Advantages of "Paddy Raft"

- Mean to survive from flood and drought, self-reliance and sharing to others
- Reveal traditional knowledge on agriculture for climate change adaptation and disaster resilience
- Promote natural agriculture; non chemicals farming and environmentally friendly
- Save cost by using available materials
- Save energy by non-irrigation system
- Transfer local knowledge as a learning center

Uniqueness of Paddy Raft

- Can be grown all year round, which is no need to rest soil or plow stubble like typical rice cultivation
- Do not need pesticides, just simply press and shortly immerse the Paddy Raft under the water for pest control
- Only use natural nutrient directly from the river, do not need any additional fertilizer
- Conserve rice gene
- Take shorter period than typical rice cultivation

This research aims to investigate the traditional knowledge and practices for adaptation to extreme events, which supported by research cluster of climate change and disaster management, Chulalongkorn University. Objective is to analyze the body of knowledge of farmers in a practice of climate change adaptation such as flood and drought. "Paddy Raft" is one of the agriculture practices that has potential to adapt to climate change situation successfully. However, this practice could only be the survival way when crisis occurred because the river belongs to public property, which is inappropriate for privately benefit. Except farmers have their own water resources.

Researcher team, 2015

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Rafting rice

Adaptive agriculture
in flood affected area

"Paddy Raft is a resilient way, not alternative way"

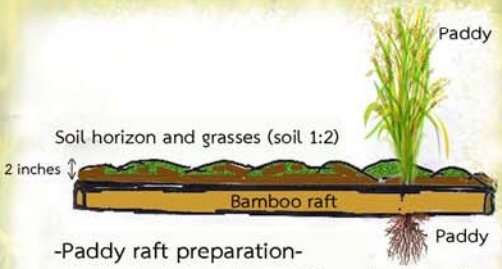
Rafting rice originator:

Mr. Suphan Mathasan, Farmer from Samchuk district, Suphunburi Province, Thailand

Process of Rafting rice cultivation

Step 1: Raft preparation/ Planting materials

- Soak the rice seeds overnight and air dry the soaked seeds for 1 more night
- Plant the rice germinated seeds in the seedling raft same as general rice seeding preparation
- Make properly bamboo raft size
- Prepare rafting rice cultivation bed by lining a bamboo raft with water Hyacinth, floating plant or grasses and covering with river sediment at the ratio of 1:2 with approximately 2 inches height for firmly attached and used as a green fertilizer



-Paddy raft preparation-

Step 2: Rice cultivation

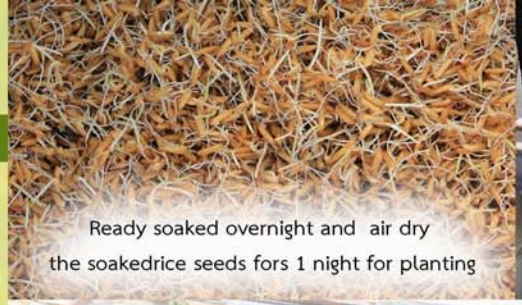
- For transplanting: use the rice sprouts at 14-20 days after planting the seeds. During transplanting, by hand to cultivation bed prepared, space out apart in the row that range between 20x20 cm or 20x25 cm
- For broadcasting rice: use the germinated seeds broadcasting onto cultivation bed

Step 3: Crop management

- For pest control, just press and immerse the Paddy Raft under water for a few minutes to let pest floating out and also feeding for fish and other aquatic animals.
- For nourishment, just let the rice roots absorb naturally nutrient in the river

Step 4: Harvesting

- Rafting rice can be accomplished as a traditional harvesting


Ready soaked overnight and air dry the soakedrice seeds fors 1 night for planting


Rice sprouts for transplanting


Mixed water Hyacinth with clay


Bamboo raft for rice planting


Paddy raft of transplanting


Paddy raft of broadcasting


Press paddy raft sink into the river for controlling pest


One week transplanted rice


Harvesting


Paddy from rafting rice cultivation