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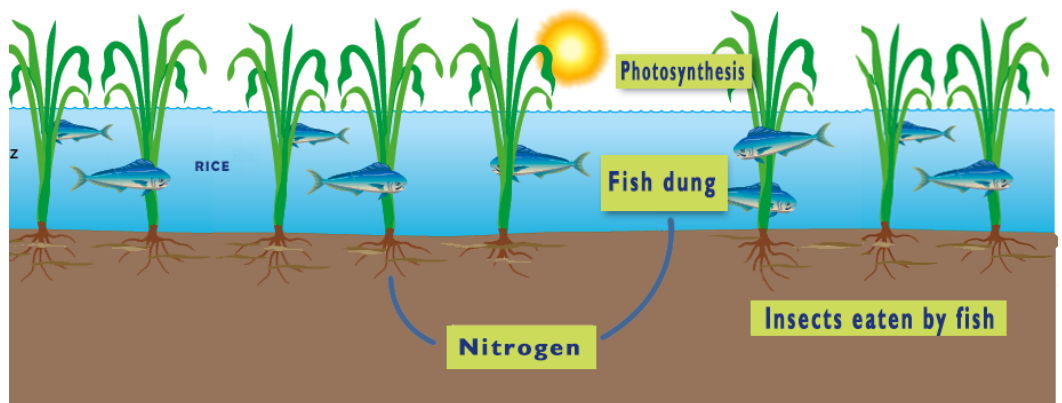
We would like to thank
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Rice Field Fisheries on the Tonle Sap Lake, Cambodia

Objective :

Our objective in conserving rice field fisheries is to increase natural fish stock and improving livelihoods.

Methodology:



Fishing in rice fields is not new in Cambodia – fishermen have long known that their paddies are a good source of fish in the wet season. However studies have indicated that by encouraging fish to spread to ricefields in the wet season can actually increase both fish populations and rice production. Fish thrive in the paddies because they have access to the huge food source generated by all the insects attracted by the rice.

In the wet season, the fish spread far and wide; creating blockages to their passage is prohibited, so that the whole community can have equal access to this important protein source. As the waters begin to recede, fish make use of either natural or community-dug channels which lead them to 'dry season ponds'. These are reservoirs of water which stay deep enough throughout the dry season to sustain the fish, and can be blocked with barrages to ensure sufficient fish stock stay in them for the dry season.

Fishing in the dry season ponds is illegal, to ensure that the fish survive and spawn and can fill the paddies again when the rains return. Water buffalo are kept out, as they also stir up the waters and disturb spawning. When the water levels rise with the wet season, the fish return to the paddies, which welcome the natural fertiliser the fish provide, and the pest control service they perform. Both of these processes have been shown to increase rice yields.

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Synthesis

Beginning in 2014, CI has been working closely with Community Fishery Committees (CFCs) on the Tonle Sap to construct and protect rice field fisheries. This has been a part of CI's broader project with the communities to conserve fish stocks and diversity and support local livelihoods, funded by Fondation Ensemble.

Methodology: Implementation with the community members

A primary step was arranging study tour for members of the Tonle Sap CFCs to visit a rice field fisheries refuge in Battambang province in May to learn from their experience of establishing and managing the refuge.

Potential sites in our target project area were then considered and chosen by the community members in consultation with the Fisheries Administration and village chiefs. Two initial sites for dry season pond were chosen based on their water level in the dry season, abundant aquatic life, and surrounding areas of flooded paddy fields. One of the ponds was deepened a little by the community, and both are on commune lands where their protection through the dry season can be ensured.

At a community meeting, elections were held to select members for the new Ricefield Fish Conservation (RFC) Committees, who convened in November 2014, and will be responsible for protecting the sites.

Activities so far have included conducting a fish baseline study ; and installation of fences and barrages at the sites to prevent fish passage to the wider lake at the end of the wet season, and to stop buffalo entering into the conservation areas. A baseline study has also been undertaken of the rice yields of the sites; which will be compared with yields, expected to be increased, at project completion.

Results

- The fish baseline found 30 species of fish in the community pond and 22 species plus crabs in the stream.
- We are yet to conduct the follow-up studies which would reveal changes in fish density or diversity, or rice yields.
- The fences and barrages are so far proving effective in preventing fish passage and keeping buffalo out.



Site selection for rice field fish conservation with CFCs, village chief, and FiA cantonment



Building fence to block dry season ponds

december 2015