

## Chapter Four

# Conclusions and Recommendations

Several indicators of unsustainability, in terms of degradation of the resource base, decline in production flow, and reduced opportunities for sound resource management practices prevail in the Chittagong Hill Tracts of Bangladesh. The workshop was conducted to facilitate sustainable development of agriculture in the CHT through the identification and adoption of technical and institutional options appropriate to the potentials and limitations of the region.

In keeping with the intention, the workshop provided an opportunity for all those involved in the development and welfare of the people and environment of the region to sit together for in-depth analysis of past experiences and regional future strategies. Lengthy discussions were held at the end of each working session. This chapter presents the major conclusions and recommendations that emerged from these discussions. The workshop was divided into four working sessions and a concluding session. At the end of the workshop, the discussions during each working session were summed up and the main conclusions and recommendations drawn to present a holistic perspective of the output of the workshop.

### Session 1

The first working session was chaired by Prof. Anirul Islam Chowdhary, Vice Chancellor of the Jahangirnagar University, and the rapporteurs were Mr. Mong Sathowai Chowdhury, Dr. Azharul H. Muzumder and Mr. Syed Mahbub Khan. Four papers were presented in this session.

The first paper, presented by Dr. Tej Partap of ICIMOD, outlined the 'hill perspective' and stressed

the need to take it into account while designing and implementing development interventions for hilly areas.

Paper II, presented by Dr. Md. Waliuzzaman of the Bangladesh Council for Science and Industrial Research, focussed on the potentials for producing medicinal and aromatic plant resources as high-value cash crops in the CHT.

The third paper, which dealt with poverty and access to land in terms of perspective and issues in the CHT, written by Dr. Safiqur Rahman, was presented by Dr. Saleh Uddin Ahmed from the Academy for Rural Development.

The last paper of this session, by Dr. M.A. Sattar of the Wildlife Conservation and Management Development Project, dwelt on the *Jhumia* settlement scheme of the local Department of Forests and focussed on proper village land-use planning and implementation.

The main recommendations from the discussions are outlined below.

- Recognition and better understanding of hill characteristics, such as inaccessibility, fragility, marginality, diversity, niche, and human adaptation mechanisms, are essential prerequisites for devising sustainable development imperatives for hilly areas.
- Twenty important varieties of herbal medicinal plants were identified as having good prospects for cultivation in the hilly areas of the CHT. The CHTDB was requested to undertake schemes for such enterprises and the BCSIR to ensure technical assistance and support.
- There is a need to carry out extensive afforestation programmes, especially on C and D class lands, and to develop agroforestry in the hilly areas in order to forestall the deteriorating

trends and to maintain an ecological balance.

- Cash crops, including subsistence crops, should be included in hill farm cropping patterns. This undertaking should follow integrated approaches that involve concerned agencies and research organisations.

## Session 2

The second working session, which took place on the morning of 24th January, was chaired by Mr. Egbert Pelinck, Director General, ICIMOD, and the rapporteurs were Mr. Mong Sathowai Chowdhury and Mr. A.T.M. Emdad Hossain. The topics of the four papers presented at this session were 1) Hill Area Development Approach - An Overview; 2) Agriculture in the CHT: Findings of a Field Survey in the Year 1992; 3) Environmental Aspects of Development Projects in the CHT; and 4) Land Management for Sustainable Productivity in the CHT based on Geographical Characteristics. The chairperson expressed appreciation of the authors; Dr. Mohammad Haroon-ur Rashid; Md. Adul Quasem; Mr. Mahfuzul Haque; and Dr. M.M. Hassan and Dr. Azharul H. Mazumdar and discussed the salient features of each paper. The recommendations/suggestions from this session are given below.

- Soil and water conservation are critical problems and are in crucial need of attention.
- Technically sound, economically feasible, and socially acceptable, location-specific technology packages should be developed to combat environmental degradation.
- Soil conservation measures appropriate to the local situation should be adopted in order to alleviate soil erosion hazards and the spiralling effects of siltation of water reservoirs and stream channels causing drainage congestion, flash floods, etc.
- Development of agriculture in the Hill Tracts is seriously constrained by poor agricultural marketing facilities, resulting in low prices for products, especially for fruits, vegetables, and spices. Therefore, special projects for marketing of agricultural inputs and outputs should be introduced.
- A tree-based participatory land-use system should be developed and practised.
- Afforestation of USF should be continued under

the umbrella of a natural watershed management and soil conservation policy.

- Shifting cultivation should be replaced by more stabilised cultivation practices and cultivation of horticultural crops and other high-yielding crops should be promoted.
- Planners should have adequate briefing and orientation about the hills and related aspects before making development plans for hilly areas.

## Session 3

The third session took place in the afternoon of the same day and was chaired by Dr. Md. Haroon-ur Rashid, Secretary-Planning Division, and the rapporteurs were Mr. Khairul Alam and Dr. Azharul H. Mazumdar. Three papers entitled, i) Sustainability and Potentials of Low-cost Water Harvesting Systems in the CHT; 2) Experiences of the Betagi-Pomora Project and Prospects for the CHT; and 3) Upland Settlement Components with Rubber as a Prospective Perennial Cash Crop in CHT, were presented by Mr. Quamrul Islam Siddique, Dr. A.H. Golam Quddus, S.K. Khisa, and A.T.M. Emdad Hossain respectively.

During the course of the discussions certain problems were identified. They were:

- inadequate mapping and data collection,
- inadequate planning and design,
- construction deficiency,
- inadequate operation and maintenance practices,
- heterogeneity in ethnic groups,
- diversity in topography and socioeconomic needs,
- lack of marketing, processing, and transportation facilities for products,
- inadequate technical policies,
- lack of technical assistance, and
- monocropping-posing a problem to the environment and to the individual budget.

The recommendations that emerged from this session, which also address the problems identified above, are outlined below.

- Low-cost water harvesting techniques should be adopted in the CHT.
- Before implementing water resource-use projects in the CHT, baseline socioeconomic feasibility

- studies and biophysical surveys should be carried out in order to avoid the risk of failure of such costly projects. Such surveys should include adequate mapping of the area and detailed databases on the socioeconomic and biophysical aspects.
- People's participation should be encouraged and ensured in planning and managing water resource use.
  - Crossdams should be constructed to create local reservoirs.
  - Experiences in successful land-use practices in other areas with similar land characteristics should be extrapolated for trials in the CHT. It must be ensured that such extrapolations are site-specific and also accommodate the bio-physical carrying capacity and people's needs.
  - Extension of rubber plantation, along with other perennial cash crops, should be encouraged on small landholdings in the settlement areas of the CHT.
  - To promote and ensure sustainability of the production systems in the long run, land should be permanently leased out to the farmer.
  - Marketing and processing of rubber should be centrally coordinated.
  - Women's participation in all the above activities is vital and should be encouraged.

### Session 4

The fourth and the last working session was chaired by Mr. Parijat Kushum Chakma of the Local Government Council of Rangamati and the rapporteurs were Mr. Md. Khairul Alam and Dr. Azharul H. Mazumdar.

Four papers entitled, 1) the Prospects of Sloping Agricultural Land Technology for Replacing Swidden Agriculture in the CHT, 2) Development of Non-farm Activities in the CHT, 3) Some Innovative Traditional Farming-related Technologies, Systems, and Practices of the Hill People and Their Sustainability, and 4) Chittagong Hill Tracts: A Socio-economic Profile, were presented. The authors of the respective papers were 1) Mr. Sudibya Kanti Khisa, 2) Dr. Zaid Bakht and A. Baves (presented by Dr. M.R. Khan), 3) Dr. Md. Sabjal Uddin, and 4) Dr. M.R. Khan.

During the discussion that ensued several problems were identified by the group. They are:

- models may not be directly or exactly replicable,
- lack of proper perspective planning,
- lack of skill, infrastructure, and manpower
- inappropriate policies adapted in different public enterprises in some cases, and
- lack of proper coordination.

Based on the problems identified above, some recommendations were suggested. They are outlined below.

- Appropriate, area-specific land-use technologies should be developed and introduced.
- Interventions that promote and facilitate income-generating off-farm activities should be incorporated.
- A master plan for eco-tourism should be prepared.
- Socially acceptable and economically viable, appropriate farm technologies should be introduced and integrated farming systems encouraged.
- Socioeconomic data profiles should be regularly updated for planning future programmes for the sustainable development of the CHT area and its people.

In addition to the above topic-specific recommendations, certain general recommendation/conclusions pertaining to the overall development of the CHT were also highlighted. They are stated below.

- The rural population is the key to sustainable development and this should be kept in mind in any environment or development intervention.
- Suitable sustainable development strategies in the CHT should be evolved through continuous research action programmes.
- To promote the incorporation of environmental and sustainability concerns into all activities, public awareness should be created at all levels.
- All action programmes implemented should be in conformity with the mandate of a number of international conventions to which Bangladesh is a signatory.

To sum up, the workshop outcomes include an assessment of the agricultural and related development policies and programmes in hilly areas of Bangladesh and identification of available knowledge and information about these areas to facilitate formulation of appropriate development strategies for these hilly areas.