Plenary Session VIII.

Thematic Papers: Property Rights, Markets & Institutions



Tala-andig villagers transporting rattan back to the village in Mindanao, the Philippines. At what point do remunerative marketing opportunities and dwindling natural supplies encourage farmers to undertake enrichment planting of economic species into fallow land?

Plenary Session VII. Thematic Papers: Property Rights, Markets & Institutions

Oral Presentations:

Productivity Management of Swidden Fallows: The Interplay of market Forces and Institutional Factors in Isabela, Philippines

By Paulo n. Pasicolan*

A large potion of grasslands in the Philippines is classified as abandoned swidden under long fallow. Generally, they are marginal lands and with low productivity per unit area. Being oftentimes invaded by *Imperata cylindrical*, the light loving nature of this grass coupled with frequent burning. Perpetuates the species dominance over other plants. Thus, reforestation and agroforestry, are regarded as the most ideal conversion processes to effectively eradicate this weed species. However, reforesting the grasslands through Contract Reforestation Program has been costly, with a dismal performance in the initial phase.

This paper highlights the spontaneous introduction of tree crop in swidden fallows in the two municipalities of Isabela, Northeastern Philippines. It identifies the various institutional factors of successful tree growing at the farm level

Field visitation and random informal interviews with small tree growers where carried out. Their motivations and considerations for tree growing were confronted.

Factors that led to the successful tree growing: 1) presence of ready wood market, 2) availability of credit assistance, 3) provision of more planting area with tenurial security, 4) mutual partnership between the private and government sectors, and 5) effective extension program.

Isabela's idle grassland transformation to tree-based system could prototype a larger scale conversion towards a more stable land use. It was largely spontaneous and market-driven. By meeting farmers basic tree growing needs, e.g., sure wood market, provision of starting capital, more planting area, etc. A transition from swidden fallow to tree-based system can be achieved, without necessarily depending heavily on direct government financial support.

Keywords: fallow management, tree-based cropping, spontaneous conversion, market-driven, institutional incentives.

^{*} College of Forestry & Environmental Management, Isabela State University, ISU Cabagan, Garita Slopes, Cabagan, Isabela 1303, Philippines. Tel: c/o 63-49-5363992; Fax: c/o 63-49-5361115; E-mail: c/o icraflhi@irri.cgnet.com

The Role of Land Tenure on Development of Cinnamon Agroforestry in Kerinci, Sumatra

By Suyanto, Thomas Tomich, and Keijiro Otsuka

When population density is low and land is abundant, traditional shifting cultivation (with a long fallow period) is sustainable. However, when population pressure increases and land become scarce, the fallow period may become too short for sustainable food crop production. The adoption of agroforestry systems can be an alternative to unsustainable shifting cultivation. Important tree crops such as rubber (Hevea braziliensis) and cinnamon (Cassiavera) have been introduced into shifting cultivation systems in Sumatra. This paper analysis the effect of land tenure on development cinnamon agroforestry that is as example of improved tree fallow.

Land tenure has important role in establishing sustainable land use practice. Traditionally indigenous societies have followed a matrilineal inheritance system with joint ownership that limits individuals right to land and others asset. There seem to have been, however, significant change toward more individualized in responds to populations pressure and commercialization of tree crops. With more secure individual land right, it will stimulate farmers to adopt more efficient and more sustainable land use, including the development of agroforestry.

With secure land and tree tenure, high profitability of cinnamon production, and diminished access to forest land, farmer will tend to convert bush-fallow area into cinnamon agroforestry rather than into shifting cultivation to produce annual food crops. This evidence will bring environmental benefits, comparing with if the major source of tree plots is primary forest.

Post Graduate Fellow, International Centre for Research in Agroforestry, S.E. Asian Regional Research Programme, P.O. Box 161, Bogor 16001, Indonesia. Tel: 62-251-315234; Fax: 62-251-315567; E-mail: icraf-indonesia@cgnet.com

Senior Natural Resource Economist, International Centre for Research in Agroforestry, S.E. Asian Regional Research Programme, P.O. Box 161, Bogor 16001, Indonesia. Tel: 62-251-315234; Fax: 62-251-315567; E-mail: icraf-indonesia@cgnet.com Professor & Research Fellow, Faculty of Economics, Tokyo Metropolitan Univ., 1-1 Minami-Ohsawa, Hachiohii, Tokyo 192-03, Japan. Tel: 81-426-772324; Fax: 81-426-772304. Email: otsuka-keijiro@c.metro-u.ac.jp

The Development of Central Sumatran Traditional Fallow Systems in a Changing Environment

By Silvia Wemer*

Since the beginning of the 20th century, the traditional fallow system of central Sumatra has undergone successive changes. Triggered by external developments, local farmers integrated economic tree crops, especially rubber, into their upland fields. This economic enrichment of the fallow, however, did not change the shifting cultivation system itself. It represented an ideal complementary to upland rice production, using excess labour force during periods where labour demands in the rice fields were low.

During the last decades, however, the proportion between rice production and cash revenue generation within the land use system changed. Initially, cash revenue from economic tree crops was only used to provide cash income for taxes, school fees and consumer goods which could not be produced by the farmers themselves, whereas food, especially rice, subsistence was always the priority of agricultural production. Nowadays, farmers increasingly focus their attention on economic tree crops and cash generation. The major motive for the establishment of an upland field more and more shifts from rice production for subsistence to the establishment of a tree crop garden, where rice merely is an intercrop during the pre-harvest period.

Depending on the environmental conditions as well as on the availability of land, information, infrastructure and inputs, different villages now move in different directions, changing the picture of a formerly more uniform shifting cultivation landscape.

In remote areas with limited infrastructure but abundant land resources exhibiting a rolling hill relief with no potential for irrigated rice production, rice is still cultivated on upland fields. A full food subsistence, however, is not aimed at anymore. When the home-grown stock has been consumed, rice is bought with the cash revenue generated through the sale of economic tree crop products.

Where geomorphology is favorable, upland rice production is replaced by irrigated rice production, whereas the shifting cycle is reduced to initial slashing and burning for the establishment of an economic tree crop garden. Vegetables still are grown in the preharvest period, but no rice.

In areas with limited potential for irrigated rice production, but good infrastructure, farmers very much focus now on the cultivation of economic tree crops, especially cinnamon, which promises good revenues, is not prone to pests and needs little care. Rice and vegetables are interplanted during the first years, but the main consideration for the opening of an upland field is not rice production anymore, but the establishment of an economic tree crop garden.

The decline of shifting cultivation for the means of rice production causes a decline of traditional fallow systems consisting mainly of secondary vegetation. Ecologically and economically tree crop gardens now more and more replace the function of traditional fallows as a local source for building and handicraft materials, fuelwood, fruits and medicinal plants, for the recovery of the soil fertility and for soil protection as well as for biodiversity conservation.

Keywords: shifting cultivation, tree crop gardens, Sumatra, economic fallow, rubber, cassiavera

Geographer and PhD candidate at the Technical University of Berlin, Faculty of Environment and Society, FR 2-7, c/o Prof. Dr. J. Küchler, Franklinstr. 28/29, 10587 Berlin

Poster Presentations:

The Role of Policy and Market Institutions in Determining the Feasibility of Rattan Cultivation Within Shifting Cultivation Systems

By Brian Belcher

Rattans are among the most economically important non-timber products from tropical forests in Asia. The bulk of rattan production still comes from unmanaged wild resources. However, a number of rattan cultivation models have been developed, including some traditional approaches that incorporate rattan within the fallow in shifting agricultural systems. This approach seems to offer many advantages in terms of increased income, reduced risk, and income generation from the fallow, making longer fallow periods economically feasible. In practice though, rattan enrichment in fallow is not really very widespread, and traditional rattan gardens in Indonesia are being abandoned in some places. This is due partly to technical limitations, but more to Marketing systems typical of non-timber forest products, and economic limitations. policy and other institutional mechanisms, tend to depress farm gate prices for rattan, making rattan cultivation relatively unattractive, even in the face of increasing industrial demand for rattan raw material. This paper examines the economic benefits and constraints to rattan cultivation in fallow and suggests options to increase the attractiveness of the strategy.

Keywords: rattan, shifting cultivation, institutions, market, policy, cost-benefit analysis, Indonesia

^{*}Principal Economist, International Network for Bamboo and Rattan, 17 Jor Bagh, New Delhi, India 110 003

The Pivotal Role of Indigenous Regulatory Institutions in Support of Sustainable Swidden Farming Systems in LAO P.D.R.

By Phouang Parisak Pravongviengkham

Swidden farming system or slash-and-burn agriculture, with upland rice and maize as the major crops, is the predominant land use system in the upland areas of Lao PDR. Previous papers dealing with slash-and-burn agriculture have used ethnic identity for policy formulation and in the planning and execution of development activities. Present terminology still classify the population in Lao PDR into "dwellers of the lowlands, midland mountain slopes and highlands or mountain summits" strongly reinforces bias associating a particular swidden system with a particular ethnic cultural group.

Initial observation on upland land use practices from a recent in-depth agroecosystem, village and household survey in parts of Luang Prabang, Xieng Khouang and Houphanh have revealed that swidden farm typology should rather include landscape-ecological endowments (including slope classes & soil types/vegetation); size of holding-population pressure; livestock systems & importance; access to markets & inputs/access to alternatives sources of income & also very important (in the Lao context) the local institution indigenous regulatory role – traditional social norms and local decision-making process (affecting the use of the resources). In the Lao swidden systems, especially in the last 20-30 years, local institution indigenous regulatory systems (at village community-level) has a pivotal in ensuring the sustainability of the different swidden systems, irrespective of ethnic identify.

Recent "grassroot survey work" has shown that the practice of shifting cultivation was not just a form of successional management of fallow plots driven by the upland farmer ethnic affiliation or <u>individualistic</u> farming skill/knowledge/management and decision making ability. With accumulated local knowledge on resources availability & capability (better understanding of dynamics of existing eco-systems & perceived understanding of land capability & fertility) and increasing external influence (roods/education/market/information-technology/credit system, etc.); the need to use more efficiently available resources, for achieving the maintenance of normal livelihood and gradual betterment of the community socio-economical status, have became a priority occupation at village committee and elder's group. This form of community-based management of communal resource was devised by the village authority & elders groups with the participation of all households. There was no inference nor influence from the district or other external forces. This shows a strong sense of solidarity and autonomy.

The local regulatory system has been a driving force in influencing and directing the gradual move of the traditional swidden system, from the stage of a simple fallow plot successional system to a <u>more complex</u> "<u>block/plot</u>" fallow rotational systems. The main feature of this "block/plot" system is that the village authority is given the sole right (by the community) to select and allocate (on a yearly basis) to each grouping of households a block fallow site and, within the block, to each individual farmer the plot site to swidden. The formation of groupings of households to work together is <u>obligatory</u> but can be flexible, the allocation of blocks and plots can also be flexible or inflexible.

103

^{*} Deputy Director DLF, Dept of Livestock & Fisheries, Ministry of Agriculture and Forestry, Vientiane, Lao PDR. Tel: c/o 856-21-215-013; Fax: c/o 85-621-217-250

The reason behind this relatively strict to strict block/plot fallow land allocation system & procedure is to achieve fair & equitable distribution of fallow land among all village members /households. A block fallow site is composed of a number of fallow plots. A farmer crop, in most cases, on one fallow plot. The indigenous regulatory system was important to ensure that all village households have equal opportunities in resource use, which consequently provided an incentive for the farmer to manage better land resources provided to him/her. The regulatory systems have played also a catalytic role in motivating & supporting collective enterprises that benefit also to individual household, e.g., creation of a village rice bank, collective social fund, credit system (to support intensification of agricultural production).

The efficient 'manipulation' and management of the fallow blocks & plots and the retainment of strong inter-household, intra-village and even inter-village solidarity and equitable use of land and other eco-resources has been one major determinant in allowing a more productive and stable land use practice and, therefore, ensuring the sustainability of a number of Lao swidden systems and consequently, the normal functioning & maintenance of upland farmers' livelihood. The consciousness & awareness in supporting sustainable swidden-based agro-ecosystems is reflected in the unanimity in the practice of village-level regulatory social norms.

Efficient manipulation of fallow succession by the whole village community can help in retaining a good fallow vegetation cover & allows also a more productive used of scarce labour (e.g., less labour need for slashing and weeding). It allows also intensification of other important economic activities within the village agroecosystems; such as the full exploitation or biological improvement of fallow lands for more intensified cattle production, which is considered by the local farmers themselves a viable alternative to reducing gradually and eventually substituting the practice of a still predominant rice-based swidden farming system.

It is therefore important and indispensable to achieve a sound understanding of the dynamics of the Lao swidden systems, their evolutional pathways and the role of the local institution, community and the individual farmer within different communities; to be able to classify and describe the functioning of the different systems and sub-systems, their sustainability and unsustainability so that appropriate development strategies and action programs can be developed to strengthen the sustainable systems & to improve (if possible) the unsustainable systems.

Due to the fact that my research work covers a wide range of issues and topics, the paper that I wish to present would focus on describing in brief the different Lao swidden systems, their evolution from traditional swidden management system, that is from the stage of a simple fallow plot successional system to a more complex "block/plot" fallow rotational systems; strengths & weaknesses of these systems. Then I would focus indepth on what I called "the regulatory fixed block/fixed plot rotational system" where intensification of livestock in the 'communal fallow land' has become an integral part of this type of swidden system (there are other sub-components also of economic importance but my focus will be only on fallow succession manipulation & intensification of livestock). This type of swidden system is original (livestock production-wise) since (1) it allows fencing of the whole village herd in one specific location and enabling soil fertility management (here upland rice is not fenced), (2) it facilitates management of the herd and (3) it shows clearly entry points for introducing technical innovations, e.g., planning longer term improvement of fallow lands; establish forages & legumes in the fallows,

Introduce permanent animal care services. In this system livestock production can be intensified relatively easy (technically and socially and environmentally feasible), since the community is already well organized, by indigenous social norms.

Effect of Land Allocation to Farmers on Shifting Cultivation in Vietnam: A Case Study of Sinh Pinh Commune, tua Chun Dictrict, Lai Chau Province

By Dinh Van Quang*

The landuse rights parallel with others regulating the transfer of land to other people and even offspring and its use as collaterals for money lending as provided by laws in 1993 have caused farmers of this country to change their approach to landuse, encouraged them to practice sustainable farming and better protection of land resources which have been allocated to them. As a result, the use and management of public lands in the Upland of Vietnam have experienced good success.

The H'Mong household economy TOT project carried out at Sinh Pinh commune. Tua Chua district, Lai Chau province, using the integrated farming models of Forest Tree Cropping +Swiddenning + Gardening on sloping lands appears to be promising. The H'mong forest people formerly using their traditional method of forest clearing for food production have begun to plant forest tree crops, to establish alley cropping and practice soil conservation management. Intensive-labor farming to increase land productivity begins to be adopted on lands recently received.

Rotational swiddening is a traditional system among forest peoples. Under the prevailing conditions, changes of that system do not seem to be easy, in particular under the conditions of higher pressure from an increasing population. The use of legumes to cover the land under farming, to practice better soil conservation management, to increase soil productivity and shorten the restoration process should receive the highest priority in research on landuse in particular in the mountain area of this country.

105

^{*} Researcher in Forestry Economy, RCFEE, Under Forest, Sci. Ins. of Vietnam, Chem Tu Liem, Hanoi, Vietnam. Tel: 84-4-8347434; Fax: 84-4-8345722; Email: hxty@netnam.org.vn

Building on Traditional Practices to Improve the Productivity of Natural Resource Management: A Community-Based Approach

By Tawatchai Ratanasom

The evolution of resource management and the development of community institutions and regulations amongst pioneer and rotational swiddeners in the highlands of northern Thailand will be presented. Recent changes have had considerable implications for fallow management.

The Thai-German Highland Development Programme (TG-HDP) has been supporting governments efforts to improve the quality of life of the highland population, reduce drug abuse problems and maintain a better ecological balance since 1982. The traditional practices of the ethnic groups with which TG-HDP has been co-operating can be broadly divided into Pioneer Swiddeners (Hmong, Lahu, Lisu) and Rotational Swiddeners (Karen). In the case of the Pioneer Swiddeners, fallow management was hardly considered as new forest land was progressively opened up for cultivation and villages sites periodically relocated. Settlements consisted of a number of clans who retained considerable decision making authority within each clan, resulting in weak community regulation of local issues, including resource management.

In the case of the Rotational Swiddeners, fallow regeneration was, and remains, central to the swidden system and traditional practices (single year of cropping, no soil preparation, retention of large trees, etc.) ensure that this occurs. Swiddening is associated with wet rice cultivation, village sites are permanent, community institutions are well developed and clear regulations for resource management exist.

Over the last 15 years or so, recent developments have exerted external pressures on these traditional systems. Both groups, but in particular the pioneer swiddeners, have had to adjust to permanent settlement within a fixed land area, the promotion of community leadership, a ban on forest destruction and increased population pressure on a limit land resource. An approach to develop community institutions and subsequently inter-community networks has been found to be an essential element of adjusting practices to new realities. Natural resource management systems have required adjustment, agricultural systems and practices have been modified and a number of innovative approaches developed by different community groups which impact on fallow management. These include, semi-permanent/alley cropping, the planting of legume cover crops, the inclusion of trees and the integration of livestock raising.

Keywords: pioneer, rotational swiddening, fallow management, swidden intensification, indigenous practices, permanent agriculture

Thai-German Highland, Development Programme Area Manager, Mae Hong Son City Hall, P.O. Box 63, Maehong Son-58000, Thailand. Tel: 66-53-611179-80; Fax: 66-53-611181

Synthesis Reports.

Farmer-Developed Fallow Management Innovations in Southeast Asia: The Opportunity for Strategic Regional Partnerships

By James Hafner, Ellen McCallie, and Lucy Fisher

This paper presents review of the range of fallow management systems developed by farmers in Southeast Asia based primarily on papers to be presented at the "Indigenous Strategies for the Intensification of Shifting Cultivation in Southeast Asia Workshop (23-27 June, Bogor, Indonesia). Based on the synthesis developed by participants in a related graduate seminar at Cornell University, an analytical framework for regional research is proposed which includes three components: key analytical concepts and assumptions; a template of criteria for fallow systems characterization; and considerations for research process design based on partnerships among peoples' organizations, development NGOs, research and government agencies.

Our analysis of fallows research highlights the need to put in context both the object of study (i.e., the process of fallows intensification) and the approach to study (i.e., research strategy and methods). Conference papers which form the basic data set for this paper covered a wide range of plant species, management strategies and local development contexts. However, they can be grouped broadly into three basic types: descriptive case studies of fallow management systems; applications of evaluative tools to proposed or extant fallow systems; and multiple site analyses of trends, principles and hypothesis.

The analytical framework proposed here places emphasis on understanding the observed fallow management systems as transitional systems within a dynamic setting. Thus, a minimum data set for describing farmer-developed fallow management regimes within a local, hierarchical systems context is proposed. This identifies a range of factors to which farmers are responding in developing their livelihood strategies and the fallow component of their farm systems. Conceptually, stock factors (primarily biophysical) are seen as interacting with selection factors (primarily socio-economic, such as farm household goals, opportunities and constraints) to produce the fallow management system observed. On the basis of this characterization, an attempt is made to generalize about "contexts" of fallows intensification and assess the potential for transferability of farmer innovations. The key themes and trends which emerged from case studies are noted and several regional hypotheses are proposed to guide a regionally coordinated research.

Dep't of Natural Resources, 308 Fernow Hall, Cornell University, Ithaca NY 14853, USA. Tel: (1-607) 255-3191 (O); Fax: 607-255-2644; Email: jah36@cornell.edu

Dep't of Soil, Crop and Atmospheric Sci., 622 Bradfield Hall, Cornell University, Ithaca, NY 14853, USA. Fax: 607-255-2644, Email: em39@cornell.edu

Management of Organic Inputs in Soils of the Tropics (MOIST) Group, CIIFAD, 620 Bradfield, Cornell University, Ithaca, NY 14853, USA. Tel: 607-255-2920 (O); Fax: 607-255-2644; Email: Ihf2@cornell.edu

From the characterization step, it appears that a regional research effort could follow evaluating and validating technological innovations along a standard process of: economic and ecological criteria, identifying promising technologies, delineating "representative sites," and refining "extrapolation domains" for fallow systems to be applied regionally. Concerns are raised about such a research process and the assumptions on which it is based. Based on the track-record of technologically-driven research in socially and economically marginalized areas, and the transitional nature of fallow management forms, critically examination of assumptions behind the array of possible research approaches should be integral to the research agenda. It is argued that research in politically marginal, heterogeneous, and less productive dryland areas should address the question of how agricultural research can most effectively contribute to a process of wider social change. Thus, it is proposed that a research initiative should seriously examine how to incorporate the following elements: place fallows management within a wider systems context; strive to build local institutional capacity through sitespecific research collaboration with farmers and NGOs; seek technological results which are both effective in practice and scientifically valid. Thus, capacity building and participatory technology development is viewed as complementary to on-station and onfarm experimental research, and comparative, site-based research. Regional research which is self-reflective, values innovative methodological approaches and integrates local people provides the best hope for both avoiding the shortcomings of past research and policies targeted at swidden farmers -- and directly advancing the strategic needs of this marginalized group.

List of Participants

Australia

Harold Brookfield

Professor Research School of Pacific & Asian Studies Division of Society and Environment Department of Anthropology Australian National University Canberra ACT 0200

Tel: 61-6-2494348 Fax: 61-6-2494688

Email: hbrook@coombs.anu.edu.au

Lesley Marianne Potter

Associate Professor / Head of Department Department of Geography University of Adelaide 105 Sansom Road West Lakes Shore South Australia 5020

Tel: 61-8-83035647 Fax: 61-8-83033772

Email: lpotter@arts.adelaide.edu.au

Padma Lal

Research Program Coordinator Australian Centre for International Agricultural Research (ACIAR) G.P.O. Box 1571 Canberra, ACT 2601

Tel: 61-6-2170500 Fax: 61-6-2170501

E-mail: plal@aciar.gov.au

Peter Grist

Research Associate Center for Resource & Environmental Studies Australian National University Canberra ACT 0200

Tel: 61-6-2798399 Fax: 61-6-2798395

Email: grisp@cres.anu.edu.au

Richard Michael Bourke

Visiting Fellow Research School of Pacific & Asian Studies Department of Human Geography Australian National University **ACT 0200**

Tel: 61-6-2494345 Fax: 61-6-2494896

Email: rmbourke@coombs.anu.edu.au

Justin Lee

Department of Geography University of Adelaide 105 Sansom Road West Lakes Shore South Australia 5020

Bhutan

Dechen Dorji

Assistant Project Manager First Eastern Zone Agriculture Project & Third Forestry Development Project RNR RC, Khangma Kanglung, Trashigang Tel: 975-4-35112/113; 35131

Fax: 975-4-35115

Dorjee Dukpa

Project Facilitation Officer Project Facilitation Office RNRRC Khangma Kanglung, Trashigang Tel: 975-4-35112/113; 35131

Fax: 975-4-35115

Thonkay Dukpa
Assistant Research Officer
Ministry of Agriculture
RNR-RC Khangma
PO Trashigang
Eastern Bhutan

Tel: 975-4-35122 Fax: 975-4-35115

Pelzang Wangchuck

National Project Manager Land Use Planning Project Land Use Planning Section Policy and Planning Division Ministry of Agriculture Royal Government of Bhutan P.O. Box No. 590 Thimphu

Tel: 975-2-23745; 23746 Fax: 975-2-23748

Canada

Janet L. Durno
Consultant in Agroforestry
14307-49 Avenue
Edmonton, Alberta
Tel: 1-403-435-6914

Email: durno@planet.eon.net

P.R. China

Guo Huijun

Assistant President
Chinese Academy of Sciences
Huguo Road No. 22#
Kunming, 650021
Yunnan

Tel: 86-0871-3331789 Fax: 86 0871 3324834 Email: hjguo@ms.kmb.ac.cn

Long Chun-Lin

Associate Professor and Project Coordinator Kunming Institute of Botany Chinese Academy of Sciences Heilongtan, Kunming 650204 Tel: 86-871-51550660

Fax: 86-871-5150227 Email: longcl@ynpu.edu.cn Tek Bahadur Chhetri
Research Officer
First Eastern Zone Agriculture Project &
Third Forestry Development Project
RNR RC, Khangma
Kanglung, Trashigang
Tel: 975-4-35112/113; 35131

Fax: 975-4-35115

Xu Jianchu

Assistant Professor / Deputy Head Department of Ethnobotany Kunming Institute of Botany Heilongtan, Kunming Yunnan 650204

Tel: 86-871-5212143/5150660, ext. 3213

Fax: 86-871-5150227 E-mail: xujc@ms.kmb.ac.cn

Zhang Lianmin
Assistant Professor
Department of Forestry
Southwest Forestry College
Kunming 650224

Tel: 86-871-5637200, ext 3022

Fax: 86-871-563-7217

Email: c/o gxcao@ns.tenway.co.cn

Chen Ai Guo

Associate Professor & Deputy Director Agroforestry Department Xishuangbanna Tropical Botanical Garden Chinese Academy of Sciences Menglun, Mengla, Yunnan 666303

Tel: 86-691-8715419 Fax: 86-691-8715070

Email: c/o hjguo@ms.kmb.ac.cn

Lin Weifu

Deputy Director Rubber Cultivation Research Institute Chinese Academy of Tropical Agriculture Sciences Baodao Xincun, Danzhou Hainan, 571737

Tel: 86-890-3300571, 3300459

Fax: 86-890-3300315

Email: c/o rcri@public.hk.hq.cn

Denmark

Ole Mertz

Research Fellow Institute of Geography University of Copenhagen Oster Voldgade 10 1350 Copenhagen K Tel: 45-35-322531, 322500

Fax: 45-35-322501 Email: om@geogr.ku.dk

Germany

Dietrich Schmidt-Voat

Assistant Professor South Asia Institute Geography Department Heidelberg University Im Neuenheimer Feld 330 D-69120 Heidelberg

Tel: 49-6221-548961 Fax: 49-6221-545926

Email: cp2@ix.urz.uni-heidelberg.de

India

Rita Sharma

GB Pant Institute of Himalayan Environment & Development Sikkim Unit, P.O. Tadong Gangtok-737 102 Sikkim

Tel: 91-3592-23335 Fax: 91-3592-23335

Email: gbp.sk@scs.lwbbs.com

P.S. Ramakrishnan

School of Environmental Sciences Jawaharlal Nehru University

New Delhi 110067

Tel: 91-11-617-2438, 667-676 ext. 238

Fax: 91-11-616-5886

E-mail: psrama@jnuniv.emet.in

Supong Keitzar

Joint Director (Research) State Agricultural Research Station Post Box No. 23 Mokokchung - 798601 Nagaland

Tel: 91-369-23537

E-mail: mokok@x400.nicgw.nic.in

Amenba Yaden

ACF Forest, NEPED Project Operations Unit c/o Mr. R. Kevichusa

MH-14, Old Minister's Hill P.O. Box 231

Kohima 797 001 Nagaland

Tel: 91-370-21684

E-mail: kohima@x400.nicgw.nic.in

Indonesia

Silvia Werner

Kompleks IKIP

Jl Pendidikan 5 Blok H, No. 111 Duren Sawit, Jakarta 13440

Tel: 62-21-8625076 Fax: 62-21-8625076 E-mail: silviaks@rad.net.id

Dodit Agus Riyono

Sub Balai Rehabilitasi Lahan dan Konservasi Tanah

(Sub BRLKT)

Kantor Wilayah Departemen Kehutanan Propinsi

Kalimantan Timur Jalan M.T. Haryono Samarinda Kalimantan Timur

Tel: 62-541-34950 Fax: c/o 62-541-33437

Email: SFMPNANA@elang.idola.net.id

Ade Cahyat

PLASMA (LSM) Komplek Yeschar Jl. Pertahanan No. 1 Samarinda

Kalimantan Timur Tel: 62-541-35753 Fax: c/o 62-541-33437

Email: SFMPNANA@elang.idola.net.id

A.P.Y. Djogo

Nusa Tenggara Upland Development Consortium

Politeknik Pertanian Universitas Nusa Cendana PO Box 1152, Kupang Nusa Tenggara Timur 85011 Tel: 62-391-22836; 32292

Fax: 62-380-26865

E-mail: djogo@kupang.wasantara.net.id

Muhamad Juhan

Lecturer Politeknik Pertanian Universitas Nusa Cendana P.O. Box 1152, Kupang 85011, NTT

Tel: 62-380-26876 Fax: 62-380-26865

Hideyuki Sasaki

Senior Regional Planner Pacific Consultant International Jl. Sulayar No. 45

Pontianak, Kalimantan Barat

Tel: 62-561-44881 Fax: 62-561-44881 Mahdi Salman

Executive Director

Lembaga Pengembangan Masyarakat Desa

Jl. Asem No. 13

Kota Baru Dompu 84201

Nusa Tenggara Barat

Tel: 62-373-21682 Fax: 62-373-21682

Mustofa Agung Sardjono

Sekretaris Program S-2

Gedung Pasca Sarjana Fakultas Pertanian

Universitas Mulawarman

Jl. Gunung Kelua

Samarinda

Kalimantan Timur

Tel: 62-541-31108

Fax: c/o 62-541-33437

Email: SFMPNANA@elang.idola.net.id

Abdullah Bamualim

Balai Pengkajian Teknologi

P.O. Box 1022 Timor Timur Km. 32 Naibonat

Tel: 62-380-25055 Fax: 62-380-23281

Aholiab Aoetpah

Lecturer

Politeknik Pertanian Universitas Nusa Cendana

P.O. Box 1152, Kupang 85011

Nusa Tenggara Timur Tel: 62-380-26876 Fax: 62-380-26865

Johan Kieft

Agricultural Advisor

Yayasan Timor Membangun

P.O. Box 116

Kefamenanu 85601

Timor, Nusa Tenggara Timur

Tel: 62-388-31364 Fax: 62-388-31111

Fahmuddin Agus

Center for Soil and Agroclimatic Research

Jl. Ir. H. Juanda 98 Bogor 16123

Tel: 62-251-621987

Fax: 62-251-311256 or 621-987 Email: f.agus@bogor.wasantara.net.id **Parikesit**

Institute of Ecology Padjadjaran University

Jl. Sekeloa Selatan 1, Bandung 40132

Tel: 62-22-2504982; 2502176

Fax: 62-22-2504982

E-mail: eco-nan@melsa.net.id

Sri Suharti

Silviculture Division

Forest Nature Conservation Research and

Development Center Jl. Gunung Batu No. 5 Kotak Pos 66 Bogor 16001

Tel: 62-251-325111

Djaban Tinambunan

Director of Forestry Product and Social Economic Research and Development

Jalan Gunung Batu No. 5

Bogor 16004

Tel: 62-251-326-378 Fax: 62-251-313-613

Kurniatun Hairiah

Lecturer

Faculty of Agriculture Brawijaya University Jl. Veteran, Malang

Tel: 62-341-553623/564355

Fax: 62-341-564333

Djuber Pasaribu

Central for Research Institute for Food Crops

Jl. Merdeka No. 147 Bogor 16111 Tel: 62-251-321762

Fax: 62-251-312775

Christian Gonner

SFMP - GTZ

P.O. Box 1087 Samarinda 75001

Kaltim, Indonesia

Tel: 62-541-33434; 33149 Fax: 62-541-33437

E-mail: portalFN@perkin-elmer.com

Eric Penot

Farming Systems

International Centre for Research in Agroforestry

S.E. Asian Regional Research Programme

P.O. Box 161, Bogor 16001

Tel: 62-251-315234 Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Nani Diuangsih

Director

Institute of Ecology Padjadjaran University

Jl. Sekeloa Selatan 1, Bandung 40132

Tel: 62-22-2504982; 2502176

Fax: 62-22-2504982

E-mail: eco-nan@melsa.net.id

A. Ngaloken Gintings

Conservationist

Forest Nature Conservation Research and

Development Center Jl. Gunung Batu No. 5 Kotak Pos 66, Bogor 16001 Tel: 62-251-325111; 323063

Fax: 62-251-315222

Sitanala Arsvad

SEAMEO - BIOTROP

Jl. Raya Tajur Km 6

P.O. Box 116

Bogor 16001

Tel: 0251-323-848

Fax: 0251-326-851

E-mail: biotrop@indo.net.id

Soetjipto Partohardiono

Agronomist

Central for Research Institute for Food Crops

Jl. Merdeka No.147

Bogor 16111

Tel: 62-251-334089; 331718; 312824 (direct)

Fax: 62-251-312755

A.M. Fagi

Director

Central Research Institute for Food Crops

Jl. Merdeka No. 147, Bogor 16111 Tel: 62-251-334089; 331718

Fax: 62-251-312775

E-mail: crifc1@server.indo.net.id

Dennis Garrity

Regional Coordinator

International Centre for Research in Agroforestry

S.E. Asian Regional Research Programme

P.O. Box 161, Bogor 16001 Tel: 62-251-315234

Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Thomas P. Tomich

Senior Natural Resource Economist

International Centre for Research in Agroforestry S.E. Asian Regional Research Programme

P.O. Box 161, Bogor 16001

Tel: 62-251-315234

Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Chip Fay

Forest Policy Analyst

International Centre for Research in Agroforestry

S.E. Asian Regional Research Programme P.O. Box 161, Bogor 16001

Tel: 62-251-315234 Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Suyanto

Post Graduate Fellow

International Centre for Research in Agroforestry

S.E. Asian Regional Research Programme

P.O. Box 161, Bogor 16001

Tel: 62-251-315234 Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Malcolm Cairns

Associate Scientist

International Centre for Research in Agroforestry

S.E. Asian Regional Research Programme

P.O. Box 161, Bogor 16001 Tel: 62-251-315234

Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Kenya

Peter Cooper

Programme Coordinator, Program 4 International Centre for Research in Agroforestry

United Nations Avenue, Gigiri P.O. Box 30677, Nairobi

Tel: 254-2-521-1450 Fax: 254-2-521-001

E-mail: P.Cooper@cgnet.com

Chun K. Lai

Visiting Scientist

International Centre for Research in Agroforestry

S.E. Asian Regional Research Programme

P.O. Box 161, Bogor 16001

Tel: 62-251-315234 Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Paul Burgers

International Centre for Research in Agroforestry

S.E. Asian Regional Research Programme

P.O. Box 161, Bogor 16001

Tel: 62-251-315234

Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Harun Alrasjid

Director

Forest Nature Conservation Research and

Development Center Jl. Gunung Batu No. 5

Kotak Pos 66, Bogor 16001 Tel: 62-251-325111

Fax: 62-251-325111

Lao P.D.R.

Rogier Eijkens

Forestry Programme Officer FAO - Representative P.O. Box 1640

Vientiane

Tel: 856-21-413205 Fax: 856-21-414500

Email: fao-lao@field.fao.org

Soulasith Maniphone

Upland Agronomist

Luang Prabang Agricultural & Forestry Service

P.O. Box 600 Luang Prabang

Tel: 856-71-212310

Fax: 856-71-212310

Email: c/o keithf@pobox.com

Keith S. Fahrney

Lao-IRRI Project Upland Agronomist P.O. Box 600 Luang Prabang

Tel: 856-71-212310 Fax: 856-71-212310 Email: keithf@pobox.com

Sianouvong Savathvong

Chief of Forestry Section
Department of Forestry
Luang Prabang Provincial Forestry Section
P.O. Box 530
Luang Prabang

Tel: 856-71-212016 Fax: 856-71-212915

Houmchisavath Sodarak

Project Director Shifting Cultivation Research Sub-Programme P.O. Box 487 Luang Prabang

Tel: 856-71-212099 Fax: 856-71-212467 **Onechanh Boonnaphol**

Chief, Luang Prabang Agricultural and Forestry Service

P.O. Box 600 Luang Prabang Tel: 856-71-212310 Fax: 856-71-212310

Email: c/o keithf@pobox.com

Peter Kurt Hansen

Advisor Shifting Cultivation Research Project P.O. Box 487 Luang Prabang Tel: 856-71-212099

Fax: 856-71-212467

Manfred Fischer

Associate Professional Officer FAO Lao

P.O. Box 1640 Vientiane

Tel: 856-21-413205; 856-71-212016 (field) Fax: 856 21-414500; 856-71-212915 (field)

Email: c/o FAO-LAO@Field.fao.org

Malaysia

Bernstein Daud Raiit

Ass. Conservatory of Forest Forestry Dept. Sarawak Ibu Pejabat Jabatan Perhutanan Wisma Sumber Alam 7th Floor Jl. Stadium, Petra Jaya 93660 Kuching, Sarawak Tel: 60-82-442180

Tel: 60-82-442180 Fax: 60-82-441377

email: info@wsa.forest.gov.my

Dawend Jiwan

Executive Forester (Agroforestry)
Forest Department
Wisma Sumber Alam
Jl. Stadium, 93660 Kuching
Sarawak

Tel: 60-82-442180 Fax: 60-82-441377

Email: info@wsa.forest.gov.my

P.V. Ramesh

Project Management Officer
United Nations Office for Project Services UNOPS
Asia Office, Wisma UN
Blok C, Kom. Pejabat Damansara
Jl. Dungun, Damansara Heights
PO.Box 13673
50818, Kuala Lumpur

Tel: 603-255 9122, ext. **3371** Fax: 603-253-1505

Email: pvramesh@unops.org

Phrang Roy

Project Services
United Nations Office for Project Services UNOPS
Asia Office, Wisma UN
Blok C, Kom. Pejabat Damansara
Jl. Dungun, Damansara Heights
PO.Box 13673
50818, Kuala Lumpur

Tel: 603-255 9122 x 3365 Fax: 603-253-1505 Email: proy@unops.org

Philippines

Paulo Nicolas Pasicolan

College of Forestry & Environmental Management Isabela State University ISU Cabagan, Garita Slopes Cabagan, Isabela 1303

Tel: c/o 63-49-5363992 Fax: c/o 63-49-5361115

E-mail: c/o icrafphi@irri.cgnet.com

Colin Piggin

Upland Rice Program Leader International Rice Research Institute PO Box 933 1099 Manila

Tel: 63-2-845 0563 Fax: 63-2-845 0606

Email: c.piggin@cgnet.com

Lorenza M. Daguitan

Executive Director

Montañosa Research & Development Center

Makamkamlis, Sagada 2619

Mountain Province

Tel: 63-74-442-5347 Fax: 63-74-444-3362

Patrick M. Rocamora

Research Assistant
Southeast Asian Ministers of Education Org.
Regional Centre for Graduate Study
& Research in Agriculture (SEAMEO-SEARCA)
College, Los Baños, Laguna 4031

Tel: 63-49-5363459, 5362287, 5362290 Fax: 63-2-8135697, 8170598

Email: pmr@agri.searca.org

Edwin Balbarino

Program Leader
Farm and Resource Management Institute
Visayan State College of Agriculture
Baybay, Leyte

Tel: 63-53-3352433 Fax: 63-53-3352433

E-mail: vnp-ed@mozcom.com

Fatima T. Tangan

Ecosystems Research and Development Service Department of Environment and Natural Resources -Cordillera Administrative Region Loakan Road, Baguio City 2600 Tel: 63-74-447-2541/4472632

Fax: 63-2-817-5410

Email: c/o harrdec@burgos.slu.edu.ph

Matthew A. Tauli

Food Production Desk Coordinator Montañosa Research & Development Centre P.O. Box 124, Makamkamlis, Sagada 2619

Mountain Province Tel: 63-74-442-5347 Fax: 63-74-444-3362

Peter D. Suson

ICRAF-Philippines
S.E. Asian Regional Research Programme
Claveria Research Site
c/o MOSCAT Campus
9004 Claveria, Misamis Oriental

Tel: 63-912-7100798 Fax: 63-912-7105324

Email: junm@cdo.webliq.com or

icrafphi@irri.cgnet.com

Rodel D. Lasco

Associate Dean / Assistant Professor College of Forestry UPLB, College, 4031 Laguna Tel: 63-49-536-2342 or 536-2599 Fax: 63-49-536-3206 or 536-3657

E-mail: rlasco@laguna.net or rdl@mudspring.uplb.edu.ph

Papua New Guinea

Bire Bino
Agroforester
Department of Agriculture and Livestock
Haes, Dal, Aiyura
P.O. Box 384

Kainantu, E.H.P. Tel: 675-640-4400 Fax: 675-640 4400

Singapore

John Graham

Programme Officer
Agricultural Economics
Agriculture, Food & Nutrition Sciences Division
International Development Research Centre
7th Storey, RELC Building
30, Orange Grove Road
Singapore 1025

Tel: 65-235-1344 Fax: 65-235-1849

E-mail: JGraham@idrc.org.sg

Sweden

Damrong Tayanin

Researcher
Department of Linguistics and Phonetics
Lund University
Helgonabacken 12
S-223 62 Lund

Tel: 46 46-2223343 Fax: 46 46-2224210

Email: Damrong.Tayanin@ling.lu.se

Thailand

Klaus Prinz

Project Coordinator McKean Rehabilitation Centre (MRC) P.O. Box 53 Chiang Mai 50000

Tel: 66-53-277049 ext. 127 Fax: 66-53-282495

E-mail: mckeanrc@chmai.loxinfo.co.th

Tawatchai Rattanasorn

Area Manager Thai-German Highland Development Programme Mae Hong Son City Hall P.O. Box 63, Mae Hong Son-58000

Tel: 66-53-611179-80 Fax: 66-53-611181

Somchai Ongprasert

Dept. of Soils and Fertilizers

Mae Jo University

Mae Jo, Chiang Mai 50290

Tel: 66-53-489164 Fax: 66-53-489164

Email: chai@maejo.mju.ac.th

Borpit Maneeratana

Forest Fire Control
Royal Forest Department
Nan Watershed Management Office (Kao Noi)
Tambon Dottai Amphre Muang

Nan Province 55000 Tel: 66-54-771475

Fax: 66-54-771475

Wichai Songwadhana

Royal Forest Department Nan Watershed Management Office (Khao Noi) Tambon Dootai, Amphoe Muang

Nan Province 55000 Tel: 66-54-771475 Fax: 66-54-771475

Pinkaew Luangaramsri

c/o Center for Ethnic Studies and Development 78/10 Suthep Road, Tambol Suthep Muang Chiang Mai 50200 E-mail: c/o cesd@cm.ksc.co.th

Tossaporn Kurupunya

54 Trangkapum Rd. Amphur Kantang Trang 92110

United Kingdom

Dr. Nicholas Charles Theodore Tapp Lecturer Dept. of Social Anthropology The University of Edinburgh Adam Ferguson Building George Square Edinburgh EH8 9LL

Tel: 44-181-339-9657 Fax: 44-171-834-0190

E-mail: NTapp@compuserve.com

USA

Kathleen S. Friday
Associate Pasific Islands Forester

USDA Forest Service Institute of Pasific Islands Forestry 1151 Punchbowl St., Room 323 Honolulu, Hawaii 96813

Tel: 1-808-522-8233 Fax: 1-808-5228236 E-mail: lenewell@gte.net **Uraivan Tan-Kim-Yong**

Director

Faculty of Social Sciences Chiang Mai University Chiang Mai 50002

Tel: 66-53-221699 ext. 3573

Fax: 66-53-222763

E-mail: urivan@chiangmai.ac.th

Payong Srithong

Coordinator

Agroecology Development and Plant Genetic Resources Conservation (AGRECO/PGRC) P.O. Box 15, Danchang

Suphanburi 72180 Tel: c/o 66-35-521-883 Fax: c/o 66-35-521-883

Chaleo Kanjunt

Director

UN / Thai Sam-Mun Highland Development Project

Office of Watershed Development Huay Kaew Road, Amphoe Muang

Chinag Mai 50000

Tel: 66-53-217453; 217454 Fax: 66-53217454; 217455

Lucy Fisher
MOIST Asia Coordinator
CIIFAD
Cornell University
618 Bradfield Hall,
Ithaca, NY 14853
Tel: 1-607-257-8223
Fax: 1-607-255-2644

E-mail: lhf2@comell.edu

James A. H. Hafner

Ph.D. student

Department of Natural Resources

Cornell University 308 Fernow Hall Ithaca, NY 14853

Tel: 1-607-2739375 Email: jah36@cornell.edu

Ellen McCallie

Graduate Student Cornell University

620 Bradfield Hall

Ithaca, NY 14953

Tel: 1-607 255-9150 Fax: 1-607 255-2644 Email: em39@comell.edu

Michael Benge

Senior Agroforetsry Officer Global Environment Center Agency for International Development

Rm. 413-E, SA-18

Washington, DC 20523-1812

Tel: 703-6988256 Fax: 703-875-4639

E-mail: mbenge@usaid.gov

Vietnam

Jeanette Eeuwes

UNV to UNDP Ethnic Minorities Project

Post Office

Bac Kan Province Tel: 84-281-870681 Fax: 84-281-870295

E-mail: dcdcbt@netnam.org.vn

Nguyen Thi Thanh Nga

Head of Ethnic Cultural Heritage Department National Centre for Social Sciences and Humanities Institute of Ethnology

27 Tran Xuan Soan Str.

Hanoi

Tel: 84-4-8258867 Fax: 84-4-9711435

E-mail: Chong@iseas.ac.vn

Tran Duc Vien

Senior Lecturer

Department of Agroecology & Environmental

Sciences (DAES)

Hanoi Agricultural Univ (HAU)

Trau Qui, Gia Lam,

Hanoi

Tel: 84-4-822-7080 Fax: 84-4-821-8934

E-mail: vientd@uplands.ac.vn

Sarah W. Workman

International Coordinator National Agroforestry Center

USDA Forest Service

East Campus - UNL

Lincoln, NE 68583-0822 Tel: 1-402-437-5178, ext. 40

Fax: 1-402-437-5712

Email: sworkman@unlinfo.unl.edu

Deborah Lawrence

Ph.D. Candidate in Ecology

Botany Department Duke University

P.O. Box 90339

P.O. Box 90339

Durham, NC 27708-0339 Tel: 1-919-660-7372

Tel: 1-919-660-7372 Fax: 1-919-660-7293

Email: dclawren@acpub.duke.edu

Ta Long

National Centre for Social & Human Science

Institute of Ethnology 27 Tran Xuan Soan Str.

Hanoi

Tel: 84-4-8258867

Fax: 84-4-9711435

Email: c/o Truong@uplands.ac.vn

Tran Trung Dung

Agroforestry Faculty

Central Highlands University

Km. 4 National Road No. 14

Buon Ma Thuot City

Daklak

Tel: 84-50-852195

Fax: 84-50-855572

Hoang Xuan Ty

Director of the Research Center for Forest Ecology

and Environment

Forest Science Institute of Vietnam

Chem, Tu Liem

Hanoi

Tel: 84-4-8347434

Fax: 84-4-8345722

Email: hxty@netnam.org.vn

Dinh Van Quang

Researcher in Forestry Economy
Research Center for Forest Ecology and
Environment
Forest Science Institute of Vietnam
Chem Tu Liem

Hanoi

Tel: 84-4-8347434 Fax: 84-4-8345722

Email: c/o hxty@netnam.org.vn

Ha Quang Khai

Head of Soil Division National Forestry College Xuan Mai, Ha Tay Province Fax: c/o 84 34 840042 Email: sfsp@netnam.org.vn

Nguyen Tuan Hao

Forest Research Center (FRC)
Bai Bang, Phong Chau

Phu Tho

Tel: 84-21-829241 Fax: 84-21-829275

Frede Danborg

FAO - Hanoi P.O. Box 63

No. 3, Nguyen Gia Thieu Str.

Hanoi

Tel: 84-4-8253431 Fax: 84-4-8264512

Email: vfap@netnam.org.vn

Paul van der Poel

Social Forester, GTZ No. 1 Nguyen Long Tru

Hanoi

Tel: 84-4-8214768 Fax: 84-4-8214765 Pham Van Hien

Farming Systems Department Agroforestry Faculty Tay Nguyen University 3 Road No. 14, Km 4 Buon Ma Thuot City Daklak Province

Tel: 84-50-852290 Fax: 84-50-855572

Email: endavn@netnam2.org.vn

Vu Dai Duong

Lecturer
Silviculture Division
National Forestry College
Xuan Mai, Ha Tay Province
Fax: c/o 84-34-840042
Email: sfsp@netnam.org.vn

Tu Quang Hien

Associate Professor
University of Agriculture & Forestry
Thay Nguyen City
Thay Nguyen Province
Tel: 84-280-851588
Fax: 84-280-852665

Karin Eberhardt

Representative for Mainland Southeast Asia

World Neighbors 202B Doi Can No. B2 Ba Dinh, Hanoi Tel: 844-8431-463

Fax: 844-8325-247

E-mail: karin@netnam.org.vn

Organizing Committee

A.M. Fagi

Director Central Research Institute for Food Crop Jl. Merdeka no. 147 Bogor

Tel: 62-251-334089; 331718 (O) 62-251-322-465 (H) Fax: 62-251-312775

E-mail: crifc1@server.indo.net.id

A.P.Y. Djogo

Nusa Tenggara Upland Development Consortium Politeknik Pertanian Universitas Nusa Cendana PO Box 1152, Kupang Nusa Tenggara Timur 85011 Tel: 62-391-22836; 32292

Fax: 62-391-22836 (H); 26865 (O) E-mail: djogo@kupang.wasantara.net.id

Dennis P. Garrity

Systems Agronomist & Reg. Coordinator S.E. Asian Regional Research Programme Jl. Gunung Batu no. 5 P.O. Box 161, Bogor 16001 Indonesia

Tel: (62-251) 315-234 Fax: (62-251) 315-567

E-mail: icraf-indonesia@cgnet.com icrafind@server.indo.net.id

Kurniatun Hairiah

Lecturer
Faculty of Agriculture
Brawijaya University
Jl. Veteran, Malang

Tel: 62-341-553623/564355

Fax: 62-341-564333

A. Ngaloken Gintings

Conservationist Forest R&D Centre Jl. Gunung Batu no.5 Kotak Pos 66, Bogor 16001 Tel: 62-251-325111; 315005

Fax: 62-251-325111

Email: fao-apan@indo.net.id (c/o APAN)

Chun K. Lai

Visiting Scientist ICRAF Southeast Asian Regional Research Programme Jl. Gunung Batu no. 5 P.O. Box 161, Bogor 16001 Indonesia Tel: (62-251) 315-234

Fax: (62-251) 315-567

E-mail: icraf-indonesia@cgnet.com icrafind@server.indo.net.id

Hubert de Foresta

Senior Ecologists
S.E. Asian Regional Research Programme
Jl. Gunung Batu no. 5
P.O. Box 161, Bogor 16001
Indonesia
Tel: (62-251) 315-234

Tel: (62-251) 315-234 Fax: (62-251) 315-567

E-mail: icraf-indonesia@cgnet.com icrafind@server.indo.net.id

Meine van Noordwijk

Deputy of Regional Coordinator S.E. Asian Regional Research Programme Jl. Gunung Batu no. 5 P.O. Box 161, Bogor 16001 Indonesia Tel: (62-251) 315-234

Tel: (62-251) 315-234 Fax: (62-251) 315-567

E-mail: icraf-indonesia@cgnet.com icrafind@server.indo.net.id

Soetjipto Partohardjono

Agronomist Central for Research Institute for Food Crops Jl. Merdeka No.147, Bogor 16111 Tel: 0251-334089; 331718

0251-312824 (direct) Fax: 0251-312755

Malcolm Cairns

Associate Scientist
International Centre for Research in
Agroforestry
S.E. Asian Regional Research Programme
P.O. Box 161, Bogor 16001

Tel: 62-251-315234 Fax: 62-251-315567

E-mail: icraf-indonesia@cgnet.com

Sri Suharti

Anthropologist
Forest Research & Development Centre
Jl. Gunung Batu No. 5
Bogor 16001, Indonesia
Tel./Fax: 62-251-325-111

Remote Steering Committee

Daniel Buckles

International Development Research Centre 250 Albert Street P.O.Box 8500, Ottawa K1G 3H9 CANADA

Tel: (613)236-6163 Fax: (613)567-7749 E-mail: dbuckles@idrc.ca

David Thurston

Professor (Retired)
Dept. of Plant Pathology
330 Plant Science Building
Cornell University
Ithaca NY 14853
USA

Tel: 607-255-7835 Fax: 607-255-4471

E-mail: hdt1@comell.edu

Ellen McCallie

Graduate Student 620 Bradfield Hall Cornell University Ithaca NY 14853 USA

Tel: 607 255-9150 Fax: 607 255-2644

E-mail: em39@comell.edu

Lucy Fisher

Management of Organic Inputs in Soils of the Tropics (MOIST) Group, CIIFAD 620 Bradfield Cornell University Ithaca, NY 14853 USA

Tel: 607-255-2920 Fax: 607-255-2644 E-mail: lhf2@comell.edu

David Bates

L.H. Bailey Hortorium 462 Mann Library Building Cornell University Ithaca, New York 14853-4301

Tel: (607)255-7979 Fax: (607)255-2131

E-mail: dmb15@comell.edu

Erick Fernandes

Assistant Professor Tropical Cropping Systems & Agroforestry Dep't of Soil, Crop and Atmospheric Sci. 622 Bradfield Hall, Comell University Ithaca, NY 14853

USA

Tel: 607-255-1712 Fax: 607-255-2644 E-mail: ecf3@comell.edu

Larry Fisher

Dep't of Natural Resources Fernow Hall, Cornell U. Ithaca, NY 1485 USA

Tel: 607-255-4523 Fax: 607-255-8207 E-mail: laf2@comell.edu

James A. Hafner

Department of Natural Resources 308 Fernow Hall Comell University Ithaca NY 14853 USA

Tel: 1-607-255-3191 Fax: 1-607-255-2644 Email: jah36@comell.edu

Sponsoring Agencies

- ASEAN-Canada Fund
- Australian Centre for International Agricultural Research (ACIAR)
- Cornell International Institute for Food, Agriculture & Development (CIIFAD)
- International Centre for Research in Agroforestry (ICRAF)
- International Development Research Centre (IDRC)
- The Ford Foundation, Vietnam, P.R. China & Thailand programmes
- United States Agency for International Development (USAID)