

# TECHNICAL ASSISTANCE COMPLETION REPORT

Division: SEAE

TA No. and Name: <b>TA 5711: First Agriculture and Natural Resources Research at CGIAR Centers- Policy Research for Sustainable Upland Systems</b>			Amount Approved: <b>\$1.2 million</b>	
			Revised Amount: -	
Executing Agency: <b>ICRAF-Southeast Asian Regional Research Programme</b>		Source of Funding: <b>TASF</b>	TA Amount Undisbursed <b>\$187.35</b>	TA Amount Utilized <b>\$1,199,812.65</b>
Date Approval                      Signing                      Fielding of Consultants 12 Dec 1996                      31 Mar 1997                      30 April 1997			TA Completion Date Original: 29 April 2000      Actual: 31 Dec 2000	
			Account Closing Date Original: 29 Oct 2000 <sup>1</sup> Actual <sup>2</sup>	
<b>Description</b> Slash and burn (S&B) techniques for converting forestlands to other uses is widely practiced by rural population in the uplands of Southeast Asian Region. It is estimated that S&B techniques contribute between 30% and 60% of the global deforestation. Associated with the problem of deforestation are the issues relating to climate change, loss of biodiversity and problems of poverty and household food security. To address these problems, in 1995, the International Centre for Research in Agroforestry (ICRAF), in association with other members of the Consultative Group on International Agriculture Research (CGIAR), started the Alternatives to Slash and Burn Program (ASBP) with support from Global Environment Facility (GEF). The key hypothesis underlying ASBP was that intensifying land use is an alternative to S&B and that it can reduce deforestation and poverty. This was based on the premise that (i) intensive land use will be environmentally sound, socially acceptable and financially profitable to the farmers; (ii) land and tree tenures will provide appropriate incentives for resource conservation; and (iii) sound macro economic and sector policy environment would encourage sound resource management. Indonesia was one of the first countries selected for ASBP research. In response to a request from ICRAF for grant financing to sustain ASBP research, the Asian Development Bank (ADB) approved the captioned study as one of the five components of a Regional Technical Assistance for CGIAR Centers.				
<b>Objectives and Scope</b> The objectives of the TA are to (i) identify necessary conditions for intensification of land use, (ii) strengthen capacity for quantitative policy analysis, (iii) communicate the policy implications of the research to policy makers, and (iv) synthesize lessons from research to provide insights of wide relevance. The TA study comprised collaborative research and training in biophysical, agronomic, economic and institutional aspects of the determinants and consequences of S&B. The TA had three main components: (i) socio-economic and ecological aspects of upland agroforestry systems and their sustainability, (ii) land and tree tenure as it relates to sustainable natural resource management, and (iii) infrastructure and other national policies that contribute to deforestation and land use change. The study was undertaken in Indonesia, Thailand and the Philippines. The total cost of the Project was about \$3.72 million of which ADB financed \$1.2 million. ICRAF, International Food Policy Research Institute, GEF, International Fund for Agriculture Development, Ford Foundation, and the national agricultural research systems (NARS) in the participating countries financed the balance amount of about \$2.52 million. The NARS were identified as the implementing agencies and their contribution to the TA was in kind.				
<b>Evaluation of Inputs</b> A network of research sites was selected in Sumatra in Indonesia, the Mae Chaem watershed in Thailand, and Mindanao in the Philippines. The sites included buffer zones of national parks, margins of production natural forests, degraded forests, and watersheds. The research examined the ways of raising productivity of agroforestry systems and assessed the superiority of intensively managed agroforestry systems over S&B system in terms of its profitability, agronomic sustainability and environmental impact, and tradeoffs among various economic and environmental objectives. The research tested and validated a number of innovative indicators of above ground and below ground biodiversity, carbon stocks and greenhouse gas emissions, agronomic sustainability, returns to labor and other determinants of adoptability by smallholders and national policy makers' concerns. The measurements of differences among environmental consequences of the various land use systems provided the basis for quantifying major trade offs involved in land use change. At each site,				

<sup>1</sup> Assumed to be 6 months after the completion date.

<sup>2</sup> Memo sent to CTLA on 5 February 2003 to close account.

the study examined issues relating to incentive structures and institutional mechanisms for promoting intensive landuse.

The TA study had sound objectives. However, the scope and the terms of reference were not very clearly defined. As a result, ICRAF introduced new areas of research that fit into the TA objectives and scope as and when host countries requested them. The research was mostly conducted by ICRAF consultants. There were two review missions during the TA implementation period. The missions succeeded in bringing about greater focus on the research program and on having a good reporting format to help monitor the progress. Because of political uncertainties and unrest that prevailed in Indonesia during 1999 and 2000, the research could not be carried out as per the original schedule. The TA study was therefore extended until December 2000.

### **Evaluation of Outputs**

The TA resulted in considerable research outputs, including a total of 47 research reports of good quality. The findings of the study, as given in the research reports, showed that there was little evidence that unsustainable systems are associated with poverty driven landuse conflicts. On the contrary, the study found that unsustainable practices were associated mostly with government sponsored transmigration programs and with logging or large plantation projects. These findings are generally true for all the participating countries. The study demonstrated the values of indigenous landuse traditions and the opportunities to build on indigenous land management concepts. The study on tenures showed that clearer property rights provide greater incentives for natural resource management. The findings on tenure study helped the participating governments to modify their policies on community forestry. The new policies allowed the local communities to gain greater tenure security in exchange of enhancing productivity and protection of forestlands. In Indonesia, the study was instrumental in making the government recognize traditional agroforest lands (known as Krui forests) within classified forestlands as a specific form of land use. Research on Indonesia's national policies showed that forest conversion that was profitable before the economic crisis became even more profitable during and after the crisis as the exchange rate collapsed and increased the profitability of tradable primary commodities such as timber.

The TA study was driven by ICRAF. Although NARS were listed as implementing agencies, the TA study did not identify NARS' roles and responsibilities. NARS' participation in the planning and implementation of the study was inadequate. They, however, benefited much by participating in training workshops and seminars. Two regional workshops held in Thailand brought about good awareness among NARS on the need for quantitative policy research to guide decision making and environmental externalities. The training program also benefited a number of local researchers and students. ICRAF carried out the research satisfactorily. However, the administration of the TA study, particularly the financial and administrative aspects were less than satisfactory. Progress reports and withdrawal applications were often delayed. Following completion of the study, it took ICRAF nearly two years to finalize documents for the closure of accounts.

### **Overall Assessment and Rating**

The TA study succeeded in meeting its objectives. It identified conditions for intensifying landuse, strengthened capacity for quantitative research on policy analysis, and communicated policy implications to policy makers. The study outputs adequately met the overall objectives, and therefore this TA study is rated successful.

### **Major Lessons Learned**

Regional TA studies of this nature should be driven by the needs of DMCs and there should be greater participation of NARS in their design and implementation to enhance DMCs ownership. The role of CGIAR centers should be mostly advisory. CGIAR RETAs should provide for greater involvement of NARS in planning, design and implementation of the TA. Capacity building of NARs should be an explicit objective of such TA. Because CGIAR centers are not very familiar with the requirements of ADB, close supervision of TA implementation is critical.

### **Recommendations and Follow-Up Actions**

The experience gained in implementation of this TA may be taken into consideration in the ongoing process on the revision of guidelines for selection and evaluation of future TA proposals to CGIAR centers. As ICRAF has produced a number of reports on various subjects, it will be useful if ICRAF publishes a capsule report summarizing the key findings of the TA study for dissemination to ADB DMCs.

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