I. General information

1. Training title

   Integrated Watershed Management Planning

2. Target groups

   + Staff working in forestry and agriculture sector: provincial department of agriculture and rural development (DARD), provincial forestry department, provincial water resources department, center for agriculture and forestry extension, provincial department of natural resources and environment, provincial planning and investment department, provincial industry department, management boards of protection and special-use forest, Tay Nguyen university, staff of Lak and Krong Bong district, etc.

   + Staff and officers working for donor-assisted projects and programs: Srepok river Integrated Watershed Management Project (DANIDA), Reform of Forestry Administration System Project (GTZ-REFAS).

3. Objectives

   Overall objective of this training course is to provide trainees with basic knowledge and skills of procedures for, methods and tools of integrated watershed management planning with the aim to strengthen their capacity of application to specialized task. After the training course, trainees are expected to be able to:

   - Analyze issues, opportunities and constrains in watershed management.
   - Identify objective of watershed management appropriate to specific conditions of each area.
   - Explain and assess natural resources and socio-economic database for watershed management planning.
   - Conduct a survey at a certain watershed area.
   - Work out an integrated watershed management plan.

4. Trainees

   Trainees attending the training course are 24 staff and officers working at Daklak province listed according to technical sectors and working institutions as follows:

   According to technical fields:
   
   - Forestry sector: 8 persons
   - Agriculture sector: 3 persons
   - Irrigation, water resources management sector: 4 persons
   - Land management sector: 5 persons
   - Others: 4 persons

   According to working institutions:
   
   - Daklak Department of Agriculture and Rural Development: 6 persons
   - Daklak Department of Industry: 1 person
   - Daklak Department of Natural Resources and Environment: 1 person
   - Center for Agriculture Planning, Inventory and Projection: 2 persons
   - Department of Planning and Investment: 1 person
   - Tay Nguyen University: 1 person
Natural Resources and Environment Consulting Center, Dak Lak: 1 person
Staff of Lak district: 3 persons
Staff of Krong Bong district: 3 persons
Forest and national park management boards: 3 persons
Srepok project and GTZ-REFAS project: 2 persons

5. Time and location
   Time: The training course is organized in 3 weeks, from 14th November to 30th November (exclusive of travel time).
   Location:
   In-door training: Meeting hall of Daklak DARD.
   Field practice location: Hoa Son commune, Krong Bong district, Dak Lak province.

6. Implemented main contents
   - Concept of watershed management planning
   - Legal, policy, organization and administration framework
   - Geographical Information System (GIS) in watershed management
   - Issues related to water resources
   - Land use and land use system
   - Introduction of an area for watershed management planning
   - Identification of problem and priority
   - Watershed inventory
   - Watershed management planning
   - Working out plan for implementation
   - Training assessment

7. Trainers
   Trainers are senior lectures of Vietnam Forestry University, Tay Nguyen University, researchers of several Institutes, such as Forest Inventory and Planning Institute (FIPI) and staff/officers working for Project of Srepok river watershed integrated management, Daklak department of water resources. Besides this, officers of MRC-GTZ Viet Nam Project supported and monitored the training organization as well.

<table>
<thead>
<tr>
<th>No.</th>
<th>Full name</th>
<th>Position, institution</th>
<th>Task assigned in the training</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Mr. Nguyen Ba Ngai</td>
<td>Dr., Senior lecturer, Vietnam Forestry University (VFU)</td>
<td>Principal lecturer, responsible for facilitating the training course and specialized issues</td>
</tr>
<tr>
<td>2</td>
<td>Mr. Hoang Xuan Y</td>
<td>MSc., Lecturer, VFU</td>
<td>Principal lecturer, responsible for organizational issues</td>
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<tr>
<td>3</td>
<td>Mr. Nguyen Van Hoa</td>
<td>Dr., Lecturer, Tay Nguyen University, Daklak</td>
<td>Lecturer, responsible for special subjects on land use and land use system</td>
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<tr>
<td>4</td>
<td>Mr. Pham Tan Ha</td>
<td>Project of integrated water resources management of Sperok river watershed area, Daklak province</td>
<td>Lecturer, responsible for special subjects on GIS</td>
</tr>
<tr>
<td>5</td>
<td>Mr. Vu Duc Con</td>
<td>MSc., Daklak water resources department,</td>
<td>Lecturer, responsible for special subjects on water resources</td>
</tr>
</tbody>
</table>
8. Training management agency
The training course was managed and directed by Department of Forestry in collaboration with Daklak DARD and Watershed Management Project MRC-GTZ.

9. Implementation agency
Office of the Watershed Management Project MRC-GTZ in collaboration with Vietnam Forestry University conducted this training course.

II. Training results
1. Knowledge and skills compared with objectives
After the training course, trainees are able to:
- Uncover problems, analyze problems, opportunities, constrains in watershed management.
- Identify objectives, analyze objectives appropriate to capacity of field survey area
- Assess land, water, forest resources and other resources for integrated watershed management planning.
- Master steps of organization and implementation of conducting a survey at a certain watershed area.
- Work out a plan for integrated watershed management based on surveyed data.

2. Outputs
Relevant issues have been surveyed and uncovered, and a plan for integrated watershed management has been worked out as follows:
- Uncover 3 issues (low income, inadequate water resources management and utilization, shortage of land for production and living), based on that, identify objectives and analyze objectives to deal with problems from now to 2010.
- Predict needs of Hoa Son commune to 2010 serving for integrated watershed management planning
- Integrated watershed management plan up to 2010 of Hoa Son commune, Krong Bong district, Daklak province.
- Training proceedings consists of the whole training documents, i.e. training materials, training outputs by trainees and system of gained data.
- Training process and outputs have been synthesized and will be able to updated to be available in the information system www.mekonginfo.org
3. Training assessment

After the training, organizers assess the training based on single self-assessed results by trainees. Final results is generally considered to be good (of which, Bad 0%; Medium 11%; Good 64.4% and very good 24.6%)

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<th>Bad</th>
<th>Medium</th>
<th>Good</th>
<th>Very good</th>
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III. Comments

1. Agenda, process and method
   - Contents, agenda and method are appropriate to target groups.
   - Application of learner-centered teaching method attracts trainee concentration.

2. Trainees
   + Good points:
     - Active participation.
     - Enthusiasm, good attitude of learning and experience sharing
     - Older trainees show their activeness and share much experience in technical issues.
   + Weak points:
     - Due to the fact that the training is organized at BMT city which is near trainees’ working institutions, trainees are usually interrupted by their routine works, especially the young ones.
     - Specializations of trainees are different from each other, thus, accessibility to watershed management field is not equal.
     - The ratio of female trainee is low. Furthermore, they are almost young and inexperienced.

3. Lectures
   + Good points:
     - Lectures are well-experienced in watershed management planning field, some of which participated in several other training courses on integrated watershed management.
     - Good involvement of lectures who have been staff working in watershed, irrigation management and land use management in Daklak.
     - Willing to exchange practical experience.
   + Weak points:
     - Several lectures from local area lack teaching methods.
- Loose cooperation on the training organization due to far distance and unavailable information.

4. Organization of training process

+ Good point:
  - The training follows well the agreed plan.
  - Adequate training agenda and organizational process.
  - Explicit and transparency organization and financial management, especially with participation of stakeholders, such as MCR-GTZ Project, Daklak DARD, VFU and local authority.
  - The training has received attention, high appreciation of DARD, provincial leader, and other relevant agencies. Especially, local television supported to propagate information on mass media.

+ Weak point:
  - The training course is organized at BMT city that is the reason why trainees are interrupted by their routine works during the training.
  - There planned to have 27 trainees, however, only 24 are able to attend the training as several projects and program could not assign staff to participate in due to workload by the end of year.

IV. Recommendations

- There should have refreshment training courses offering to trainees of this training course so that they could be equipped more knowledge to become key staff on watershed management at local areas.
- Analyze training needs assessed during such training course to identify following training themes.
- Such training course should be organized by Quarter III annually to avoid workload.
- As in the training results, 2 needs of watershed management of Daklak province have been raised by trainees: firstly, promotion of the institution and administrative organization; secondly, capacity building to watershed management at local areas (see the need synthesis table in the training proceedings). Relevant agencies and MRC-GTZ program are required to pay more attention to these.
- Experienced from this training course, local lectures and several good trainees should have more training to become potential lectures on integrated watershed management at local areas.

Prepared by

Nguyen Ba Ngai
Principal Trainer