

Integrated Natural Resource Management: The Key to Prosperity and Peace in the Drylands

W D Dar¹

Ladies and gentlemen!

I extend my warmest welcome to the Honorable Vice Minister of Planning, Cao Duc Fat, Dr Ngo The Dan, President, Scientific Committee, Nguyen Van Bo, Chairman, Scientific Department, Le Hung Quoc, Chairman, Extension Department, Dang Kim Son, Director, Information Center, Nguyen Dinh Huong, Deputy Chairman, International Cooperation Department, Ministry of Agriculture and Rural Development, and Mr D J Bandaragoda, Regional Director, International Water Management Institute (IWMI), who are with us in this joint project planning meeting. Let us recognize their presence by giving them a loud applause. I also welcome Dr T D Long, Deputy Director General (DDG), Vietnam Agricultural Science Institute (VASI), Dr Le Quoc Doanh, DDG, VASI, Dr Thai Phien, and the delegates who have come from different countries and the media staff from Vietnam.

For some of you, this may be the first visit to Vietnam, a beautiful and historic country with very hospitable people. While you are here, you will also have an excellent opportunity to see an example of intensive agriculture. I speak on behalf of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), a non-profit, apolitical, international organization for science-based agricultural development. Established in 1972, it is one of the 16 centers of the Consultative Group on International Agricultural Research (CGIAR). ICRISAT's new vision is "improved well-being of the poor of the semi-arid tropics (SAT) through agricultural research for impact."

Our new mission is "to help the poor of the SAT through science with a human face and partnership-based research and to increase agricultural productivity and food security, reduce poverty, and protect the environment in SAT production systems." Basically, we aim to improve and sustain agricultural

productivity in some of the harshest environments that account for about two-third of the world's cultivable land.

We serve more than 800 million people in 48 countries, the poorest of the poor, who live in the dry tropics of Asia and Sub-Saharan Africa. We are supported by more than 50 governments, foundations, and development banks. Our strategy is to focus on comparative advantage, develop a competitive edge, and enhance strategic partnerships. The situation is challenging as this region is heavily populated and pressure on natural resources is very severe. Unless we protect our soil and water resources, they will be degraded and will not be able to support the rural livelihoods in the SAT. ICRISAT has a mandate to improve the livelihoods of the millions of poor living in the SAT through increased agricultural productivity through integrated genetic and natural resource management.

Water is the life line of the people living in the SAT region and unless it is managed, its continuing depletion will endanger the survival of the people living in this region. The main source of water in SAT is the monsoon rain, which generally occurs as downpours resulting into excess water during the rainy days. Downpours cause severe soil erosion and also take away nutrient rich top soil along with the runoff, which causes severe damage to the natural resources. Subsequently, dry spells follow during the crop growing season. The appropriate way to manage these problems is the adoption of watershed management. Watersheds are not only the units for managing the rainwater but also are the converging points of various rural activities of millions of the poor living in them.

The Asian Development Bank (ADB) and ICRISAT share a common vision of alleviating poverty in Asia and ADB's valuable support to ICRISAT is through our project "Improving

1. International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru 502 324, Andhra Pradesh, India.

Management of Natural Resources for Sustainable Rainfed Agriculture” that has gone a long way. I have a special concern for this project since it showcases our credo of science with a human face operating in this project. Our approach of integrated participatory watershed management has attracted the attention of not only the researchers and farmers but also top policy makers in India and Vietnam.

The integrated watershed management approach involves participation of all stakeholders in the watershed program. It demands teamwork and effective cooperation. Traditionally watersheds have been viewed as hydrological units to conserve soil and water. However, this view has not benefited farmers. Instead we must adopt the integrated watershed management approach. Here, all natural resources in the watershed are nurtured properly so that livelihood sources are effectively sustained.

The world is changing and in a borderless global economy, things done locally can have global impact. Thus, farmers in the drylands not only must increase productivity of their farm but also become competitive. Working together, we must fight poverty and hunger especially in the drylands. They are the root causes of the political and social instability we frequently see today. Global disorder could be handled effectively by local efforts in the watersheds by increasing productivity and rural incomes.

A recent study conducted by ADB indicated that investments in rainfed areas are as productive as those in favorable irrigated areas. The same study also highlighted a need to develop rural infrastructure which will have direct impact on alleviating rural poverty and improving rural livelihoods. The integrated watershed management approach will help to manage the natural resources efficiently and effectively so that the rural livelihoods can be improved substantially through convergence of various activities in the watershed.

ICRISAT has a 29-year experience in watershed management. It is time we now share experiences with farmers. Hence, ADB’s timely support has helped ICRISAT and the national agricultural research systems (NARS) in Asia to develop a suitable model for sustainable natural resource management of watershed. The concerned efforts of a team of scientists led by Dr S P Wani have shown excellent results in this project. Dr Ian Johnson,

Chairman, CGIAR who visited Adarsha watershed in Kothapally, Andhra Pradesh, India said: “This is an excellent example of the value of partnerships, research and action in the field as well as the dedication of ICRISAT staff to small and poor farmers.” Recently, a Planning Commission Member of the Government of India also visited Kothapally. He was highly impressed with the visible impact in this watershed. In fact, he asked details for discussion in the commission for possible replication in other watershed programs.

Our important partners in Kothapally watershed are the Central Research Institute for Dryland Agriculture (CRIDA) and Drought Prone Area Programme (DPAP). Dr H P Singh (CRIDA) and Ms T K Sreedevi (DPAP) are with us in this meeting. Our other partners from other benchmark sites in India, Thailand, and Vietnam are also here. We are happy that together, we have brought ICRISAT and NARS experiences in watershed management to benefit our poor farmers. Ten other villages in Andhra Pradesh are adopting this model in the Andhra Pradesh Rural Livelihoods Programme (APRLP). We are looking forward to promote this model in five districts in Andhra Pradesh to alleviate poverty by improving rural livelihoods.

Kothapally is not an isolated watershed model, but is just one of the benchmark sites operated in this project. I have personally visited benchmark sites in Vietnam and Thailand. When you visit Thanh Ha watershed in Vietnam you will see and experience the happiness of the farmers whose incomes have increased two-fold during the last three years. I met Deputy Prime Minister Mr Nguyen Cong Tab during this visit, and he was very satisfied with our work. I am happy to announce that the Thanh Ha watershed has helped in generating support from the Vietnamese government for natural resource management research. VASI and Danish Agency for Development Assistance (DANIDA) have also recognized the importance of watershed research.

Likewise, I am happy to note that ADB’s support has made a big difference to the rural poor in the benchmark watersheds in India, Thailand, and Vietnam. Now the challenge is for us to translate our success into a broad-based movement of natural resource management. We can do this through the consortium approach adopted in this project. For a

peaceful world and a better tomorrow, natural resource endowments must be managed and used sustainably. ICRISAT vows to convert “Grey SAT areas into green”. We are committed to achieve this through “Science with a human face”. The support of

development investors such as ADB is very critical in this effort. I am sure that we, as a team, will win this fight to help attain a food secure, prosperous and peaceful world for present and future generations.

Thank you all.