

## **Development of a guideline for the conservation and management of natural resources in Mali and Niger**

Arable lands in the Sahel region in semi-arid West Africa are being degraded through intensive land use activities such as exploitative farming, extensive animal husbandry, and excessive fuelwood collection. Hence, it is necessary not only to introduce conservation techniques against degradation of soil and vegetation, but also to facilitate and get the villagers involved in conservation efforts. In this way, villagers become part of the solution. In addition, it is essential to have a regional or local support system to encourage and guide the villagers in tackling natural resource management issues.

Against this backdrop, JIRCAS implemented the “Study on the Establishment of Methods of Management and Conservation of Resources for Agricultural Production” with the Institute of Rural Economy in the Republic of Mali and the Ministry of Agriculture in the Republic of Niger. This study was subsidized by the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Japan from 2008 to 2012.

Four villages in Mali and two villages in Niger were selected as target areas for verification. Conservation activities (e.g. erosion control, reforestation, and soil fertility improvement) were carried out at these villages using approaches and techniques to clarify the constraints and to emphasize and reinforce the role of villages and relevant organizations. All applied approaches were compiled to form the guideline and technical manuals.

In the guideline, problems are resolved by applying the ‘question method’. The question method brings existing problems to light, hastening the problem-solving process with the cooperation of villagers (Fig. 1). The method lets local government officers act as facilitators, thereby allowing wide participation and enabling the villagers to clarify and solve the problems by themselves. In addition, the approach focuses on land management policy (COFO system, Fig. 2), which was developed based on Niger’s Rural Code (Code Rural du Niger, 1993). It is designed to enhance the establishment, management, financing and implementation capabilities of the village organization (COFOB) responsible for the conservation of natural resources, and it strengthens cooperation among relevant organizations. This approach thereby improves the ability of villagers to solve every problem they could face during implementation of conservation activities.

The approach used in the guideline is widely applicable because it contains detailed procedures and examples that local government officers in agriculture, forestry and environment can carry out during conservation activities with villagers. The guideline has already been certified by the Ministry of Agriculture in Niger and the Institute of Rural Economy, Ministry of Agriculture in Mali. Likewise, the technical manuals which were presented in 10 separate volumes including one on forest conservation, have been highly appreciated by officials from relevant agencies in Mali and Niger. Because these technical manuals clearly illustrate the information and procedures needed by local government officers to guide and advice villagers.

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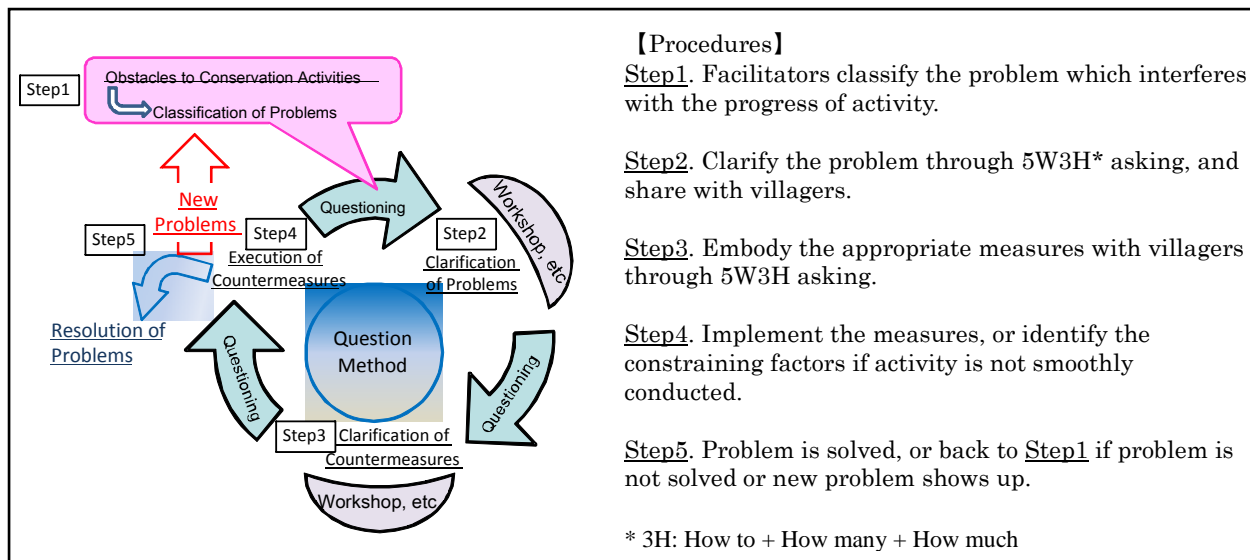


Fig. 1. Problem resolution through questioning

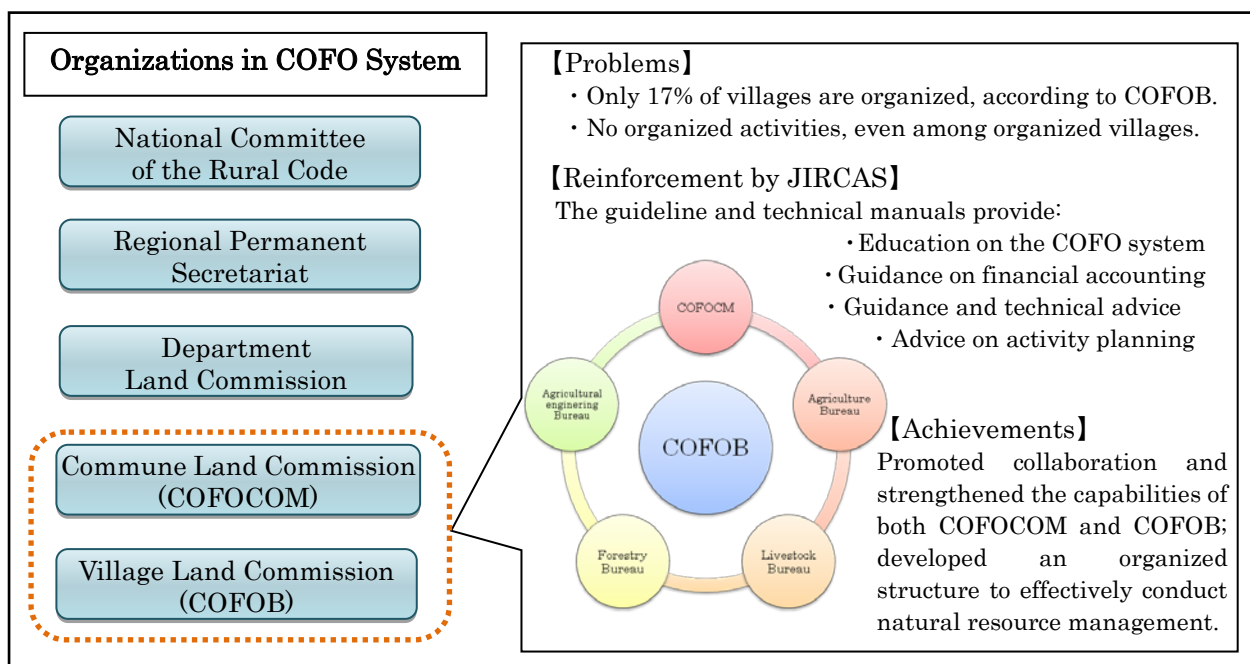


Fig. 2. Reinforcement of COFO system (local policy for land management) in Niger