

### **Socialist Republic of Vietnam**

- Estimated / measured:

- Increased productivity of agricultural crops by 20-50% compared to current, contributing to increased revenue GDP per capita in the project area increased from 266 USD / person / year now up to 484 USD/ person / year after 5 years;
- 30 typically ecological villages are built.

- The problems / challenges that may arise:

- Lack of overall planning and system link among modules of model;
- Requires high initial investment;
- Lack of forestry staffs and limited in level of ability.

- The responsibilities and coordinate in the implementation: MARD co-operates with National Target Program in Desertification and the two provinces of Ninh Thuan and Binh Thuan.

### **6 The project idea on rainfall and surface runoff collection technology to serve the community with which has the international support.**

#### **a) Title of project proposals for technology development**

" Building 15 pilot rainwater collection systems for residents in the Northern mountainous of Vietnam"

#### **b) Project's information**

- Introduction / Background:

In some residential areas in Northern Vietnam, there are severe shortage of water for living and farming in the dry season, while redundant rainfall in the rainy season. The terrain is fine for construction rainwater tanks with big volume and low cost. Investigation and survey to locate and construct rainwater collection system for runoff that help improving the lives of residents in areas is essential.

- Goals and objectives:

- Goals: To study a number of technologies for gathering rainwater runoff in accordance with geological and hydrology conditions in a mountainous are of Northern Vietnam;
- Objective: To build and put into use a rainwater collection system for daily runoff and agriculture for some residential areas in a mountainous are of Northern Vietnam.

- Relations of project with the priorities in sustainable development of the country: Diversification of water sources.

- Things that are obtained from the project as the value / benefits / messages: To do poverty reduction in some mountainous residential areas.

- The scope and feasibility of the project: Some projects have been implemented in Vietnam.

- Timeline: 5 years

- The requirements for budget / resources: The cost of surveys, models, equipment installation, consult experts, building a collection system are estimated as 15 million USD.

- Estimated / measured: Build 15 rainfall collection systems. Each system cost 1 million USD according to the price \$20/m<sup>3</sup> and volume of each system is 50,000 m<sup>3</sup>.

- The problems / challenges that may arise: Some reservoirs can be affected due to infiltration. Normally reservoir bed or walls depending on reservoir type and its location.

The responsibilities and coordinate in the implementation: MARD, Irrigation Department, local People's Committees.