARMING PROJECT IN NIGERIA
AFRICAN-AMERICAN ISSUES CENTER DISCUSSION PAPER NO. 10 (1985) EN
AFRICAN-AMERICAN ISSUES CENTER
NG;XA pg 1-28
Reports on a preliminary study of farmers' responses to alley farming, a technology designed to improve small ruminants and arable crop production in a humid zone of West Africa. Evaluates the technology being used and points out areas that need modifying. Uses Leucaena leucocephala and Gliricidia sepium fast-growing leguminous trees to feed sheep and goats. Monitors the communities' responses by collecting information through surveys and interviews about the reasons why certain categories of people were underrepresented in the alley farming population
15 TABLES; 24 REF.
GLIRICIDIA SEPIUM; LEUCAENA LEUCOCEPHALA; ALLEY CROPPING; FARMERS; SHEEP; GOATS; HUMID ZONES; CROPS; FOOD PRODUCTION; WOMEN

00162
07225
SJOHOLM, H.
ORGUT, STOCKHOLM (SWEDEN)
ARID ZONE FORESTRY FOR LOCAL DEVELOPMENT: AN INTRODUCTORY HANDBOOK
(1983) EN
ORGUT
XA pg 1-103
Presents some basic and fundamental statements on arid zone land use with emphasis on forestry for the benefit of rural communities of Africa and the Near and Middle East. Describes the arid-zone environment, climate, soils and desertification. Discusses the place of trees in arid zones, e.g., in forestry and agroforestry. Touches on some important social factors affecting forestry and forest products like fuelwood, fodder and food. Also describes some special plantations, e.g., shelterbelts, irrigated forest plantations and afforestation of sand dunes.
ARID ZONES; RURAL COMMUNITIES; AGROFORESTRY; ENVIRONMENT; FORESTRY; DEVELOPMENT

00163
B02912
634.0.26(669.85)
NGEH, C.P.
AGROFORESTRY IN THE NORTH WEST AND SOUTH WEST PROVINCES (THE CASE OF TAUNGYA)
(1985) EN
DSCHANG UNIV. CENTRE, NASA
CM;XA;NG pg 1-62
Gives the main reasons that led to the failure of the taungya system in the forest reserves of Southern Bakundu and the South West Province. Describes the reintroduction of the system in the North West Province and gives proposals for the melioration and subsequent revival of the system.
18 REF.; 4 FIG.; 9 TABLES. SUMMARIES (EN, FR)
TAUNGYA SYSTEM; AGRISILVICULTURE; AGROFORESTRY; LAND USE; FARMING SYSTEMS; CLIMATE; VEGETATION; SOILS; TROPICS

00164
B01963
634.0.26(676.2)
BUCK, L.E. (ED.)
ICRAF, NAIROBI (KENYA) AND UNIVERSITY OF NAIROBI, NAIROBI (KENYA)
PROCEEDINGS OF THE KENYA NATIONAL SEMINAR ON AGROFORESTRY
(1981) EN
ICRAF
KE;XA pg 1-638
Presents the proceedings of the Kenya National Seminar on
Agroforestry in 1980 and stresses the need to assist in shaping rational land-use policies. Highlights the need to assist in the development of appropriate, national land-use policies that will fully recognize the need for an integrated approach to land management. Outlines Kenya's land-use problems and suggests agroforestry as a potentially appropriate land-use strategy for stabilizing production systems. Gives attention to the need for appropriate tree species selection and the criteria for selection. Discusses broad issues of rural development and gives some fundamental constraints that exist in the way of easy improvement in agricultural productivity. Also highlights some promising projects designed to develop and test methods for overcoming some of these constraints.
AGROFORESTRY; LAND USE; RURAL DEVELOPMENT; POLICIES; TROPICS

00165
B02759
634.0.26(676)
OBEL, E.; AMARE GETAHUN; MACKLIN, B.
PROCEEDINGS OF AGROFORESTRY WORKSHOP FOR HIGH POTENTIAL AREAS IN KENYA, SEMINAR HELD IN BUKURA, KAKAMEGA IN MARCH 1983
(1983) EN
KENGO
KE;XA pg 1-68
Describes the high-potential highlands of Kenya, which are estimated to cover 9 percent of the total area. Commercialized agriculture has been dominated by large-scale cash crop and dairy farming, and the traditional land-use system practiced remains with smallholders for food, cash and livestock rearing. Shows how the increasing pressure on land has led to the adoption of agroforestry systems. Presents the workshop deliberations that will help to increase food productivity and produce fuelwood. Also shows the place of fast-growing multipurpose trees in agroforestry.
AGROFORESTRY; TREES; SEEDS; SEEDLINGS; FUELWOOD; AFFORESTATION; EXTENSION ACTIVITIES; TROPICS

00166
B00491
634.0.26(213)
MACDONALD, L.H. (ED.)
AGROFORESTRY IN THE AFRICAN HUMID TROPICS: PROCEEDINGS OF A WORKSHOP HELD IN IBADAN, NIGERIA, 27 APRIL - 1 MAY 1981.
(1982) EN
UNU TOKYO
XA pg 1-163
Provides introductory material on the principles of agroforestry, traditional agroforestry systems and prospects for their development. Discusses the taungya system from biological and production viewpoints and the current agroforestry activities in the African humid tropics. Outlines the future development of agroforestry emphasizing the role of trees in the production and consumption systems and presents reports of the working groups.
BIBLIOGRAPHY P. 152-159

PROSOPIS CHILENSIS; ACACIA TORTILIS; TAMARIX APHYLLA; EUCALYPTUS; ACACIA SENEGAL; ADANSONIA DIGITATA; ZIZIPHUS; AGROFORESTRY; HUMID TROPICS; LAND USE; RESEARCH; SOIL CONSERVATION; SOIL FERTILITY

00167
B02838
634.0.26(624)
BAUMER, M.; DARNHOFER, T.; HOEKSTRA, D.A.; HUXLEY, P.A.
ICRAF, NAIROBI (KENYA)
PROPOSALS FOR AN AGROFORESTRY APPROACH IN THE JEBEL MARRA RURAL DEVELOPMENT PROJECT AREA
(1985) EN
ICRAF
SD;XA pg 1-104
Describes the environment of the Jebel Marra Rural Development Project area in Sudan and presents an analysis of the Wadi Azam area farming systems. Proposes an agroforestry project in the Jebel Marra region and describes selected agroforestry interventions presented to people in the area giving the methedolofy behind the proposed interventions. Also includes research and development proposals for a selected integrated agroforestry approach to development as a whole.
9 REF.
AGROFORESTRY; RURAL DEVELOPMENT; SEMI ARID ZONES

00168
06098
HOEKSTRA, D.A.
ICRAF, NAIROBI (KENYA)
LEUCAENA LEUCOCEPHALA HEDGEROWS INTERCROPPED WITH MAIZE AND BEANS: AN EX ANTE ANALYSIS OF A CANDIDATE AGROFORESTRY LAND USE SYSTEM FOR THE SEMI-ARID AREAS IN MACHAKOS DISTRICT
ICRAF WORKING PAPER NO. 3 (1983) EN
ICRAF
KE;XA pg 1-12
Presents an exante analysis of a candidate agroforestry land-use system for a semi-arid area in Machakos district, Kenya. Leucaena leucocephala hedgerows were grown together with maize and beans. Leucaena cuttings were used as mulch and added to the soil for crops in the alleys and the stems were used for fuelwood. Analyses the potential of the land-use system and presents results and graphical displays produced by MULBUD - a microcomputer program for the analysis of agroforestry land-use systems.
5 REF.
LEUCAENA LEUCOCEPHALA; ZEA MAYS; PHASEOLUS; INTERCROPPING; SEMI ARID ZONES; MULCHES; FUELWOOD; HEDGEROWS; ECONOMIC ANALYSIS

00169
07956
BASHIR, J.A.; AMARE GETAHUN; NGUGI, D.; MACKLIN, B.
MINISTRY OF ENERGY AND REGIONAL DEVELOPMENT, NAIROBI (KENYA) LEUCAENA ALLEY CROPPING FOR THE KENYA COAST
AMELIORATION OF SOIL BY TREES (PRINSLEY, R.T. AND SWIFT, M.J. EDS.) (1986) EN
COMMONWEALTH SCIENCE COUNCIL
XA;KE pg 155-165
The effect of Leucaeana leucocephala on the yields, nitrogen content, soil fertility and weed control in some alley cropping trials with maize on sandy soils at the coast of Kenya is discussed. The maize and green manure yields are analysed using different tables.

6 TABLES; 11 REF. SUMMARY (EN)
LEUCAENA LEUCOCEPHALA; ZEA MAYS; ALLEY CROPPING; SANDY SOILS; WEED CONTROL; SOIL FERTILITY

00170
07977
YAMOAH, C.F.; GROSZ, R.
USAID/FSIP, KIGALI (RWANDA)
LINKING ON-STATION RESEARCH WITH ON-FARM TESTING: THE CASE OF AGROFORESTRY AND ORGANIC MATTER-BASED CROPPING SYSTEMS FOR THE RWANDA FARMING SYSTEMS IMPROVEMENT PROJECT
AGROFORESTRY SYSTEMS Vol 6 No 2 (1988) EN
XA;RW pg 271-281
Describes the Farming Systems Improvement Project. Reports on how the project combined problem diagnosis and analysis, researcher managed adaptive trials and a field day to attack the lack of information in checking erosion in hillfarming systems. The project designed land-use systems that would check erosion, increase soil organic matter by the use of leguminous shrubs and cover crops as nutrient sources - concepts embodied in agroforestry systems.
13 REF. SUMMARY (EN)
AGROFORESTRY; FARMING SYSTEMS; ON FARM TRIALS; COVER PLANTS; SOIL FERTILITY; SHRUBS; LEGUMES; HILLSIDE FARMING

00171
07949
TOTHILL, J.C.
ILCA, ADDIS ABABA (ETHIOPIA)
APPLICATION OF AGROFORESTRY TO AFRICAN CROP-LIVESTOCK FARMING SYSTEMS
ILCA BULL Vol No 29 (1987) EN
XA;ET pg 20-23
The potential of leguminous trees to increase crop-livestock production in sub-saharan Africa is discussed. Key management issues influencing tree introduction and contributions to these systems are described followed by a detailed account of the management techniques suitable for different agro-ecological zones.
12 REF. SUMMARY (EN)
ACACIA ALBIDA; LEUCAENA LEUCOCEPHALA; GLIRICIDIA SEPIUM; AGROFORESTRY; MIXED FARMING; LIVESTOCK; FARMING SYSTEMS; LEGUMES; TREES; TROPICS

00172
03945
AGBAHUNGBA, A.G.
UNITE DE RECHERCHE FORESTIERE, COTONOU (BENIN)
AGROFORESTRY AND EXPERIENCE WITH PLANTED FALLOW AT PAHOU IN THE PEOPLE'S REPUBLIC OF BENIN
AGROFORESTERIE ET EXPERIENCE DE LA JACHERE PLANTEE A PAHOU EN REPUBLIQUE POPULAIRE DU BENIN.
PREMIERES JOURNEES NATIONALES DE LA SCIENCE ET DE LA TECHNOLOGIE, TENUES A COTONOU DU 5 AU 11 AVRIL 1984
(1984) FR
UNITE DE RECHERCHE FORESTIERE, COTONOU (BENIN)
XA;BJ pg 1-28
Présente les effets de l'explosion démographique sur l'évolution du système de culture itinérante sur brûlis au Bénin et dans le reste des zones intertropicales africaines, notamment la surexploitation des

terres arables, le raccourcissement des jachères, la baisse continue de la fertilité des sols et une pénurie chronique de bois de feu. Aborde différentes formes de classification et de description des systèmes agroforestiers et leur rôle potentiel dans l'amélioration des jachères. Présente également les résultats des trois années d'essais sur jachère plantée à Pahou, au Bénin. Trois espèces (Acacia auriculiformis, Eucalyptus torelliana et Leucaena leucocephala) sont comparées sur la base de leurs performances sylvicoles et de leur effet sur l'amélioration de la fertilité des sols.
10 TABLES; 16 REF.; 5 FIG. SUMMARY (EN)
ACACIA AURICULIFORMIS; EUCALYPTUS TORELLIANA; LEUCAENA LEUCOCEPHALA; SHIFTING CULTIVATION; FARMING SYSTEMS; FALLOWS; AGROFORESTRY; FOOD CROPS; FUELWOOD; SOIL FERTILITY; YIELDS; DATA ANALYSIS; TROPICS

00173
04977
BILE ALLOGHO, J.; BIBANG, P.
MINISTERE DES EAUX ET FORETS, LIBREVILLE (GABON). DIRECTION GENERALE DES EAUX ET FORETS. DIRECTION DU REBOISEMENT
REPORT ON THE BILINGA-BANANA AGRI-SILVICULTURE TRIALS (AFFORESTATION BRIGADE OF M'BINE)
COMPTE RENDU DES ESSAIS AGROSYLVICOLES BILINGA-BANANIER (BRIGADE DE REBOISEMENT DE LA M'BINE)
SEMINAIRE SUR L'AGROFORESTERIE EN ZONE FORESTIERE HUMIDE, MAKOKOU, 1-10 JUILLET 1985
(1985) FR
MINISTERE DES EAUX ET FORETS
XA;GA pg 1-22
Décrit un exemple d'une association Bilinga (Nauclea diderrichii)-bananier dans une zone de la forêt dense gabonaise. Les travaux d'installation de ces deux espèces et les coûts sont présentés. L'article contient aussi une analyse comparative des paramètres de croissance.
5 TABLES; 4 FIG.
NAUCLEA DIDERRICHII; MUSA; AGROFORESTRY; AFFORESTATION; FALLOWS; TROPICAL RAIN FOREST; HUMID TROPICS; COST BENEFIT ANALYSIS

00174
06867
DOMMERGUES, Y.
CTFT, NOGENT-SUR-MARNE (FRANCE)
FOR A BETTER EXPLOITATION OF NITROGEN FIXATION IN BURUNDI
POUR UNE MEILLEURE EXPLOITATION DE LA FIXATION D'AZOTE AU BURUNDI
(1986) FR
CTFT
XA;BI pg 1-18
Ce rapport de mission présente les résultats de l'inventaire des systèmes fixateurs d'azote susceptibles d'être améliorés au Burundi. Passe en revue les facteurs limitant une meilleure fixation symbiotique de l'azote. Présente également des suggestions sur les recherches à entreprendre en vue de l'amélioration de ces systèmes.
14 REF. SUMMARY (FR)
MYRICA; CASUARINA; LEUCAENA; CALLIANDRA; LUPINUS; CANAVALIA; SESBANIA; ACACIA; ALBIZIA; RHIZOBIUM; NITROGEN FIXATION; LEGUME TREES; SYMBIOSIS; LIMITING FACTORS; SOIL ACIDITY; AGROFORESTRY; RESEARCH; TROPICS

00175
07431
BONKOUNGOU, E.G.
IRBET, OUAGADOUGOU (BURKINA FASO)
MONOGRAPH ON THE KARITE, BUTYROSPERMUM PARADOXUM (GAERTN.F) HEPPER, A MULTIPURPOSE AGROFORESTRY SPECIES
MONOGRAPHIE DU KARITE, BUTYROSPERMUM PARADOXUM (GAERTN.F) HEPPER, ESPECE AGROFORESTIERE A USAGES MULTIPLES
(1987) FR
IRBET/CNRST
XA;BF pg 69
Monographie contenant des informations sur le Karité: description botanique, biologie de la reproduction, aire de distribution et valeur alimentaire. Les méthodes sylvicoles et les résultats des essais comparatifs effectués au Burkina Faso sont résumés.
6 TABLES; 13 FIG.; 45 REF.
VITELLARIA PARADOXA; MULTIPURPOSE TREES; AGROFORESTRY; SILVICULTURE; BIOLOGY; NATURAL DISTRIBUTION; USES; TAXONOMY; GROWTH HABIT; VEGETATIVE PROPAGATION; SOCIOECONOMIC ANALYSIS; OIL CROPS; RESEARCH; SUBHUMID ZONES; SEMI ARID ZONES

00176
05161
ODERMATT, O.; SORG, J.P.
ISAR, BUTARE (RWANDA)
ACROCARPUS FRAXINIFOLIUS WIGHT AT THE RUHANDE ARBORETUM, BUTARE, RWANDA
ACROCARPUS FRAXINIFOLIUS WIGHT A L'ARBORETUM DE RUHANDE, BUTARE, RWANDA.
NOTE TECHNIQUE NO 1 (1981) FR
ISAR
XA;RW pg 1-32
Un rapport sur le comportement de l'Acrocarpus fraxinifolius à l'arboretum de Ruhande. Il comprend l'écologie, les caractères sylvicoles et l'importance de cette espèce dans les systèmes agroforestiers. les mensurations dendrométriques obtenues entre 1955 et 1981 sont présentées et les causes de variation de ces données sont discutées.
10 TABLES; 5 FIG.; 15 REF.
ACROCARPUS FRAXINIFOLIUS; AGROFORESTRY; HIGHLANDS; SHADE TREES; SPACING; SILVICULTURE; TROPICS

00177
06536
NEUMANN, I.; PIETROWICZ, P.
PROJET AGRO-PASTORAL, GTZ - NYABISINDU (RWANDA).
AGROFORESTRY IN NYABISINDU. RESEARCH ON THE INTEGRATION OF TREES AND HEDGES IN AGRICULTURE
AGROFORESTERIE A NYABISINDU. RECHERCHES SUR L'INTEGRATION DES ARBRES ET DES HAIES DANS L'AGRICULTURE
ETUDES ET EXPERIENCES NO 9 (1987) FR
PAP
XA;RW pg 130
Présente un rapport descriptif du projet agroforestier de Nyabisindu au Rwanda. Le rapport contient les conditions climatiques, géologiques, édaphiques et la composition floristique de la station. Examine aussi les aspects socio-économiques des exploitations traditionnelles et l'évolution du projet au cours des dix dernières années, les méthodes appliquées et les interactions entre les arbres et les cultures vivrières.

32 TABLES; 10 FIG.; 39 REF.
GREVILLEA ROBUSTA; SESBANIA SESBAN; LEUCAENA LEUCOCEPHALA; CALLIANDRA; EUPHORBIA; AGROFORESTRY; TREES; HEDGES; FOOD PRODUCTION; NITROGEN FIXATION; TREE CROP INTERFACE; TRADITIONAL FARMING; FUELWOOD

00178
03959
KOYO, J.P.
CTFT, POINTE-NOIRE (CONGO)
LIMBA-COCOA AND LIMBA-BANANA AGRISILVICULTURE ASSOCIATIONS IN MAYOMBE (PEOPLE'S REPUBLIC OF CONGO)
ASSOCIATIONS AGROSYLVICOLES LIMBA-CACAOYER ET LIMBA-BANANIER AU MAYOMBE (REPUBLIQUE POPULAIRE DU CONGO)
SEMINAIRE SUR L'AGROSYLVICULTURE, IBADAN, NIGERIA, AVRIL 1981
(1981) FR
CTFT
XA;CG pg 1-10
L'auteur analyse les interactions biologiques dans les associations limba (Terminalia superba)-cacaoyer et limba-bananier dans la zone subhumide du Congo. Les effets positifs et négatifs de chaque cas sont discutés.
3 FIG.; 6 REF.
TERMINALIA SUPERBA; THEOBROMA CACAO; MUSA PARADISIACA; AGRISILVICULTURE; AGROFORESTRY; BIOLOGICAL INTERACTIONS; CLEARING; GROWTH; LITTER; PROJECTS; SUBHUMID TROPICS

00179
04988
MALDAGUE, M.
LAVAL UNIV., QUEBEC (CANADA)
AGROFORESTRY PROBLEMS
PROBLEMATIQUE DE L'AGROFORESTERIE
COURS DE SENSIBILISATION SUR L'AGROFORESTERIE EN ZONE FORESTIERE HUMIDE, MAKOKOU, GABON, 1-10 JUILLET 1985 (1985) FR
UNESCO
XA;GA pg 1-41
L'historique et divers aspects conceptuels de l'agroforesterie tel que sa définition, l'intérêt récent porté a l'agroforesterie, ses objectifs et ses méthodes sont discutés. Les avantages et désavantages des systèmes agroforestiers sont présentés. Les systèmes traditionnels de production agricole et leur amélioration possible par des pratiques agroforestières sont analysés.
73 REF.
AGROFORESTRY; RURAL DEVELOPMENT; SOCIOECONOMIC FACTORS; LEGISLATION

00180
02982
ANON
FACULTE DES SCIENCES AGRONOMIQUES DE L'ETAT, GEMBLOUX (BELGIUM)
AFRICAN AGROFORESTRY
AGROFORESTERIE AFRICAINE
(1981) FR
FAO-SIDA
XA pg 1-44
L'étude analyse diverses contraintes à l'accroissement de la production agricole en Afrique et suggère des solutions possibles. Les systèmes traditionnels de production agricole sont analysés. Un accent

particulier est mis sur le rapport défavorable entre les superficies encore sous culture itinérante archaïque et celles déjà stabilisées par l'intégration d'arbres améliorants.
27 REF.
AGROFORESTRY; AGRICULTURAL DEVELOPMENT; RURAL DEVELOPMENT; PLANT PRODUCTION; CROPPING SYSTEMS; FUELWOOD; TROPICAL FRUITS; FORAGE

00181
02068
PERRIER DE LA BATHIE, A.
RW 85-01 PROJECT: 'AGROFORESTRY ZONATION'. REMOTE SENSING CONSULTANCY. REPORT ON A RWANDA MISSION (28 APRIL - 15 MAY 1987)
PROJET RW 85-01 'ZONATION AGROFORESTIERE'. CONSULTATION EN TELEDETECTION. RAPPORT DE MISSION, RWANDA (28 AVRIL - 15 MAI 1987)
(1987) FR
ICRAF
XA;RW pg 1-65
Cette consultation a pour objectif de définir dans quelle mesure l'étude des photos aériennes et éventuellement des images spatiales Landsat ou Spot peut être utile dans le cadre du projet collaboratif de recherche agroforestière entre l'ICRAF et le Gouvernement du Rwanda (projet AFRENA). Le projet a pour but de mettre au point une typologie des exploitations aboutissant à la détermination de zones ayant un potentiel équivalent du point de vue de l'occupation des sols par des systèmes à composantes ligneuses. Le projet couvre 6 communes dans la région de Butare et Kibuya mais la consultation n'a porte que sur 3 communes. Les photos aériennes disponibles pour cette étude se sont avérées être trop anciennes et à une échelle et avec une émulsion photographique non adaptées pour pouvoir établir des critères de définition des terroirs actuels. Toutefois, les conseils et observations consignés dans ce rapport de mission sont d'une grande utilité pour la suite à donner à ce genre d'étude.
17 PHOTOGRAPHS; 9 FIG. SUMMARY (FR)
REMOTE SENSING; AGROFORESTRY; CLASSIFICATION; LAND USE; MAPPING

00182
04266
ANON
CTFT, NOGENT-SUR-MARNE (FRANCE)
FAIDHERBIA ALBIDA
LE FAIDHERBIA ALBIDA
(1965) FR
CTFT
XA;BF pg 1-35
L'article comprend une série des analyses des sols. Ces analyses démontrent les effets bénéfiques de la Faidherbia albida sur la fertilité des sols et l'augmentation significative des rendements de mil et de la capacité de charge des pâturages en saison sèche.
7 TABLES; 6 FIG.
ACACIA ALBIDA; ARID ZONES; SOIL FERTILITY; CROPS; ANIMAL HUSBANDRY; SOIL ANALYSIS; MINERALS

00183
00894
DOMMERGUES, Y.
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, VANDOEUVRE-LES-NANCY (FRANCE). CENTRE DE PEDOLOGIE BIOLOGIQUE

BIOGEOCHEMICAL CYCLES OF MINERAL ELEMENTS IN TROPICAL FORMATIONS LES CYCLES BIOGEOCHIMIQUES DES ELEMENTS MINERAUX DANS LES FORMATIONS TROPICALES
BOIS ET FORETS DES TROPIQUES Vol No 87 (1963) FR
XA;XL;XP pg 9-25
Décrit le processus de recyclage de la matière organique et des élements minéraux des sols sous forêts tropicales. Aborde aussi la décomposition des résidus de culture et leur apport en matière organique et éléments minéraux, notamment l'azote, le potassium, le phosphore, le magnésium et le calcium. Une comparaison est faite entre les zones tempérées et les zones tropicales.
5 TABLES; 34 REF. SUMMARIES (EN, ES)
SOIL FORMATION; SOIL FERTILITY; SOIL AMENDMENTS; CYCLING; MINERALS; FOREST; TROPICS

00184
00064
GIFFARD, P.L.
CTFT, NOGENT-SUR-MARNE (FRANCE)
THE POSSIBILITIES OF REAFFORESTATION WITH ACACIA ALBIDA IN SENEGAL
LES POSSIBILITES DE REBOISEMENT EN ACACIA ALBIDA AU SENEGAL
BOIS ET FORETS DES TROPIQUES Vol No 95 (1964) FR
CTFT
XA;SN pg 21-33
Examine les rôles que l'Acacia albida pourrait jouer dans le reboisement et l'amélioration des sols au Sénégal. L'espèce est décrite. Expose aussi les causes des échecs passés des projets de regénération artificielle et propose une nouvelle méthode.Recommande l'introduction de l'Acacia dans la region des Niayes et dans le bassin arachidier.
8 PHOTOGRAPHS; 18 REF. SUMMARIES (EN, ES)
ACACIA ALBIDA; BOTANY; SOIL FERTILITY; REFORESTATION; FODDER CROPS; ARID ZONES

00185
0900
GODEFROY, J.; JACQUIN, F.
IFAC, ABIDJAN (COTE D'IVOIRE)
RELATION BETWEEN THE STRUCTURAL STABILITY OF CULTIVATED SOILS AND ORGANIC MANURE APPLICATION UNDER TROPICAL CONDITIONS; COMPARISON WITH FOREST SOILS
RELATION ENTRE LA STABILITE STRUCTURALE DES SOLS CULTIVES ET LES APPORTS ORGANIQUES EN CONDITIONS TROPICALES; COMPARAISON AVEC LES SOLS FORESTIERS
FRUITS Vol 30 No 10 (1975) FR
XA;CI pg 595-612
Analyse les résultats des expériences sur l'application de fumures organiques sur des sols ferrallitiques hydromorphes. L'auteur démontre les effets négatifs de la mise en culture sur la teneur en matière organique et la stabilité structurale des sols. Ces essais démontrent aussi l'action améliorante des amendements organiques sur la structure des sols forestiers, plus précisément sur la cohésion et la mouillabilité des agrégats.
10 TABLES; 12 FIG. SUMMARY (FR)
MUSA; ANANAS COMOSUS; SOIL FERTILITY; SOIL STRUCTURE; ORGANIC MATTER; FOREST SOILS; MANURES; TROPICS

00186
00289
D'HOORE, J.
INFLUENCE OF CULTIVATION ON THE EVOLUTION OF SOILS IN THE DENSE FOREST ZONES OF LOW AND MEDIUM ALTITUDES
INFLUENCE DE LA MISE EN CULTURE SUR L'EVOLUTION DES SOLS DANS LA ZONE DE FORET DENSE DE BASSE ET MOYENNE ALTITUDES
AFRICAN SOILS Vol 13 No 2 (1968) FR
XA pg 155-168
Décrit le processus de la destruction du couvert végétal naturel et de la dégradation de l'activité biologique des sols forestiers. Présente aussi un aperçu des principaux processus formateurs et destructeurs des sols, notamment les apports en éléments extérieurs au matériau originel, les transformations chimiques, physiques et biologiques des constituants originaux, néoformés ou importés, les transports sélectifs, les remaniements mécaniques des sols et le décapage par érosion.
19 REF. SUMMARY (EN)
COFFEA; THEOBROMA CACAO; HEVEA BRASILIENSIS; FOOD CROPS; CASH CROPS; SOIL FORMATION; SOIL DEGRADATION; SOIL FERTILITY; SOIL BIOLOGY

00187
06646
DIANGANA, D.
CTFT, POINTE-NOIRE (CONGO)
SELECTION OF FAST GROWING NITROGEN FIXING WOODY SPECIES FOR A HIGH BIOMASS PRODUCTION IN SAVANNA
SELECTION DES ESPECES LIGNEUSES FIXATRICES D'AZOTE A CROISSANCE RAPIDE, POUR LA PRODUCTION A GRANDE ECHELLE DE LA BIOMASSE EN SAVANE.
DEUXIEME RAPPORT ANNUEL D'AVANCEMENT DES TRAVAUX DE RECHERCHES MARS 1984 - DECEMBRE 1985
(1986) FR
CTFT
XA;CG pg 13
Le rapport présente les résultats des expériences sur la sélection des espèces ligneuses fixatrices d'azote. La vitesse de croissance et la production de biomasse sont considérées comme les critères majeurs de la sélection.
5 TABLES. SUMMARY (FR)
ACACIA AURICULIFORMIS; ACACIA MANGIUM; ALBIZIA FALCATARIA; CALLIANDRA CALOTHYRSUS; LEUCAENA LEUCOCEPHALA; SPECIES SELECTION; GROWTH; NITROGEN FIXING TREES; TRIALS; DATA ANALYSIS; SAVANNA; TROPICS

00188
07473
WENCELIUS, F.
CTFT, ABIDJAN (COTE D'IVOIRE)
AGROFORESTRY RESEARCH PROPOSALS IN COTE D'IVOIRE
L'AGROFORESTERIE, PROPOSITIONS DE RECHERCHES EN COTE D'IVOIRE
(1981) FR
MINISTERE DE LA RECHERCHE SCIENTIFIQUE
XA;CI pg 1-14
Les risques de dégradation de la forêt ivoirienne dûs à la pratique de la culture itinérante et au raccourcissement des jachères sont analysés. Présente aussi un résumé des informations sur les pratiques agroforestières et les modalités de leur application en Côte d'Ivoire.
19 REF.
AGROFORESTRY; FORESTRY; TREES; RESEARCH; SHIFTING CULTIVATION; TAUNGYA SYSTEM; FALLOWS; SOIL FERTILITY

00189
07273
ANON
CTFT-IRAT, NOGENT-SUR-MARNE (FRANCE)
AGROFORESTRY RESEARCH-DEVELOPMENT ACTIVITIES CARRIED OUT IN DIFFERENT COUNTRIES OF TROPICAL AFRICA
LES OPERATIONS DE RECHERCHE-DEVELOPPEMENT EN AGROFORESTERIE MENEES EN DIFFERENTS PAYS EN AFRIQUE TROPICALE
(1987) FR
CTFT-IRAT
XA pg 1-18
L'article présente une analyse des rôles de l'arbre dans les systèmes de production agricole et pastorale en se référant particulièrement aux exemples du Sénégal, du Cameroun, du Congo, du Burundi et de la Côte d'Ivoire. Présente aussi une analyse des actions. Recherche-Développement sur les associations arbres-cultures. Les contraintes au développement de l'agroforesterie en Afrique sont analysées.
SUMMARIES (EN, FR)
AGROFORESTRY; RURAL DEVELOPMENT; RESEARCH; TREES; FARMING SYSTEMS

00190
04676
BOUDET, G.
INSTITUT D'ELEVAGE DE MEDECINE VETERINAIRE DES PAYS TROPICAUX, MAISONS-ALFORT (FRANCE)
THE SAHELIAN VEGETATION, ITS EVOLUTION AND ITS MANAGEMENT BY MAN LA VEGETATION SAHELIENNE, SON EVOLUTION ET SA GESTION PAR L'HOMME
(1981) FR
XA;ML pg 1-16
Présente une liste des espèces herbacées et ligneuses du Sahel malien. Un tableau synoptique déterminant l'abondance de chaque espèce et de chaque groupe y est inclus. L'évolution de cette végétation en fonction des aléas pluviométriques et de la transhumance est analysée.
3 FIG.; 6 REF.
VEGETATION; SURVEYING; SILVOPASTORAL SYSTEMS; NOMADISM; SAHEL; SPECIES LIST

00191
06752
HAMEL, O.
CTFT, NOGENT-SUR-MARNE (FRANCE)
RESEARCH AND DEVELOPMENT. TREE AND DESERTIFICATION IN DRY TROPICAL AFRICA
RECHERCHE ET DEVELOPPEMENT. L'ARBRE ET LA DESERTIFICATION EN AFRIQUE TROPICALE SECHE
AMENAGEMENT ET NATURE Vol No 81 (1986) FR
XA pg 27-31
Analyse les causes de la désertification et les échecs des projets de reboisement au Sahel. Décrit l'interdépendance des écosystèmes sylvo-pastoraux et des écosystèmes agricoles et propose une série d'étapes à suivre pour une approche intégrée dans la lutte contre la désertification.
6 REF.
RESEARCH; TREES; DESERTIFICATION; FORESTRY; DEVELOPMENT; SILVOPASTORAL SYSTEMS; ARID ZONES

00192
05678
DUCATILLION, C.; LOUP, C.
IRAM-GRET, PARIS (FRANCE)
TREES IN AGRICULTURAL LANDSCAPE. AGROFORESTRY PRACTICES. DESCRIPTION AND PROSPECTS
L'ARBRE DANS LE PAYSAGE AGRICOLE. PRATIQUES AGROFORESTIERES. DESCRIPTION ET PERSPECTIVES
PRATIQUES PAYSANNES DES COMORES (1985) FR
CEDAFER
XA;KM pg 210
Présentent les résultats des enquêtes diagnostiques sur la stabilité des forêts des zones humides des Comores. En relation avec l'évolution des forêts les auteurs analysent les problèmes, les besoins et les habitudes des paysans. Présentent également les espèces végétales d'importance économique et écologique reconnues localement. Proposent des espèces à multiplier et à introduire dans des zones écologiques spécifiques.
11 TABLES; 26 FIG.; 120 REF. SUMMARY (FR)
ARTOCARPUS; DALBERGIA; DRACAENA; IPOMOEA; KHAYA; LANTANA; PTEROCARPUS PSIDIUM; MANGIFERA; ELETTARIA; FOREST INVENTORY; LAND TENURE; AGROFORESTRY; HOME GARDENS; MARGINAL LANDS; HIGHLANDS; FOREST NURSERIES; TRIALS; HUMID TROPICS

00193
06525
JOUVE, P.; DAVID, D.
CIRAD, MONTPELLIER (FRANCE)
SPATIAL DIVERSITY AND EVOLUTION IN THE TYPES OF ASSOCIATION OF AGRICULTURE AND ANIMAL PRODUCTION IN THE MARADI REGION IN NIGER
DIVERSITE SPATIALE ET EVOLUTION DES MODES D'ASSOCIATION DE L'AGRICULTURE ET DE L'ELEVAGE DANS LA REGION DE MARADI AU NIGER (ZONE SAHELIENNE)
CAHIERS DE LA RECHERCHE-DEVELOPPEMENT Vol No 7 (1985) FR
XA;NE pg 54-64
Présente les diversités des systèmes agricoles villageois. A partir des ces diversités, l'auteur retrace l'évolution des systèmes agro-pastoraux de la région. La nature des relations entre l'agriculture et l'élevage est analysée, notamment en ce qui concerne la concurrence pour l'occupation de l'espace, l'entretien de la fertilité des sols et la traction animale.Les effets de la sécheresse sur la saturation foncière sont aussi passés en revue
14 REF. SUMMARIES (EN, ES, FR)
AGROPASTORAL SYSTEMS; LAND USE; SOIL FERTILITY; DRAUGHT ANIMALS; DROUGHT; ARID ZONES

00194
00144
PIOT, J.
WOODY PLANTS AND SAVANNA PASTURES OF ADAMAOUA (CAMEROON)
VEGETAUX LIGNEUX ET PATURAGES DES SAVANES DE L'ADAMAOUA AU CAMEROUN
REV ELEV MED VET PAYS TROP Vol 22 No 4 (1969) FR
XA;CM pg 541-559
Analyse les causes de la dégradation de la végétation ligneuse et des pâturages des savanes, notamment l'action des feux et du surpâturage. Présente aussi la valeur pastorale des espèces ligneuses et fait des recommandations sur l'usage des feux, la politique pastorale et les bases d'aménagement sylvopastoral.
3 TABLES; 8 FIG.; 10 REF. SUMMARIES (EN, ES, FR)
SAVANNA; PASTURES; SILVOPASTORAL SYSTEMS; STOCKING RATE; FIRES; TREES; SHRUBS; TROPICS

00195
07701
POMIER, M.; BELIGNE, V.; BONNEAU, X.; DE TAFFIN, G.
RESTORATION OF SOIL FERTILITY WHEN REPLANTING COCONUT GROVES
RESTAURATION DE LA FERTILITE DES SOLS LORS DE LA REPLANTATION D'UNE COCOTERAIE
OLEAGINEUX Vol 41 No 5 (1986) FR
XA;CI pg 223-230
Décrit des moyens de régénér des sols sous cocoteraie dans la zone côtière de l'Afrique de l'Ouest. Présente et analyse les résultats des essais comparatifs entre légumineuses ligneuses et herbacées. 4 TABLES; 6 FIG.;
4 REF. SUMMARIES (EN, ES, FR)
COCOS NUCIFERA; ALBIZIA FALCATARIA; ACACIA AURICULIFORMIS; ACACIA MANGIUM; GREEN MANURES; SOIL FERTILITY; FUELWOOD; CASH CROPS; NITROGEN FIXING TREES

00196
07122
PIERI, C.
IRAT, MONTPELLIER (FRANCE)
FOOD CROP FERTILIZATION AND SOIL FERTILITY IN SUB-SAHARAN PEASANT AGRICULTURE
FERTILISATION DES CULTURES VIVRIERES ET FERTILITE DES SOLS EN AGRICULTURE PAYSANNE SUBSAHARIENNE
L'AGRONOMIE TROPICALE Vol 41 No 1 (1986) FR
XA pg 1-19
Passe en revue les contributions de la recherche agronomique française à l'élaboration de bases agrotechniques dans le domaine de l'amélioration et du maintien de la fertilité des sols. Une importance particulière est accordée à l'amélioration des systèmes de fixation symbiotique de l'azote.
22 TABLES; 10 FIG.; 56 REF. SUMMARIES (EN, ES, FR)
FOOD CROPS; PEASANT FARMING; SOIL FERTILITY; MANURES; FERTILIZERS; NITROGEN FIXATION

00197
07644
CCE; ENDA
ENDA, DAKAR (SENEGAL)
USEFUL PLANTS AND TREES: SESBANIA ROSTRATA
PLANTES ET ARBRES UTILES: LE SESBANIA ROSTRE.
FICHE TECHNIQUE N0 69 (1987) FR
ENDA
XA pg 1-2
Fiche technique portant des renseignements utiles sur la légumineuse ligneuse Sesbania rostrata, notamment sur sa distribution, son écologie, ses caractères morphologiques, ses diverses utilisations et les méthodes de multiplication.
SESBANIA ROSTRATA; CHARACTERISTICS; USES; NITROGEN FIXING TREES; PLANT PROPAGATION

00198
07576
CCE; ENDA
ENDA, DAKAR (SENEGAL)
USEFUL PLANTS AND TREES: FAIDHERBIA ALBIDA (ACACIA ALBIDA) PLANTES ET ARBRES UTILES: FAIDHERBIA ALBIDA (ACACIA ALBIDA) FICHE TECHNIQUE NO 1
(1987) FR
ENDA
XA pg 1-5
Une fiche technique contenant des renseignements utiles sur le Faidherbia albida (syn: Acacia albida), notamment les noms vernaculaires en Afrique de l'Ouest, la distribution géographique, l'écologie, les caractères agroforestiers de l'espèce, les divers usages et les méthodes de multiplication.
9 REF.
ACACIA ALBIDA; NITROGEN FIXING TREES; FODDER CROPS; TAXONOMY; PROPAGATION; USES

00199
04984
ANON
MINISTERE DES FERMES D'ETAT, DE L'ELEVAGE ET DE LA PECHE, COTONOU (BENIN). DIRECTION DES ETUDES ET DE LA PLANIFICATION
INVENTORY OF COMMON FODDER PLANTS
INVENTAIRE DES FOURRAGES COURANTS
NOTES TECHNIQUES SUR L'ELEVAGE No. 1.1.1 (1984) FR
XA;BJ pg 1-19
Un rapport contenant les résultats d'enquêtes sur la distribution , l'abondance et la fréquence de chaque espèce fourragère au Sud-Bénin. Les espèces fourragères sont classées en familles botaniques ou dans les catégories des ligneuses ou des herbacées. Les fréquences moyennes de chaque famille et de chaque catégorie sont données.
6 TABLES
MULTIPURPOSE TREES; FODDER CROPS; SPECIES LIST

00200
06250
DEPOMMIER, D.
ICRAF, NAIROBI (KENYA)
AGROFORESTRY AND AGROFORESTRY SYSTEMS
AGROFORESTERIE ET SYSTEMES AGROFORESTIERS
AGROFORESTERIE EN ZONES FORESTIERES HUMIDES D'AFRIQUE. RAPPORT DU SEMINAIRE SOUS-REGIONAL 1-8 JUILLET 1985, MAKOKOU, GABON
(1985) FR
UNESCO-MAB
XA pg 73-86
Note définissant les objectifs et le programme de l'ICRAF. Présente également une définition de l'agroforesterie, les diverses classifications de systèmes agroforestiers et une description de la méthodologie de diagnostic et de conception (MDC).
3 TABLES; 5 FIG.
AGROFORESTRY; CLASSIFICATION; ECOLOGICAL FACTORS; SOCIOECONOMIC FACTORS; AGROSILVOPASTORAL SYSTEMS

00201
03961
GOUDET, J.P.; DEPOMMIER, D.
CTFT, NOGENT-SUR-MARNE (FRANCE)
AGROFORESTRY: FORESTRY AND PRODUCTION SYSTEMS. A CASE STUDY
AGROFORESTERIE: FORESTERIE ET SYSTEMES DE PRODUCTION. ETUDE DE CAS
(1983) FR
CTFT
XA pg 102
Passe en revue les divers usages de l'arbre et de ses produits. Montre les risques posés par la pratique de la culture itinérante sur la dégradation du milieu forestier et comment les pratiques agroforestières pourraient minimiser ces risques. Présente également des notes descriptives sur les systèmes agroforestiers et des exemples de leur application dans certains pays africains. Les meilleures espèces ligneuses adaptées aux systèmes agroforestiers sont recommandées.
285 REF.
ACACIA ALBIDA; ZIZIPHUS MAURITIANA; EUCALYPTUS; AZADIRACHTA INDICA; AGROFORESTRY; FARMING SYSTEMS; TAUNGYA SYSTEM; WINDBREAKS; BIBLIOGRAPHY; TROPICS; SEMI ARID ZONES

00202
04668
SAMYN, J.M.; ZONGO, A.
DIRECTION DE L'AMENAGEMENT FORESTIER ET DU REBOISEMENT, OUAGADOUGOU (BURKINA FASO). PROJET BOIS DE VILLAGES
AGROFORESTRY: A POTENTIAL SOLUTION TO MAJOR PROBLEMS OF BURKINA FASO. SOME POSSIBLE APPLICATIONS
L'AGROFORESTERIE FACE AUX GRANDS PROBLEMES DU BURKINA FASO, QUELQUES APPLICATIONS POSSIBLES
(1984) FR
INTERCOOPERATION, BERNE (SWITZERLAND)
XA;BF pg 1-26
Présente les effets désastreux de trois facteurs de dégradation des savanes boisées au Burkina Faso. Les facteurs cités et analysés sont l'accroissement démographique, les méthodes de culture et le besoin en bois du feu. Les méthodes agroforestières traditionnelles, la nécessité de les améliorer et leur contribution potentielle pour un développement intégré du milieu rural sont discutées.
16 PHOTOGRAPHS; 26 REF. SUMMARY (FR)
ACACIA ALBIDA; TAMARINDUS INDICA; ACACIA NILOTICA; ACACIA SENEGAL; BALANITES AEGYPTIACA; PROSOPIS CHILENSIS; PROSOPIS JULIFLORA; AGROFORESTRY; SOCIAL FORESTRY; FRUIT TREES; FODDER CROPS; TAUNGYA SYSTEM; FALLOWS; ARID ZONES; SEMI ARID ZONES

00203
07432
BONKOUNGOU, E.G.
IRBET, OUAGADOUGOU (BURKINA FASO)
A MONOGRAPH ON THE NERE, PARKIA BIGLOBOSA (JACQ.) BENTH., A MULTIPURPOSE AGROFORESTRY SPECIES
MONOGRAPHIE DU NERE, PARKIA BIGLOBOSA (JACQ.) BENTH., ESPECE AGROFORESTIERE A USAGES MULTIPLES
(1987) FR
IRBET/CNRST
XA;BF pg 1-45
Présente des informations sur le Néré (Parkia biglobosa): description botanique, biologie de la reproduction, aire de distribution, importance alimentaire, toxicité et propriétés médicinales. Les

méthodes sylvicoles englobant le semis, la pépinière, la plantation et la protection sont aussi présentées. Les résultats des essais comparatifs effectués au Burkina Faso sont résumés.
8 TABLES; 6 FIG.; 23 REF.
PARKIA BIGLOBOSA; MULTIPURPOSE TREES; AGROFORESTRY; BIOLOGY; NATURAL DISTRIBUTION; BOTANY; TAXONOMY; USES; PROVENANCE TRIALS; VEGETATIVE PROPAGATION; USES

00204
04257
PELTIER, R.
CENTRE DE RECHERCHES FORESTIERES, NKOLBISSON (CAMEROON). ANTENNE DE MAROUA
RESULTS OF SILVICULTURE TRIALS, 1983 MEASUREMENTS
RESULTATS DES ESSAIS SYLVICOLES. MESURES 1983
(1984) FR
CRF/IRA
XA;CM pg 1-5
Présente les résultats d'une étude des interactions entre les espèces ligneuses et les cultures annuelles. Comprend également un résumé des analyses statistiques des données dendrométriques et des rendements des cultures vivrières.
4 TABLES
EUCALYPTUS CAMALDULENSIS; ACACIA NILOTICA; DALBERGIA SISSOO; AZADIRACHTA INDICA; ACACIA ALBIDA; AGROFORESTRY; SILVICULTURE; TAUNGYA SYSTEM; TRIALS; SAHEL; SEMI ARID ZONES

00205
03308
MIQUEL, S.
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, BRUNOY (FRANCE)
EXPERIMENTAL AGROFORESTRY: REPORT OF A MISSION TO GABON, I.R.E.T. STATION AT MAKOKOU
AGROFORESTERIE EXPERIMENTALE: RAPPORT DE MISSION AU GABON, STATION I.R.E.T. A MAKOKOU
(1983) FR
UNESCO-MAB
XA;GA pg 1-11
En vue de combattre la déforestation dans la zone équatoriale africaine, l'auteur suggère l'application de méthodes agroforestières intégrées. Les espèces d'arbres et de lianes proposées ont été sélectionnées sur la base de leurs utilisations locales (alimentaires, médicinales, fourragères, énergétiques, ou pour la fixation symbiotique de l'azote). Ces espèces ont été soumises à des essais comparatifs et les premiers résultats sont discutés.
AGROFORESTRY; RESEARCH; FOREST INVENTORY; TRIALS; GERMINATION; SPECIES LIST

00206
06833
HARDOUIN, J.
INSTITUT DE MEDECINE TROPICALE, ANTWERPEN (BELGIUM)
AN EXAMPLE OF AGROFORESTRY IN RWANDA
UN EXEMPLE D'AGRO-FORESTERIE AU RWANDA
TROPICULTURA Vol 2 No 3 (1984) FR
XA;RW pg 104-106

Un rapport de mission décrivant un cas de réussite d'un projet agroforestier dans la commune de Nyabisindu au Rwanda. Apporte des informations sur les superficies occupées par chaque culture dans le terroir familial, la répartition des précipitations et les types d'associations agropastorales et agrosylvopastorales.
3 TABLES; 2 FIG.
AGROFORESTRY; EXPERIMENTAL STATION; PROJECTS

00207
05613
BAUMER, M.
ICRAF, NAIROBI (KENYA)
COULD AGROFORESTRY CONTRIBUTE TO DEVELOPMENT IN RWANDA?
L'AGROFORESTERIE PEUT-ELLE AIDER AU DEVELOPPEMENT DU RWANDA?
JOURNEES NATIONALES FORESTIERES (9-12 OCTOBRE 1984) AU RWANDA (1984) FR
ICRAF
XA;RW pg 1-8
Définit l'agroforesterie, ses composants et ses objectifs. Décrit quelques systèmes agroforestiers. Compare la politique de développement basée sur la disparition de sous-populations (villages) et celle sur la villagisation. Propose des systèmes agroforestiers aptes à s'intégrer dans les systèmes de production des villages. Un accent particulier est mis sur l'introduction des arbres à usages multiples.
AGROFORESTRY; RURAL DEVELOPMENT; FUELWOOD; FODDER CROPS; SOIL FERTILITY

00208
07907
DIACK, M.
ISRA, DJIBELOR (SENEGAL)
SESBANIA ROSTRATA PROPAGATION AND ITS EFFECT ON RICE PRODUCTION
MULTIPLICATION DE SESBANIA ROSTRATA ET SON EFFET SUR LA PRODUCTION DU RIZ
LES ARBRES FIXATEURS D'AZOTE. ACTES DES SEMINAIRES, 17-25 MARS 1986, DAKAR, SENEGAL (1987) FR
ORSTOM
XA;SN pg 357-365
Sesbania rostrata, une légumineuse tropicale, a été soumise à des essais de multiplication et on a testé son effet sur la fertilité des sols et le rendement en riz. Les effets du Rhizobium naturel et du Rhizobium spécifique (ORS 571) sont comparés. Les résultats montrent que l'apport de Sesbania dans le sol a significativement amélioré le rendement en grains et paille de riz. L'étude montre aussi que le Rhizobium spécifique n'a pas été plus performant que le Rhizobium naturel.
4 TABLES; 3 REF. SUMMARY (FR)
SESBANIA ROSTRATA; ORYZA SATIVA; TRIALS; PLANT PROPAGATION; NITROGEN FIXING TREES; GREEN MANURES; SOIL FERTILITY; LEGUMINOSAE; FOOD CROPS; GROWTH HABIT; YIELDS

00209
04727
AUDRU, J.
INSTITUT D'ELEVAGE DE MEDECINE VETERINAIRE DES PAYS TROPICAUX, MAISONS-ALFORT (FRANCE)
THE SILVOPASTORAL ZONE OF PALE (COTE D'IVOIRE)
ZONE SYLVO-PASTORALE DE LA PALE (COTE D'IVOIRE)
(1978) FR
MINISTERE DE LA PRODUCTION ANIMALE, ABIDJAN (COTE D'IVOIRE)

XA;CI pg 1-15
Ce rapport décrit les investissements et travaux déjà effectués dans le cadre du projet "Zone sylvo-pastorale de la Palé". Le projet a pour objectifs la stabilisation et l'intégration de l'élevage Peuhl dans le complexe agro-pastoral Nord ivoirien. Présente également les coûts des premiers travaux, notamment le balisage extérieur de la zone, construction de routes, de pistes et de ponts, création d'un centre administratif, de puits, etc.
3 FIG.
SILVOPASTORAL SYSTEMS; RANGELANDS; GRASSLAND MANAGEMENT; LIVESTOCK

00210
05155
BAUMER, M.
ICRAF, NAIROBI (KENYA)
THE ROLE OF BOSCIA SENEGALENSIS (PERS.) LAM. IN THE AFRICAN RURAL ECONOMY: ITS CONSUMPTION BY LIVESTOCK
ROLE DE BOSCIA SENEGALENSIS (PERS.) LAM. DANS L'ECONOMIE RURALE AFRICAINE: SA CONSOMMATION PAR LE BETAIL
REV ELEV MED VET PAYS TROP Vol 34 No 3 (1981) FR
XA;SN pg 325-328
Explique l'importance grandissante de Boscia senegalensis dans l'alimentation de bétail. L'espèce est généralement considérée comme très peu appétée. Cependant il semble que cette espèce soit devenue l'une des plus recherchée par les bovins dans certaines régions du Sénégal. La sécheresse qui a entraîné la disparition des bonnes plantes fourragères et le pica - trouble nutritionnel qui fait manger n'importe quoi au bétail - sont mentionnés comme étant des causes probables de ce changement dans l'attitude des bovins.
16 REF. SUMMARIES (EN, ES, FR)
BOSCIA SENEGALENSIS; FODDER CROPS; CATTLE; PALATABILITY; RURAL DEVELOPMENT; SEMI ARID ZONES; SHRUBS

00211
04019
LOUPPE, D.
CTFT, NOGENT-SUR-MARNE (FRANCE)
THE INTEGRATION OF TREES IN AGRICULTURAL DEVELOPMENT IN NIGER
L'INTEGRATION DE L'ARBRE DANS LE DEVELOPPEMENT AGRICOLE AU NIGER
REUNION ANNUELLE DES CADRES DE L'AGRICULTURE, 18-27 FEVRIER 1980, NIGER (1980) FR
INRA, DEPARTEMENT DES RECHERCHES FORESTIERES
XA;NE pg 1-13
La nécessité de l'intégration des arbres dans les systèmes de production agricole est démontrée à travers une série de données numériques sur leur valeur alimentaire. Les rôles de l'arbre dans l'amélioration et le maintien de la fertilité des sols et comme source de bois de chauffage, de construction et d'oeuvres d'art sont aussi discutés.
3 TABLES; 11 REF.
ADANSONIA DIGITATA; ACACIA ALBIDA; BOMBAX COSTATUM; ANDROPOGON GAYANUS; TREES; AGROFORESTRY; CHEMICAL ANALYSIS; USES; FEED CROPS; YIELDS; AFFORESTATION; WINDBREAKS; PROTECTIVE PLANTS; SOIL CONSERVATION; TAUNGYA SYSTEM; SPECIES LIST; SEMI ARID ZONES

00212
04152
TOUTAIN, B.
INSTITUT D'ELEVAGE DE MEDECINE VETERINAIRE DES PAYS TROPICAUX, MAISONS-ALFORT (FRANCE)
WOODY AND HERBACEOUS SPECIES IN THE SAHELIAN PASTURE ECOSYSTEMS IN UPPER VOLTA. REPORT OF THE FIRST SURVEY
ESPECES LIGNEUSES ET HERBACEES DANS LES ECOSYSTEMES PATURES SAHELIENS DE HAUTE-VOLTA. RAPPORT DE PREMIERE CAMPAGNE
(1981) FR
GERDAT/IEMVT/CTFT/ENS
XA;BF pg 1-53
Un rapport sur le programme de développement rural "Espèces ligneuses et herbacées des pâturages sahéliens" du Burkina Faso. L'importance de ces deux types de fourrages est évaluée dans le département de Dori. La structure et l'évolution des végétations ligneuses sont déterminées à l'aide des paramètres dendrométriques, taux de mortalité, intensité des broutages, répartition des systèmes racinaires, densité de chaque espèce par unité de surface, etc. Présente une évaluation de la valeur fourragère et de la production de la biomasse. Contient également un schéma matriciel qui détermine les caractéristiques des végétations et la valeur fourragère de chaque type de pâturage.
7 TABLES; 4 FIG.; 4 REF.
TREES; SHRUBS; FODDER PLANTS; RESEARCH; BIOMASS; PRODUCTION; PHENOLOGY; NUTRITIVE VALUE; FUELWOOD; SOIL CONSERVATION; SOIL FERTILITY; SPECIES LIST

00213
B04098
634.0.26
BAUMER, M.
ICRAF, NAIROBI (KENYA)
AGROFORESTRY AND DESERTIFICATION. THE POSSIBLE ROLE OF AGROFORESTRY IN THE STRUGGLE AGAINST DESERTIFICATION AND ENVIRONMENTAL DEGRADATION
AGROFORESTERIE ET DESERTIFICATION. LE ROLE POSSIBLE DE L'AGROFORESTERIE DANS LA LUTTE CONTRE LA DESERTIFICATION ET LA DEGRADATION DE L'ENVIRONNEMENT
(1987) FR
CTA, WAGENINGEN (HOLLAND)
XA pg 1-260
Définit le concept et la pratique de l'agroforesterie, les types d'aridité et les modes, risques et causes de la désertification. Passe en revue et illustre les différents systèmes agroforestiers utilisés pour lutter contre la désertification. Présente aussi les caractères et avantages de l'agroforesterie à la fois pour assurer une production agro-silvo-pastorale soutenue et pour une gestion intégrée des terres sans risque de dégradation de l'environnement. Les rôles des formations ligneuses dans la conservation et l'amélioration de la fertilité des sols, la fixation des dunes et dans l'alimentation humaine et animale sont décrits et illustrés par des exemples. Souligne la nécessité d'entreprendre préalablement des recherches dans les domaines de l'environnement, des systèmes d'utilisation des terres, de la production agricole, et des aspects socio-économiques avant de se lancer dans des grands projets en agroforesterie.
19 TABLES; 349 REF.; 15 FIG.
DESERTIFICATION; DESERT CONTROL; AGROFORESTRY; AGROSILVOPASTORAL SYSTEMS; SAHEL; SPECIES LIST; TROPICS; ARID ZONES

00214
03838
POULAIN, J.F.
IRAT, OUAGADOUGOU (BURKINA FASO)
INFLUENCE OF ACACIA ALBIDA DEL. ON PEDOCLIMATIC FACTORS AND CROP YIELDS

INFLUENCE DE L'ACACIA ALBIDA DEL. SUR LES FACTEURS PEDOCLIMATIQUES ET LES RENDEMENTS DES CULTURES. LE POINT DE VUE DE L'AGRONOME (1970) FR
IRAT
XA;BF pg 1-10
Analyse les effets de l'Acacia albida sur le microclimat, la fertilité des sols et les rendements des cultures. Présente aussi les avantages et les désavantages de l'intégration de l'Acacia albida dans les systèmes de culture traditionelle et mécanisée.
21 REF.
ACACIA ALBIDA; NITROGEN FIXING TREES; SOIL FERTILITY; FOOD CROPS; YIELDS; AGROFORESTRY; TROPICS; ARID ZONES

00215
07810
VERNIER, P.; GODEFROY, J.
IDESSA/CV, BOUAKE (COTE D'IVOIRE)
THE BEHAVIOUR OF SESBANIA ROSTRATA BREM. ET OBERM. IN NORTHERN CAMEROON
COMPORTEMENT DE SESBANIA ROSTRATA BREM. ET OBERM. DANS LE NORD DU CAMEROUN
FRUITS Vol 42 No 9 (1987) FR
XA;CM pg 511-514
Analyse les résultats des expériences sur le comportement de Sesbania rostrata sur un sol ferrugineux hydromorphe. Les paramètres observés sont les taux de germination et de croissance. L'effet de l'inoculation des plantes avec la souche de Rhizobium spécifique (ORS. 571) est aussi analysé.
3 TABLES; 3 REF. SUMMARY (FR)
SESBANIA ROSTRATA; GROWTH; NITROGEN FIXATION; BIOMASS; SEMI ARID ZONES

00216
8008
NIANG, A.I.
SAFGRAD, OUAGADOUGOU (BURKINA FASO)
PRELIMINARY NOTES ON TWO MULTIPURPOSE TREE SPECIES: ACACIA ALBIDA DEL. BUTYROSPERMUM PARKII G. DON (KARITE)
NOTE PRELIMINAIRE SUR DEUX ESPECES A USAGE MULTIPLE. ACACIA ALBIDA DEL., BUTYROSPERMUM PARKII G. DON (KARITE)
(1987) FR
SAFGRAD
XA pg 1-28
Monographie présentant la morphologie, la physiologie, la phénologie et la distribution géographique de l'Acacia albida, et du Butyrospermum parkii. Présente les usages de ces deux espèces et les effets bénéfiques qu'elles apportent au microclimat, au sol et aux cultures se trouvant sous couvert ou à proximité ou en association. Présente aussi des analyses chimiques indiquant la valeur alimentaire ou fourragère de différents organes de ces deux espèces.
7 TABLES; 6 FIG.; 46 REF.
ACACIA ALBIDA; VITELLARIA PARADOXA; MULTIPURPOSE TREES; CHEMICAL ANALYSIS; NUTRITIVE VALUE; PHENOLOGY; DISTRIBUTION; CULTIVATION; PLANT PROPAGATION

00217
08009
NIANG, A.I.
SAFGRAD, OUAGADOUGOU (BURKINA FASO)
THE KAMSI VILLAGE, DIAGNOSIS AND AGROFORESTRY RESEARCH PROPOSALS
VILLAGE DE KAMSI, RAPPORT DE DIAGNOSTIC ET DE PROPOSITIONS DE RECHERCHES AGROFORESTIERES
(1987) FR
SAFGRAD/CNRST
XA;BF pg 1-55
Présente les résultats des enquêtes diagnostic effectuées sur les systèmes de production agricole du village de Kamsi. Contient une description biophysique et socio-économique du village. Analyse les résultats des enquêtes notamment l'identification des potentiels des systèmes de production agricole, et des contraintes. Présente aussi des propositions d'interventions agroforestières et non agroforestières et les contraintes possibles à leur exécution.
10 TABLES; 2 FIG.; 51 REF.
AGRICULTURAL PRODUCTION; ENVIRONMENT; HUMAN POPULATION; FARMING SYSTEMS; SOCIOECONOMIC ASPECTS; SOIL FERTILITY; EROSION CONTROL; AGROFORESTRY; PROJECT PROPOSALS

00218
08006
NIANG, A.I.
SAFGRAD, OUAGADOUGOU (BURKINA FASO)
PROVISIONAL SURVEY DIAGNOSTIC GUIDELINES
GUIDE PROVISOIRE D'ENQUETE DIAGNOSTIQUE
(1987) FR
SAFGRAD
XZ pg 1-13
Ce guide contient une série des questionnaires qui permettent une approche méthodologique dans le cadre des enquêtes diagnostic sur les systèmes d'utilisation des terres et de production agricole, notamment l'évaluation des ressources, contraintes, aspects bioécologiques etc., en vue de formuler des projets et recherches en agroforesterie.
AGROFORESTRY; SURVEYS; METHODS; DIAGNOSIS

00219
08007
NIANG, A.I.
INERA, OUAGADOUGOU (BURKINA FASO)
THE MOSSI PLATEAU. A PREDIAGNOSIS SURVEY REPORT
LE PLATEAU MOSSI. RAPPORT DE PREDIAGNOSTIC
(1987) FR
INERA
XA;BF pg 1-60
Comprend une description bio-écologique et socio-économique du Plateau Mossi, notamment des données sur le climat, la topographie, la végétation, la population et sa distribution ethnique et l'économie. Présente aussi les systèmes d'utilisation des terres et les structures de production et de commercialisation des produits agricole. Les facteurs et les contraintes de la production agricole sont également analysés.
10 TABLES; 51 REF.
AGROFORESTRY; SURVEYS; ENVIRONMENT; LAND TENURE; LAND USE; FARMING SYSTEMS; AGRICULTURAL PRODUCTION; MARKETING; FINANCE

00220
05686
ANON
PROJET AGRO-PASTORAL, GTZ - NYABISINDU (RWANDA)
MATRIX FOR THE SELECTION OF AGROFORESTRY SPECIES IN THE AGROPASTORAL PROJECT REGION
SCHEMA MATRICIEL POUR LE CHOIX DES ESSENCES SE PRETANT A UNE UTILISATION AGROFORESTIERE DANS LA REGION DU PROJET AGRO-PASTORAL FICHE TECHNIQUE No.3 (1985) FR
PAP
XA;RW pg 1-7
Présente un schéma matriciel comprenant des renseignements déterminants sur le choix des arbres à usages multiples, notamment: les conditions écologiques et édaphiques, sites favorables, modes de multiplication, but de production, et autres propriétés telles que la fixation de l'azote, amélioration des sols et les propriétés mellifères.
15 REF.
ACACIA; ALBIZIA; ALNUS; ACROCARPUS; CAJANUS CAJAN; CALLIANDRA; CASSIA; CEDRELA; CROTON; ENTADA; LEUCAENA; FICUS; PODOCARPUS; ERYTHRINA; AGROFORESTRY; TREES; SPECIES SELECTION; SILVICULTURE; TREE PRODUCTS; CHEMICOPHYSICAL PROPERTIES; SUBHUMID TROPICS

00221
4983
ANON
DEPARTEMENT DE LA RECHERCHE AGRONOMIQUE, PORTO-NOVO (BENIN). LABORATOIRE D'ECONOMIE ET DE SOCIOLOGIE RURALES
SOCIO-ECONOMIC INVESTIGATION ON THE NATURAL PALMERY OF BENIN
ENQUETE SOCIO-ECONOMIQUE DANS LA PALMERAIE NATURELLE DU BENIN
(1982) FR
MIN. DE L'ENSEIGNEMENT SUP. ET DE LA RECHERCHE SCIENTIFIQUES, BENIN XA;BJ pg 1-35
L'article décrit les structures sociales de la population exploitant les palmeraies naturelles, en mettant l'accent sur la répartition de la main-d'oeuvre, active et inactive, selon l'âge et le sexe. Aborde aussi une description du système foncier, des systèmes de production et des types des produits visés (huile ou vin). Les contraintes à l'amélioration de la production sont mentionnés. Les systèmes de commercialisation des produits et le revenu des paysans sont aussi analysés.
20 TABLES; 3 FIG.
ELAEIS GUINEENSIS; PALMAE; AGROFORESTRY; SOCIOECONOMIC FACTORS; OIL CROPS

00222
04488
MIQUEL, S.; HLADIK, A.
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, BRUNOY (FRANCE). LABORATOIRE D'ECOLOGIE TROPICALE
THE CONCEPT OF AGROFORESTRY: AN EXAMPLE OF EXPERIMENTS IN PROGRESS IN MAKOKOU DISTRICT, GABON
SUR LE CONCEPT D'AGROFORESTERIE: EXEMPLE D'EXPERIENCES EN COURS DANS LA REGION DE MAKOKOU, GABON
BULL ECOL Vol 15 No 3 (1984) FR
XA;GA pg 163-173
Le concept de l'agroforesterie est présenté à partir d'éléments des connaisances acquises de l'étude des systèmes agricoles traditionnels tropicaux. L'importance de la biologie, de l'écologie et des sciences

sociales est soulignée. On décrit un exemple de mise en place de parcelles expérimentales. Les espèces végétales ont été sélectionnées parmi la flore locale.
4 FIG.; 35 REF. SUMMARIES (EN, FR)
AGROFORESTRY; TREE CROPS; SPECIES LIST; TROPICAL RAIN FOREST; TRADITIONAL FARMING; HUMID TROPICS

00223
4734
ANON
MINISTERE DE L'ENVIRONNEMENT ET DU TOURISME, OUAGADOUDOU (BURKINA FASO). PROJET BOIS DE VILLAGES
INTERVENTION TECHNIQUES FOR THE VILLAGE WOODLOT ACTION
LES TECHNIQUES D'INTERVENTION POUR L'ACTION BOIS DE VILLAGES
FICHE TECHNIQUE NO.2 (1982) FR
PROJET BOIS DE VILLAGES
XA;BF pg 1-20
Les rôles des arbres dans la conservation et l'amélioration des sols sont présentés. Les techniques de plantation des espèces agroforestières sont décrites. L'article comprend aussi un aperçu sur la protection et la lutte contre les feux.
ACACIA SEYAL; ACACIA SENEGAL; LEUCAENA LEUCOCEPHALA; EUCALYPTUS CAMALDULENSIS; GMELINA ARBOREA; AZADIRACHTA; CASSIA SIAMEA; SOCIAL FORESTRY; WOODY LEGUMES; AGROFORESTRY; REFORESTATION; EROSION

00224
B04254
634.0.26.001.5(675.)
LIPMAN, E.
ISAR, BUTARE (RWANDA). DEPARTEMENT DE FORESTERIE
THE STATE OF AGROFORESTRY RESEARCH IN RWANDA. BIBLIOGRAPHICAL STUDY AND SYNTHESIS OF AGROFORESTRY ACTIVITIES
ETAT DE LA RECHERCHE AGROFORESTIERE AU RWANDA. ETUDE BIBLIOGRAPHIQUE ET SYNTHESE DES ACTIVITES AGROFORESTIERES
(1987) FR
DF-ISAR/ICRAF
XA;RW pg 1-179
Ce rapport contient une description sommaire des projets agroforestiers et sylvicoles au Rwanda. Présente aussi des reflexions sur l'avenir de l'agroforesterie dans ce pays et une bibliographie annotée.
4 TABLES; 228 REF.; 2 MAPS
CALLIANDRA; GREVILLEA; LEUCAENA; MORUS; SESBANIA; PINUS; SOLANUM TUBEROSUM; AGROFORESTRY; BIBLIOGRAPHY; RESEARCH; EVALUATION; REFORESTATION; TAUNGYA SYSTEM; AGRISILVICULTURE; SUBHUMID TROPICS

00225
07398
BALLE, P.
CTFT, BOUAKE (COTE D'IVOIRE). DIVISION SYLVICULTURE
AGROFORESTRY, CONDITIONS OF APPLICATION IN COTE D'IVOIRE
L'AGROFORESTERIE, CONDITIONS D'APPLICATION EN COTE D'IVOIRE
(1983) FR
CTFT
XA;CI pg 1-6

Adopte la définition de l'agroforesterie de Combe et Budowski. Entre les zones forestières et les savanes, l'auteur essaye de déterminer où et comment les techniques agroforestières pourraient être appliquées à titre curatif ou préventif dans le processus d'amélioration des écosystèmes agricoles.
LEUCAENA LEUCOCEPHALA; LAND USE; FORESTRY; AGRICULTURE; AGROFORESTRY; ECOLOGICAL ZONATION; RURAL DEVELOPMENT

00226
04730
BERNUS, E.
ORSTOM, BONDY (FRANCE)
THE TREE AND THE NOMAD
L'ARBRE ET LE NOMADE
J AGR TRAD BOT APPL Vol 26 No 2 (1979) FR
XA pg 103-128
Présente l'importance des arbres dans la vie sociale, économique et culturelle des nomades Touareg du Sahel.
8 FIG.; 38 REF. SUMMARY (EN)
MULTIPURPOSE TREES; FODDER CROPS; SILVOPASTORAL SYSTEMS; NOMADISM; SAHEL; SPECIES LIST; ARID ZONES

00227
04683
MALZI, P.
SOME PLANTS FROM NORTHERN CAMEROON AND THEIR USES
QUELQUES PLANTES DU NORD CAMEROUN ET LEURS UTILISATIONS
J AGR TRAD BOT APPL Vol 1 No 7-9 (1954) FR
XA;CM pg 317-332
Décrit quelques plantes et leurs utilisations. Présente aussi une liste des noms vernaculaires des arbres en langue Fulfuldé.
MULTIPURPOSE TREES; SHRUBS; USES; SPECIES LIST

00228
07916
BA, A.M.
ORSTOM, DAKAR (SENEGAL)
FIRST RESULTS FROM ECTOMYCORRHIZAE INFECTION TRIALS OF TWO LOCAL FOREST SPECIES IN SOUTHERN SENEGAL - AFZELIA AFRICANA SM. AND UAPACA GUINEENSIS MULL. ARG.
PREMIERS RESULTATS SUR L'INFECTION ECTOMYCORHIZIENNE CHEZ DEUX ESSENCES FORESTIERES LOCALES DU SUD DU SENEGAL - AFZELIA AFRICANA SM. ET UAPACA GUINEENSIS MULL. ARG.
LES ARBRES FIXATEURS D'AZOTE. ACTES DES SEMINAIRES, 17-25 MARS 1986, DAKAR, SENEGAL (1987) FR
ORSTOM
XA;SN pg 243-255
L'étude détermine la fréquence, la morphologie et la diversité des espèces fongiques impliquées dans la mycorhization des espèces Afzelia africana et Uapaca guineensis dans la forêt de la Basse-Casamance au Sénégal.
3 TABLES; 8 REF. SUMMARY (FR)
AFZELIA AFRICANA; UAPACA GUINEENSIS; TREES; SEMI ARID ZONES; SYMBIOSIS; MYCORRHIZAE; FUNGI; TRIALS; ROOTING; GROWTH; METHODS

00229
05790
EGGER, K.E.
HEIDELBERG UNIV.,(GERMANY, F.R.), BOTANISCHES INST.
STUDY ON THE IMPROVEMENT OF CULTIVATION TECHNIQUES AND EROSION CONTROL
ETUDE SUR L'AMELIORATION DES TECHNIQUES CULTURALES ET DU CONTROLE DE L'EROSION
RAPPORT DEFINITIF DELIVRE AU GOUVERNEMENT DE LA REPUBLIQUE UNIE DU CAMEROUN (1978) FR
PROJET DE DEVELOPPEMENT AGRICOLE DU LIEKE-MBAM
XA;CM pg 70
Présente l'organisation et les propositions d'un projet de restauration de systèmes de production agricole. L'agriculture itinérante pratiquée par une forte population, dépassant largement la capacité de charge des terres disponibles, a entrainé la savanisation, l'érosion et la baisse de la fertilité de sols. Pour maintenir la stabilité écologique et la productivité des terres, l'auteur propose l'approche 'ecofarming' ou la stratégie agro-sylvo-pastorale sous deux formes: Les systèmes de forêt claire artificielle pouvant accommoder des cultures héliophiles (arachide, maïs, etc ..) et de savane boisée cultivée comprenant des champs ouverts sous forme de clairières interrompues par des zones fortement boisées. La vulgarisation de ces deux systèmes est présentée.
18 TABLES; 15 FIG.
ARACHIS HYPOGAEA; MANIHOT ESCULENTA; ZEA MAYS; THEOBROMA CACAO; COFFEA CANEPHORA; MUSA PARADISIACA; CAJANUS CAJAN; CASSIA; CROTON; LEUCAENA LEUCOCEPHALA; TEPHROSIA; AGROSILVOPASTORAL SYSTEMS; ECOLOGY; MONITORING; EROSION CONTROL; CROPPING SYSTEMS; CULTIVATION; FALLOW SYSTEMS; INNOVATION ADOPTION; EXTENSION ACTIVITIES; SAVANNAS; WOODLANDS; HUMID TROPICS

00230
06819
HALLE, F.
UNIVERSITE DES SCIENCES ET TECHNIQUES DU LANGUEDOC, MONTPELLIER (FRANCE). LABORATOIRE DE BOTANIQUE TROPICALE
A TRADITIONAL FARMING SYSTEM BUT A NEW SCIENTIFIC INTERFACE: AGROFORESTRY IN THE TROPICAL REGIONS
UN SYSTEME D'EXPLOITATION ANCIEN, MAIS UNE INTERFACE SCIENTIFIQUE NOUVELLE: L'AGROFORESTERIE DANS LES REGIONS TROPICALES
CONFERENCES PUBLIQUES, MONTPELLIER, DECEMBRE 1983 (1984) FR
UNIV SCIE TECH DU LANGUEDOC
XP;XA;XL pg 46-65
Analyse le contexte historique de l'agroforesterie. A travers un exemple, il montre les causes qui sont à la base des échecs des projets agroforestiers. Diverses techniques agroforestières sont également décrites
10 FIG.; 22 REF.
GARCINIA MANGOSTANA; DURIO ZIBETHINUS; LEUCAENA LEUCOCEPHALA; CORDIA; ERYTHRINA; ELAEIS GUINEENSIS; VITELLARIA; EUCALYPTUS; COFFEA; AGROFORESTRY; SYSTEM ANALYSIS; TRADITIONAL FARMING; TROPICS

00231
07134
BERTRAND, A.
CTFT, NOGENT-SUR-MARNE (FRANCE)
EVOLUTION OF ANIMAL PRODUCTION AND FORESTRY POLICY IN THE SUDANIAN ZONE. THE EXAMPLE OF THE THIRD REGION OF MALI

EVOLUTION DE L'ELEVAGE ET POLITIQUE FORESTIERE EN ZONE SOUDANIENNE. L'EXEMPLE DE LA TROISIEME REGION DU MALI
SEMINAIRE 'RELATIONS AGRICULTURE-ELEVAGE', DSA-CIRAD, 10-13 SEPTEMBRE 1985 MONTPELLIER, FRANCE (1985) FR
XA;ML pg 35-39
Décrit les problèmes engendrés par le développement de l'élevage, notamment le rapport entre les domaines pastoraux et forestiers, les formes et modalités des élevages et l'accroissement du cheptel. Analyse également les effets de l'accroissement démographique et de l'évolution du cheptel sur la dégradation des formations forestières.
4 REF. SUMMARIES (EN, ES, FR)
SILVOPASTORAL SYSTEMS; FOREST POLICY; LIVESTOCK; HUMAN ACTIVITIES

00232
04159
SIMON, A.
UCCAO, YAOUNDE (CAMEROUN)
SOIL CONSERVATION TECHNIQUES IN THE HIGH PLATEAU OF WESTERN CAMEROON
TECHNIQUES DE CONSERVATION DES SOLS DANS LES HAUTS PLATEAUX DE L'OUEST-CAMEROUN
(1983) FR
XA;CM pg 1-139
Comprend les résultats de trois années d'essais techniques sur la conservation et la restauration de la fertilité des sols dans les hauts plateaux de l'ouest du Cameroun. Décrit également les systèmes traditionnels de culture et suggère leur intégration dans la lutte antiérosive et la conservation de la fertilité des sols. Les données sur le comportement des essais mis en place au cours de la première année sont analysées. Les suggestions sur le choix des systèmes en fonction de leur rentabilité sont présentées.
3 TABLES; 9 FIG.; 25 REF.
SOIL CONSERVATION; METHODS; EROSION CONTROL; FALLOWS; ORGANIC MATTER; MULCHING; TREES; GRAZING LAND; AFFORESTATION; GRASSES; SPACING

00233
00221
VIGNAL, M.
BUREAU DE CONSERVATION DES SOLS (MADAGASCAR)
SOIL CONSERVATION IN MADAGASCAR
LA CONSERVATION DES SOLS A MADAGASCAR
BOIS ET FORETS DES TROPIQUES Vol No 75 (1961) FR
XA;MG pg 17-26
Présente brièvement les résultats des enquêtes sur l'ampleur de l'érosion et de la dégradation des sols à Madagascar. Décrit les techniques appliquées et les résultats dans la vallée du lac Alaotra. Ces expériences ont permis la création d'un nouveau paysage rural où les terres agricoles et les forêts s'intègrent harmonieusement.
7 FIG. SUMMARIES (EN, ES)
SOIL CONSERVATION; WATERSHEDS; FARMING SYSTEMS

00234
02091
CTFT
CTFT, NIAMEY (NIGER)
NOTE ON GAO (ACACIA ALBIDA)
NOTE SUR LE GAO (ACACIA ALBIDA)
(1973) FR

CTFT
XA;NE pg 1-17
Décrit la contribution de l'Acacia albida (syn. Faidherbia albida) dans le processus d'amélioration des sols dans les zones sèches d'Afrique. Présente également l'effet bénéfique de cet arbre sur le rendement des cultures vivrières. Les pratiques sylvicoles, de la propagation à l'entretien, sont aussi décrites.
ACACIA ALBIDA; SOIL FERTILITY; SOIL CONSERVATION; SILVICULTURE; PLANT PROPAGATION; COST BENEFIT ANALYSIS; ARID ZONES

00235
08017
LOUPPE, D.
CTFT, DAKAR (SENEGAL)
RESEARCH DEVELOPMENT PROJECT ON THE ROLE OF TREE IN AGRICULTURE. 1987 ANNUAL REPORT
PROJET DE RECHERCHE-DEVELOPPEMENT SUR LE ROLE DE L'ARBRE EN EXPLOITATION AGRICOLE. RAPPORT ANNUEL 1987
(1988) FR
DRPF/ISRA, DAKAR,(SENEGAL)
XA;SN pg 1-58
Le rapport présente le cadre institutionnel du projet Recherche-Développement sur le rôle des arbres dans l'amélioration des écosystèmes agricoles. Les composantes du projet présenté sont: la création de haies-vives et l'étude du comportement des essences fruitières et fourragères. Présente également les résultats des essais réalisés depuis 1985. Ces essais comprennent la mise en place de cultures intercalaires, les analyses de sols et de rendements des cultures intercalaires.
13 FIG.
TRIALS; AGROFORESTRY; RESEARCH PROJECTS; LIVE FENCES; FODDER TREES; CUTTINGS; SPECIES LIST; SILVOPASTORAL SYSTEMS

00236
4151
DELWAULLE, J.C.
CTFT, NOGENT-SUR-MARNE (FRANCE)
THE ROLE OF WOODY VEGETATION FOR RURAL POPULATIONS IN THE DRY TROPICAL ZONES
LE ROLE DES FORMATIONS LIGNEUSES POUR LES POPULATIONS RURALES DES ZONES TROPICALES SECHES
LA FORET DANS LE MONDE, SES ROLES DANS LA VIE RURALE. COLLOQUE INTERNATIONAL CENECA (1978) FR
XA pg 1-4
Décrit le rôle joué par les formations ligneuses dans les sociétés rurales des zones tropicales sèches. L'importance de l'arbre est décrite notamment dans le domaine de l'élevage, de l'agriculture, de l'énergie et de la construction.
DESERTIFICATION; FORESTRY; DESERT CONTROL; SOIL CONSERVATION; DEVELOPMENT; ARID ZONES

00237
06753
DOMMERGUES, Y.
BSSFT, NOGENT-SUR-MARNE (FRANCE)
CAN WOODY VEGETATION BE PRESERVED IN DRY TROPICAL AFRICA?
PEUT-ON SAUVER LA VEGETATION LIGNEUSE EN AFRIQUE TROPICALE SECHE?
AMENAGEMENT ET NATURE Vol No 81 (1986) FR
XA pg 31-32

Présente le rôle joué par les arbres dans les sociétés de l'Afrique tropicale sèche et les causes de la dégradation des formations ligneuses. Examine le rôle que pourraient jouer les légumineuses ligneuses dans les systèmes de production et dans l'amélioration des sols. Présente également les méthodes à appliquer pour intégrer les légumineuses ligneuses dans les processus de reforestation.
FOREST DEGRADATION; NITROGEN FIXING TREES; REFORESTATION; VEGETATIVE PROPAGATION; TROPICS

00238
B01485
634.0.26(66)
ANON
SECID, CHAPEL HILL (USA)
PROCEEDINGS OF THE SEMINAR ON AGROFORESTRY IN SAHEL, 23 MAY - 11 JUNE 1983, NIAMEY, NIGER. VOL. 1
COMPTES-RENDUS DU SEMINAIRE SUR L'AGROFORESTERIE AU SAHEL, 23 MAI -11 JUIN 1983, NIAMEY, NIGER. VOL. 1
(1983) FR
CILSS/CLUB DU SAHEL AID, WASHINGTON, D.C. (US)
XA pg 1-55
Une synthèse des articles présentés et discutés au cours du séminaire sur l'agroforesterie au Sahel tenu à Niamey, Niger. Ce document de synthèse accorde une importance particulière à la formation des experts agroforestiers, au programme de vulgarisation rurale, à l'examen des legislations forestières africaines. Présente des suggestions sur le développement de l'agroforesterie.
AGROFORESTRY; SAHEL; ARID ZONES

00239
B01487
634.0.26(66)
ANON
SECID, CHAPEL HILL (USA)
PROCEEDINGS OF THE SEMINAR ON AGROFORESTRY IN THE SAHEL, 23 MAY - 11 JUNE 1983, NIAMEY, NIGER. VOL. 2
COMPTES RENDUS DU SEMINAIRE SUR L'AGROFORESTERIE AU SAHEL, 23 MAI -11 JUIN 1983, NIAMEY, NIGER. VOL. 2
(1983) FR
CILSS/CLUB DU SAHEL AID, WASHINGTON, D.C.
XA pg 1-213
Contient des articles sur l'expansion démographique, les structures sociales et administratives des pays sahéliens. Les impacts de ces aspects sur la désertifiaction sont analysés. Les aspects écologiques de la désertification et le rôle de l'agroforesterie dans la lutte contre la désertification sont discutés.
AGROFORESTRY; RESEARCH; DESERTIFICATION; ECOLOGY; FORESTS; TROPICS; FARMING SYSTEMS; SAHEL

00240
04141
GRISON, F.
CTFT, NKOLBISSON (CAMEROON)
AGRISILVICULTURE: ITS POSSIBLE CONTRIBUTION TO THE MANAGEMENT AND CONSERVATION OF FOREST RESOURCES
L'AGRISYLVICULTURE DANS LA PERSPECTIVE DE L'AMENAGEMENT ET DE LA CONSERVATION DE LA RESSOURCE FORESTIERE.
THE TROPICAL RAIN FOREST, ECOLOGY AND RESOURCE MANAGEMENT, LEEDS, UK., 14 - 19 APRIL 1982 (1982) FR

CTFT
XA;CM pg 1-6
La concentration des paysans le long des axes routiers, le changement des systèmes de production, l'évolution des normes de vie et le raccourcissement des jachères sont cités comme causes de la dégradation des ressources forestières. L'agroforesterie est présentée comme une alternative pouvant à la fois accroître la production agricole et assurer la conservation des forêts.
SUMMARIES (EN, FR)
THEOBROMA CACAO; TERMINALIA SUPERBA; TERMINALIA IVORENSIS; AGROFORESTRY; SHIFTING CULTIVATION; MINERAL CYCLING; SHADE TREES; SOIL FERTILITY; TROPICAL RAIN FOREST; HUMID TROPICS

00241
04987
MALDAGUE, M.
LAVAL UNIV., QUEBEC CITY (CANADA)
AN INTRODUCTION TO THE AGROFORESTRY PERSPECTIVES IN AFRICA
INTRODUCTION SUR LES PERSPECTIVES DE L'AGROFORESTERIE EN AFRIQUE COURS DE SENSIBILISATION SUR L'AGROFORESTERIE EN ZONE FORESTIERE HUMIDE, MAKOKOU, GABON, 1 - 10 JUILLET 1985 (1985) FR
UNESCO
XA;GA pg 1-48
Décrit divers systèmes agroforestiers en Afrique, notamment le système taungya, le maintien des arbres producteurs d'aliments et les plantations commerciales. L'incorporation de la composante élevage dans ces systèmes et son rôle dans la politique de l'autosuffisance alimentaire et l'équilibre écologique sont analysés. Propose une stratégie sur le développement de l'agroforesterie.
108 REF.
AGROFORESTRY; RURAL DEVELOPMENT; AGRICULTURAL PRODUCTION; TAUNGYA SYSTEM; FOOD PRODUCTION; TREE PLANTATIONS

00242
07976
BAUMER, M.
ICRAF, NAIROBI (KENYA)
AGROFORESTRY AND LAND MANAGEMENT
AGROFORESTERIE ET AMENAGEMENT DU TERRITOIRE
MONDE ET CULTURES: XLIV-3, 1984 (1988) FR
ICRAF
XZ;XA pg 663-711
Décrit l'agroforesterie et ses formes. Met un accent particulier sur les systèmes agroforestiers sahéliens et soudano-sahéliens, plus particulièrement les systèmes agropastoraux et agro-sylvo-pastoraux. Présente les effets bénéfiques de certaines espèces ligneuses sur les cultures et l'élevage.
4 TABLES; 70 REF.
AGROFORESTRY; FODDER TREES; AGROPASTORAL SYSTEMS; AGROSILVOPASTORAL SYSTEMS; NITROGEN FIXING TREES; LAND MANAGEMENT; SAHEL; ARID ZONES

00243
07937
CAZET, M.
DRPF/ISRA, DAKAR (SENEGAL)
LINEAR PLANTING AND ALLEY CROPPING ON DEGRADED SANDY SOILS OF CENTRAL NORTHERN SENEGAL. THE INFLUENCE OF RHIZOBIUM INOCULATION AND NEMATOCIDE TREATMENT ON TREES AND CROP BEHAVIOUR

PLANTATION EN LIGNES ET CULTURES INTERCALAIRES SUR LES SOLS SABLEUX DEGRADES DE LA ZONE CENTRE NORD DU SENEGAL. INFLUENCE DE L'INOCULATION DES ARBRES AVEC LE RHIZOBIUM SP. ET DU TRAITEMENT NEMATICIDE DES SOLS SUR LE COMPORTEMENT DES ARBRES ET DES CULTURES
(1987) FR
DIRECTION DES RECHERCHES SUR LES PRODUCTIONS FORESTIERES
XA;SN pg 1-15
Une étude comparative des cinq légumineuses ligneuses plantées sur sols sableux dégradés de Thianaba, au Sénégal. L'essai vise à tester l'effet de l'inoculation et des traitements nématicides sur la croissance des arbres et sur le rendement des cultures intercalaires.
SUMMARY (FR)
ACACIA ALBIDA; ACACIA TORTILIS; ACACIA NILOTICA; ACACIA SENEGAL; PROSOPIS JULIFLORA; TRIALS; AGROFORESTRY; ALLEY CROPPING; LEGUMINOSAE; RHIZOBIUM; INOCULATION, NEMATODES; GROWTH; YIELDS

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AE UNITED ARAB EMIRATES
AF AFGHANISTAN
AG ANTIGUA
AI ANGUILLA
AL ALBANIA
AN NETHERLANDS ANTILLES
AO ANGOLA
AQ ANTARCTICA
AR ARGENTINA
AS AMERICAN SAMOA
AT AUSTRIA
AU AUSTRALIA
BB BARBADOS
BD BANGLADESH
BE BELGIUM
BF BURKINA FASO
BG BULGARIA
BH BAHRAIN
BI BURUNDI
BJ BENIN
BM BERMUDA
BN BRUNEI
BO BOLIVIA
BR BRAZIL
BS BAHAMAS
BT BHUTAN
BU BURMA
BV BOUVET ISLAND
BW BOTSWANA
BY BYELORUSSIAN SSR
BZ BELIZE
CA CANADA
CC COCOS ISLAND
CF CENTRAL AFRICAN REPUBLIC
CG CONGO
CH SWITZERLAND
CI IVORY COAST
CK COOK ISLANDS
CL CHILE
CM CAMEROON
CN CHINA
CO COLOMBIA
CR COSTA RICA
CS CZECHOSLOVAKIA
CT CANTON AND ENDERBURY
CU CUBA
CV CAPE VERDE
CX CHRISTMAS ISLAND
CY CYPRUS
DD GERMAN DEMOCRATIC REPUBLIC
DE GERMANY FEDERAL REPUBLIC
DJ DJIBOUTI
DK DENMARK
DM DOMINICA
DO DOMINICAN REPUBLIC
DZ ALGERIA
EC ECUADOR
EG EGYPT
EH WESTERN SAHARA
ES SPAIN
ET ETHIOPIA
FI FINLAND
FJ FIJI
FK FALKLAND ISLANDS
FO FAEROE ISLANDS
FR FRANCE
GA GABON
GB UNITED KINGDOM
GD GRENADA
GF FRENCH GUIANA
GH GHANA
GI GIBRALTAR
GL GREENLAND
GM GAMBIA
GN GUINEA
GP GUADELOUPE
GQ EQUATORIAL GUINEA
GR GREECE
GT GUATEMALA
GU GUAM
GW GUINEA BISSAU
GY GUYANA
HK HONG KONG
HM HEARD AND MACDONALD ISLANDS
HN HONDURAS
HT HAITI
HU HUNGARY
ID INDONESIA
IE IRELAND
IL ISRAEL
IN INDIA
IO BRITISH INDIAN OCEAN
IQ IRAQ
IR IRAN
IS ICELAND

IT ITALY
JM JAMAICA
JO JORDAN
JP JAPAN
JT JOHNSTON ISLAND
KE KENYA
KH KAMPUCHEA DEMOCRATIC
KI KIRIBATI
KM COMOROS
KN SAINT CHRISTOPHER
KP KOREA DEMOCRATIC PEOPLES REPUBLIC
KW KUWAIT
KY CAYMAN ISLANDS
LA LAO PEOPLES DEMOCRATIC
LB LEBANON
LC SAINT LUCIA
LI LIECHTENSTEIN
LK SRI LANKA
LR LIBERIA
LS LESOTHO
LU LUXEMBERG
LY LIBYAN ARAB JAMAHIRIYA
MA MOROCCO
MC MONACA
MG MADAGASCAR
MI MIDWAY ISLANDS
ML MALI
MN MONGOLIA
MO MACAU
MR MAURITANIA
MS MONTSERRAT
MT MALTA
MU MAURITIUS
MV MALDIVES
MW MALAWI
MX MEXICO
MZ MOZAMBIQUE
NA NAMIBIA
NC NEW CALEDONIA
NE NIGER
NF NORFOLK ISLANDS
NG NIGERIA
NI NICARAGUA
NL NETHERLANDS
NO NORWAY
NP NEPAL
NQ DRONNING MAUD LAND
NR NAURA
NT NEUTRAL ZONE
NU NIUE
NZ NEW ZEALAND
OM OMAN
PA PANAMA
PC PACIFIC ISLANDS
PE PERU
PF FRENCH POLYNESIA
PG PAPUA NEW GUINEA
PH PHILIPPINES
PK PAKISTAN
PL POLAND
PN PITCAIRN ISLAND
PR PUERTO RICO
PT PORTUGAL
PU UNITED STATES MISCELLA
PY PARAGUAY
PZ PANAMA CANAL ZONE
QA QATAR
RE REUNION
RO ROMANIA
RW RWANDA
SA SAUDI ARABIA
SB SOLOMON ISLANDS
SC SEYCHELLES
SD SUDAN
SE SWEDEN
SG SINGAPORE
SH SAINT HELENA
SJ SVALBARD AND JAN MAYEN
SL SIERRA LEONE
SN SENEGAL
SO SOMALIA
SR SURINAME
ST SAO TOME AND PRINCIPE
SU UNION OF SOVIET REPUBLIC
SV EL SALVADOR
SZ SWAZILAND
TC TURKS AND CAICOS ISLANDS
TD CHAD
TG TOGO
TH THAILAND
TK TOKELAU
TN TUNISIA
TO TONGA
TP EAST TIMOR
TR TURKEY
TT TRINIDAD AND TOBAGO
TV TUVALU
TW TAIWAN
TZ TANZANIA UNITED REPUBLIC
UA UKRANIAN SSR
UG UGANDA
US UNITED STATES
UY URUGUAY
VA VATICAN CITY STATE
VC SAINT VICENT
VE VENEZUELA
VG BRITISH VIRGIN ISLANDS
VI UNITED STATES VIRGIN ISLANDS
VN VIETNAM
VU VANUATU
WF WALLIS AND FUTUNA ISLAND

WK	WAKE ISLANDS
WS	SAMOA
YD	YEMEN DEMOCRATIC
YE	YEMEN
YU	YUGOSLAVIA
ZA	SOUTH AFRICA
ZM	ZAMBIA
ZR	ZAIRE
ZW	ZIMBABWE
SY	SYRIAN ARAB REPUBLIC
MQ	MARTINIQUE
MY	MALAYSIA

REGIONAL CODES AND NAMES

XA	AFRICA
XE	EUROPE
XL	LATIN AMERICA
XN	NORTH AMERICA
XP	ASIA AND THE PACIFIC
XW	WESTERN ASIA
XZ	GLOBAL