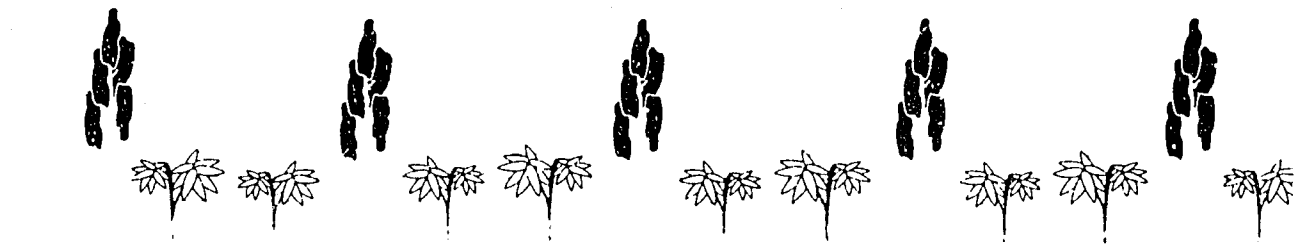
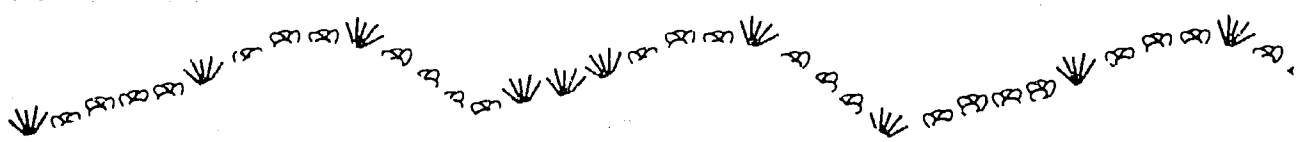
United States
Department of
Agriculture

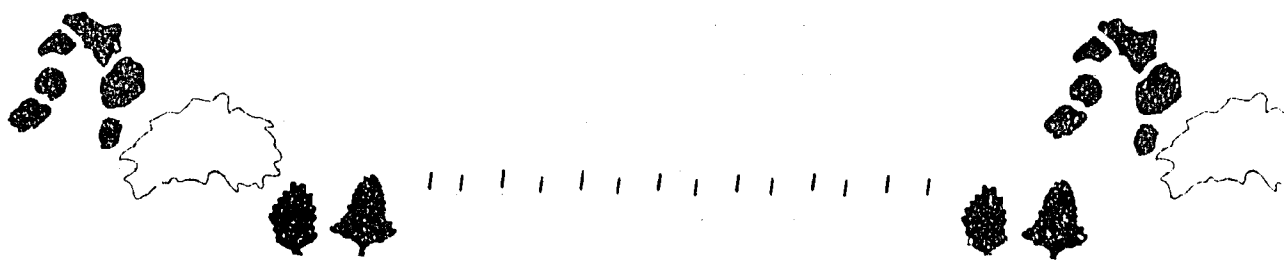
**Forest Service
and Office of
International
Cooperation and
Development**

Forestry Support
Program
Sponsored by
U.S. Agency
for International
Development

Directory of International Training and Educational Opportunities in Agroforestry







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DIRECTORY OF INTERNATIONAL TRAINING AND EDUCATIONAL OPPORTUNITIES

IN

AGROFORESTRY

Nuria Muniz-Miret
and
Julie Bournes

Washington, D.C.
January 1993

This report was prepared by the Forestry Support Program which is managed jointly by the U.S. Department of Agriculture's Forest Service and Office of International Cooperation and Development (OICD), with funds provided by the U.S. Agency for International Development (USAID) Bureau for Research and Development (R&D) through its Office of Environment and Natural Resources (ENR) (RSSA BST-5519-R-AG-2188)

United States Department of Agriculture

Forest Service

United States Agency for International Development

United States Department of Agriculture

Office of International Cooperation and Development

Foreword

Agroforestry training and education needs are apparent at all levels of the agriculture and natural resources sector. One of the most severe limitations to the successful adoption of agroforestry land-use systems has been the dearth of personnel with the knowledge and skills to integrate the various disciplines required in researching, planning and managing agroforestry interventions.

In the last decade or so, several leading institutions involved in agroforestry research, development, and education have been actively involved in the formulation of training and education programs with an agroforestry orientation. A distinction is made between "training" and "education", training being the short-term study of specific aspects of agroforestry with the aim of achieving a higher level of technical skill, and education referring to broader, longer-term studies aimed at achieving a higher technical qualification.

Training and education programs in agroforestry require staffing in the combined disciplines of agriculture, animal science, social science and forestry. In addition, they require faculty commitment to a farming systems approach and inter-departmental cooperation in teaching and research. It is still difficult to assess whether these and other elements are present in existing programs where agroforestry has been incorporated. Emerging trends seem to indicate that traditional forestry programs are broadening their scope, from forests to integrated land-use systems, while agricultural programs are recognizing the important role of trees in soil improvement and protection, the production of fodder, food, and fuel, and the fulfillment of other domestic and commercial needs. New institutional structures are evolving that allow training and educational programs to encourage coursework and research projects which span many disciplines. However, further analysis of curricula structure and institutional arrangements is required in this area.

Attempts are being made by different institutions worldwide to inventory training and education opportunities in agroforestry; still the collection and dissemination of information is difficult. In 1991, USDA/FSP produced a listing of agroforestry training and education opportunities in the U.S.A. and other countries. Due to its popularity and demand USDA/FSP undertook to revise and republish the list in 1992. The target audience for this directory is staff in USAID missions responsible for Agriculture and Natural Resource programs, managers of USAID-sponsored projects with an interest in agroforestry, and NGOs. I believe that the directory will also be a useful source of information for researchers, land managers and planners, development workers, as well as for teachers and students wishing to pursue a professional career or further training in agroforestry.

All of the information in the new directory has been obtained from, or verified through universities and training institutions currently teaching agroforestry. Every year, additional universities and training institutions expand their curricula to include agroforestry. It is therefore not unrealistic to assume that future editions of this directory will occur in due course.

Ester Zulberti
Director Training and Information, ICRAF

Preface

This directory contains a listing of educational opportunities in agroforestry offered around the world. It includes programs and courses focusing only on agroforestry issues as well as those incorporating agroforestry as a significant component. These educational opportunities range from long-term (eight month-two year) certificate or diploma programs to short-term (three day-six month) professional training courses. The directory is a compilation of the most readily identifiable institutions and universities in Africa, Asia, Australia, Latin America, Europe, the United States and Canada which responded to our request for information on educational opportunities.

The primary audience for the directory is the staff of USAID missions responsible for agriculture and natural resource programs and the managers of USAID-sponsored projects seeking agroforestry-related training for project personnel. Copies are also available to any interested party; the previous, 1991, edition of this directory was extensively requested by NGOs worldwide.

Most institutions listed as offering degree programs support the study of agroforestry by providing students with core agroforestry courses and allowing them to draw on agroforestry-related courses from different departments. However, more than half of the universities included recognize the study of agroforestry as a specialization within a field, such as Forestry or Natural Resources. Specialization programs usually offer several regularly-scheduled courses which focus specifically on agroforestry or social forestry and attempt to address a variety of social, economic, and ecological issues within these fields.

Thirteen institutions listed in this directory allow graduate-level specialization in agroforestry, thus encouraging students from many fields and nations to join in a closer study of agroforestry. Among these institutions, are the University of Melbourne, Australia, the University College of North Wales, United Kingdom and in the U.S., the University of Florida and Texas A&M University located respectively in subtropical and semiarid environments.

Two institutions supporting graduate degrees in agroforestry (as opposed to those listed above, which provide an agroforestry specialization within a forestry or agriculture degree) are the Centro Agronomico Tropical de Investigacion y Ensenanza (CATIE) in Costa Rica, which offers an M.Sc. in Agroforestry, and the International Center for Research in Agroforestry (ICRAF), which has initiated efforts to develop agroforestry M.Sc. programs in a number of universities and colleges in Africa.

Training courses take a somewhat greater variety of approaches to agroforestry than degree programs; some provide a more comprehensive overview while others attempt to apply specific aspects of agroforestry into related subjects. Many training courses require field work, team projects and written reports and some confer certificates upon completion.

Some examples of institutions that provide an overview in agroforestry include: the University for Peace, which offers a course that analyzes the role of trees in sustainable agriculture in the humid tropics; the Asian Forest Research Institute which has developed a course that summarizes agroforestry practices suitable for the semiarid tropics; and the Asia-Pacific Agroforestry Network (APAN) which offers a "refresher" course on agroforestry, directed to agroforestry trainers.

Agroforestry is analyzed in a broader context by ANUTECH Pty Ldt (Australia) and the International Agricultural Centre (The Netherlands) who independently review agroforestry in a forestry and rural planning context. Another example is the School of Environmental Conservation and Management (SECM) (Indonesia) which considers the application of agroforestry to watershed management.

We hope that this directory will create an awareness of the growing number and variety of agroforestry-related training and educational opportunities, and thereby contribute to the formation of international professional expertise and institutional strength in agroforestry.

Communication with many of the institutions contacted during the compilation of this directory indicated that the number of agroforestry programs is likely to grow in the future. This year alone we have added 11 institutions to the directory. The Forestry Support Program welcomes any information on additional organizations for inclusion. Information submitted should follow the questionnaire provided in the appendix to this directory. Any corrections or additions to the current entries are also welcome and should be addressed to: Susan Huke, International Forestry, USDA/FS, P.O. Box 96090, Washington, DC 20090-6090.

This document was prepared under the guidance of Susan Huke, Agroforestry Coordinator, Forestry Support Program. The principal author of this edition was Nuria Muniz-Miret, Agroforestry Consultant. Special recognition is owed to Julie Bournes, author of the previous 1991 directory, whose hard work is still evident in this new edition. Special thanks to Colleen Poonawala for her expert clerical assistance and to Robin Maille, Agroforestry Associate, Forestry Support Program, for proof-reading, editing the final entries and overseeing the publication of the directory.

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* *These institutions were not able to respond on time to the update request in order to be included in this edition. The information provided has been taken from the 1991 directory.*

UNIVERSITIES AND ORGANIZATIONS IN THE UNITED STATES AND CANADA (BY PROGRAM TYPE)

I. Graduate-Level Degree or Diploma Programs in Agroforestry or Specialization in Agroforestry

Michigan State University
North Carolina State University
Texas A&I University
Texas A&M University
University of Florida
University of Idaho
Virginia Polytechnic Institute and State University

II. Graduate-Level Degree or Diploma Programs Offering Courses in Agroforestry

Cornell University
Oregon State University
University of Hawaii at Manoa
University of Montana
Ridgetown College of Agricultural Technology
Yale University

III. Training Courses in Agroforestry or with Agroforestry-Related Components

Institute of Pacific Island Forestry
Michigan State University
Nitrogen Fixing Tree Association (NFTA)
U.S. Department of Agriculture (USDA)
University of Florida
University of Hawaii at Manoa
University of Idaho
Washington State University

UNIVERSITIES AND ORGANIZATIONS OVERSEAS (BY PROGRAM TYPE)

I. Graduate-Level Degree or Diploma Programs in Agroforestry or Specialization in Agroforestry

Centro Agronomico de Investigacion y Ensenanza (Costa Rica)
International Council for Research in Agroforestry (Kenya) (via AFRENA Program)
Moi University (Kenya)*
University College of North Wales (United Kingdom)
University of Melbourne (Australia)
University of Science and Technology (Ghana)
Wageningen Agricultural University (The Netherlands)

II. Graduate-Level Degree or Diploma Programs Offering Courses in Agroforestry

Escuela Agricola Panamericana "Zamorano" (Honduras)
International Institute for Aerospace Survey and Earth Sciences (The Netherlands)
School of Environmental Conservation and Management* (Indonesia)

III. Training Courses in Agroforestry or with Agroforestry-Related Components

ANUTECH Pty Ltd (Australia)
Arid Forest Research Institute (India)
Asia Pacific Agroforestry Network (Indonesia)
BAIF Development Research Foundation (India)
Centro Agronomico de Investigacion y Ensenanza (Costa Rica)
Escuela Agricola Panamericana "Zamorano" (Honduras)
Escuela de Agricultura de la Region Tropical Humeda (Costa Rica)
International Agricultural Centre (The Netherlands)
International Centre for Research in Agroforestry (Kenya)
International Crops Research Institute for the Semi-Arid Tropics (India)
International Institute of Rural Reconstruction (Philippines)
International Institute of Tropical Agriculture* (Nigeria)
International Tree Crops Institute (Australia)
Mag-uugmad Foundation, Inc. (Philippines)
Mindanao Baptist Rural Life Center* (Philippines)
Organization for Tropical Studies (Costa Rica)
Regional Community Forestry Training Center (Thailand)
Silsoe College (Great Britain)
University for Peace (Costa Rica)
University of Oxford (Great Britain)
University of the Philippines at Los Banos (Philippines)
University of Queensland (Australia)

PART I

INSTITUTIONS OF THE UNITED STATES AND CANADA

Institution

Cornell University
Department of Natural Resources
Fernow Hall
Ithaca, NY 14853

Contacts

James Lassoie, Chairman
Department of Natural Resources
Tel: 607/255-2298; Fax: 607/255-0349

James E. Haldeman
Assistant Director/Training Officer
International Agriculture Program
Tel: 607/255-2283; Fax: 607/255-1005; Tlx: 559020
INTAG CGNET: CGI 209

Program

The Department of Natural Resources (DNR) offers two courses on agroforestry as part of their M.P.S., M.S., and Ph. D. degree programs in natural resources. Natural Resources 415: "Agroforestry Principles and Practices," covers technical aspects of agroforestry, including agronomic, forestry, socio-economic, and institutional issues. Conceptual and methodological approaches to agroforestry research design and program development are emphasized. A second course, Natural Resources 615: "Case Studies in Agroforestry," is a seminar designed around specific examples of agroforestry projects and practices in developing and developed countries.

Both courses depend heavily on the active participation of students and guest speakers who come from a variety of academic disciplines and bring previous research or work experience in agroforestry into the courses. Opportunities to study agroforestry have been offered every year since 1985. In addition, DNR offers a graduate minor in Conservation and Sustainable Development.

The DNR is in the College of Agriculture and Life Sciences (CALS), which has 450 faculty members teaching courses in the following areas: Agricultural and Biological Engineering; Animal Sciences; Biological Sciences; Entomology; Food Science; International Agriculture; Natural Resources; Plant Breeding; Plant Pathology; Rural Sociology; and Soils, Crop and Atmospheric Sciences. Some courses focus specifically on the tropics, such as "Production of Tropical Crops," "Tropical Livestock Production," and "Tropical Forages," and many courses in International Agriculture emphasize a multidisciplinary approach to agricultural and rural development. These offerings constitute an interdisciplinary basis for the study of agroforestry. Nearly one-third of the faculty at CALS have had substantial experience abroad.

Training Course

CALS established the International Agriculture Program (IAP) in 1963 to strengthen opportunities to study agriculture and rural development in the Third World. IAP has designed and conducted several hundred technical training programs, some in English and Spanish, with

durations ranging from one week to one year. The trainings are tailored to specific audiences such as program developers, evaluators, and researchers responsible for implementing rural development programs. IAP has held two major AID training contracts and administered workshops for AID and World Bank officials. IAP can develop programs in many areas of study, including agronomy, animal science, plant breeding and pathology, environmental sciences, and rural sociology, and intends to organize courses in agroforestry in the future.

Institutional Setting and Facilities

Cornell University is the largest land-grant university in New York State. Facilities include Mann Library, the second-largest agricultural library in the United States; the Center for Analysis of World Food Issues Library Collection; and the New York State Agriculture Experiment Station. The University established the Cornell International Institute for Food, Agriculture and Development (CIIFAD) in 1990 to advance agricultural production and food distribution in developing nations and to explore alternative strategies for sustained improvement in food production through interdisciplinary research.

Costs

Tuition and fees for graduate study at the University are $8,200 for the 1992-93 academic year.

Foreign Students

Approximately 10 percent of the graduate students in the Department of Natural Resources and about fifteen percent of all CALS students are foreign students. Cornell University requires a minimum TOEFL score of 550.

English as a Second Language courses and other intensive English training opportunities are available.

Institution	**Institute of Pacific Islands Forestry** **USDA Forest Service** 115 Punchbowl St., Rm. 323 Honolulu, Hawaii 96813 U.S.A.
Contact	Leonard Newell, Pacific Islands Forester
Training Course	IPIF offers a 2 to 5 day seminar in various agroforestry technologies and extension techniques applicable to the Pacific Islands. The course content has included basic definitions of agroforestry, local cultural and technical aspects of Pacific agroforestry; asexual propagation of fruit trees; use of contour hedgerows of nitrogen-fixing species; nursery management; the evolution of Philippine "social forestry"; farm planning, etc. Collaboration takes place with other Pacific Islands institutions in order to plan the seminar according to the need of each region/island. One year lead time is necessary to plan seminars and seek funding.
Institutional Setting and Facilities	Seminars are taught in classrooms and the field on the appointed Pacific Island.
Costs	The cost of each seminar is determined independently. Financing has been previously provided by the Forest Service, USDA Land Grant programs at Pacific Island college campuses, and other sources.
Foreign Students	Proficiency in English is required

Institution

Michigan State University
Department of Forestry
126 Natural Resources Bldg.
East Lansing, MI 48824-1222

Contact

Michael A. Gold, Director
International Forestry Programs
Assistant Professor, Agroforestry
Tel: 517/355-0090; Fax: 517/336-1143; Tlx: 650/264-1762 MCI
E-MAIL: MGOLD@MSU.bitnet

Program

Michigan State University offers multidisciplinary programs in agroforestry, community (social) forestry, and international resource economics for M.S. and Ph.D. candidates in the Department of Forestry. Supporting these programs is an integrated set of courses focusing on the theme of sustainable forest and tree resource management from a farm and community perspective. The multidisciplinary programs are co-sponsored by the Center of Advanced Study of International Development and the Institute of International Agriculture.

Training Course

The Department of Forestry also arranges a variety of short courses in agroforestry and social forestry on an "as needed" basis. For example, in 1988 a 1-month professional forestry training program in multiple use forest management was offered on three occasions to forestry professionals from Taiwan and once to foresters from India. In 1989 the department also designed an eight-week program in integrated social forestry for UNDP/Philippines focusing on communications, extension and policy.

The Department of Forestry participates annually in the International Forestry Seminar coordinated by the University of Michigan. The department is responsible for the U of M Seminar's presentation of agroforestry, social forestry and extension programs.

Institutional Setting and Facilities

The Department of Forestry maintains three permanent, full-time faculty positions in international development and agroforestry and in natural resource sociology (community/social forestry) and international trade. As part of a longstanding tradition of the university and the department, the faculty have a long and continuous involvement in international programs. Current project activities include: a silvopastoral management system project on small farms in Jamaica funded by the Jamaica Agriculture Research Program; active cooperative agroforestry research projects with faculty of the Instituto Superior de Agricultura in the Dominican Republic funded by USAID/DR; and an environmental education/participation project in Thailand funded by the Ford Foundation, and others. The department is currently hosting a long-term, USAID-funded, Ph.D. Fellowship training program for Winrock International under the Forestry/Fuelwood Research and Development (F/FRED) project. Five Asian Ph.D. students are being

trained in agroforestry and social forestry. The F/FRED Fellowship project serves as a model for advanced, multidisciplinary graduate training in agroforestry and social forestry.

Costs

Annual out-of-state tuition, fees and living costs for graduate study for a year of advanced study as of the fall of 1992 are as follows (costs listed below are inclusive and include tuition and fees, health insurance, room including between term housing costs, food, books and supplies, misc.):

- Masters students: $19,267 total annual costs
- Ph.D. candidates: $16,534 total annual cost

For graduate students that receive research assistantships costs are greatly reduced. However, as a general rule, international students must come to M.S.U. with fully guaranteed funding from external sources for the length of their graduate training.

Foreign Students

In recent years, foreign students have averaged 45 percent of all graduate students in the Department of Forestry. Most foreign students rely on outside funding from such sources as USAID, UNFAO, the World Bank, Winrock International, Fulbright, and the Agroforestry Research Network in Africa (AFRENA), and the African-American Institute (AFGRAD).

The University requires a minimum TOEFL score of 500, with no subscore below 52. In addition the Department of Forestry requires the Graduate Record Exam (GRE) be taken.

Michigan State University has an English language institute.

Institution

Nitrogen Fixing Tree Association (NFTA)
1010 Holomua Road
Paia, Maui, Hawaii 96779-9744

Contact

Jim Chamberlain
Acting President
Tel: 808/579-9563; Fax: 808/579-8516

Training Course

NFTA offers training to practitioners of agroforestry on the uses and management of nitrogen fixing trees (NFTs) in rural development forestry. The organization has a comprehensive training curriculum that can be adapted to the clients' needs, including fodder production, fuelwood, erosion control, etc.

NFTA offers the course "Nitrogen Fixing Trees in Agroforestry" to requesting institutions. The course examines the value of NFTs in environmentally sound, economically feasible and socially desirable small-scale agroforestry systems. It provides participants the skills to identify and manage important NFT species. Also, it builds the skills of trainees to manage agroforestry systems with NFTs. The course also uses NIFTAL (Nitrogen Fixing Tropical Agricultural Legumes) training materials to present information on biological Nitrogen fixation, the role of rhizobia, assessment of the need to inoculate and other appropriate biological Nitrogen fixation technologies. The course has been taught about ten times previously.

Institutional Setting and Facilities

Training takes place at the location specified by the requesting institutions.

Costs

The costs vary depending upon number of participants and location

Foreign Students

Participants must have basic English skills and must be involved with agroforestry through agriculture or forestry. There are no English language training opportunities available at NFTA.

Institution

North Carolina State University
International Program
College of Agriculture and Life Sciences
Box 7645
Raleigh, NC 27695

Contacts

Dr. Thurman Grove
College of Agriculture and Life Sciences
Tel: 919/515-2665; Fax: 919/515-3928

Dr. Jan Laarman
College of Forest Resources
Box 8008
Raleigh, NC 27695
Tel: 919/515-7784; Fax: 919/515-6193

Program

North Carolina State University offers M.S. and Ph.D. programs in Soil Science, Forestry, Botany, Crop Science, Horticulture, Plant Pathology, Statistics, Genetics, Economics, Sociology and other sciences. Students pursuing these degrees may specialize in agroforestry by drawing on course offerings in several departments. A core course in agroforestry is offered each year. The course reviews basic principles and case studies covering the biophysical, socioeconomic, and policy dimensions of agroforestry. The course generally has a high enrollment of international students.

Faculty and graduate students have projects in Brazil, Peru, Bolivia, Costa Rica, Kenya and Indonesia—and the number of field sites continues to increase. Programs of special interest are the Tropical Soils Research Program (sponsored through the Soil Science Department), and the Central America and Mexico Coniferous Resource Cooperative (through the Forestry Department). These two programs have strengthened over several years. The first concentrates on cropping productivity and sustainability in the tropics, while the second focuses on gene conservation of tropical tree species.

Institutional Setting and Facilities

North Carolina State is a large land-grant university of 27,000 students, of whom more than 1,200 are international students from about 90 countries. Founded in 1887, the university has broad academic offerings, extensive national and international linkages, and large-scale public service, extension, and research activities. The eight colleges which comprise the university offer baccalareate degrees in 89 fields. Together with more than 30 research center and institutes, the university supports a broad spectrum of more than 1,200 scientific, technological, and schoiarly research endeavors. North Carolina State University is recognized nationally and internationally for its strengths in the two parent fields which comprise agroforestry—agriculture and forestry.

Costs

For non-residents of North Carolina, tuition and fees are $3,831 per semester for a courseload of nine or more academic credits (1992 figures). Living costs in the Raleigh area are variable, but a planning estimate is $15,000 per year for an international student with family (rent, food, schooling for children, etc.). Opportunities for fellowships and research assistantships vary by department. Many previous international students have been supported by their own governments, USAID, the Rockefeller Foundation, the World Bank, and other external sources.

Foreign Students

The University requires a minimum TOEFL score of 550 for admission to graduate study. The Department of Foreign Languages offers English as a second language and also conducts a summer institute in English.

International students at North Carolina State originate from many countries. Those doing work in agroforestry are principally from Latin America and Asia, with representation also from Africa and Middle East.

Institution

Oregon State University
College of Forestry
Corvallis, OR 97331

Contact

Perry J. Brown
Associate Dean
College of Forestry
Tel: 503/737-2005; Fax: 503/737-1393

Program

Oregon State University is a science and technology oriented institution with strong programs in Agriculture, Forestry, Engineering, Oceanography, basic sciences and social sciences. The university has extensive involvement in international education, training research and development.

OSU offers an M.S. degree program with emphasis in Agroforestry which includes the subjects of forestry, pastoral systems and cropping systems. Graduate students focus their thesis or dissertation research on Agroforestry issues. The university offers a three-credit Agroforestry Seminar each winter. The program encourages taking courses in related fields, such as: Forest Science, Rangeland Resources, Horticulture, Crop and Soil Science and Social Sciences.

Institutional Setting and Facilities

OSU, located in a major forest region of the USA, has extensive instructional and research facilities throughout Oregon including research forests, farms and experiment stations.

Costs

An M.S. degree at the College of Forestry costs approximately $14,500 per year for all academic and personal expenses.

Student have been financed in the past by variable-OSU resources, USAID, USDA, foreign governments, etc.

Foreign Students

Foreign students are required to have minimum of 3.0 GPA in college, submit GRE Scores and attain 550 or higher on TOEFL. Approximately 1,600 of 16,000 students at OSU are foreign students.

Institution	**Ridgetown College of Agricultural Technology** Main Street Ridgetown, Ontario Canada N0P 2C0 Tel: 519/674-5456; Fax: 519/674-3042
Contact	Chris Nanni Course Coordinator
Program	The Ridgetown College offers four different 2-year diploma programs in the area of agricultural technology. The College offers a course on Agroforestry every year which covers the following topics: role and history of agroforestry; the value and productive capacity of the farm woodlot; tree identification; marketing; soil and water conservation benefits; establishment and value of maple syrup operations and Christmas tree plantations; and the establishment and maintenance of windbreaks and shelterbelts on the farm. Field trips are taken to several woodlots and tree plantations. The course is taught every winter semester (January-April). For further information, contact the course coordinator.
Institutional Setting and Facilities	For information, contact the registrar's office.
Costs	The total cost of yearly expenses approximates $2,110 (1992 figures). This includes tuition, fees, deposits, and room and board. Tuition rates vary for foreign students. Please contact the Registrar's Office for current fees.
Foreign Students	Students must have English language proficiency.

Institution

Texas A&I University
Center for Semi-Arid Forest Resources
Caesar Kleberg Wildlife Research Institute
Campus Box 218
Kingsville, TX 78363

Contact

Dr. Peter Felker
Tel: 512/595-3922, Fax: 512/595-3713

Program

Texas A&I University offers B.S. and M.S. degrees in the departments of agronomy and Resource Science and Animal & Wildlife Science. Outstanding field facilities are available within 30 km of campus for students who wish to pursue hands-on research in agroforestry. Long term field sites with immature and mature stands of Prosopis are being studied for growth as a function of silviculture and agroforestry management practices. Twelve-year old Prosopis alba plantations are available for seed production and research. Large scale Leucaena leucocephala plantations are available for research through private collaborators. A major genetic collection of fruit, forage and vegetable clones of cactus are available for field research. Greenhouse facilities and tissue culture facilities are available for asexual propagation research. Students have excellent access to microcomputer facilities and will learn to perform their own statistical analyses on personal computers.

Collaborative agroforestry research is being carried out in Haiti, Argentina, India and Pakistan on such topics as genetic improvement for erect, thornless, high-pod producing Prosopis and development of Prosopis for use in saline and high pH soils.

Institutional Setting and Facilities

Texas A&I University has over 6,000 students and has recently become a member of the Texas A&M University System. Texas A&I is located in a nearly sub-tropical region of Texas 35 miles from the Gulf of Mexico and 100 miles from Mexico. The mean annual rainfall is 650 mm and the winters are normally mild with only several freezes per year. Close professional contacts exist between many universities in nearby Mexico. Over 55 percent of the student body is of Hispanic origin and Texas A&I is officially designated as a minority institution.

The Center for Semi-Arid Forest Resources focuses on applied research to develop the economies of semi-arid regions via agroforestry systems through appropriate choice of grass/tree combinations, processing of high value lumber from trees, influences of trees on soil fertility, plantation establishment techniques, genetic improvement studies and market research.

Costs

For non-residents of Texas carrying nine credit hours the cost for tuition and fees is $1,662 per semester. For planning purposes additional living costs for a single graduate student would be about $10,000 per year. A financial support letter showing $11,200 in U.S. currency for

the first year is required. Many previous international students have been supported by their own governments as well as USAID, the Rockefeller Foundation, The World Bank, and other external sources.

Foreign Students

The University requires a TOEFL score of 500 and a combined quantitative plus verbal GRE score of 800 to 1,000 depending on the undergraduate grade point average. An intensive English as a foreign language course is also offered by the university.

Due to the small size of the university, it is possible to tailor programs in Agroforestry to meet individual needs.

Institution

Texas A&M University
Forest Science and Range Science Departments
College Station, TX 77843-2135

Contacts

Richard F. Fisher, Head
Forest Science Department
Tel: 409/845-5033; Fax: 409/845-6049

Dr. Thomas L. Thurow
Range Science Department
Tel: 409/845-3765; Fax: 409/845-6430

Program

Students at Texas A&M University can pursue M.S. or Ph.D. degrees in Forest Science with a concentration in agroforestry by drawing on course offerings from the Forest Science, Range Science, Fish and Wildlife Science, Soil and Crop Science, Economics, Sociology, and other departments. The Department of Range Science offers a course entitled "Agroforestry" (RENR 621) every year in the spring semester. For this course, experts in different subjects are drawn from on and off campus to cover basic agroforestry concepts through lectures and class discussion. The course objectives are to: discuss the meaning and scope of agroforestry; understand world bioclimatic patterns as they relate to agroforestry; outline different types of agroforestry systems and their applicability; consider global problems of deforestation and desertification as they relate to agroforestry; address socio-political and economic aspects of agroforestry; and consider the risks and benefits of germplasm introduction and conservation. The course will be team-taught by two faculty members from the Forest Science and Range Science Departments.

Students studying agroforestry can choose either a tropical or temperate and a humid or arid focus. Due to its geographic location, Texas A&M offers especially favorable opportunities for the study of agroforestry (including issues of soil and water conservation and fuelwood production) in arid and semiarid areas. Texas A&M has a number of research and experimental field stations in the area, and one of the faculty has professional experience in semiarid regions of Africa.

Institutional Setting and Facilities

The agroforestry program is offered by the Institute of Natural Resources, which was established to facilitate interdisciplinary studies. Students can specialize in:

(1) Genetics and Biotechnology,

(2) Ecology and Ecosystem Management (including the agroforestry program), and

(3) Information Science.

Texas A&M is an important public university which emphasizes research in the sciences. It is located between two small towns in east-central Texas, and lies between a southeastern pine forest and prairies and high plains. Due to its location, programs emphasize both humid forest and semi-arid savanna and grassland ecosystems.

Costs

Tuition and fees for the academic year are $3,700, and cost of living expenses are $7,200 per year (1992 figures).

Foreign Students

Approximately fifty percent of the students enrolled in the agroforestry course are international and most have agroforestry work experience. In the 1990 class there were students from Brazil, Kenya, Mali, Pakistan, the Philippines, and Somalia. USAID, UNFAO, and private agencies are the most common funding sources for international students. University fellowships are available for students whose GRE scores exceed 1,300, and research assistantships are occasionally available. Foreign students cannot be admitted as non-degree students.

The University requires a minimum TOEFL score of 550, although 600 is preferred, for admission. The University offers instruction in English through the English Language Institute.

Institution

United States Department of Agriculture (USDA)
Office of International Cooperation and Development (OICD)
Washington, D.C. 20250-4300

Contact

Course Coordinator
USDA/OICD/DRD/MCD
Room 3100 South Building
Washington, D.C. 20250-4900

Tel: 202/690-1836; Fax: 202/690-1960
Tlx: 7400228 CDOP UC

Training Course

The following Agroforestry-related courses will be offered by the USDA. All courses, take place during summer months. Scheduled dates vary each year.

(1) The USDA offers a 5-week course entitled "Agroforestry Training and Extension" (USDA TC 170-5) at the University of Florida, Gainesville. The course is designed for mid-level professionals who are involved in promoting the integration of agriculture, forestry, and livestock production among small farmers. Candidates are expected to have relevant background and preferably a degree in agronomy, forestry, horticulture, extension, and / or animal science.

The course will focus on understanding the principles and potential of agroforestry systems and agroforestry extension techniques. Among other topics, the course will cover the following subjects: The productive and protective role of agroforestry; diagnosis and design procedures; biophysical and socio-economic characteristics of land use systems; economic evaluation; and agroforestry extension methodologies.

A 1-week field trip is scheduled to Jamaica or Mexico to demonstrate ongoing agroforestry programs and to provide field training for diagnosis and design procedures. Participants will need field clothes for this activity as well as other shorter field trips within the U.S. They also must have a double or multiple-entry visa for the United States to facilitate their entry into the U.S. at least twice (at the original time of arrival, and upon return from the field trip in Jamaica or Mexico).

(2) USDA offers a 6-week course entitled "Land Use for Community Forestry and Natural Resource Development" (USDA TC 120-10) at the University of Idaho. The course is designed for land use and regional planners, administrators of planning programs, and natural resource specialists working with land use planning teams. The course is specially useful for community or social foresters and rangeland, park and wildlife managers.

The course objective is to enable participants to develop and implement a land use plan that will best meet resource management and social goals. The following are some of the subjects that will be included: land use planning concepts and principles; social and environmental impact assessment; incorporating the participation of local people into planning; GIS and spatial analysis; agroforestry; and the generation, analysis and evaluation of alternative land use plans.

There will be a 1-week field trip throughout the Pacific Northwest to meet with land use planners, resource managers and farmers.

(3) USDA also offers the 6-week course entitled "Sustainable Development of Dryland Regions: Planning and Management for Multiple Use" (USDA TC 170-03) at the University of Arizona in Tucson. This course is designed for mid-level planners, managers, implementors and decision-makers engaged in the sustainable development of dryland regions in developing countries.

The course focuses on multiple use management of renewable resources as a means to achieve an appropriate integration of biophysical and socioeconomic components in dry-land regions. The course includes the following topics: limitations of dryland environments; livestock production and management of grazing lands; small-scale agricultural crop production; water resource management; wildlife, recreation and tourism; the role of forestry in sustainable development; fuelwood management and agroforestry practices; windbreak planting and sand dune stabilization; and multiple use management practices.

Institutional Setting and Facilities

The Office of International Cooperation and Development (OICD) of the USDA offers short technical courses in cooperation with U.S. universities for the staff of agricultural and rural development institutions in developing countries. Upon request, OICD can conduct modified versions of the courses offered in the U.S. and overseas.

Space is assigned on a first-come, first-serve basis. Enrollment information should be received by OICD at least two months prior to the course start date.

Costs

For further information regarding course fees please contact the USDA/OICD office.

USDA does not fund participants in these courses. Funding is usually arranged through USAID, UNFAO, the World Bank, international development banks, and other host country sponsors.

Foreign Students

English proficiency is required for participation in all courses.

Institution

University of Florida
School of Forest Resources and Conservation
Department of Forestry
118 Newins-Ziegler Hall
Gainesville, FL 32611

Contact

Dr. P.K.R. Nair
Professor of Agroforestry
Tel: 904/392-4851; Fax: 904/392-1707; Telex: 568757 UF INTL

Program

The University of Florida offers an interdisciplinary graduate degree program in Agroforestry. Candidates for the degree of M.S. or Ph.D in Forestry (or another department, such as Agronomy or Soil Science) can specialize in Agroforestry; this emphasis is reflected in the courses taken and the thesis or dissertation topic. Candidates can also earn a Specialization or Minor in agroforestry by fulfilling certain requirements. In the spring, the Department of Forestry offers a 3-credit course in agroforestry. The department also holds a course on Tropical Forestry each autumn. Other courses can be selected from among several disciplines, such as: forestry, agronomy, soil science, botany, food and resource economics, geography, and anthropology. The University is a member of the Organization of Tropical Studies (OTS) and its graduate students can compete for admission to OTS courses. There are also possibilities for placing graduate students of agroforestry at overseas research sites such as ICRAF in Kenya or CATIE in Costa Rica (see separate entries for these institutions in this directory).

Graduate students pursuing studies in agroforestry may also choose to obtain a certificate in Tropical Agriculture or to minor in farming systems by meeting certain requirements.

Training Course

The University of Florida offers a short course entitled "Agroforestry Training and Extension in cooperation with the USDA Office of International Cooperation and Development (USDA TC 170-5). This five-week course has been offered once every summer since 1989, and is described in detail in this directory under the U.S. Department of Agriculture entry.

Institutional Setting and Facilities

The School of Forest Resources and Conservation includes the Department of Forestry, the Department of Wildlife and Range Sciences, and the Department of Fisheries and Aquaculture, as well as the Program for Studies in Tropical Conservation. Its Institute of Food and Agricultural Sciences (IFAS) initiated the interdisciplinary program in agroforestry in 1987 in response to dramatic increases in agroforestry-related activity at the University. The agroforestry program maintains an active involvement in international activities by providing technical support to the IFAS International Programs Office. It also cooperates with the University's Centers for African and Latin American Studies, and the Office of International Programs and Studies.

The University of Florida which is located in the subtropics, provides a suitable environment in agroforestry research for students of tropical developing countries.

Costs

Out-of-state tuition and fees for graduate study are $358.40 per credit hour (1992 figures). Masters students must take a minimum of 32 credit hours to complete their degree. Please, contact the university for more information.

Foreign Students

Students seeking admission to the graduate program in agroforestry should have a degree in a relevant field, such as agronomy, food and resource economics, soil science, horticulture, or social sciences, and should apply to the department which most closely represents their interests. The university requires a minimum TOEFL score of 550 for admission to graduate study. The English Language Institute of the University offers English language instruction.

The summer course targets professionals from developing countries.

Institution

University of Hawaii at Manoa
College of Tropical Agriculture and Human Resources
Department of Agronomy and Soil Science
1910 East-West Road
Honolulu, HI 96822

Contact

James H. Fownes
Assistant Agronomist in Agroforestry
Tel: 808/956-7508; Fax: 808/956-6539

Program

The Department of Agronomy and Soil Science offers M.S. and Ph.D. programs in Agronomy, Soil Science, and Horticulture. Students in these programs may take the course entitled "Agroforestry Systems" (Agronomy 480) which considers: the classification of agroforestry systems; important tropical tree species; productivity and nutrient cycling in agroforestry systems; hydrology; erosion control; sustainability; and modeling of tree-based agricultural systems.

The department also offers a course entitled "Agroforestry Ecosystem Analysis" (Agronomy 680) which covers the following topics: the advanced quantitative analysis of production, nutrient cycling, hydrology, competition, and sustainability of agroforestry systems.

Training Course

The U of H at Manoa often collaborates with the Nitrogen Fixing Tree Association (NFTA) and the Nitrogen Fixation by Tropical Agricultural Legumes (NIFTAL) Program in offering Agroforestry-related short courses during the summer.

Institutional Setting and Facilities

The University of Hawaii at Manoa is the only U.S. university in a tropical region and has many opportunities for the study of tropical plants and soils. Hawaii's striking gradients in elevation, rainfall, and substrate age provide a "living laboratory" for the study of tropical agroecosystems, and the College of Tropical Agriculture maintains a network of field research stations throughout the various environmental settings. The nearby East-West Center supports research and policy studies by foreign students and professionals, particularly from Asia and the Pacific. In addition, NFTA is headquartered at the College's Waimanalo Experiment Station and cooperates with the College in various programs.

Costs

Tuition for full time (non-resident) graduate students is approximately $2,620 per semester.

Foreign Students

The University requires a minimum TOEFL score of 500. English-language training courses are available.

Institution

University of Idaho
College of Forestry, Wildlife and Range Sciences (CFWR)
Moscow, ID 83843

Contact

Dr. A. A. Moslemi
Director of Graduate Programs
Tel: 208/885-9402; Fax: 208/885-6226

Program

The College offers 12 courses in International Forestry, Range and Resource Conservation. Agroforestry has been taught in the College since 1986 and students may now select this field as their area of concentration.

The faculty has 33 members with extensive international experience covering all natural resource specialties and who are often on leave from the College on long-term overseas assignment. Currently, there are ten faculty who are involved in various phases of agroforestry and around 20 graduate students working in various aspects of this field. In this program many graduate students, both U.S. and foreign, do their graduate research overseas.

Training Course

The Department of Forest Resources offers a short course entitled "Land Use Planning for Community Forestry and Natural Resource Development" in cooperation with the Office of International Cooperation and Development of the U.S. Department of Agriculture. This course is described under the entry for the U.S. Department of Agriculture. It has been attended by over 100 participants from 40 countries since 1981. The course has also been presented in collaboration with the Indian Institute for Forest Management in Bhopal, India, and the Pakistan Forestry Institute, Peshawar, Pakistan.

Institutional Setting and Facilities

The CFWR manages a 7,300-acre experimental forest, and a 24-acre Forest Research Nursery/Greenhouse complex. Research is directed at forest tree seedling improvement, growing hardwood seedlings for windbreaks and shelterbelts, and research plantings. The College administers an experimental area in southern Idaho which offers a site for rangeland ecosystem and grazing studies. There is also an extensive collection of tropical herbarium specimens and slides pertaining to tropical dendrology and ecology. The Natural Resources Communications Laboratory produces multi-media programs for natural resource agencies in the United States and abroad.

Costs

Tuition costs for out-of-state students are approximately $15,000, including living expenses (1992 figures).

Foreign Students

In 1991-1992 there were approximately 50 international students enrolled in the College. A minimum TOEFL score or 525 is required for international students. English-language training opportunities are available through the new University of Idaho Intensive English Language and Culture Programs.

Previous foreign students have obtained funding from USAID, the World Bank, and other governmental sources. Students from Brazil may apply for the Foster Fellowship.

Institution

University of Montana
School of Forestry
Missoula, MT 59812

Contact

Dr. Stephen F. Siebert
Assistant Professor
International Resource Management
Tel: 406/243-4661; Fax: 406/243-4510

Program

The School of Forestry offers M.S. and Ph.D. programs in Forest Resource Management and Resource Conservation. As part of these programs, it offers two courses on an annual basis which are related to agroforestry. The course entitled "Social Forestry" considers the biophysical and socioeconomic aspects of agroforestry, community forestry, and related systems. It includes discussion of such issues as annual-perennial crop interactions, soil conservation implications, soil fertility factors, land tenure, gender, and food security. A second course, "Sustainable International Conservation and Development" analyzes opportunities and constraints to the development and management of natural resources on a sustainable basis. This course places a particular emphasis on the humid tropics. Students interested in agroforestry are also encouraged to take several courses in the Sociology Department, including: "Society and Environment," "Gender, Class and Social Change," and "Rural Sociology and International Development."

Institutional Setting and Facilities

The School of Forestry has collaborative working relationships with the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the National Park Service, which can be useful to students in the field of natural resource management.

Costs

The cost of tuition, fees, books, and living expenses is estimated to be $10,000 per academic year (1992 figures).

Foreign Students

At present, there are seven international graduate students at the School of Forestry. Financing sources for foreign students have included USAID and the Asian Development Bank. Teaching and Research Assistantships may be obtained by foreign students depending on their qualifications. The university has a very supportive Foreign Student Service Program and offers instruction in English as a second language. The School of Forestry requires a TOEFL score of 500.

Institution	**Virginia Polytechnic Institute & State University** School of Forestry and Wildlife Resources 324 Cheatham Hall Blacksburg, VA 24061-0324
Contact	Robert L. Youngs, Professor Tel: 703-231-7673; Fax: 703-231-3330; Tlx: 9103331861 Internet: YOUNGS@VTM1.cc.vt.edu
Program	Virginia Tech offers new interdisciplinary programs in agroforestry and international forestry for B.S., M.S. MF., and Ph.D. degree candidates. Supporting these programs is an integrated set of courses, special studies, seminars, and field activities designed to provide for special interests, broaden perspectives, and introduce techniques concerned with sustainable management and the use of forests and related renewable resources. Courses include: World Forestry (Forestry 3784, Spring Semester) and Agroforestry (Forestry, Crop & Soil Environmental Sciences 4334, Fall Semester). Additional courses are offered on economic and social aspects of international development and international studies. International activities are carried out in close cooperation with the Office of International Research and Development. This includes coordination of a major reforestation program in Senegal and participation in other international research and development projects.
Training Course	Virginia Tech participates in training programs sponsored by major international development agencies in many parts of the world. These vary from 2-week study tours to graduate degree programs in Forestry and Wildlife Resources.
Institutional Setting and Facilities	The School of Forestry and Wildlife Resources offers academic, research, and extension programs in Forestry, Wood Science and Forest Products and Fisheries and Wildlife that are among the strongest in the country. Faculty members have had extensive international experience. Facilities provide effective and productive settings for study and for interdisciplinary association.
Costs	Out-of-State tuition and fees are $5,254 for the academic year (1992-93). Most students find accommodations off campus. Meals may be arranged in university facilities or off campus. Several forms of financial assistance are available to graduate students, including assistantships, fellowships, and scholarships.
Foreign Students	About a third of the graduate students in the School of Forestry and Wildlife Resources are from other countries. Most of them have support from their home country or from international development agencies. Satisfactory scores on both the TOEFL and the GRE are required for admission to the Graduate School. The University has a remedial English program for students who need additional language competence.

Institution

Washington State University
Department of Natural Resource Sciences
Johnson Hall
Pullman, WA 99164-6410

Contacts

Edward J. DePuit, Chairman
Department of Natural Resource Sciences
Tel: 509/335-4499; Fax: 509/335-7862

Kjell Christopherson
International Programs Development Cooperation
221 Hulbert Hall
Tel: 509/335-2980; Fax: 509/335-2982

Program

The Department of Natural Resource Sciences offers undergraduate and graduate programs in forest management, range management, wildlife biology and management, and wildland recreation leading to Bachelor of Science degrees in Natural Resource Management and Natural Resource Sciences and Masters of Science degrees in Natural Resources and Natural Resource Sciences. The undergraduate programs allow students to concentrate on management, the sciences, or, with the approval of their adviser, develop individual academic programs that will meet their academic and personal goals. Washington State University has strong capabilities and interests in agroforestry and natural resources centered in the departments of Agricultural Economics, Natural Resource Science, and Environmental Science and Regional Planning. WSU faculty have ongoing research and extension activities worldwide in agroforestry and natural resources.

Training Course

Training to enhance the capacity of host country personnel to carry out sound economic and financial analysis of agroforestry systems is offered through workshops on agroforestry and natural resource economics. The Department of Natural Resource Sciences in conjunction with the Department of Agricultural Economics, and the International Programs Development Cooperation offers two, 2-week training courses. Both courses are designed to enable key host country field project managers, project planners, decision makers, and the NGO community, in the disciplines of forestry, sociology, agronomy or other related fields to carryout economic and financial analyses of proposed agroforestry and natural resource projects with a view of improving resource allocation decisions. The first course, Natural Resource Planning, takes into consideration all of the physical, biological, cultural, political, and economic aspects of natural resource use in the decision process. The second course, Natural Resource Management, focuses on pragmatic, field oriented economics, the importance of acquiring an understanding of key underlying economic principles in the decision making process, and analytical techniques.

Workshop participants will improve their ability to develop and implement agroforestry or natural resource projects that meet social, economic and resource management objectives for the country and its people. Specific objectives are that participants will at the end of the workshop:

- Know basic terms used in economic and financial analyses of agroforestry systems and understand economic concepts and principles.
- Know which data are important and how to collect them.
- Be able to develop an analytical base case including justification of assumptions and specification of a range of management alternatives.
- Be able to carryout economic and financial analyses of agroforestry and natural resource projects and programs.

An international workshop, "Planning for Agroforestry," was held in Pullman in 1989. In July 1991, the Forestry Support Program (FSP) sponsored a one-week workshop on agroforestry economics, attended by some 40 individuals with widely differing professional backgrounds. The workshop was hosted by the Nitrogen Tree Fixing Association (NFTA). The two-week training workshops are tailor-made to the needs expressed during the FSP/NFTA workshop. A workshop on natural resource economics is being offered in Asia in February 1993 for 25 participants from five countries.

Institutional Setting and Facilities

Facilities at Washington State University include the department's microcomputer laboratory, the ecophysiology laboratory, the animal holding complex, the furbearer research laboratory at the Steffen Center complex, the Hudson Biological Reserve at Smoot Hill, the Ownbay Herbarium, and the 12,000 acre Colockum multiple-use research area.

Costs

The fee for the special training courses is between $3,000 and $3,500, depending upon the number of participants, and does not include travel related costs, per diem or incidental expenses. Registration fees for undergraduate study total $2,717 for nonresidents, graduate fees total $3,789 for nonresidents.

Foreign Students

Approximately 10 percent of the students at Washington State University are foreign, coming from 58 countries. Washington State University requires a TOEFL of 550.

Institution

Yale University
School of Forestry and Environmental Studies
205 Prospect Street
New Haven, CT 06511

Contact

Jared Cohon
Dean
Tel: 203/432-5100; Fax: 203/432-5942;
Telex: 5101012363 YALE FES

Program

The School of Forestry and Environmental Studies offers a Master of Environmental Studies (MES), a Master of Forest Science (MFS), a Master of Forestry (MF), a Doctor of Forestry and Environmental Studies, and a Doctor of Philosophy. The School offers three graduate-level courses which deal with agroforestry. The "Seminar in Agroforestry Systems" (F&ES 592b), offered in the spring, considers concepts, classification, and types of traditional and innovative agroforestry systems; agroforestry components and their interactions; choice of appropriate tree species; effects of trees on soil conservation; economic analysis of small-, medium-, and large-scale agroforestry; social and community forestry; agroforestry extension; and agroforestry research priorities.

The School also offers "Tropical Forest Ecology" (F&ES 574a), whose objective is to summarize ecological knowledge on tropical forest ecosystems and to demonstrate how this information can be used to manage, conserve and restore forests and to implement alternative tree-based land use schemes, such as agroforestry. Among the topics discussed are: plant-animal interactions; nutrient cycling; deforestation causes, consequences and alternatives; social and community forestry; and restoration of degraded tropical forest ecosystems.

Students may pursue their specific areas of interest relating to agroforestry through the "Project in Tropical Ecology" (F&ES 577a,b), which allows in-depth study on an individual or small-group basis.

The "Special Student" status allows individuals desiring short-term study to enroll for one semester only and for one course only after meeting the regular admission requirements.

Institutional Setting and Facilities

The School of Forestry and Environmental Studies established the Tropical Resources Institute (TRI) in 1983 to provide a focus for the study of tropical resource issues from an applied management and policy perspective. TRI provides a broad-based program, including courses in tropical forest ecology, tropical economic botany, tropical soils, rural development sociology, and tropical natural history. In addition, students can take advantage of offerings in other programs at Yale University, such as the Departments of Anthropology, Economics, Political Science, Sociology, the Center for International and Area Studies, and the School of Organization and Management.

In addition, TRI sponsors seminars and symposia, field trips to tropical areas, and overseas summer internships for masters students. During the summer of 1990, ten students worked on tropical resource problems in Costa Rica, Brazil, Honduras, Puerto Rico, Columbia and Indonesia. Current faculty and doctoral research covers such topics as the management of native fruit trees in agroforestry systems, the influence of trees on soil fertility and nutrient cycling, and the social ecology of native groups living in biosphere reserves. TRI has signed about forty Memoranda of Understanding (MOUs) with natural resource institutions in the U.S. and overseas to facilitate cooperation in training, internships, student and faculty exchanges, and collaborative research.

Yale University established the School of Forestry in 1900, and it is the oldest forestry school in the western hemisphere. The Forestry Library has one of the oldest and largest collections of forestry, natural resources, and related publications in the world, with holdings of over 130,000 volumes and over 900 serial publications. Greeley Memorial Laboratory has facilities for work in soils, plant ecology, wildlife ecology, and forest pathology.

Costs

Tuition for Master's-level study for the 1992/93 academic year cost $13,630, and for doctoral study $15,920. Living expenses for the year cost $10,000.

Foreign Students

In 1991/92 close to 25 percent of the incoming class were from foreign countries.

The School requires a TOEFL score of 650 or better for admission, as well as taking of the Graduate Record Exam.

PART II

INSTITUTIONS OVERSEAS

Institution

ANUTECH Pty Ltd
GPO Box 4
Canberra, Act 2601
Australia
Tel: 616/249-5671 Fax: 616/2495875 or 2571433

Contact

George Collet
Course Coordinator

Program

ANUTECH Pty Ltd. is a company solely-owned by the Australian National University. It draws on the expertise of the Forestry Department within the School of Resource and Environmental Management as well as expertise from other research schools within the university.

Training Course

ANUTECH currently runs two professional development short courses both of which relate to agroforestry training:

(1) The "Forestry Planning and Management Course" is a 12-week course focusing predominantly on the identification, design, appraisal, implementation, management and evaluation of forestry projects. Other topics, such as: social forestry, agroforestry, sustainable forest management, watershed management, EIA, rapid rural appraisal and resource surveys are also included. Field visits and time at the Queensland Forest Service's Research and Training Centre focus primarily on large-scale forestry projects. This course has been previously offered five times.

(2) The course entitled "Rural Project Planning" is a 6-week course focusing on the social, environmental and economic impacts of rural development projects. The course introduces development economics and development sociology and covers issues of appropriate technology, agroforestry, women in development, and sustainable development. It also provides the participants with skills in project planning, management and evaluation and familiarizes them with computer applications in project appraisal. This course has been previously taught once in 1992 and is scheduled to be offered annually.

ANUTECH has also the capability of designing and mounting courses tailored to the specific need of the client or the participants. For example, ANUTECH ran a specific Agroforestry short course in 1990 for career extension officers and advisors. This course could be easily offered again.

Institutional Setting and Facilities

As part of the Australian National University, ANUTECH is located in the heart of the Capital, and is well equipped with all educational, sports and social facilities.

Costs

The 12-week and 6-week courses cost approximately $14,400 and $8,625 respectively. The cost includes tuition, field tours, health insurance, access to computer facilities, all accommodations, establishment and meal allowances and other expenses.

Funding for foreign students has come from a variety of sources including AIDAB, FAO/UNDP, Asian Development Bank, Commonwealth Secretariat, NZ High Commission, GTZ and individual foreign governments.

Students

Students are expected to have a background in forestry or rural development, and be working (or intending to work) in the field. Extension workers, planners, managers and technicians/researchers are encouraged to apply.

In past years there have been between 15 and 20 foreign students attending the course. English language training is readily available but at additional cost.

Institution

Arid Forest Research Institute (AFRI)
16/507 Chopasani Housing Board
Jodhpur - 342 008
India
Tel: 26034 or 26475

Contact

Shri A. P. Dwivedi
Director

Training Course

The Arid Forest Research Institute, an institution of recent establishment, offers the course entitled "Agroforestry in Arid and Semi-Arid Regions". This course was developed to meet the training needs of local scientists working for research organizations including those working in forestry departments. AFRI has offered the course twice since 1990.

The course's content focuses on the following topics: the present agroforestry practices in arid zones; the selection of suitable tree species for agroforestry practices; the interaction between tree crops and agricultural crops; silvopastoral systems and other related subjects. A scheduled date for the next course offering was not provided.

Costs

The Government of India has financed some students in previous courses. The exact cost of the next training activity was not available.

Institution

Asia-Pacific Agroforestry Network (APAN)
FAO - APAN
P.O. Box 382
Bogor 16001,
Indonesia

Tel and Fax: (62-251)/323063;
Tlx: 73/69143 FAOREP IA

Contact

Chun K. Lai
Regional Coordinator

Program

In April-May 1992 APAN offered a two-week course entitled "Refresher Course for Agroforestry Trainers in Asia-Pacific" which was held in West Java, Indonesia. The following were the course objectives: review agroforestry training approaches, tools and materials used in APAN countries and the South Pacific; provide a forum for the exchange and experiences in agroforestry, in order to produce a compendium of agroforestry training resources in Asia-Pacific; and plan further agroforestry training activities in Asia-Pacific (at regional, national and local levels).

The course was divided into the following 11 sessions:

(1) Workshop objectives; basic concepts and overview of agroforestry in Asia-Pacific;

(2) Overview of agroforestry training;

(3) APAN country experiences;

(4) Appropriate tools;

(5) Agroforestry diagnosis and design;

(6) Agroforestry in Indonesia;

(7) Sketch mapping as a diagnostic tool;

(8) Related networks an information management;

(9) Follow-up and planning activities;

(10) Synthesis of earlier sessions; and

(11) Panel discussion.

A second course is proposed to take place in Indonesia in the month of May.

Institutional Setting and Facilities

The 1992 regional agroforestry training course took place at the Cisarua Mountain Hotel and various field sites in West Java, Indonesia. Some sessions like sketch mapping were taught in the classroom and practiced in the field; approximately one-third of the course duration was spent in the field.

Costs

The total cost of organizing the 2-week course was about $75,000. No course fee was charged to participants.

Twenty participants were supported by APAN (with funds from the OSDA/FS Tropical Forestry Program); two other participants were given travel and per diem support by their own organizations. ICRAF, RWEDP and F/FRED provided in-kind contributions in the form of resource persons and publications.

Students

The participants should be actual trainers or directly involved in managing or implementing agroforestry training activities.

Institution

Asian Rural Life Development Foundation (ARLDF)
P.O. Box 94
8000 Davao City
Philippines

Contact

Harold Watson
Director

Program

ARLDF is not a formal education or training center. The foundation trains hundreds of people per year, mostly small farmers and their families. Three courses are offered, two of them specifically agroforestry.

SALT I or Training in Sloping Agricultural Land Technology is designed to create an awareness of environmental degradation in the uplands of the tropics. Nearly 3/4 of the course is held in the field, the remaining portion is in the classroom. Participants work closely with staff and local farmers and actually design and implement a small project in the village area. Over the 2 to 3 day course, participants learn about alley-cropping and contour hedgerow-based farming systems that will help poor rural farm families.

SALT II, the Simple Agro-Livestock Technology course is similar to SALT I, except that it incorporates a livestock component into the systems. Participants get first-hand experience with animal/forage systems.

SALT III is Sustainable Agroforestry Land Technology. The focus of this course is on small reforestation projects (1 hectare) that are practical and can help small farmers.

Institutional Setting and Facilities

The training center is located on a 19-hectare farm in southern mindanao, Philippines. The climate is tropical and the terrain is mountainous. The center has live-in facilities but no access to telephone, television, etc. Mail and communication is through the office in Davao, about 2 hours from the training center.

Costs

Training costs are $13.00 per day. This includes food and lodging. Courses are 2 to 3 days in length. Although funding is available through ARLDF, these funds are limited and extremely competitive. Most participants attend with assistance from Ford Foundation, Winrock, FAO, etc.

Students

There are no admission requirements. Trainees come from all parts of the Philippines. In the past year, there have been over 300 foreign participants from over 30 countries, mostly Asia/Southeast Asia. Courses are conducted in English and three Filipino dialects.

Institution

BAIF Development Research Foundation
'Kamdhenu', Senapati Bapat Marg
Pune, India 411 016
Tel: 342621; Tlx: 0145-7283

Contacts

Dr. Manibhai Desai
President

Dr.N. G. Hedge
Executive Vice President

Program

BAIF began as an agricultural research institute in 1967. Since then, it has expanded to include a variety of development related issues. BAIF is a voluntary organization dedicated to socio-economic reconstruction of the rural poor. Human development is the focal point of the unique BAIF approach. It creates awareness, motivates action and provides methods of self-reliance through the application of science and technology. The institute engages in various training activities and publishes a variety of technical pamphlets and manuals, including manuals for trainers. Some of the program areas that BAIF is involved in include cattle development, watershed planning, afforestation, and bioenergy.

Training courses are held at any of six regional offices. Courses are taught over a period of 1 to 2 weeks and are offered 2 to 3 times every year. The courses cover the following topics: cattle management, fodder and fuelwood production, cultivation of MPTS, agroforestry, wastelands development, sericulture and mushroom production.

BAIF has taken the leadership in organizing a Network for the promotion of Multipurpose Tree Species and publishes a quarterly newsletter, 'MPTS Newsletter' to strengthen the NGOs with technical information training, sharing of success stories and exchange of planting material.

Institutional Setting and Facilities

BAIF has a central research station which has facilities for the study of agricultural development and animal health. There is also an information resource center for the distribution of training materials. The 6 regional centers are bases for training and extension, as well as some community based research, located in the states of Maharashtra, Gujarat and Karnataka.

Costs

The training courses costs about $100 per week, this amount includes training materials, boarding and lodging at BAIF Campus for foreign students.

Students

Training courses tend to aim at Indian NGOs, field technicians and farmers. Knowledge of English and sponsorship to cover the course are required of participants.

Institution

Centro Agronomico de Investigacion y Ensenanza (CATIE)
COSTA RICA

Contact

Ramon Lastra, Ph.D.
Coordinador Programa de Maestria
Tel: (506)561016; Fax: 561533; Telex: 8005

Program

CATIE offers M.Sc. programs in Production Systems, Silviculture, and Agroforestry. Courses which are offered in support of these degree programs and which focus specifically on agroforestry include:

(1) "Soils in Agroforestry Systems", which covers the following aspects of agroforestry systems: water regimes, organic matter cycling, and nutrient cycles for nitrogen, phosphorus, potassium, calcium, and magnesium;

(2) "Development of Agroforestry Systems", which considers the following: agroforestry system components and their interactions; design and evaluation methodology; and socio-cultural aspects;

(3) "Measuring Agroforestry Systems", which discusses research methodologies for agroforestry systems, including: demarcation of plots; interpretation and application of results; measurement of tree, forage, livestock, and crop components; floristic composition, and other area; and

(4) "Biology of Agroforestry Systems", which covers: the classification of agroforestry systems; microbiology of soils, including rhizobia and micorrizae; nutrient cycling; vegetative propagation; microclimate and hydrology; nutritional aspects of trees; animal nutrition; and annual crops.

Training Course

CATIE offers a 3-month course entitled "International Course on Agroforestry Systems Development" to be offered from July to October. The objectives of the course are to enable participants to plan and conduct communication strategies to support forestry extension, and to disseminate technical and socioeconomic information concerning the cultivation of multipurpose trees (MPTs) by small and medium rural producers. At the end of the course, participants are able to:

(1) Understand and apply the concepts and principles of silviculture with MPTs;

(2) Master the concepts and practices of developing communication strategies to support forestry extension involving MPTs;

(3) Design and produce educational materials to support forestry extension;

(4) Plan, implement, and evaluate extension methodologies and practices;

(5) Develop social profiles in rural communities; and

(6) Organize rural producers to participate in community forest nurseries.

The first month the course includes a discussion of natural resources, forests, and rural populations and consideration of silvicultural principles for MPTs. The second and third months of the course treat diagnosis, the planning of communication strategies, extension objectives and methodologies, monitoring and evaluation, and the design and production of supporting materials. The course consists of approximately 30% theoretical training and 70% practical training, including workshops, laboratory work, research and field trips.

This course is offered as part of The Project for the Cultivation of Multipurpose Trees (in Madelena), whose objective is to enhance the incomes and welfare of rural families and to alleviate the deterioration of the environment by promoting a significant increase in the cultivation of MPTs in farms and the commercialization of forest products. In particular, it seeks to address the lack of trained forest extension agents. The course is offered at CATIE headquarters in Turrialba, with visits to rural communities and demonstration farms.

Institutional Setting and Facilities

CATIE is an educational and scientific organization which seeks to promote research, education, training, and technical cooperation in agricultural and livestock production and the use of renewable natural resources, with a focus on Central America and the Antilles. CATIE's research and educational facilities are located on 950 hectares in Turrialba and on a 150-hectare experimental farm in the Atlantic region of Costa Rica.

Costs

Tuition costs for the M.Sc. program are approximately $8,190 for the first year of study and $8,540 for the second year. This does not include living expenses, which are estimated at about $500 per month.

Financial assistance for the three-month course may be available from JICA (Japan International Cooperation Agency) including, tuition, room and board, medical insurance and travel to and from country of origin. The course is also open to a limited number of individuals with separate funding source. Please contact CATIE for course costs.

Students

Participants in the short course must be sponsored by a national organization whose activities are related to forestry development. They must hold a university degree in Forest Science, Agronomy, or a related discipline, and be working in forestry or agroforestry-related education, training, extension or communication activities. Students must also have proficient Spanish language skills.

Institution	**Escuela Agricola Panamericana (Zamorano)** P.O. Box 93 EAP Tegucigalpa, Honduras, C.A.
Contact	Dr. Keith Andrews, Director Tel: 504/76-6140 504/76-6150; Fax: 504/76-6240
Program	EAP offers two degrees: the Agronomo degree, which consists of a 33-month program (9 academic semesters) of intensive training in agriculture; and the Ingeniero Agronomo degree which requires a research component and an additional 11 months in order to complete a total of 12 academic semesters. The current program for the Ingeniero Agronomo degree consists of lectures, laboratories and field practicals in agriculture, agroforestry and forestry. A new curriculum in Natural Resource Management, with an emphasis on a agriculture/forestry relationships has recently being developed for the ingeniero degree. This new curriculum will be offered for the first time in 1993. EAP collaborates in research and training exchange programs with several U.S. institutions, including Colorado State University, College of Natural Resources, and with the Oxford Forestry Institute, U.K.
Training Course	EAP offers occasional short courses in agroforestry, forestry, and related topics through its W.K. Kellogg Center for Rural Development and sponsored by various agencies. The Center was established in 1988, and has offered several short courses since then.
Institutional Setting and Facilities	EAP, also named "Zamorano" after the farm where it is situated, is a private international college, established in 1942. The school is located in the Yeguare River valley in central Honduras. The campus and school properties comprises about 7,000 acres of agricultural land, pine forest and cloud forests. It has an infrastructure and physical plant equal to most U.S. colleges of similar size. The college houses faculty and up to 650 students on the campus in an international community.
Costs	The total cost of the Ingeniero Agronomo degree program is approximately $15,000 per year which includes housing, insurance, supplies, etc. Students receive scholarships from many sources, especially USAID, GTZ, and other government and private agencies.
Students	EAP attracts students from 22 countries in Latin America and the Caribbean. Classes are conducted in Spanish. Regular students are required to take English classes.

Institution

Escuela de Agricultura de la Region Tropical Humeda (E.A.R.T.H)
Apdo 4442-1000
San Jose, Costa Rica
Tel:506/55-2000; Fax: 506/76-5231

Contact

Carlos Chaves
Coordinator
Continuing Education Program

Program

EARTH is an International Private Agricultural College of recent establishment which focuses on sustainable practices in the humid tropics. The academic program offers a B.Sc degree in general agriculture for the humid tropics. EARTH also provides short term training through its Continuing Education Program which facilitates information exchange between the school and the community.

The School is located in the low lands of Costa Rica and it has very modern and efficient facilities for training activities.

Training Course

As a component of the Continuing Education Program, EARTH offers the course entitled "Selection and Reproduction of Native Lumber Tree Species from the Humid Tropics". This course has been taught twice already (1991-1992). Although agroforestry training activities are not currently offered,the program is interested in developing them in the near future.

All short course trainings at EARTH are taught in Spanish.

Institutional Setting and Facilities

EARTH has a large property, about 8,000 acres, divided into a commercial farm and a teaching farm. In both farms, there are agroforestry activities such as black pepper production and grassing systems that include leguminous trees.

Costs

The total cost for the short courses is approximately $140.00 which includes room and board for a period of 5 days.

Institution

International Agricultural Centre
P.O. Box 88
6700 AB Wageningen
The Netherlands

Contact

Dr. R. J. De Hoogh
Course Director
Tel: (31-8370) 90111; Fax: (31-8370) 18552; Tlx: 45888 INTAS NL

Training Course

The International Agriculture Centre (IAC) will be offering its annual "International Course on the Design of Community Forestry" for the sixth time in 1993. This 3-month course, taught from September to December, is designed for program officers engaged in policy formulation or in the design, management and evaluation of rural development programs. The course attempts to place the concept of community forestry within the broader context of rural development. The curriculum is divided into three main aspects: information, design, and field work, and it is organized into seven sections summarized as follows:

The first section (Introduction) allows participants to: present an overview of their work on community forestry development; identify their learning expectations; and begin a task assignment for designing a community forestry proposal.

The second section examines different topics of tree and land management, such as: agroforestry; the economic and social dimensions of land and tree tenure; land use evaluation and carrying capacity; and rural energy and the scarcity of woodfuels.

The third section covers the following subjects: community forestry; farm-household system analysis; gender impact analysis; village organization; extension and supporting policies; and selection of target groups.

The fourth section deals with field work techniques, such as: data collection and analysis using case studies from rural areas of The Netherlands; Participatory rural appraisal methodology; and the introduction to Objective Oriented Project Planning (OOPP).

The fifth section is devoted to problem analysis and community forestry program objectives as part of the task assignment. Presenting and reporting techniques are also reviewed.

The sixth section covers the following subjects: financial and economic considerations; planning for soil and water conservation; and strategies and policies regarding community forestry programs.

In the final section teams apply OOPP methodology to their task assignments and present their results to other participants.

In order to work on the task assignment participants form into regional teams. Each team prepares a community forestry program proposal that targets a specific area within a country of their region. Accordingly, preference for admission to the course is given to groups of two or three participants (with varying educational and professional backgrounds) per country.

Institutional Setting and Facilities

The International Agricultural Center is located in Wageningen; a town of approximately 32,500 inhabitants in the center of The Netherlands. Wageningen is also the home of the Agricultural University and a large number of other institutes specialized in various branches of agriculture. IAC is also currently organizing in-region courses, similar to the one described here, through established institutes in Asia, Africa and Latin America.

Costs

The cost for this course will be approximately $9,500 (15,700 Dutch Guilders) and covers tuition fees, full board and lodging, medical insurance and allowances. Scholarships may be available from the Dutch Government through The Netherlands Fellowship Programme (NFP). Previous students have generally been supported by their governments, employers, non-governmental organizations, or externally financed projects, and have also been funded by UN/FAO, the Finnish, German and Swedish Governments, the World Bank, and the European Development Fund (European Communities).

Students

The course accepts 24 participants and requires a B.S. degree, preferably an M.S. degree, in forestry, agriculture, or a social science such as rural planning. At least 5 years of professional experience is also required. The course accepts candidates from both non-governmental and governmental organizations, and strongly encourages application by women. Participants must have a good command of English, as there are no English training facilities available.

Institution

The International Centre for Research in Agroforestry (ICRAF)
P.O. Box 30677
Nairobi, KENYA

Contact

Dr. Habib Ibrahim
Training Coordinator
Tel: (254-2)521001; Fax: 521001; Telex: 22048

Program

ICRAF coordinates a post-graduate fellowship program for researchers from institutions linked to the Agroforestry Research Network for Africa (AFRENA) in order to upgrade their professional qualifications. ICRAF has established AFRENAs in Southern Africa, Eastern and Central Africa, the Humid Lowlands of West Africa, and the Semi-arid Lowlands of West Africa. Post-graduate training for research from networks in Asia and Latin America are also offered.

ICRAF funds a 5-year program for AFRENA Southern Africa for the training of a multidiciplinary team from Malawi, Tanzania, Zambia, and Zimbabwe. The program involves initial course work abroad and subsequent theses research at AFRENA research sites. Nine fellows are currently studying in the United States and Canada under this program. Funding for ICRAF AFRENA for Sahelian zone (SALWA) was also obtained to train scientists from Niger, Mali, Burkina Faso, and Senegal. The graduate fellows will complete their course work in Canada and thesis research at their respective countries.

In addition, in 1992 ICRAF initiated a project to develop curricula for agroforestry education in African universities and technical colleges, at the M.Sc. level. The following developed four model curricula were developed:

(1) M.Sc. Agroforestry;

(2) M.Sc. Agronomy with Option in Agroforestry;

(3) M.Sc. Animal Science with Option in Agroforestry; and

(4) M.Sc. Forestry with Option in Agroforestry.

Moi University in Kenya and the University of Science and Technology in Kumasi, Ghana (see separate entries in this directory) began M.Sc. programs in the 1990/91 academic year, and Sokoine Agricultural University in Tanzania intends to do so in the near future. ICRAF is also working to develop an African Network on Agroforestry Education (ANAFE).

ICRAF has a Research Fellowships and Visiting Scientists program which allows professional staff and senior scientists from developing country national institutions to undertake agroforestry research

alongside ICRAF staff. This non-degree program may last as long as two years. ICRAF offers six-month internships to allow professionals from national institutions in developing countries to study or work on an agroforestry project under the supervision of ICRAF's scientific staff. Students during their last year in universities or diploma institutes may also join ICRAF in the study of agroforestry for periods 3 to 12 months.

Training Course

ICRAF offers an annual training course entitled "Agroforestry Research for Development", which has been offered at least ten times since 1985. The aim of the course is to strengthen the ability of research scientists from developing countries to initiate and implement agroforestry research which will generate technologies suited to local conditions and farmers.

The course is organized into five modules. (1) Module I presents an introduction to agroforestry systems concepts, research approaches, and the role of multipurpose trees and shrubs. (2) Module II considers specific agroforestry technologies such as hedgerow intercropping; rotational systems; crops under tree cover; pasture and animals under tree cover; and linear, sequential, and multistrata agroforestry technologies. (3) Module III discusses the Diagnostic and Design (D&D) methodology developed by ICRAF to undertake interdisciplinary identification of land-use problems and potentials and to establish research and development priorities. 94) Module IV provides an introduction to agroforestry research in the areas of technology design and development, multipurpose trees and shrubs, on-farm research, and the evaluation of farmers' systems.

The course is held every year in May and in October at ICRAF Headquarters in Nairobi for a worldwide audience.

The course is also offered in the different countries of collaborative national institutions linked to AFRENA. It is adapted to suit the needs of training programs in various agro-ecological zones of Africa, Asia and Latin America, and has been offered in English, French and Spanish to date.

This course is also offered in October to individual donor funded participants.

ICRAF also offers specialized research courses on agroforestry research topics, such as: multipurpose tree improvement; experimental design in agroforestry; experiment procedures in agroforestry, etc. Research scientists and their technical staff are qualified candidates for these courses.

In addition, ICRAF sponsors workshops, seminars and conferences to provide opportunities for interaction among different parties involved in agroforestry research and to assess problems, develop guidelines, or formulate joint plans.

Institutional Setting and Facilities

ICRAF is fully equipped as a training facility and has a conference hall, audio-visual support, a library, and a research station in Machakos.

Costs

The cost of the "Agroforestry Research for Development" course ranges between $3,500 and $6,000, depending on travel costs and the specific course program.

Students

ICRAF training is offered to participants from developing countries. Previous students have come from national forestry and agriculture institutions in over 51 countries in Africa, Asia, the Pacific, and Latin America. ICRAF encourages an equal number of men and women participants.

Institution

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
P.O. Patancheru-502 324
Andhra pradesh, INDIA

Contact

Program Leader
Human Resources Development Program

Training Course

ICRISAT offers a 6-month training program in "Resource Management" which is held each year from May through November. The objective of the course is to improve participant research techniques and other skills dealing with: 1) watershed development for improved land and water management; 2) proficiency in production factors related to agronomic practices, cropping systems, agroclimatology, and soil fertility; and 3) protection of plant material as a means to increase and stabilize food production in the rainfed semiarid tropics. The program was designed in collaboration with various agencies in the semi-arid tropics to meet specific training needs of scientists, managers, agriculturalists, administrators, and other participants.

ICRISAT also offers programs for Postdoctoral and Research Fellows, and Research Scholars. These programs allow scientists with varying levels of experience and education to work with senior scientists on specific research activities in the semiarid tropics.

Institutional Setting and Facilities

Since 1974 ICRISAT has offered training for agriculturalists from national programs working in the semiarid tropics. Its facilities include fully equipped laboratories, study facilities and a reference library.

Costs

The cost of the Resource Management course is approximately $850 per month, not including airfare. Candidates must be nominated and recommended by an institution working in the semiarid tropics. This institution usually provides funding for its candidate. ICRISAT has a limited number of partial or complete scholarships to which agencies may apply on behalf of their candidates. The application deadline is February 15.

Students

Minimum academic qualifications vary widely. Candidates must be engaged in work directly related to increasing and stabilizing food production in the semiarid tropics.

English is the primary language of instruction. An intensive 2-month English course for non-English-speaking candidates may be organized at ICRISAT from mid-March to mid-May prior to the course.

Institution

International Institute for Aerospace Survey and Earth Sciences (ITC)
Boulevard 1945, No. 350
P.O. Box 6
7500 AA Enschede
THE NETHERLANDS

Contact

Mrs. A. Scheggetman
Tel: (31-053)/874444; Fax: (31-053)/874400;
Tlx: 44525 ITC NL

Program

The International Institute for Aerospace Survey and Earth Sciences (ITC) offers an annual eight-month post-graduate diploma course entitled "Forestry for Rural Development" beginning the second week of October. The course aims to develope a greater understanding of the role of trees in production systems and to facilitate a more productive use of woody plants in meeting local community needs and pursuing sustainable rural development. The course is organized as follows:

(1) Concepts and Approaches: participants analyze their own work experiences in order to gain insight about the social, economic and cultural factors governing the use and management of trees and forests in rural areas;

(2) Surveys for Rural Forestry: students learn to select and implement appropriate survey strategies in order to identify relevant social, economic, structural, and biological factors that affect rural forestry. Students are encouraged to use remote sensing materials. This section also considers the integration of technical and social issues, such as agroforestry, rural energy, and watershed management;

(3) Fieldwork: using a multi-disciplinary group approach, students implement a field survey; and

(4) Applications: additional information is provided on intervention techniques and participatory approaches. Students are expected to apply their new skills to their own working situations.

Students will gain a greater understanding of the following subjects: the qualitative and quantitative role of trees in land use systems; the constraints and opportunities for improving the management of woody biomass resources; the role of local communities and their priorities; and ways to tap and systematize indigenous knowledge and practices in order to improve productivity and access to community resources. Fieldwork is conducted in a (sub)tropical country for a period of four weeks. Upon completion of the course a post-graduate diploma in forestry for rural development is awarded.

Institutional Setting and Facilities

ITC has been well known for its training activities, particularly in the area of aerial photography, photogrammetry, and photo-interpretation. Currently, it is changing its curricula to reflect a greater emphasis on the collection and processing of geo-based data and the management of geo-information. Full attention is now given to all aspects of aerospace surveying, remote sensing, and the application of manual and digital techniques.

The diploma program described above is offered by the forestry group of the Department of Land Resource Surveys and Rural Development of ITC, in close cooperation with the Educational Training Consultants Foundation (ETC). Teaching staff are also drawn from other departments and other Dutch institutes, such as the International Agricultural Center and Wageningen Agricultural University.

Costs

The estimated cost for 1992 is approximately $15,000 (Dfl. 25,000) which includes living expenses and travel to the overseas fieldwork site. Although ITC has no funds of its own, a number of fellowships are available each year under the Netherlands Fellowship Programme. Previous students have also been financed by organization in their country of origin.

Applications for admission should be submitted 6 months prior to the start of the course, and normally payment must be received three to four months before the beginning of the course.

Students

The course is designed for foresters engaged in community forestry programs, for agricultural extension officers interested in developing integrated tree components, and other officers working in a related field in rural development. The level of seniority of participants depends on the level of development of the extension service in their country. The course is also open to trainers and teachers in a relevant field. Applicants must hold a B.Sc. or equivalent in forestry, agriculture, or a relevant discipline. Good stereoscopic and color vision is desired.

The course is offered in English, and there are no language training facilities available at ITC. Therefore, participants must have English language proficiency.

Institution

International Institute of Rural Reconstruction (IIRR)
Silang, Cavite
PHILIPPINES 4118

Contact

Scott Killough
Deputy Director
Appropriate Technology Unit
Tel: (63-969) 9451; Fax: (63-2)522-2494;
Tlx: 27886 IIRR PH

Training Course

IIRR offers a 4-week short course entitled "International Course on Regenerative Agriculture," which will be held in October at the Institutes's campus in Cavite province, Philippines. This course is primarily aimed at enhancing participants' knowledge and skills in the management of agricultural projects and focuses on regenerative agricultural technologies which rely heavily on internal farm resources and the diversification of farm enterprises. Agroforestry is a major subject area in the course curriculum which is organized into the four main content areas listed below.

(1) "Low-External Input Agricultural Technologies" covers the following subjects: genetic resource conservation, aquaculture, agroforestry, livestock production systems, bio-intensive gardening, lowland and upland farming systems, and food lot modules;

(2) "Technology Dissemination/Adaptation" focuses on the use of indigenous technical knowledge in order to emphasize a participatory approach to technology development;

(3) "Project Management for Sustainable Agriculture Development" considers methodologies for planning, implementing and evaluating the integration of low-input technologies for sustainable development into agricultural projects; and

(4) "Individual Study" allows participants to develop a project idea based on knowledge gained during the course.

Other topics covered during the course are: The value of indigenous land-use knowledge; Agricultural and natural resource management; Agro-ecosystem analysis and other rapid appraisal methods; Agroforestry based technologies for improved upland farm management; Low external input production systems for rice-based lowland ecosystems: family food production and nutrition improvement through bio-intensive gardening; alternative pest management; bio-fertilizers and cover cropping; tuber crop production and processing; post-harvest technologies; conservation and wildlife issues; and gender issues in Aquaculture and the environment.

The training course involves IIRR field staff-practitioners as well as farmer-scholars. It also draws on the staff of universities, NGOs, and government organizations. The course incorporates field visits, a village stay, practicum, video/slide discussions and workshops.

Institutional Setting and Facilities

IIRR has undertaken short courses in Regenerative Agriculture (RA) in collaboration with its national affiliates, alumni, and other NGOs in various countries including Mexico, Ghana, Guatemala, India, Kenya, Thailand, Papua New Guinea, Bangladesh, and the Philippines. It has also developed training materials, such as an Agroforestry Technology Information Kit for upland farmers on marginal lands (jointly produced by the Ford Foundation and the Department of Environment and Natural Resources of the Philippines). IIRR works with support, and in collaboration with, agencies such as the Rockefeller Brothers Fund, UNICEF, UNFAO, World Neighbors, the Ford Foundation, CIDA and others.

Costs

The cost of this course is $2,500, including $1,500 for tuition and fees and $1,000 for room and board. An additional allowance of $300 is suggested for incidental or personal expenses. A limited number of fellowships is available.

Students

The course is open to project managers, extension leaders, trainers, and development workers. Women are especially invited to attend the course.

Institution

International Institute of Tropical Agriculture (IITA)
PMB 5320, Oyo Road
Ibadan, Nigeria

or

c/o L.W. Lambourne & Co.
Carolyn Hse. 26 Dingwall Road
Croydon CR9 3EE
United Kingdom

Contacts

Dr. Jim Gulley
Group Training Coordinator

Dr. Kwesi Atta-Krah
Coordinator
Alley Farming Network for Africa (AFNETA)
IITA
Tel: (234-22)400300; Tlx: TDS IBA NG 20311
or TROPIB NG 31417

Program

IITA offers an Associated Agroforestry Research program and other Individual training programs for students (B.Sc., M.Sc., or Ph.D.) registered with a recognized university. Such students may conduct their graduate research programs under the supervision of a scientist at IITA provided that the subject matter is of relevance to IITA's mandate. Under this arrangement the degree is awarded by the university at which the student is enrolled.

Training Course

IITA's Alley Farming Network for Africa (AFNETA), in collaboration with ILCA and ICRAF, offers a 2-week training course in alley farming in the humid and sub-humid regions of Africa. The course focuses on research methodologies for alley farming appropriate to sub-Saharan Africa. It is designed to train national agricultural research system (NARS) scientists in the conduct of on-station and on-farm alley farming research. Particular emphasis is given to on-farm research (OFR) principles and linkages between research and extension. Attention is also given to analytical tools for socio-economic assessments. The principal subjects covered by the course are:

(1) Tropical farming systems and their constraints;

(2) Methods of screening and selecting multipurpose trees;

(3) Interaction of trees and crops in alley farming systems;

(4) Soil management for sustainable agriculture;

(5) Integration of livestock into agroforestry systems;

(6) Socio-economic and cultural factors;

(7) Principles of on-farm experimentation;

(8) Methodologies for experimental and developmental OFR;

(9) Experimental design and statistical tools in OFR; and

(10) Research planning and reports.

Twenty participants are selected from NARS institutions in tropical Africa. Candidates must be actively involved in field research in agronomy, agroforestry, animal science, or socio-economics. Actual or potential involvement in a multi-disciplinary OFR project is advantageous. A minimum of an M.Sc. or the equivalent in agriculture or forestry, as well as at least two years of experience in research, extension or training, are required.

In addition, AFNETA has begun to conduct regional and in-country training courses in collaboration with the staff of other international agricultural research centers and the NARS institutions in Africa. AFNETA offered its first in-country agroforestry training course in cooperation with the Nigeria National Chapter of AFNETA and the University of Ibadan in July 1990. The course considered: tree/crop interactions; soil management principles; management of MPT's; weed control in agroforestry systems; livestock integration in agroforestry; socio-economic and cultural factors; research-extension-farmer linkages; and field experimentation techniques. The core resource persons were Nigerian scientists who had been trained during the "Train the Trainer" workshop held by AFNETA at IITA in March 1990. Participants came from agricultural development projects, research institutions, universities, and private enterprises.

AFNETA and the "Projet de Recherche Agronomique Applique et Vulgarisation in Zaire" organized in February 1991 a training course on principles, practices, and methodologies in agroforestry research at Mvuazi, Zaire. The course was intended for young scientists and development workers with Ingenieur Agronome qualifications or its equivalent in agriculture, forestry, social science or animal science. The course was conducted in French.

Institutional Setting and Facilities

IITA is an international center for research in tropical agriculture, with a particular focus on sub-Saharan Africa, and AFNETA is located within its Resource Management Research Program.

Costs

The course fees for "Alley Farming for Tropical Africa" are $525, including $225 for training, insurance, medical care, and course-related travel, and $300 for room, board and a stipend (1991 figures). The cost of the other training courses varied from $1,200 to $1,500. Please contact IITA for current course offerings and updated costs.

Scholarship possibilities are available only to African scientists working in institutions carrying out AFNETA collaborative trials. Financing sources for previous students have included IFAD, CIDA, UNFAO, USAID, GTZ, DANIDA, IDRC, and others.

Students

Priority is usually given to African scientists and technicians as well as development workers, although other participants may comprise up to ten percent of the class. Particular efforts will be made to attract women into the program. The courses are taught in English and French. There are no language training facilities.

Institution	**International Tree Crops Institute (Head Office)** P.O. Box 283 Caulfield South Victoria 3162, AUSTRALIA
Contact	Geoff Wilson International Board Secretary Tel: (61-3)/571-6209; Fax: 571-8502
Training Course	In the past years ITCI has organized a variety of training courses and seminars related to agroforestry. Previous courses include the following: (1) Temperate Zone Agroforestry (New Zealand), (2) Dry Country Agroforestry (Australia), (3) Tree Seed Farming (Australia), and (4) Farm Sawmilling (Australia). ITCI also conducts scientific exchange visits with the Chinese Academy of Forestry on temperate and arid zone agroforestry in China. Please contact the ITCI office above for information on current course offerings.
Institutional Setting and Facilities	No information available
Costs	No information available
Students	Previous courses have been designed for extension officers in agriculture and forestry, farmers, and lecturers in the fields of agroforestry and farm trees.

Institution

Mag-uugmad Foundation, Inc.
P.O. Box 286 (or 39-2 Palaez Street)
6000 Cebu City
Philippines
Tel: 220-197

Contacts

Mr. Lapulapu L. Cerna
President of the Board

Mr Leonardo A. Moneva
Program Manager

Program

The Mag-uugmad Foundation offers subsidized training for technicians and farmers thrcugh the Upland Resource Management Outreach Program (funded by the Ford Foundation). The program targets people from the Upland Development Program sites, the Department of Environment and Natural Resources, GOs and NGOs.

Training Course

The Mag-uugmad Foundation offers a 5-1/2 day training course which covers the subjects of Soil and Water Conservation, Soil Fertility Management, Crops and Cropping Systems and Farmer-Based Extension. The course, limited to 15 participants, has been taught a total of 48 times to local and foreign students including Peace Corps volunteers.

Institutional Setting and Facilities

The training center for the Mag-uugmad Foundation is located at an elevation of 500 m. above sea level, 25 km. an upland barangay of Cebu City. The center has electricity, sleeping quarters, a small lecture hall and the overall capacity to accommodate 22 persons.

Costs

The course costs about $150.00 per person for 5-1/2 days of training. The IDRC and the U.S. Government have provided funding for some students in previous years.

Students

All participants must have background in upland development and must be physically fit to undergo hands-on training. Knowledge of the english language is required.

Institution

The Mindanao Baptist Rural Life Center
P.O. Box 94
8000 Davao City
Philippines

Contact

Harold Watson
Director

Training Course

Although the center is not a formal education institution it train hundreds of people per year, mostly small farmers and their families. Three courses are offered, two of which focus specifically on agroforestry.

(1) SALT I "Sloping Agricultural Land Technology"

This training course is designed to create an awareness of environmental degradation in the uplands of the tropics. Nearly 3/4 of the course is held in the field, the remaining portion is taught in the classroom. Participants work closely with staff and local farmers in designing and implementing a small project in a village area. Over the 2 to 3 day course, participants learn about alley-cropping and contour hedgerow-based farming systems which can help poor rural farm families.

(2) SALT II "Simple Agro-Livestock Technology"

This course is similar to SALT I, except that it incorporates a livestock component to the systems. Participants get first-hand experience with animal/forage systems.

(3) SALT III "Sustainable Agroforestry Land Technology"

This course focuses on small-farm reforestation projects (1 hectare).

Institutional Setting and Facilities

The training center is located on a 19-hectare farm in the tropical mountains of southern Mindanao, Philippines. The center has live-in facilities but no access to telephone, television etc. Mail and communication are achieved through the office in Davao, about 2 hours from the training center.

Costs

The training cost is approximately $13.00 per day for a period of 2 to 3 days. This includes food and lodging. Although funding is available through ARLDF, these funds are limited and extremely competitive. Most participants attend with financial assistance from Ford Foundation, Winrock, FAO and others.

Students

There are no admission requirements. Trainees come from all parts of the Philippines. In past years, there have been over 300 foreign participants from over 30 countries, mostly Asia/Southeast Asia. Courses are conducted in English and three Filipino dialects.

Institution

Moi University
Faculty of Forest Resources and Wildlife Management
P.O. Box 3900
Eldoret, Kenya

Contact

Mr. Anwar-Ul-Haq
Dean

Program

Moi University offers B.Sc. and M.Phil. degree programs in Forestry. The university is developing a specialization in Agroforestry for the M.Phil degree. The following are the required courses for this specialization:

- FOR 840R Concepts and Practices of Agroforestry. Course reviews definition and classification of agroforestry, land-use systems and environmental factors related to agroforestry, agroforestry management techniques, and characteristics of trees and shrubs.

- FOR 841R Land Evaluation and Classification. Land-use, soil, climate and vegetation identification and classification, prioritization of problems solvable with agroforestry, and policy issues.

- FOR 842R Socio-economic Aspects of Agroforestry. Social and economic concepts, family and gender issues, land and tree tenure, basic micro and macro economic theory pertaining to agroforestry, economic considerations for multi-output/long term enterprises.

- FOR 843R Agroforestry Diagnosis and Design. Selection procedures for choosing diagnostic field sites; prioritization of potential interventions, technology recommendations, research and extension activities; design initiation.

- FOR 844R Agroforestry Research Techniques. Research processes and objectives, experimentation plots, units of measurement, farm trials, analysis of data.

- FOR 845R Multipurpose Trees and Shrubs (MPTS) in Agroforestry. MPT's in current farming systems; characteristics, evaluation and selection, establishment and management of MPT's; interface between MPT's, crops and animals.

There are also several elective courses, some of which include Extension Methodology, Rural Sociology and Community Development, Range, Wildlife and Fisheries Management, and Crop Production and Farming Systems. Students are required to take five elective courses. They are also expected to take part in field work as well as complete a thesis.

Institutional Setting and Facilities

Moi University has two field stations. Marigat is located in an arid and semi-arid setting; the Cenegalo Forest is in a "high potential" area. The university has complete facilities for housing students, as well as recreation, social activities, counselling and health services.

Costs

The total cost for housing, tuition, books and supplies is approximately $2000 per year (1991 figure). The program is designed as a 2-year program.

Students

Because of the high number of qualified Kenyans, very few foreign students are admitted to Moi. However, some people have been accepted from Rwanda, Malawi, and Zambia. These students had the support of their governments.

Institution

Organization for Tropical Studies (OTS) (Organizacion para Estudios Tropicales [OET])
Oficina Centroamericana
Apartado 676
2050 San Pedro de Montes de Oca
Costa Rica
Tel: 506/40-6696; Fax: 506/40-6783

North American Office
P.O. Box DM, Duke Station
Durham, North Carolina 27706
Tel: 919/684-5774; Fax: 919/684-5661

Contacts

Barbara E. Lewis
Academic Coordinator

Martha Rosemeyer
Agroecology Coordinator

Training Course

OTS offers a six-week course in Agroecology (OTS 93-7) in June. Taught in Spanish by Dr M.E. Swisher, the course will develop the capability to study agroecosystems, both from the biological as well as ecological perspectives. The course is an intensive 6-week session which will consist of field visits to a variety of distinct environments, both biophysical and socio-economic. During that time, participants will develop the ability to define the problems found in agroecosystems, as well as propose and research possible solutions.

Another OTS course, held for 8 weeks starting in June, is Tropical Managed Ecosystems (OTS 93-4). This course is conducted in English and will take place mostly in the field. The course focuses on agriculture and forest management, looking at a variety of agricultural systems including two agroforestry systems. The instructors for the course are to be announced.

OTS offers other courses on various topics pertaining to tropical biology, ecology and development.

Institutional Setting and Facilities

OTS is an international research organization dedicated to improve natural resource management in the tropics. It was established in 1963 and has offices in Durham, North Carolina and San Jose, Costa Rica. In Costa Rica, OTS runs three research stations: La Selva, the Wilson Botanical Garden and the Palo Verde Station. The 3,800 acres of rainforest known as La Selva is located in the Atlantic lowlands of northeastern Costa Rica, adjacent to the 110,000 acre Braulio Carrillo National Park. Primarily undisturbed forest, La Selva has been rated as one of the four premier sites for tropical moist forest research. The 390 acre botanical garden is located at mid-elevation in southeastern Costa Rica and is celebrated as one of the most significant collections of

ornamental and economic plants in Central America. The Palo Verde Station is situated within the Refugio Rafael Lucas Rodriguez Caballero, a wildlife reserve of some 23,000 acres located in northwestern Costa Rica.

Costs

The cost for the agroecology course is approximately $3,400 which includes room, board, transportation in Costa Rica and course materials. Students are responsible for transportation to Costa Rica and personal expenses. Some funding is available through OTS for citizens from Latin American or Caribbean countries. However, this funding is limited and very competitive. OTS looks favorably on students that have obtained funding, even partial, through outside sources. OTS can provide a list of previous students' funding sources.

Tuition for Tropical Managed Ecosystems is $3,000 or $1,000 for students from OTS member institutions. Students from Latin American OTS member institutions are eligible for additional fellowships to a maximum of $800. Personal expenses and transportation to Costa Rica are extra.

Students

Students from universities which are OTS members are accepted to both courses, although entrance is highly competitive. A minimum of a bachelor's degree in agronomy, ecology, biology or rural sociology is required for entrance into the Agroecology course. It is designed for as a forum for sharing of ideas and information between professionals, professors and students from these different fields. Students can earn up to six graduate level credits at the University of Costa Rica.

Entrance into the Tropical Managed Ecosystems is limited to students who have completed at least four graduate level classes and are in the early stages of planning their thesis or dissertation. Although the course is taught in English, knowledge of Spanish is recommended. No language training is available at OTS.

Institution

Regional Community Forestry Training Center (RECOFTC)
Kasetsart University
Bangkok 10900, Thailand

Contact

Dr. Somsak Sukwong
Director
Tel: (66-2)/5790108, 5790113 ext.226, 405;
Fax: 5614880; Tlx: 21957 RECOFTC TH

Training Course

The Regional Community Forestry Training Center (RECOFTC) will offer its annual Certificate Course in Community Forestry for the sixth time in 1993. The four-month course, taught from June to October, seeks to introduce participants to the complex interactions involved in managing, promoting and overseeing community forestry programs and projects. Students will have direct contact with villages. They will produce a community forestry action plan for one village community and will also write a paper on the development of community forestry programs in their home countries.

The topics covered in the course are organized into five main modules which are classified as follows.

(1) "Introduction and Environmental Principles" includes: Background and overview of community forestry; Ecology/Ecosystems; Principles of Forestry and Soil and Water Conservation;

(2) "People and Natural Resources" includes: Sociology (human interactions, attitudes, social processes); Economics; Farming Systems; Policy and Legislation; Community Forestry Management Systems (agroforestry, woodlots, forest management, nurseries etc.) Small-scale Forest Products Processing; Credit and Marketing;

(3) "Forestry Extension" includes: Principles; Communication Techniques; Audio-visual Aids; Extension Campaigns; Local Organizations; Incentives, Training and Trainers;

(4) "Planning" includes: Rapid Rural Appraisal, Diagnosis and Design, Monitoring and Evaluation, Project/Program Planning, Project Preparation and Implementation; and

(5) "Special Studies": In this module participants are given the opportunity to explore topics of their own special interest, including use of various software programs in RECOFTC"s own computer center.

Institutional Setting and Facilities

The course is taught at RECOFTC'S Training Center on the Bangkhen Campus of Kasetsart University in Bangkok and at the field camps in the north and northeastern parts of Thailand. Field visits to various ongoing community forestry activities will be arranged in different ecological zones of Thailand.

Costs

The cost of the course is approximately $8,200, which includes a living allowance, in-country transportation, supplies and documents, health insurance, and university fees, but does not include transportation to and from the home country.

Students

The 1992 course had seventeen participants from eleven countries, supported by various donors. Three or four scholarships are available for students from Asian countries. Applicants should hold a degree in a relevant area and have direct responsibility in a community forestry program or be scheduled to join such a program.

Institution

School of Environmental Conservation and Management (SECM)
Department of Forestry
P.O. Box 109
Bogor 16001
Indonesia

Contact

A.C. Smiet, M.Sc.

Program

SECM offers an annual 8-month post-graduate course entitled "Watershed Management" under the sponsorship of the Forestry Training Center of the Central Forestry Education and Training Agency (Ministry of Forestry). The course has been offered every year since 1986.

This course was designed to train personnel of the Ministry of Forestry to function successfully as part of interdisciplinary teams in the field of Watershed Management. Participants from other countries are also admitted. The course is organized into three modules as follows:

(1) Module 1: Considers concepts, methods, techniques and major issues in watershed management, such as: project planning; survey design and management; data requirements and presentation; network planning; mapping; census operations; and aerial photo and satellite image interpretation. This section also provides a brief introduction to the topics: socioeconomic considerations, soil and water conservation, forestry and agricultural land use, and other environmental issues.

(2) Module 2: Considers specific disciplines contributing to watershed management, such as: forest land use planning for watersheds; natural and man-made forests; reforestation and rehabilitation; agroforestry; vegetation and animal ecology; ecological relations between watersheds and surrounding areas; village ecology; social institutions; economic activities in agriculture and animal husbandry; farm management; energy; geological aspects of watersheds; soil science, erosion, and conservation aspects of watersheds; and meteorology, rainfall, and watershed hydrology.

(3) Module 3: In this section students conduct preliminary studies for their final projects (including data collection and photo interpretation). Results are then analyzed and developed into a written report.

A diploma in watershed management is awarded upon successful completion of the course.

Institutional Setting and Facilities

This course is jointly executed by the International Institute for Aerospace Survey and Earth Sciences (ITC) in the Netherlands (leading partner), the State Research Institute for Nature Management (RIN) in

the Netherlands, the College for Forestry and Land and Water Management (BCS) in the Netherlands, and the Central Forestry Education and Training agency of the Ministry of Forestry in Indonesia. The course is directed and largely conducted by a staff of permanent lecturers and instructors. The course is offered at the Bogor Forestry Training Center campus in Bogor.

Costs

No cost information was available for the next training course. Scholarships may be available from the Government of the Netherlands.

Students

Students from countries other than Indonesia, including Thailand, the Philippines, and Malaysia, have attended the course in previous years. The course is conducted in English. Language training is offered during the six to eight weeks prior to the start of the course.

Institution

Silsoe College
Cranfield Institute of Technology
Silsoe
Bedford MK45 4DT
United Kingdom

Contact

Student Recruitment Executive
Tel: (44-0525) 860428; Fax: (44-0525) 861527;
Telex: 826838 SILCAM G

Training Course

Silsoe College offers every June, an annual three-month short course, or "post-experience programme", entitled "Agroforestry Systems". The primary objective of this program is to increase the effectiveness of land use professionals in the diagnosis, analysis and design of mixed cropping systems involving woody perennials. A key theme of the course will be the quantitative assessment of "yield advantage", its ecological basis, and its environmental consequences. The course is aimed at all professionals involved in land use planning and policy with an emphasis on development projects.

The course is organized into the following modules:

(1) "Introduction to Agroforestry" includes: traditional agriculture and forestry practices; the systems approach; agro-ecological zones; socio-economics;

(2) "Animals in Agroforestry" includes: nutrition and health ecology; pasture, fodder, and browse; tree establishment and protection; ecology of range management;

(3) "Trees in Agroforestry" including multipurpose trees; selection criteria; breeding propagation; tree services, such as windbreaks and soil conservation; "woodiness" ecology;

(4) "The Ecological Environment" includes: agroecology; remote sensing and aerial photography; information systems; the "Homocline" approach;

(5) "The Socioeconomic Environment" includes: survey methods; land tenure and social structure; grants and fiscal structures; markets and economics; diagnosis and design methods; basic anthropology.

(6/7) "The Ecology of Resource Use and Interference" includes: plant-environment interactions; plant-plant interactions; interference and partitioning; experimental methods; weeds, pest and disease - an ecological approach;

(8) "Extension Methods" includes: barriers to adoption; participation; institutions; media; political aspect;

(9) "Temperate Case Studies;"

(10) "Tropical Case Studies" includes: humid plantation crops, intercropping, and shade trees; semiarid windbreaks and alley cropping; rain forests; highland tropics; home gardens; modified fallows;

(11) "The Effective Manager" includes: motivation; accounts; computing; "managing with less"; and

(12) "Synthesis and Action Plans"

The course is taught by a team of home-based and visiting lecturers with first hand experience in agroforestry research and implementation in Africa, Asia, Europe, America and the Pacific. Field visits to experimental and demonstration trials and personal research will be key elements of the course.

Institutional Setting and Facilities

Silsoe College is in the Faculty of Agricultural Engineering, Food Production and Rural Land Use of the Cranfield Institute of Technology, which is the largest center of applied research and industrial technology in the British university sector. The College is extensively involved in temperate and tropical "farmer centered" agroforestry research and development, and is a leading center for the study of soils, land use, agricultural engineering, range management, remote sensing and Geographic Information Systems (GIS). It has for many years been addressing the needs of rural communities worldwide, and offers a range of 3-month programmes, such as "Range Management", "Management Development Programmes for the Agricultural Sector", "Agricultural Water Management", and "Agribusiness Management in the Developing World". The College has a well-stocked library, teaching laboratories, workshop area and computer facilities.

Costs

The program costs for the Agroforestry Systems course are (in British pounds) $5,150.00 per participant, including tuition, study visits and materials. Residence costs are $600.00 for the 12-week period. A daily allowance of $15.00 is recommended for living and food expenses, and additional funds will be needed for warm clothing and incidental expenses. A book allowance of $80.00 is also recommended.

Many participants are financed by their governments or private employers, as well as by bilateral and multilateral funding agencies such as the British Council, The European Development Fund of the EEC, the Commonwealth Fund for Technical Cooperation, the World Bank, OPEC agencies, IFAD, UNFAO, UNDP, and the OECD.

Students

Approximately 500 students from over 50 countries are currently enrolled in Silsoe College. Instruction is in English, and the College has a Language Training Centre offering modules designed for the needs of students in particular courses of study.

Institution

University College of North Wales
School of Agriculture and Forest Sciences
Thoday Building
Deiniol Road
Bangor, Gwynedd LL57 2UW
United Kingdom

Contact

Mrs. Ann Louth
Administrative Secretary
Tel: (44-0248)/351151; Fax: (0248) 354997
Tlx: 61100 UCNWSL G

Program

The University College of North Wales offers two twelve-month M.Sc. programs which allow the study of agroforestry. Both programs are offered through the School of Agriculture and Forest Sciences.

(1) The M.Sc. in Environmental Forestry offers four areas of specialization, including: Environmental Forestry; Production Forestry; Agroforestry; and Urban Forestry. Students attend at least five postgraduate "modules" of 15 to 20 hours in accordance with their specialization. It covers environmental, biological, and socioeconomic aspects of tropical agroforestry, as well as research initiatives and techniques.

Coursework is undertaken from October to May, and the dissertation is completed from June to September. Students who leave in June without completing a dissertation receive a Diploma after passing an oral examination.

(2) The M.Sc. in Rural Resource Management seeks to present an integrated review of the scientific and socio-economic bases for the rational management and use of rural resources. It is especially suited for students from tropical, arid-zone and temperate environments seeking graduate level or in-service training relevant to land use management. This program is organized into three components:

Part I — The Environmental System

This component offers a holistic view of the principles involved in the measurement, interpretation and management of rural resources. Scientific topics include biometeorology, forest hydrology and watersheds, soil and land use classes, terrestrial and aquatic ecosystems, and vegetation classification and dynamics. Socioeconomic topics include agricultural and land use policy, forest and farm economics, extension, budgeting and communication skills. Technology-related topics include environmental impact assessments, analytical methods and environmental measurement, remote sensing, computer skills, statistics and data processing, geographic information systems (GIS), and library methods.

Part II — Students may choose from three different options (A, B and C). Option C or "Overseas Rural Development" is discussed in this section.

This option considers the following subject areas in terms of their relevance to arid-zone regions: climate; soils and water; rangeland and pastoralism; dryland farming crops and systems; agroforestry and social forestry; domesticated animals; agricultural and economic development; and use of wild plants and animals. Option C also provides instruction in the following techniques: air surveys and remote sensing; social attitudes assessment; appropriate technology; and project appraisal and preparation. (Option A, "Conservation and Land Management", focuses on temperate environments, and Option B, "Soil Resource Management", has worldwide relevance but does not treat agroforestry directly.)

Part III — Dissertation

At the completion of Parts I and II in June an oral examination is administered. A Diploma may be awarded at this time. Students seeking an M.Sc. proceed to Part III, during which they write a dissertation which must be presented not more than 2 years following registration.

Institutional Setting and Facilities

The School of Agriculture and Forest Sciences integrates the study of agriculture, forestry, soil science and wood science into a single academic structure and aims to address changing land use patterns throughout the world through cooperation and integration among these traditional disciplines. The role of environmental management is receiving increasing emphasis in all courses, particularly through the M.Sc. in Rural Resource Management. The College has a Centre for Arid Zone Studies which draws on staff from all areas of the College and from the Institute of Terrestrial Ecology in Bangor.

Costs

The annual tuition cost is approximately $12,300 (1991-1992 estimate). Financing sources for previous students have included the World Bank, FINNIDA, ODA, and others.

Students

The M.Sc. in Environmental Forestry is suited for students with a non-forestry degree seeking a forestry education, and for individuals with a forestry or agricultural background seeking further specialization. However, a degree in agriculture or forestry, and/or extensive professional experience in tropical forestry, is required for acceptance into the "Advanced Agroforestry" module. The M.Sc. in Rural Resource Management requires an undergraduate degree or equivalent, with preference given to the following disciplines: biology, geography, agriculture, forestry, and environmental sciences. Applicants with degrees in other disciplines will be considered according to their individual merits.

Proficiency in English is essential. English language training courses are offered at the University.

Institution

University for Peace
Apdo 199
1250 Escazu
Costa Rica

Contacts

Dr. Gerardo Budowski
Director, Natural Resources

Dr. Rolain Borel
Course Coordinator
Tel: 506/491324; Fax: 491929 or 534227

Training Course

The University for Peace offers the 3-week course entitled "Trees and Sustainability: Biological, Economic and Social Benefits". The course, which has been adapted from a long annual series of agroforestry courses, allows for a thorough analysis of the role of trees in sustainability. The course explores many alternatives for sustainable land-use based on the success or failure of numerous projects in the different agroecological zones of Costa Rica.

Thirty percent of the course is spent on the field. As part of their work schedule participants analyze case studies and make formal presentations of their work. The next course will be offered from May to June (1993).

Another course of related subject is: "Buffer Zone Management for Protected Areas". This workshop explores alternatives for improving and stabilizing land use and socioeconomic welfare in areas adjacent to National Parks and similar reserves. The 1993 course is scheduled for April to May.

Other short courses offered by UPEACE in the Natural Resource Area are: "Enhancing the Value of Tropical Forests Through Non-Timber Products and Services" (March, 1993); "Conflict Resolution in Natural Resource Management" (September October, 1993).

Institutional Setting and Facilities

Since its creation in 1980, the University for Peace has organized various international agroforestry courses. Its staff includes agroforestry specialists with experience in teaching, research, and development. The campus is 15 km from San Jose and houses a specialized library. Lodging is available in San Jose.

Costs

The cost of each course is $2,300, and includes tuition, materials, food, lodging, per diem, field trips, etc., but does not include the cost of international travel. In the past, participants have been funded by the World Wildlife Fund (WWF), the U.S. Peace Corps, the Swiss Government, USAID, GTZ, Helvetas, and other sources.

Students

The courses are limited to 25 participants, and is conducted in Spanish. Applicants must have sufficient knowledge of Spanish, a degree in agronomy, forestry, agricultural or forest economics, sociology, or a relevant field. The target participants are persons involved in a development projects, university and technical school professors, conservationist, resource planners and specialists in related fields.

Institution

University of Melbourne
School of Agriculture and Forestry
Parkville, Victoria 3052
Australia

Contact

Professor D.J. Connor
Dr. R. Sands
Tel: (61-03)344.6390/5032; Fax: 344.5570/5104; Tlx: UNIMELB AA35185

Program

The School of Agriculture and Forestry offers post-graduate diplomas (1-year) and research degrees (Master's and Ph.D.) in Agriculture and in Forestry which incorporate a specialization in agroforestry. Agroforestry is interpreted rather broadly to include any use of trees in the rural landscape. At the post-graduate level, instruction in agroforestry is oriented primarily to tropical regions.

Masters and Ph.D. research degree programs in agroforestry have been offered since 1985. The post-graduate programs in Agricultural Science and in Forest Science have been specifically designed to meet the needs of international students, and over 130 students from over 20 countries have been enrolled over the past ten years. The recommended subjects for students in these programs specializing in agroforestry are: Agroforestry, Project in Agroforestry, Agricultural Systems, Forestry Systems, Rural Development, Field Studies, and Statistics and Experimental Design. Among the elective subjects also offered are such courses as: Introduction to Development Planning; Tropical Animal Production; Crop and Pasture Production; Soil Science; Crop and Pasture Pathology; Agricultural Economics; and Farm Business Management. During coursework, visits are made to research institutes, and farms and forests within Victoria and in the tropical regions of northern Australia.

The programs are designed to provide advanced training for individuals currently involved in: teaching at universities and colleges; research planning and extension; and development planning and administration. The combination of coursework and field research is especially suited to experienced graduates moving into middle management positions and requiring a broad exposure to agricultural, horticultural and forestry processes. The coursework deliberately encourages an interdisciplinary training in biological, social and economic factors affecting agricultural and forestry systems. The field research enables students to collect information in their chosen area of specialization.

Candidates who complete the first year of coursework at an honors standard are invited to transfer to the Master's programs, or they may accept the Postgraduate Diploma and not proceed. The latter alternative may be attractive to candidates with limited time for postgraduate study. The Master's program usually requires 12 to 15 months to complete, during which students undertake a supervised research project. Research projects may be located in Australia or overseas.

Institutional Setting and Facilities

The School of Agriculture and Forestry is part of a large university of 20,000 students. Opportunities for field research and training are available at the University's own facilities and in cooperation with State Government Research Institutes. The University has animal, plant and soil laboratories at the Parkville campus in Melbourne. Staff in the Plant and Soil Science Section provide training in crop and pasture production, plant pathology and nutrition, soil nutrient relationships, and soil conservation. The Forestry Section has an extensive facility at the Creswick campus which includes laboratories, greenhouses, a controlled environment room, a microcomputer laboratory and remote sensing equipment. There is good access to a range of forest types. The faculty is involved in several large-scale agroforestry experiments in collaboration with the State Government Departments of Conservation and Environment, and Agriculture and Rural Affairs.

Agroforestry is playing an increasingly important role in the management of agricultural land in southern Australia, both for increased productivity and for the control of erosion and salinization. The intention of the School is to provide agroforestry specialists for Australia and for tropical countries. While most emphasis at the undergraduate level is on temperate Australia, the emphasis of the post-graduate level is oriented to the tropics.

Costs

Tuition costs per academic year are approximately $15,000, and living costs are about $10,000 per year. Foreign students may obtain scholarships from various inter-governmental aid programs as well as the Australian Government Equity and Merit Scheme. The principal financial sponsorship for international students is from Australian foreign aid under the auspices of AIDAB, as well as UNFAO and the World Bank.

Students

In the past there has been around 50 foreign students enrolled in post-graduate diploma and masters programs per year, a considerable amount of which study agroforestry as a coursework subject or a research project.

English language instruction is available at the University Language Centre and is a common part of the graduate diploma program.

Institution

University of Oxford
Oxford Forestry Institute
Department of Plant Sciences
South Parks Road
Oxford OX1 3RB
United Kingdom

Contact

Course Coordinator
Tel: (44-0865)275000; Fax: 275074; Telex: 83147 VIA OR G

Training Course

The Oxford Forestry Institute offers a thirteen-week annual course entitled "Rural Development Forestry". The course is held every year for 13 weeks between June and September. The course is designed to build professional competence in Rural Development Forestry, of which social forestry and agroforestry are two major components. Compulsory topics include:

(1) Agroforestry: a review of agroforestry systems and an examination of the scope and potential of agroforestry for improving land use, especially in the tropics;

(2) Rural Sociology and Economics: an analysis of the sociology and anthropology of rural populations in the context of communal ownership and resource allocation, and their impacts on the development of social forestry;

(3) Extension methodology;

(4) Sustainable Development;

(5) Cost Benefit Analysis; and

(6) Discounted Cash Flow Methodology.

Participants are also encouraged to study a range of topics which may be peripheral to their main interests but important to modern forestry, such as strategic planning, forest policy, remote sensing, environmental impact assessment, or other issues.

Institutional Setting and Facilities

The Oxford Forestry Institute has been a center for tropical and temperate forestry research and education for over 60 years. Its activities encompass undergraduate and graduate teaching, national and international research, and consultancy work. It offers other short courses in Forestry

Planning and Management, Forest Research Methods, and Forestry Microcomputer Applications.

Costs

The costs for the course in 1992 approximated a total amount of $14,230 including tuition, excursions/tours, accommodations, living allowance and other miscellaneous expenses. The costs for the 1993

course will only have slight adjustments. Scholarships are only available in exceptional circumstances. Common financing sources are the World Bank, the British Council, GTZ, UNFAO, CIDA, and ODA.

Students

During the previous two years, this course has had an enrollment of 15 and 18 international students, respectively. A degree in an agricultural or forest science, with at least three years of experience, is usually required. Candidates must be under 45 years of age. English proficiency is required, and there are no English language training opportunities.

Institution

University of the Philippines, Los Banos
Institute of Forest Conservation
College of Forestry
P.O. Box 434
4031 College, Laguna
The Philippines

Contact

Director
Tel: 63(94)2268 or 2736 or 3340; Telex: (758)4163 PTTLB PU
Fax: 63(94)3206

Training Course

The following courses are being offered this year by the University of the Philippines, Los Banos (UPLB):

(1) Research Techniques in Agroforestry. April 14 - June 8 (8 weeks). Agroforestry schemes; statistical techniques applicable to agroforestry research; data processing and analysis; and technical writing;

(2) Social Research Design and Evaluation Studies in Forestry. June 16 - August 10 (8 weeks). Preparation of social research and evaluation studies on integrating forestry with rural development; major steps in undertaking social research work from formulating a research problem tc analysis and preparation of research report proposal;

(3) Agroforestry. June 16 - August 10 (8 weeks). Principles, approaches/policies, methods, techniques in agroforestry and the design, implementation, monitoring and evaluation of agroforestry projects;

(4) Social Forestry Officers Development Course. August 11 - September 21 (6 weeks). Concepts and essentials of social forestry technologies and livelihood projects related to social forestry; and development of management capabilities of development agents in integrating forestry with socio-economic development schemes of rural communities;

(5) Forestry Extension Officers Development Course. September 22 - November 2 (6 weeks). Analysis of economic and social issues in forestry; application of the extension approaches and strategies to forestry projects; mobilization and organization works; comparative extension programs and monitoring and evaluation extension efforts;

(6) Forestry Project Planning and Management. November 2 - December 14 (6 weeks). Concepts, project identification and formulation, project preparation and analysis; project organization and management; project implementation, evaluation, monitoring and donor-sourcing and coordination; and

(7) Forestry for Community Development. November 3 - December 14 (6 weeks). Basic principles, strategies, concepts, practices, and lessons in community-based forest development; supportive technologies for community development; preparation of community-based forest development program.

In addition, UPLB offers short courses in natural resource management and conservation, nursery management, pest management, reforestation and plantation planning and management, seed and seedling production, and wood processing.

Institutional Setting and Facilities

The Institute of Forest Conservation (IFC) is the extension and training unit of UPLB. In addition to its regular short course offerings, IFC also designs and conducts special courses and study tours in many areas upon request. For example, the IFC may arrange to offer the "Forestry for Community Development" course upon request if at least four participants can be scheduled.

The 4,000 hectare Makiling Forest provides the venue for forestry field training. The projects of various forestry agencies are also visited during course field trips. Each course draws on resource persons from the University, government agencies, and private organizations according to their expertise.

Costs

The current costs for courses was not available. However, based on 1991 estimates the cost per course will probably be around $3,000.00. Please contact the Institute of Forest Conservation for further information.

Students

UPLB courses are open to all levels of management personnel engaged in forestry or a related field, including administrators, teachers, trainers, researchers, rangers, law enforcers, and others. The agroforestry course is specifically directed at foresters, agriculturalists, and forest managers directly involved in the planning and implementation of agroforestry projects.

All courses are conducted in English.

Institution

University of Queensland
Department of Agriculture
Queensland, Australia 4072

Contact

Dr. Ross C. Gutteridge
Overseas Projects Office
Tel: (61-07)3652062; Fax: 3651188; Tlx: UNIVQLD AA40315

Training Course

The University of Queensland offers a seven-week course entitled "Fodder Tree Legumes - Multipurpose Species for Agriculture". The course aims to inform participants about the range of fodder tree legume species available to agriculture. It reviews the environmental adaptations, agronomy and management of MPTs, and examines their role in animal production, agroforestry, soil fertility improvement, and erosion control. The course consists of a series of lectures and field visits to experimental stations and commercial properties in tropical and subtropical regions of Australia.

This course was held for the first time in November/December 1990. It will be offered in November/December 1992, and every 2 years thereafter.

Institutional Setting and Facilities

The Department of Agriculture of the University of Queensland specializes in teaching and research in tropical agriculture. The course described above receives institutional support from the Queensland Department of Primary Industries, the Queensland Forest Service, and the Commonwealth Scientific and Industrial Research Organization (CSIRO).

Costs

The cost of the course is approximately $10,000.00. Previous students have obtained funding from the Australian International Development Assistance Bureau, the World Bank, UNFAO, the Asian Development Bank, and others.

Students

There were 29 foreign students enrolled in the first offering of the course. There is an opportunity for intensive English training at the University of Queensland prior to the commencement of the course. Participants should hold a university degree or equivalent.

Institution

University of Science and Technology
Institute of Renewable Natural Resources (IRNR)
Kumasi, Ghana
Tel: 5350, 5351-9 Tlx:2555 UST GHANA

Contacts

J.G.K. Owosu
Director

S.J. Quashie-Sam
Head, Agroforestry Unit

Program

The Agroforestry Unit of the IRNR offers a two-year M.Sc degree in Agroforestry. In between course work semesters students undertake a total of 22 weeks of practical field experience in the agroecological zones of Ghana. An M.Sc thesis research project is also undertaken.

A 2-year M.Phil Agroforestry degree is also offered. A thesis is required unless students choose to take some of the M.Sc courses instead.

The IRNR also offers a one-year post-graduate diploma course in agroforestry. This is principally targeted at staff of the Ministries of Land and Natural Resources, and Agriculture.

Courses offered through these programs include: Agroforestry Concepts, Systems Technologies and Practices; Land-use Analysis and Classification; Agroforestry Multipurpose Trees; Introduction to Principles of Crop Production; Soil Management and Productivity in Agroforestry; Field Experimentation with Special Reference to Agroforestry Research; Agroforestry Research Methodology, (AF D&D) Agroforestry Diagnosis and Design Methodology; Introduction to Principles of Forestry; Economics of Agroforestry Systems; Advanced Ecology; Extension Methodology; and Special Topics in Agroforestry.

Institutional Setting and Facilities

The University of Science and Technology established IRNR in 1982 to promote the proper management and use of Ghana's renewable resources (forests, savannah, wildlife, fisheries and watersheds).

The IRNR developed courses in agroforestry in response to a request from the Government of Ghana to train the personnel that will implement agroforestry projects.

IRNR has demonstrated considerable experience in agroforestry training programs: It runs short courses in agroforestry, it organizes land-use related field trips to many regions in Ghana, and it has successfully established agroforestry research and demonstration plots at its farm on the U.S.T. campus.

The Agroforestry Unit has working relationships with ICRAF, IITA, AFNETA and more recently the University of Florida, USA.

Costs

Ghanaians do not pay tuition or boarding fees. Foreign students pay $2,200 for tuition and $1,500 for student accommodations per year. Miscellaneous fees for field practicals, and examination fees total approximately $1,500 per year. A living allowance of $2,000 to cater for meals, books, medical insurance etc. is suggested.

Students

The course is open to individuals with a B.S. in a relevant discipline.

Institution

Wageningen Agricultural University
Forestry Department
P.O. Box 342
6700 AH Wageningen
The Netherlands

Contact

Dr. W.B.J. Jonkers
International Education Office
P.O. Box 453
6700 AL Wageningen
The Netherlands
Tel: (31-83) 7082680; Fax: 7082419; Telex: NL 45854

Program

The Wageningen Agricultural University provides for the study of social forestry issues in tropical countries as part of its Master of Science degree program in Tropical Forestry. Students select one of two orientations: "Social Forestry" and "Silviculture and Forest Ecology". These orientations allow specialization in social, economic or silvicultural aspects of agroforestry. The program comprises seventeen months of lectures, practicals and thesis research and is divided into three structural components:

(1) Research methodology themes, involving subjects such as: Computer science; Statistics and Data II; Project preparation and implementation; Literature retrieval and report writing, and others;

(2) Subject matter courses, comprising an individual selection of subjects in addition to a few mandatory courses. Courses offered include "Agroforestry ecosystems", "Forestry and rural development"," Farming systems analysis", "Appropriate technology in agroforestry" and others; and

(3) Thesis research, including a minimum of two months of field or laboratory work, usually in a tropical country.

The first M.Sc. course in Tropical Forestry began in December 1986 with seven participants from four countries. The number of participants has increased each year.

Institutional Setting and Facilities

The Wageningen Agricultural University is a single faculty institution with 700 teaching staff, including more than 100 full professors, many with extensive international experience on bilateral and multilateral projects, consultancies, and faculty building in developing countries. The University's teaching and research areas include forestry, plant and animal sciences, rural sociology, economics, nutrition and food sciences, and environmental sciences. In addition to the M.Sc. in Tropical Forestry, the University also offers M.Sc. courses in "Animal Production and Aquaculture", "Crop Science", "Management of Agricultural

Knowledge Systems," "Agricultural Economics and Marketing," "Agricultural Engineering," "Soil and Water" Ecological Agriculture," "Geographic Information Systems for Rural Application," and "Biotechnology."

There are modern research and education facilities available at the University, as well as a number of research projects in developing countries for thesis research. The city of Wageningen, which hosts many independent agricultural research institutes, is one of the largest centers of agricultural education and research in Europe. Wageningen Agricultural University is one of the founding members of NATURA, the European network of Agricultural Universities.

Costs

The cost of study at the University is approximately $14,000 per year.

Students

Previous students have been funded by Dutch, Finnish, and Norwegian development agencies, United Nations agencies, and governments of tropical countries. The University requires a B.S. in forestry or a related discipline as well as proficiency in English. Applicants have to pass an entrance exam in forestry and statistics before they are admitted. English language training courses and language laboratory facilities are available.

PART III

APPENDIX

QUESTIONNAIRE

QUESTIONNAIRE FOR INSTITUTIONS OFFERING EDUCATIONAL OPPORTUNITIES IN AGROFORESTRY

(Please attach sheet with the following information)

1. **Name of Institution.**

2. **Mailing address (include telephone, fax and telex numbers).**

3. **Name and title of contact person.**

4. **Brief description of the institution:** (Include when it was established and what are the main functions of the organization. If University, then mention what distinguishes the university or the particular department.)

5. **Answer questions A-C if the institution provides degree or diploma programs:**

   a. Name and type of degree/diploma program
   (Example: 2-year M.Sc. in Social Forestry or Ph.D. in Soil Science)

   b. Does it offer a Specialization or Concentration in agroforestry?

   c. What are the admission requirements for foreign students?

6. **Name all agroforestry courses offered:** (Mention courses that incorporate the topic of agroforestry as a significant component. If university, include course number and credit hours.)

7. **Brief description of course(s) or program content:** (Mention main topics covered in the course, duration of the course, special projects and field work involved.)

8. **Answer questions A-C if the institution provides a training cource or seminar:**

   a. What academic requirement or career backgrounds must participants have to attend the course?

   b. Does the institution provide certificate(s) upon completion?

   c. Maximum number of students per session.

9. **How long has the training course or program been offered?** (Give number of years.)

10. **How often is the course offered?** (Every year, alternate years, or as requested.)

11. **When is the course usually offered?** (Give approximate date or month(s).)

12. **In what language is the course taught?**

13. **If English is the main language, does the institution have English language training opportunities?** (What kind: language Center, Intensive course(s) or other.)

14. **What is the average number of foreign students enrolled each year in the training course or program.**

15. **Setting of institution:** (Include location of the institution or where the training course takes place. Mention the possible advantages of this location ie. nearby library facilities or field work sites.)

16. **Institution facilities:** (Include relevant facilities such as laboratories, libraries, living quarters and others.)

17. **Cost in US dollars for the course or prog ram:** (If degree program, please indicate cost/year for foreign participants. Include tuition and living expenses.)

18. **Possible financial sources:** (Include scholarship possibilities, if relevant.)

19. **Provide any other important information:**