

**Minutes of Meeting on
System of Rice Intensification**
15 February 2005 -- 9:00-12:00
Multiple Cropping Center (MCC)
Chiang Mai University

Background of, rationale for, and objectives of the meeting:

Klaus Prinz of the MRC Rehabilitation Institute first learned about the System of Rice Intensification (SRI) from Madagascar in 2000. Following this, Klaus has attempted to continually follow up on the expansion of this concept as ideas have been exchanged within the SRI network. The System of Rice Intensification is a system of rice planting that increases yield at least one-fold if all of the SRI principles and methods are practiced in a correct and appropriate manner. The Agriculture Division of the MRC Rehabilitation Institute became interested in this production model in 2001, when it began field experiments with farmers in the provinces of Phrae and Chiang Rai. In addition, the Multiple Cropping Center (MCC) of Chiang Mai University also began experiments in MCC's demonstration fields and has continued these experiments each year.

The objectives of the meeting were then introduced as follows:

1. to monitor and summarize the situation of SRI rice planting,
2. to clearly assign one organization to be the main coordinator, and
3. to plan for experiments, production and extension to farmers in general.

Mr. Phrek Gypmantirisi (MCC) presented and spoke about the SRI network.

1. Government agencies' network
 - 1.1 Office of Agricultural Research and Development, Region 1 Chiang Mai
 - 1.2 Phrae Rice Research Center
 - 1.3 Multiple Cropping Center (Demonstration Fields, Faculty of Agriculture, Chiang Mai University)
 - 1.4 RISE-AT (Regional Information Center for SEA on Appropriate Technology) in media production.
2. NGOs' network
 - 2.1 ISAC (Institute for a Sustainable Agriculture Community) in Phrao and Mae Ai Districts
 - 2.2 Phrao Organic Farming Cooperative
 - 2.3 SAKDI, in Phrao and Mae Taeng Districts
 - 2.4 Rural Reconstruction Alumni and Friends Association (RRAFA) (Isan Alternative Agriculture Network, in Kalasin, Mahasarakham, Yasothon and Ubol Ratchanthani provinces in NE Thailand
 - 2.5 Rainbow Farm network, in Mae Rim District
 - 2.6 MRC (MRC Rehabilitation Center) in Chiang Rai, Chiang Mai and Phrae
 - 2.7 UHDP (Upland Holistic Development Project), with demonstration site in Mae Ai District
 - 2.8 CCHD (Catholic Commission for Human Development), doing rural development work in Mae Hong Son province.
 - 2.9 MRVR (organic agriculture project in Mae Ai District)

1. Monitoring and Summarizing the Situation of SRI

1.1 Mr. Tawan Hangsungnern (Rainbow Farm)

Rainbow Farm has extended organic rice cultivation and SRI to 65 families in 2004. SRI techniques were used to produce 50 tonnes of rice, and Rainbow Farm bought a portion of this. Farmers have tested SRI with varieties Kor Khor 6, Hom Mali 105 and San Pa Tong sticky rice. They based the experiments on economics. For the experiments with Kor Khor 6 and Hom Mali 105, the rice lodged and the rice grains shriveled. In 2005, experiments were conducted with San Pa Tong sticky rice. Compared with broadcast rice, SRI rice grew well. They are currently experimenting with red rice. The stems are strong and free of diseases, but planting area is limited by a lack of seeds and water. The Sansai Cooperative of 20 families and approximately 50 rai of land (Rainbow Farm) have started direct marketing of rice on their own. Organic rice has a selling price of 22 baht/kg, which they buy for 9.5 baht/kg.

1.2 Dr. Amphan Phromsiri (Geology Section, Chiang Mai University)

We have studied "nitrogen fixation" in regard to adjusting soil fertility in SRI fields and have data on soil, microorganisms, and yield, as well as data on growth. The results from May 2005 have been summarized. The experimental sites in the MCC fields have "the problem of acid soil," and we are not satisfied with the amount of tillering in the early growth stages.

1.3 Khun Prisana Hanwiriyanphan and Khun Wilasalak Wongwai (Office of Agricultural Research and Development Region 1 Chiang Mai)

OARD is a research support organization. None of the rice we plant is 100% SRI. We are the coordinators of work in Phan District, Chiang Rai province. We have studied the feasibility of black sesame in the field. OARD 1 is supporting work in Nan province during the period of reorganization.

1.4 Ms. Areerat Kittisiri – AAN (Alternative Agriculture Network/ Central Office, Bangkok)

We invited MRC staff to be resource people in Kudchum District, Yasothon province. To summarize the results from Surin province in 2003, using 20-day old rice seedlings gave good yields, while seedlings younger than that did not perform well. In Yasothon, results were also good, as a result of the long-term practice of organic agriculture. In an analysis of rice planting in the Isaan region (NE Thailand), they found that farmers are currently buying seed from companies, but if they practice SRI, the resulting yield produces good seed rice for the farmers. The AAN is breeding a new variety, "True Variety" and is focusing on indigenous rice varieties. There were 5 farmers planting SRI rice in Kalasin, 10 farmers in Surin, and 5 farmers in Mahasarakham. These farmers have no problems with the market, mostly they sell their own yield.

1.5 Ms. Kanjana Thomboon (Phrae Rice Research Center)

At the Research Center, we have planted organic rice according to the provincial strategy. We only started in 2004, so we can't draw any conclusions about yields yet. There are 250 participating farmers in Nong Muang Khai District, covering an area of 160 ha /1000 rai. Farmers have a problem selling the rice as the rice is very yellow.

The farmers are planting Sesbania and turning it into the soil as green manure. Three staff at the Center are assigned to work on organic rice

1.6 Mr. Sombat Chalermliemthong , Agriculture Extension, MRC Rehabilitation Institute (MRC)

MRC is extending SRI in 3 provinces: Chiang Mai, Chiang Rai, and Phrae. In the first year, there were two farmer representatives to experiment with SRI. In Chiang Mai, they have conducted experiments in the MRC experiment field and studied the differences between traditional cultivation and SRI. MRC has also collected data about the theory of SRI and compiled an information document in Thai. MRC has a network of villages and were resource people for a training of the Alternative Agriculture Network. Staff are monitoring work in the Institute and in the countryside (collecting and recording data). Data collected from farmers isn't consistent. They have summarized the data collected so far twice (from Chiang Rai and Chiang Mai). Data for yield shows that for some farmers, it has increased. An important problem is the problem of weeds. In 2004, the number of farmers practicing SRI increased, and the planting area increased from 1 rai to 3-4 rai.

The Northern Alternative Agriculture Network, Chiang Mai, and the Chiang Mai Pilot Project sent staff and farmers on an exposure tour about SRI to Ban Den, Wang Chin District, Phrae province.

Results of yield in Chiang Rai:

- Mr. David increased his yield with SRI by 50 % (from 80 tung/rai to 120 tung/rai) , using seedlings 45 days old at time of transplanting.
- Mr. Sawai planted fragrant Hom Mali, with an increase of yield by 65% (from 60 tung/rai to 100 tung/rai), for Kor Khor 6 by 30 % (from 100 tung/rai to 130 tung/rai).
- Mr. Boonruang planted 4 rai of Kor Khor 6, and has increased the area (his rice land has poor water access)

MRC has also compiled an SRI manual.

1.7 Ms. Wilasalak Wongwai (OARD 1 Chiang Mai)

This is my second time to attend a meeting of the SRI network. I took the collected academic data and set up an experiment in Bo Klua District, Nan province in 2005. On 19 February 2005, the Mae Lao Resettlement Site arranged an exhibition in Chiang Rai province on SRI.

1.8 Ms. Wilailak Krajaiwong (Sansai Resettlement Cooperative)

The Sansai Resettlement Cooperative was founded 50 years ago. I am the staff member in charge of credit and am interested in SRI rice and organic rice. I have been on study trips to Rainbow Farm twice and to ??? once. In 2005, 13 farmers planted 23 rai of organic rice in Pa Phai Nong Harn Subdistrict. This was dry season rice. The farmers say that they think SRI rice is difficult and complicated. They call it a "risky" use of their land and ask why they should do it. The organic rice is marketed by the cooperative, which has 1,000 members. There is an outlet store at the Ruam Choke Market for pesticide-free vegetables.

1.9 Dr. Prek Gypmantsiri (MCC)

We have done experiments with rice varieties San Pa Tong 1 and Kor Khor 6, comparing SRI and ordinary farmer practices for wet rice. We also have three fertilizer treatments: compost alone, compost and chemical fertilizer, and chemical fertilizer alone.

The results of the experiments were as follow:

- length of the head : SRI with chemical fertilizer yielded heads 25 cm long, while the OP system yielded heads 20-22 cm long;
- number of heads : the number of heads per transplanted bunch was greater in SRI ;
- yield of ordinary wet rice was much lower than SRI; Kor Khor 6 yielded higher than San Pa Tong 1 (height, head length, number of grains per head); and
- Kor Khor 6 was resistant to nematodes.

2. Selecting a primary agency to coordinate matters of SRI in Thailand

Mr. Rachakorn U-Saengsri spoke of the results of past work that had been carried out to a certain level during the time that the MRC Rehabilitation Center had been the primary coordinating agency and had experienced many problems and obstacles. MRC therefore proposed that another agency take over the coordination responsibilities in the future, and further proposed that this agency be the central office of the Alternative Agriculture Network.

In the future, coordination will be done via the Alternative Agriculture Network, Central Office (AAN) by contacting:

Ms. Areerat Kittisiri (Lek) at mobile phone : 09-8958612

Address: 912 Ngamwongwan Soi 31 Branch Soi 7, Ngamwongwan Road, Muang District, Nonthaburi

Tel: 66-2-9527871

e-mail : annet@ksc.th.com

3. Future work plan

It was proposed that the organic rice network for each region in Thailand contact the office of the Alternative Agriculture Network directly at the above address. For sites in Chiang Mai province, there will be a forum to exchange experiences at the end of May 2005 at Rainbow Farm in Mae Rim District, Chiang Mai province.* Interested parties can send representatives and help with public relations.

**This forum was held on 20/06/2005 after a more extensive workshop on country-level in Surin, NE Thailand.*

Summary of this meeting:

1. Relationships between organizations

1.1 Rainbow Farm is promoting organic rice production and is making attempts to do marketing through the cooperative.

1.2 OARD1 has a plan to work on organic rice and introduction of SRI.

1.3 The MRC Rehabilitation Center is working in 3 provinces, Chiang Mai, Chiang Rai and Phrae, and more farmers have taken up SRI practices.

2. Important points

- 2.1 In Thailand, SRI is tied to organic rice cultivation.
- 2.2 SRI has a good potential for quality seed production.
- 2.3 Rainbow Farm is planting rice in the dry season, called "Red Rose".

3. Organic rice and methods of developing it:

- 3.1 Organic rice can be produced using SRI techniques.
- 3.2 Varieties: we should develop our own varieties of rice for organic production.
- 3.3 Marketing (good start with Sansai Resettlement Cooperative)
- 3.4 Processing (good quality rice mill)
- 3.5 Balanced nutrients using organic fertilizer: compost, bioextract, EM (effective microorganisms), green manures and cover crops
- 3.6 Appropriate pest control

4. Research organizations

- 4.1 Multiple Cropping Center
- 4.2 Alternative Agriculture Network
- 4.3 Rainbow Farm
- 4.4 OARD

- Notes:
- 1. Develop organic rice as a One Tambol One Product (OTOP) product.
 - 2. Rainbow Farm is proposed as a pilot demonstration field site.
 - 3. Emphasize organic rice for rural consumption, with the surplus sold.

(Mr. Rachakorn U-saengsri)
Meeting Secretary