

# Small-Scale Aquaculture Program AwF-Nepal: Phase II

(1 April 2010 – 31 March 2012)

## Project Initiation Report



### Project Team:

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Dr Madhav Shrestha, IAAS, Chitwan, Nepal  
Mr Hare Ram Devekota, Lamjung  
Mr Khagaraj Nakola, District Fish Growers Association, Lamjung  
Mr Agni Nepal (NARC), Pokhara

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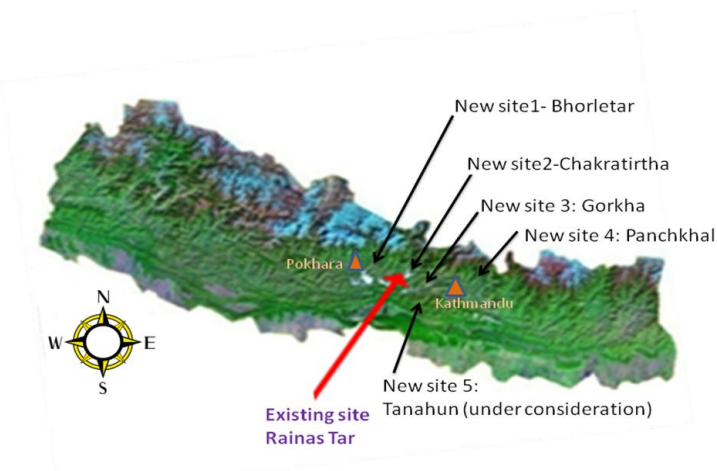
## 1. Background

After having very successful 2-year (March 2008 - February 2010) small-scale aquaculture program in Rainas Tar, Lamjung, Nepal funded by the AwF, the Project Team proposed and got approval to launch a scale-up of program in two additional villages (Sites 1 and 2) in the same district and other locations in nearby districts as shown in the Fig. 1.

The project has been launched by IAAS in cooperation with AIT (Thailand) and local organizations and individuals. A field manager, an IAAS graduate, has been hired who used to serve as Intern Manager and assisted in implementing the on-going project will be hired on full-time basis to be based at IAAS.

The main objective of the program is to improve rural food security, supply animal protein and generate supplemental income through small-scale aquaculture by empowering women using the AwF-Nepal project as model for rural communities in Nepal. Specific objectives of the proposed project include:

- To expand small-scale aquaculture to other parts of the district
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- To test and further improve the productivity and efficiency of AwF-Nepal model of small-scale aquaculture
- To assist women's fish farming groups to develop as "cooperatives" so that they can carry on their activities and also further expand fish farming by themselves.
- To disseminate the project idea as widely as possible throughout the country



As planned, a visit to the selected project sites for the initiation of the project and formation of farmer's groups was paid by Ram C. Bhujel, the Team Leader of AwF-Nepal project and a Senior Scientist based at AIT, Bangkok while having a mission trip to Nepal with EU Asia Link program at IAAS, Nepal. After completing the task of the EU project mission at IAAS from 10 – 11 July, he started a trip for AwF-Nepal project and spent about a week in the field planning and initiating the Phase II program for the AwF-Nepal project. This report covers the activities carried out during this period:

## 2. Planning meeting with Dr Madhav Shrestha (Country Coordinator) and other members of the Project Team

While having EU program during April 10-12, 2010, Ram and Madhav met and discussed thoroughly about launching of the scale-up program within the basic framework described in the original proposal submitted to AwF. Potential challenges were discussed in-depth and appropriate strategies were prepared. At the same time, assignment of tasks

to the appropriate persons and allocation of budget to specific purposes and items were clarified and agreed during the meeting. Among the project sites proposed, at least three sites were decided to initiate the project in the Year I and the remaining will be in the year II. Regarding the Project Team responsibility, the following points have been agreed:

1. Dr Ram C Bhujel: As Team Leader to liaise with AwF authorities and reporting
2. Dr Madhav Shrestha: Technical Advisor / Country Coordinator
3. Hare Ram Devkota: serving as overall Local Coordinator and responsible for Chakratirtha VDC Lamjung (Site 2)
4. Khagaraj Nakhola: Responsible for Site 1 (Bhorletar) and liaise with district Fish Growers Association and District Agriculture Development Office
5. Babu Ram Chilawal: Responsible for RDC, Rainas Tar (Previous AwF farmers and also new group)
6. Krishna Raj Pandey: Putlikhet, Gorakha (Site 3)
7. Agni Nepal: together with Dr Madhav Shrestha to take responsibility of Panchkhal, Kavre (Site 4) and Dedhgaon, Nawal Parasi (Site 5). These sites will be initiated in Year II.

After having meeting with Madhav, Ram left IAAS on 12<sup>th</sup> April for Lamjung where the AwF project (Phase I) was launched. On the same day in the afternoon, as planned he met three local persons who had promised to assist for the launching of the project. They are:

- Mr Hare Ram Devkota, an M.Sc. graduate who served an Intern Manager for the AwF-Nepal-Phase 1 project. He teaches in a primary/nursery school in the same village on part-time basis.
- Khaga Raj Nakhola: the President of District Fish Farmers Association, Lamjung
- Krishna Raj Pandey: a farmer himself for the AwF Phase I project now serves as extension agent for the project.

The objectives and planned activities were discussed in detail and a schedule of visits for the following few days were prepared.

### 3. Visit to Chakratirtha VDC, Lamjung (Site 2)

On April 13, 2010, the Project Team visited the Site 2. They were welcomed by the community leaders; Shambhu Kaddaria and among others. While waiting for other people to join, the Project Team looked around the area and talked with local people. It was revealed that the district (Lamjung) was highly affected by the political conflict. A list on the wall prepared by the community showed that more than 73 people were dead; out of which 53 were men and 20 were women. About 13 people are still disappeared who their where-about is still unknown.



**Fig. 1** Gathering in community hall.

When more people arrived to gather in a community office, they were asked to introduce by themselves individually. Although, the project aims to form a women's

group, men have to initiate and assist women to come forward; therefore only men were gathered. After introduction, on behalf of the Project Team, Ram gave a brief talk about fish farming in Nepal and the purpose of the program. Similarly, other Team members gave brief description how they started and what has been achieved so far in previous project site i.e. Rainas Tar. Several questions were raised by the locals and they were answered. At the end of the discussion of more than two hours, names of 20 family heads were prepared. Laxmi Bhatta who has been recently started fish farming, was selected as contact person or the Group Leader to facilitate the project activities including forming the women's group, training them and others.

#### 4. AwF-1 - Farms and Meeting with Rainas Tar Development Committee (RDC) Officials

After completion of the meeting in Chakratirtha VDC, the Project Team (4 persons) observed more than 20 fish ponds constructed under the AwF-Nepal Phase I. Families were met and discussed about their experience of farming fish. Almost all of them expressed that they are benefitting from fish farming and there was indications that they will continue in long term basis. For example, some farmers are already moving towards commercially integrated farming. Several farmers which we visited have bigger ponds than average (Fig. 5) and few farmers have small-ponds with pig sheds (Fig. 6). One of the remarkable progresses was seen in integrating fish farming with rice which is summarized in the box below:

Mr Krishna Raj Pandey, one of the active farmer and now act as agent of change for the Project Team, has a small pond (12m<sup>2</sup>) in front of his house adjacent to a rice plot (Fig 2) supported by the AwF project and also he had dug a ditch in a corner of a rice plot of about 500m<sup>2</sup>. The pond next to house was stocked with 25 fry, at the time of visit, their fish were about 1-1.25 kg in size, as showed by his wife (Fig 3). He has been growing fish in a rice plot as a trial. He stocked about 200 fish. The rice plot Common where a ditch of 16 m<sup>2</sup> area and 1.5 m in depth. He has hybrid variety of rice called Chandani which produces seedlings from stumps again. After harvesting rice he left the rice stumps for whole year to grow fish.

- Estimated production of fish= 200 kg / 500 m<sup>2</sup> rice plot
- Price of fish = 200 NRs (= US\$2.7) farm gate price
- Total net profit estimated = 40,000 NRs (US\$550)/year
- Estimated revenue from rice = 2,500 NRs (US\$35)

His message to other farmers: Fish farming is 5 times more profitable that vegetable farming and at least 15 times more profitable than rice. Therefore, he will stock more fish in other plots as well. If farmers know this fact, he also thinks, almost all the people will adopt fish farming in the village and other areas of the country.

After visiting the farmer's field a meeting with RDC officials was organized. They were briefed about the progresses made by the farmers as mentioned above. At the same time, they were asked to help farmers towards moving commercial scale. The following decisions were made during the meeting:

- Forming a new group under scale-plan by adding 20 new farmers and constructing a pond each
- Initiating 'One village one product (OVOP)' forming a group for each specific possible item of bamboo, stones, clay soil, clothes and so on. Large sized (A4) photos of several items were shown and given to the RDC for reference. Many such items from Thailand and other countries were also presented on Laptop



screen. This is to help farmers generate more income in addition to the income from fish farming as a part of livelihood improvement.



**Fig 2.** Fish harvesting during the visit



**Fig 3.** Just harvested fish



**Fig 4.** Ditch at the corner of Rice plot



**Fig 5.** One of the well managed ponds



**Fig 6.** Fish with pig



**Fig 7.** Two families farming together

## 5. Meeting with farmers community leaders in Gorakha District

On April 14, 2010, the Project Team (Ram Bhujel, Hareram, Krishna Pandey and Agni Nepal) visited the Putlikhet, Gaikhur VDC, Gorkha district which is adjacent to Lamjung district in the eastern part. About 16 family heads were gathered.

As in Chakratirtha VDC, the Team observed the area and found a person was constructing two cement tanks to grow fish and store water for vegetable garden. Another farmer was growing catfish as an initial trial. After gathering in a open area under tree shade (Fig. 7), fish farmers were asked to introduce by themselves individually. Similarly, on behalf of the Project Team, Ram gave a brief talk about

fish farming in Nepal and the purpose of the program. Similarly, other Team members gave brief activities done in previous project site i.e. Rainas Tar. Several questions were raised by the locals and they were answered. At the end of the discussion of more than two hours, names of 20 family heads were prepared as given by the people gathered for the meeting. A Chair was also appointed among themselves who will be the person contact with the Project Team.



**Fig. 8** Meeting with farmers

## **6. Visit to District Agriculture Development Office (DADO), Lamjung**

On April 14, 2010, the Project Team visited District Agriculture Development Office (DADO), Lamjung in the morning and met Mr Kishore Pant (Chief) and Kul Prashad Adhikari (Subject Matter Specialist). Mr Pant mentioned that there are a total of 42 staff in the office and 28 Junior Technicians (JTs) and Junior Technical Assistants (JTAs) for the extension of agricultural related technologies. It was mentioned that the purpose of visit was to discuss about the possibility of scaling-up of the aquaculture program in the whole district. More importantly, DADO as a government authority, was asked to get involved more and also be ready to take a responsibility of continuing the program after the AwF project is ended mentioning that that is their program in the long-run. According to Mr Pant Fish farming has been one of the interests of the office because of AwF program and his staff are assessing the possible areas. The chief also mentioned he has a policy and plan of agriculture commercialization under which 5-6 fish AwF farmers to make a move towards commercialization immediately so that others will also follow the route. Hopefully, production can be increased. Similarly, it was also mentioned that hatchery establishment for on-site seed production and also transport of fry from government stations for the farmers in groups can be supported/facilitated.

## **7. Visit to Bhorletar, Lamjung (western part)**

After visiting the DADO office, the Project Team headed to Bhorletar (Site 1) having some observation along the way. The purpose of visiting the site was to discuss and initiate forming fish farmers group. After having about 6 hours drive along bumpy graveled road, the Team reached to the site and met a group of farmers and community leaders gathered in a Livestock Development branch office of the district. It was found that there a farmer farming fish but facing a problem of mass mortality. A number of questions were raised and the team tried to convince the group. However, because of some problems faced by the farmer, many of them were reluctant unless there is good technical support and frequent visit. The Project Team decided to have another visit or select another site, instead in the Year II. In the mean time, the Project Team has asked the group leaders of the site to continue discussion with farmers for the possibility to start later.

## 8. Recent report from the field and others

Mr Hare Ram Devkota (Local Coordinator) has reported that:

- all 20 ponds have been constructed and fish fingerlings have been stocked in Site 3 (Gorkha) as planned.
- 13 ponds have been constructed and stocked with fingerlings. More farmers are to construct their fish ponds later this year.
- 8 farmers in RDC, Dhamilikuwa, the site of the AwF-Nepal Phase I site and more farmers will construct after they harvest rice
- Training for the groups in Site 2 and 3 has scheduled at the end of July, 2010 during which Dr Madhav along with his colleagues of IAAS has agreed to assist.

Ram and his wife, Sukanya have donated 100 T-shirts (Fig. 9) for the benefit of the project. All the funds generated from the sales of the T-shirts with AwF logo will be spent for the project activities.

Ram plans to sell these T-shirts during the World Aquaculture conference during September 13-15, 2010 in Phuket, Thailand organized by FAO/NACA.



**Fig. 9** AwF-T shirts for fund raising (Price US\$30)

The information about the T-shirt, booking and on-line payment can be found at the link below:

<http://www.see-thailand.com/whcove.html>

## 9. Planned visit schedule

Person(s) travelling	Approximate dates of travel	From / to	Purpose	Duration
Dr. Ram C. Bhujel	April 10 - 19, 2010  <b>Others scheduled are:</b> October, 2010 February 2011	AIT-Nepal	Project initiation and technical supports	2 weeks/ Visit completed
Dr. Madhav Shrestha	End of July, 2010 October, 2010 February 2011 Mid-May, 2011	IAAS – Lamjung, Tanahun, Gorkha	Training and technical supports	About a week
Mr Agni Nepal	April 14-19, 2010 October, 2010 February 2011 Mid-May, 2011	FRC, Pokhara to Kavre	Project initiation and Training and technical supports	3-4 days/visit
Mr. Hareram Devkota and Khagaraj Nakhola	Live in Project Sites	-	Work as Field Managers	Most of the time spend in the field

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