

ACCELERATING THE ADOPTION OF SOIL AND WATER CONSERVATION MEASURES BY UPLAND COMMUNITIES IN SOUTHERN MINDANAO

Background:

The seven-year Upland Development Programme in Southern Mindanao (UDP) was implemented starting in 1999 to pilot a new extension process for managing agriculture and the resource base in the uplands of Southern Mindanao. The Programme is implemented by the Department of Agriculture and sponsored by the European Union. The fact that upland soils, particularly those in areas that have been logged over, are highly sensitive to disturbance and low in resilience, their use for agriculture accelerates land degradation if done without appropriate soil conservation measures.

A number of models have been developed and promoted by UDP to respond to both the economic development and environmental protection agenda of farmers, communities and local governments. One such model is the Diversified Farming System (DFS) with food production and soil and water conservation components. The model was widely adopted by the farmers in the Programme areas. After validating the DFS farms using the Slope-Treatment Oriented Practices (STOP) approach, the Programme found that about 70% of the farms are on very steep slopes (more than 50% in slope), the only land available for the farm households' subsistence.

In March of 2004, UDP and the World Agroforestry Centre (ICRAF) agreed to jointly implement a project called "Enhancing the Upland Extension System in Southern Mindanao". The collaborative project aims to strengthen community-based extension systems that can effectively disseminate appropriate upland technologies. This relatively new intervention is gaining ground in eliciting and coordinating the support of local institutions to community-based extension and development activities.

The current situation and opportunities prompt UDP to come up with a strategy to consolidate the best technical and institutional strategies and interventions. This will enable the Programme to finalise a model of sustainable upland development and local natural resource management.

General objectives:

1. Increase the adoption of soil and water conservation measures and technologies by upland households, communities and local institutions
2. Increase the vegetation and soil cover in sloping lands
3. Promote livelihood and economic activities that protect natural resources and forests
4. Identify and strengthen existing and potential reward mechanisms for environmental services provided by upland communities

General activities:

1. Consultation with stakeholders – to assess current status of the uplands and the initiatives
2. Formation of an inter-sector Task Force to prepare Plan
3. Planning (for 1 year?)
4. Signing of MOA among participating institutions
5. Implementation of the plan/strategy (including documentation and M&E)

Proposed components of the strategy:

1. Documentation of most pressing problems, critical areas, promising technologies and opportunities
2. Awareness building/enhancement – IEC to gain public support using documented cases
3. Technology – promote effective and doable technologies, or Protective and Rewarding Interventions for Managing the Environment (PRIME)
4. Institutional arrangements – roles of UBA, UCO, Barangay Council (policy formulation/enforcement, monitoring), LGU, UDP (facilitator) partners and environmental services users/beneficiaries
5. Support – training and demonstration (c/o FTG, BEW & LS), technical (PRIME), financial (to establish demonstration farms and expand adoption), livelihood (to respond to short term needs and support medium/long term plans) policy (rewards, restrictions), institutional strengthening (for UBAs, UCOs, FTGs, Barangay Councils)

Some recommended technical interventions and innovations for steep slopes:

1. Minimum tillage – a practice in Andap, New Bataan, Compostela Valley (PPO1)
2. Agroforestry – different systems (with different inter-related components), as practiced in ICRAF and UDP areas
3. Dual farming – as recommended by Ken Proud
4. Madre de cacao in contour lines (used as stakes in establishing the contour lines) – an innovation by UDP farmers in Magsaysay, Davao del Sur (PPO3)
5. Reducing cropped area for maize but increasing production per unit area – farmers plant maize in sloping farms at wide spacings, up to 3 times wider than the recommended for optimum yield
6. Cover cropping with legumes – to protect the soil, provide nitrogen and contribute to restoration of organic matter (OM), as practiced in a fruit tree plantation in Baracatan, Toril, Davao City
7. No-clean culture – to be promoted in lieu of the “clean” or “weed-free” culture that exposes the top soil (if any) to the factors of erosion and prevents the build up of OM

