RTC-TH Aug 2013 Update

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Community-based environmental education for the self-sufficiency and sustainability of small rural family farms

ชุมชนตามสิ่งแวดล้อมศึกษาเพื่อการพึ่งตัวเองและยั่งยืนชนบทขนาดเล็กครอบครัวฟาร์ม

You may post questions / comments to the Discussion area of our website

www.neighborhoodlink.com/org/rtcth E-mail: rtc2k5@gmail.com

Planting Our Paddy Rice

By mid-July we began preparation for plowing our rice paddies. The paddies are flooded a few days prior to plowing. This is the time to check the water flow between the various paddies. Repair of dikes and drainage occurs at this time.

In the second to last week of July, we began plowing the rice paddies to prepare them for transplanting our wet rice crop. We draw some water from the East fishpond to flood the paddies for plowing.

The paddies are flooded in preparation for plowing.

The plowing is just one activity leading up to planting our wet rice. The seedlings At the same time the plowing starts, a team of workers begins to bundle seedlings from the seed bed. The work is done by hand; no tools are needed. You simply grasp and uproot a handful of seedlings. After gathering several hands full, you tie them together with a pliable bamboo strip. It's the Thai version of the "twist tie."

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RTC-TH Co-founders

Greg & Saifon Lee

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We hired a tractor & driver to plow our paddies.

Simple tools: bamboo twist-ties and ice water.

The rice seedlings are gathered by hand.

A handful is then bundled with a bamboo twist tie.

Bundled seedlings waiting for distribution.

Bundled seedlings are tossed into the prepared paddies

By dusk, the paddies were plowed and smoothed for transplanting. Distribution of the bundled seedlings is simple: gather them into a bamboo basket; carry them to the various paddies; toss them into the water throughout the paddies.

We planned the transplanting for the next day with additional hired labor. We hoped for good weather.

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Water in the paddies flows under gravity. All paddies are laid out to allow water to enter on the high side and exit on the low to the next paddy. The partly cloudy skies proved favorable. The day workers were divided into two teams. The work went quickly. By mid-day, they had transplanted nearly half the paddies. It was a good sign. At the end of the day, all 2.88 rai (~1.14 acres) of our paddies are transplanted. Thus begins our wet rice crop for 2013.

Bundled seedlings soaking in water waiting transplanting.

Transplanting is stoop, manual labor.

Iced water is the key refreshment break.

At the start, transplanting all the paddies seems a very daunting task.

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It's approaching lunch time, and nearly half our paddies are transplanted.

All paddies are transplanted at the end of the day.

Rains Refills Our Ponds

The West pond is our smallest fishpond fed by the West Gully. It is filling, but hasn't reached the overflow outlet.

The West Gully Holding Pond

The West Gully Holding Pond is about half full. It is job is to slow the water flow to the West Fishpond. Later the water will seep to the pond. The idea is to slow the West pond from overflowing too quickly. Later we will stock the holding pond with small fish to control mosquitoes that may lay eggs in the water.

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Central Fishpond is our largest fishpond. It too is filling but hasn't reached the overflow outlet.

The Central Gully Holding Pond has a little water in it.

Our efforts in terracing, composting, and tree planting aimed to slow surface runoff, increase water infiltration, and increase soil moisture retention are working. The low water level in the holding pond is evidence our efforts to keep water higher up on the farm.

East Fishpond is our second largest fishpond. (The yellow circle shows the drain outlet.)

The main purpose of the fishponds is to assure an adequate water supply for our rice paddies. The water level in the East pond is lower than the other ponds. This pond is the source of water for preparing the paddies. The East fishpond drains to the highest rice paddy. Therefore water can flow by gravity to all other lower paddies.

During the rice growing season, overflow from the Central pond also goes to the rice paddies. The overflow outfall goes into the second highest rice paddy and to all other lower paddies.

In the dry season, minimal seepage from the fishponds helps water the garden beds of squash, pumpkin, and egg plant bounding the Central Fishpond. This contributes to our efforts at "value added" gardening. Over time we hope to expand the amount of space allocated to this activity.

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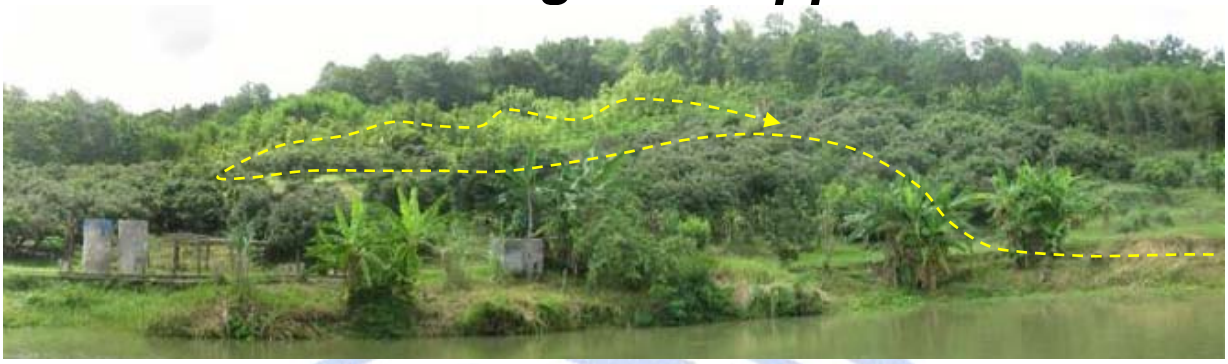
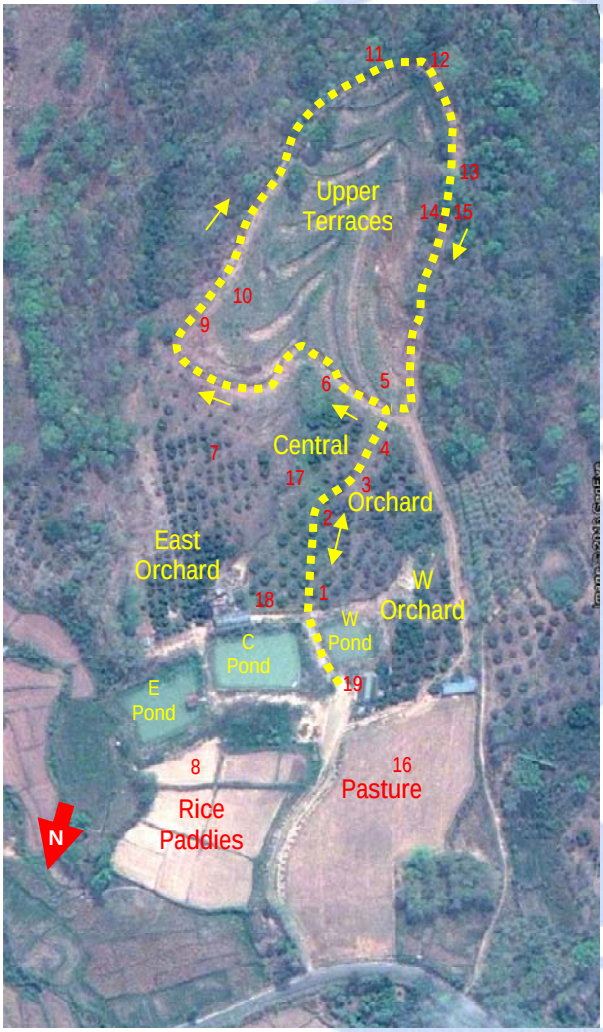
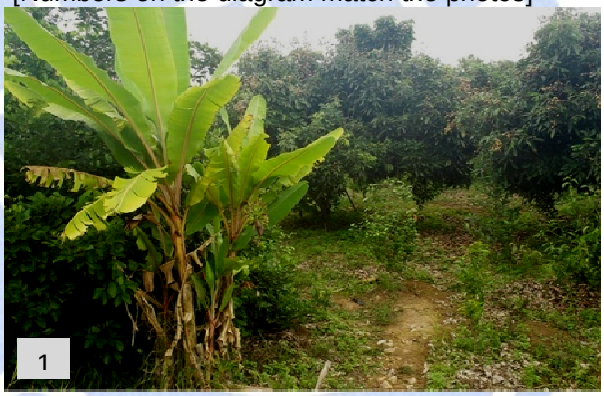
A Walk Through the Upper Farm





Sketch map of our walking tour.

Join us on a walk through the upper farm. We start from the farmhouse through the Central Orchard. After reaching the water tanks at the lower terrace, we cross over to the East side and go to the upper terraces. We return down the west side to the water tanks, then back through the Central Orchard.
[Numbers on the diagram match the photos]



Mixed crops of bananas, tea, and long an.

Rambutan ripening in the orchard.

Long an now about 1.8 cm diameter.

Saifon walking uphill through a mix of tea and long an

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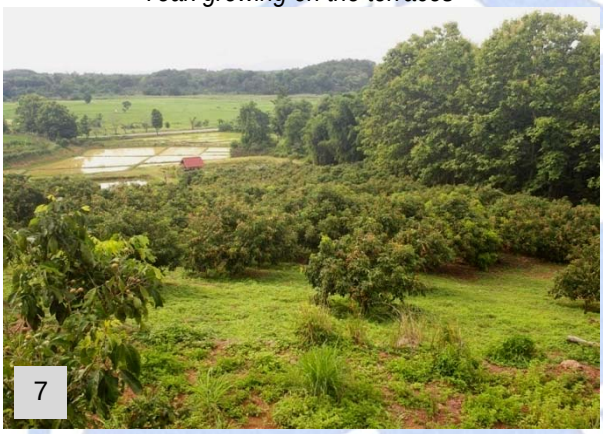
Teak growing on the terraces

The terrace crossing from West to East side



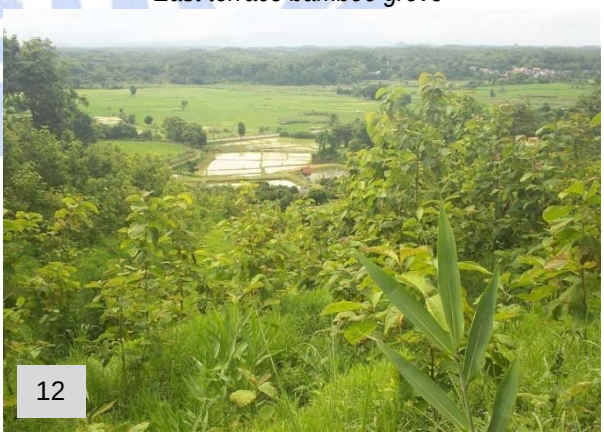
The East Orchard viewed from the lowest terrace

Our rice paddies seen from above the East Orchard

The East terrace access road and fire break.

East terrace bamboo grove

Saifon walking on the top terrace road



View from the top terrace

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The West terrace access road

Recent gentle rains produce many mushrooms

Saifon takes time to reap a forest food harvest

The pasture seen from the West terrace access road

A mix of long an, tea, and bananas at the Central Gully

A mix of tea, dragon fruit, and long an

The farmhouse, Sparky, and container "office".

From this brief walk, you can see the diversity of the upper farm. The forest is the source of the numerous native pollinators. The terraces extend the tree cover of the natural forest above the farm. Together they form the water shed for our fishponds and rice paddies.

Our plan is to maintain as much biodiversity as possible for our farm. It is a major factor for our sustainability.

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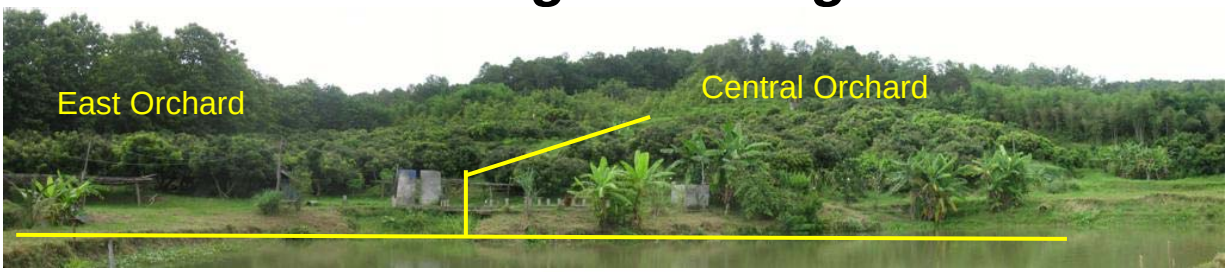
Harvesting Our Long An



Our Longan are in the East and Central Orchards. Pi Oi and Pi Or (Saifon's older sisters) planted these several years ago. Workers reach or climb up to cut the fruit bearing branches from the trees. Other workers strip the fruit from the branches and put the fruit into large gunny sacks.

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The twigs and leaves go into compost piles. The fruit are bagged and carried down from the orchard. At the farmhouse, the bags are loaded onto a truck for the trip to a weighing station where we can be paid.

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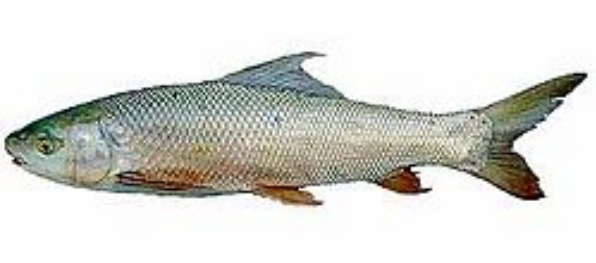
New Fish for Our Ponds

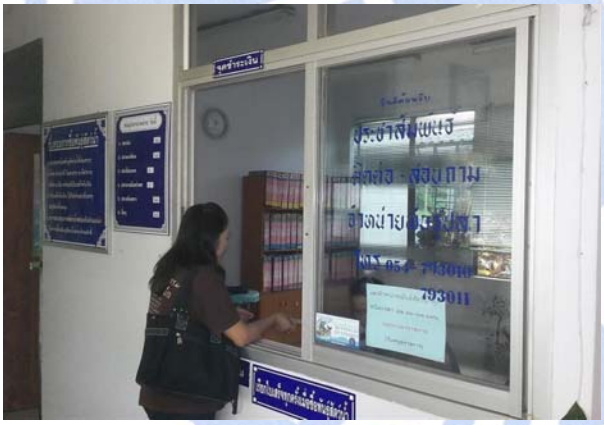
In a new bid for another "value added" effort for our farm, we got some new fish for our ponds. Saifon made a contact with the Nan Inland Fisheries Research and Development Center just south of the provincial capital. We wanted to get *Cirrhinus micorplepis* and *Probarbus jullieni.* Luckily, they had some ready for sale. So we stopped at the fishery to place our order.

Both fish are commonly used to make *laab* which is a popular dish. It can be made with beef, chicken, or fish. The meat is chopped fine to a pasty texture that can be raw or cooked. Overfishing has depleted natural populations in local rivers. So we wanted to try raising them in our fishpond to cash in on the limited supply in the local markets.



Cirrhinus mocrolepis (small mud carp)

Probarbus jullieni (Seven stripped barb)



Saifon orders and pays for the fingerlings.

The fishery workers are ready to process her order

The fingerlings we want are in tank #4

The fine mesh net makes catching them easy

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The fingerlings are about 2.5 cm long

The going rate is 100 THB for a bowl of fingerlings/bag

The bags of fingerlings gets a shot of oxygen

We unload the bags of fingerlings at the farm

To assure their safe trip home, the bags are given a shot of pure oxygen. We loaded the bags into the truck cab. The strong sun might be threatening to the fish, so we let them ride in airconditioned comfort to our farm.

We temperature acclimate the bags in our pond

Pond water is mixed with the water in the bags

The fingerlings are gently released in our fishpond

We distributed the new fish in the West and Central Fishponds. The bags were set in the water for temperature acclimation. After several minutes, the bags were opened. Fishpond water was slowly introduced and mixed in each bag to reduce the shock on the new fish. Gradually, they swam out to seek refuge in the vegetation at the edge of the ponds. Welcome to their new home.

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