SNV Bhutan Field Trip (Back to Office) Report
Climate-smart Agriculture, SNV-Netherlands Development Organisation

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<thead>
<tr>
<th>Name/designation of Project Manager</th>
<th>Badrinath Bhattarai, CSA Project Manager</th>
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<tbody>
<tr>
<td>Name of Sector Leader</td>
<td>Binai Lama</td>
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<td>Trip dates</td>
<td>5-7 March 2015</td>
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<td>Places visited</td>
<td>Wangdue, Phangyul</td>
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<td>Assignment name &amp; ION</td>
<td>1110690</td>
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Nabesa, Phangyul CSA Pilot Site

Status quo: Only the pond with high seepage losses. The community depends solely on the pond for water use both for crop production and livestock (photo below). The materials when transported manually to the site will be about 300 m away from the road head.

Task at hand: Protection of the local pond that benefits 7 h/households directly for increased rice and vegetables production.

Collaborations: SNV, Engineering Division, Dzongkhag/Gewog Agriculture and the direct beneficiaries will jointly implement the pond protection activities.

Strategies: The water protection in pond was discussed at site and agreed that the protection techniques should be simple, economically cheaper and within the capacity and the resources of the community and/or an h/hold so that the communities and/or an h/hold can up-scalable similar type of water protection activity in future by themselves. Therefore, SNV and the Engineering Division of the Department of Agriculture decided to demonstrate water protection in the very existing pond through use of soil and cement.

Requirements & responsibilities:

✓ SNV-Climate-smart Agriculture Project support
  • Cost of required quantity of cement (as estimated) with transportation up to road head point, and wage of one mason for 7 days maximum. One roll barbed wire for fencing at the top of the tank to maintain safety for children.

✓ Community's contributions:
  • clearing, digging, edging and smoothing the existing pond
  • Head load transportations of cement and one roll barbed wire to the site
  • Digging and carrying desired soil type to the site and help mason to plaster the pond until completion.

✓ Accomplishment of the task
  • 30th March 2015

✓ Monitoring and sustainability
  • M&E-Upscaling: Dzongkhags & Gewog Agriculture
  • Sustainability: Bylaws development by the communities
Expected impacts/outputs

Production increased by 30% through timely cultivation, supply of readily available water at critical stages of crops, additional areas and crops under production through:

- Paddy nursery raising on time
- Paddy transplantations on time
- Increased areas under crop production during water lean season
- Increased production of organic vegetables
- Facilitate drinking water for livestock
- Pond development for water protection technology up-scaled without external support by the community/or an h/hold level

Human wildlife conflicts management

Assessed the electric fencing demonstrated through the support from CSA project, SNV as a part of food security venture in 2014. The advantage of the electric fencing so expressed by the Phangyul beneficiaries were:

- Done away with crops guarding for wild animals after the electric fencing thus saved farm labour minimum of 90 days per crop under cultivation
- At least 30-60% of the crops being damaged every season by wild animals have now been saved and added to their food security.

The farmers have already started up-scaling up electric fencing in Phangyul and other Gewogs in Wangdue Dzongkhag. Upon request of the Gewog Tshogde (GT), SNV has partially supported GI wire (25 Kg) and an energizer (Photo above: materials are being handed over to the community by the Gup Phangyul) as an up-scaling promotional demonstration at new sites (the support counts for one-eighth of actual requirement) for management of human-wildlife conflicts leading to augment food security of the small holders’ farmers.

Discussions & presentations

Photo at the right: The team comprised of the CSA Project Manager, NOP representative, DAO and the Gewog’s Extension attended the GT. The GT members were appraised and presented on issues and strategies on climate agriculture, smart farms and smart farming in the context of water shortages for agriculture due to climate change. The members were also highlighted on the CSA activities pilot demonstrations towards resilient farming and market value chains besides the CSA plans for 2015 and sustainability strategies for future.

The CSA action research on crop diversities adaptations in light of water scarcities and upland rice production research are underway led by RDC Yusipang. For upscaling of upland rice, SNV has supported 396.5 Kg of seeds and distributed to 16 new farmers in Phangyul Gewog. With 20 farmers already cultivating since 2014 have now up-scaled to 36 farmers in 2015 covering an area of over 30 acres.