

LEARN-IT

Linking Extension and Research Need
through Information Technology

(Supported by IRRI)



MEMORANDUM OF AGREEMENT

AMONG

RRI KKU CSF

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“LEARN-IT PROJECT” PERFORMANCE FOR THAILAND



Part I : BACKGROUND

1. Principle and Rational

Mostly, Thai farmers have faced with problems of being indebted as well as poor due to the fact that the farmers lack variety resources including the knowledge of the development of the effective rice production. Moreover, the import of the chemical fertilizer, low quantity and quality of rice as well as the contamination of the chemical and pesticide in the rice fields are especially leading to the high cost investment.

In years 2006-2008, Chamnien Saranaga Foundation (CSF) supported by the Bank for Agriculture and Agricultural Cooperative (BAAC) has implemented the Rice Knowledge Bank (RKB) under

the “Implementation of Linking Extension and Research Needs through Information Technology (LEARN IT) Project in Thailand together with tri-associate members which are Khon Kaen University (KKU), Rice Research Institution (RRI) in North Eastern Mae Khong river area. Memorandum of Agreement (MOA) had been completed for those tri-parties, and International Rice Research Institution (IRRI) is the source of fund.

2. Objectives

2.1 To develop the media and knowledge of the organic rice by using communication technology/ information technology,

2.2 To promote the organic rice learning to meet the needs of the problem-solving of the farmers

3. Target Groups

There are three Rice Knowledge Bank (RKB) in following provinces : Yasothon, Nakhon Rachasima, and Nakhon Phanom

4. Beneficial Groups

Two hundred farmers of the “Organic Farmer Field Schools”

5. Period of Work

Thirty months from April 2006 to September 2008



6 Methods used in the project

6.1 BAAC meetings are held to prepare rice knowledge bank

based on experiences and lesson learned in the past and then adding information to the rice knowledge bank which formulated by the Rice Research Institute.

6.2 Survey site selection to receive an appropriate representative site.

6.3 Training farmer leaders in the use of the rice knowledge bank.

6.4 Training target farmers in the use of the rice knowledge bank.

6.5 Survey target farmers and do demonstration farm in order to transfer knowhow of RKB before and after the project. Identifying and prioritizing farmers' information needs are also included.

6.6 Make information available through CD-Rom and in print for dissemination to the farmers.

6.7 Field visit by BAAC staff to follow up farmers practices.

6.8 Survey target farmers after the project concerning uses of transferring rice knowledge bank, constraint and limitation of using CD-Rom and suggestion of improving information and materials.

7. Responsible Organizations/ Institutions

7.1 Chamnien Saranaga Foundation (CSF)

7.2 Khon Kaen University (KKU)

7.3 International Rice Research Institution (IRRI)

7.4 Rice Research Institution (RRI)

8. Project Management

RKB is managed by one teamwork, which composes of:

8.1 Advisory Team

8.2 Management Team



9. Follow up and Reports

CSF will report the progress of RKB every six month to IRRI (source of fund)

10. Indicators

- 10.1 Number of farmers who get benefits from RKB
- 10.2 Number of demonstration fields
- 10.3 Number of networks providing the organic rice knowledge

11. Accomplishments or Results

11.1 Rice production system in rainfed areas and irrigated areas have some similarities and differences in some technologies used by the farmers.

11.2 The use of farm inputs for rice production in rainfed areas is less than that in irrigated areas.

11.3 Farmers earn the annual household income from agricultural sector less than non-farm activities.

11.4 Knowledge needed by farmers before project such as organic fertilizer, weed control method, disease and insect control, soil salinity alleviation and promising rice cultivar.

11.5 Extension workers visit farmers in year round for transferring technologies during the growing season. Percentage of particular technology of rice knowledge bank used by farmers after project.

11.6 Farmers suggestion to improve information of technology transfer in CD-Rom of rice knowledge bank; such as improving size of letter, translating some words to local language, some picture unclear, some context so difficult to be understood and setting system difficult to find out.

Part II : PERFORMANCE IN THE 1ST YEAR

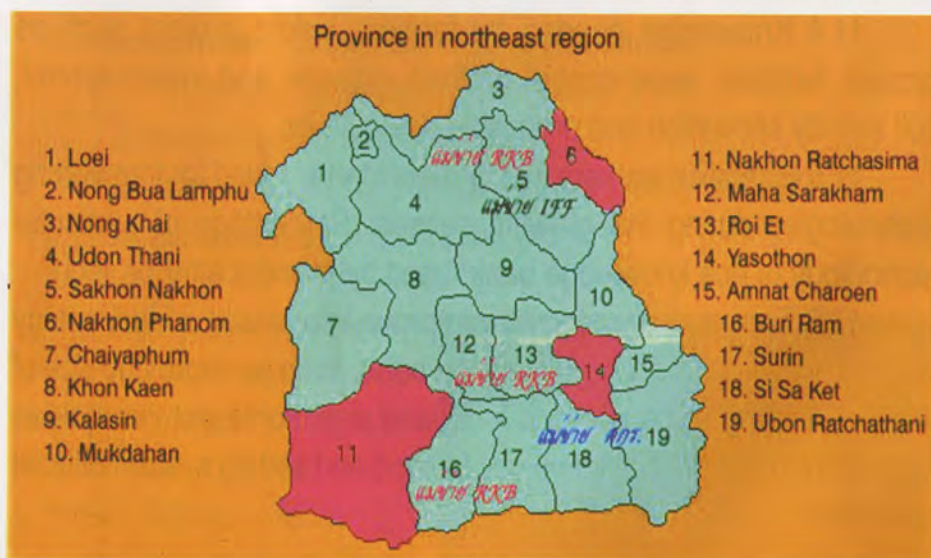
1. Selection of Organic Rice Knowledge Bank

1.1 Survey the North Eastern areas and then focus on the areas of the implementation of “Farmer Field School : FFS” in Nakhon Ratchasima, Nakhon Phanom, and Yasothon,

Results: to be able to specify the process of technology transferred to the farmers in order to improve the rice plant process as well as realize the needs of farmers.

1.2 Survey the workshop Centres in three provinces as in #1.1 by considering the potential of the workshop places. There are three Centres 1) Pimai workshop Centre, Nakhon Ratchasima 2) Tum-home workshop Centre, Nakhon Phanom 3) Wat-pha-suan-tham-ruam-jai, Yasothon

Expected Results: to be able to specify the workshop Centres in three provinces as shown in the below map.



1.3 Project Design Preparation: is to make a survey of farmers requirement, basic information of farmers, TOT curriculum design, curriculum design for farmers, workshop, and the preparation of farmer leaders.

Expected results: to be able to develop the equipments to evaluate the needs and workshop curriculum.

2. The Installation of Organic Rice Knowledge Bank : facilities and equipments – Computer installation is different in each workshop Centre. The installation such as LCD including digital camera can facilitate each of the area workshop appropriately.

Expected Results: installation of three RKB Centers

3. Workshop for Farmer Leaders (TOT) and Survey of the Needs

There are survey of the representatives of the twenty-three farmer leaders of : Farmer Field School from Nakhon Ratchasima, Nakhon Phanom, and Yasothon as follows:



3.1 Objective of the Workshop

In order to prepare the lecturers in the course of “Rice Learning Procedure”

3.2 Workshop Curriculum and Contents

3.2.1 Introduction to computer and the use of computer program

3.2.2 Preparation of the farmers members

3.2.3 Plan schedule, LEARN IT setting Centres (3 Centres)

3.3 Results of the Workshop Evaluation Regarding Questionnaires

Farmers are interested in more information about types of rice and the weeds. According to the rice production, organic rice is sufficient to solve the problems. Farmers are interested in what they have found in the organic rice fields and techniques of growing organic rice in various regions.

Expected Results: twenty – three farmer leaders from three provinces know how to use RKB CD. They also know how to be a good lecturer.



4. Workshop for Farmers and Basic Information Survey

4.1 Objectives of Workshop

4.1.1 Farmers understand the role and duty of RKB

4.1.2 Farmers understand how to basically search for knowledge of rice by using information technology

4.2 Aims of Workshop for Farmers

There are two hundred of them according to each three RKB workshop Centres.

4.3 Results of Workshop

4.3.1 Yasothon Centre

There are one hundred and two farmers participated in the workshop. Lessons of the workshop are as follows:

- 1) Make them understand the project
- 2) Educate farmers to understand the introduction to computer system, the use of CD and computer program.
- 3) Set the working plan of LEARN IT Centre



4.3.2 Nakhon Ratchasima Centre

Leaders and members of the “Organic Farmer Field School” participated in the workshop. The lessons are as follows:

- 1) Introduction to computer
- 2) Train how to use computer and search for the knowledge of rice
- 3) Design and set the demonstration farms



4.3.3 Nakhon Phanom Centre

There are eighty-seven farmers attended the workshop. The following are the contents of the workshop:

- 1) Introduction to computer : train to use and search for the knowledge of rice and how to work and do pilot study of the members
- 2) Concentration on field work in order to understand the projects and collect the basic information of farmers

5. Selection Demonstration Fields and Implementation

5.1 Results of Choosing Demonstration Fields

5.1.1 Pimai workshop Centre, Nakhon Ratchasima. Fields belong to Pimai Centre, Ban-tum-yair, Pimai covering 1/-/44 rai and the use of Homali 105 rice variety.

5.1.2 Tum-home Centre, Nakhon Phanom. Rice field of Mr. Weerapong Singsri, Ban Don-mong, Nongyart District, Ampur Muang covers 20 rais with the use of Red Jasmine, and Rice kor khor 15 rice varieties. Before participating the project, the average production is 320 kg/rai

5.1.3 Pha – Suan – Tham – ruam – jai Yasothon. Ricefield of Mr.Suphot Boontawee , Ban Nong – Pet , Nong Pet District Ampur Muang covers 2 rais. with the use of Jasmine Rice and Red jasmine rice varieties. Before participating the project, the average production is 375 kg/rai

5.2 Reasons for Choosing Demonstration Fields

5.2.1 There are centres for an education of network groups

5.2.2 They are able to collect the data of rice growth in each period



Part III : PROJECT MANAGEMENT

There are two levels of the RKB management: Centre level and area level

1. Centre level is composed of

1.1 Advisory Team

1.2 Management Team

Responsibilities are to set strategies, the project plan, fund management, follow up the results, visit field area including cooperate with the related departments and report to the source of fund.

2. Area levels are

2.1 Pimai, Nakhon Ratchasima

2.2 Tum-home, Nakhon Phanom

2.3 Wat-pha-suan-tham-ruam-jai, Yasothon

Responsibilities are to:

- Set the work schedule
- Conduct the workshop to farmers (TOT)
- Select the demonstration fields
- Work in the demonstration fields
- Do the data base and follow up
- Report to the Centre



Part IV : PLAN AND PERFORMANCE IN THE 2ND YEAR

The project specifies 4 outputs to meet the project purpose. In the 2nd year, the project performance was well – done with 4 achieved activities. Some lessons learned and challenges were found during the implementation.

1. Activities implemented

- 1.1 3 Thai RKBs developed for training
- 1.2 20 trainers know how to transfer ICT to farmers
- 1.3 200 farmers learn how to use RKB
- 1.4 5 demonstration plots for organic farming developed based on RKB knowledge

Out put	Activities conducted	Accomplished	Incorporated to existing activities
1.	Survey the target areas in 3 provinces in North East (NE) and select RKB site from farmer field school	<ul style="list-style-type: none"> - methods to be used for transferring technologies (using RKB) to farmers for improving rice production in target areas - technology information needed 	Learning process RKB in farmer field school
1.	Survey the areas to be selected as training centers <ul style="list-style-type: none"> - upper NE - lower NE 	3 training centers determined at 3 farmer field schools in 3 provinces in NE	Learning process RKB in farmer field school
2,3.	Project preparation design. <ul style="list-style-type: none"> - Questionnaire design - TOT design for farmer leaders - Farmer training curriculum design 	<ul style="list-style-type: none"> - survey tools for need assessment designed - training curriculum designed 	Learning process RKB in farmer field school
1.	Set up RKB and installation of equipment for training	Thai RKB available at 30 farmer field schools	Learning process RKB in farmer field school
2.	Conduct TOT training activity	20 farmer leaders from 3 selected provinces know how to use RKB CD and how to be a good trainer	Learning process RKB in farmer field school

Out put	Activities conducted	Accomplished	Incorporated to existing activities
3.	Conduct farmer training activity and benchmark survey	<ul style="list-style-type: none"> - 200 farmers from 3 selected provinces know how to use RKB CD - farmers in target areas know that RKB is available and utilizable at 3 farmer field schools 	Learning process RKB in farmer field school
4.	Conduct the demonstration plots and implementation	5 demonstration plots for organic rice production conducted at farmer field school	Learning process RKB in farmer field school
4.	Conduct the demonstration plots on rice seed production, yield production and management of rice straw	5 demonstration plots for organic rice production conducted at farmer field school	Learning process RKB in farmer field school

2. Lessons learned including constraint / problems encountered

The project delayed release of RKB, so farmers did not have an opportunity to use the technology to improve rice production at the early growing season.

2.1 Farmers lack using computer skill and need more training.

2.2 Incomplete information in RKB in some sub-topics

2.3 After training, limit number of farmers used computer at Tambon Administrative Institution (TAI), especially in the village where TAI located far from the village.

2.4 Farmers require other forms of RKB; such as fact sheets, poster and clip video.

2.5 Revision/improvement of RKB is necessary for the second year planning project.

3. Challenges

Improvement of rice production

When farmers planted organic rice, they knew that the cost of production was lower and the rice production may reduce too for 1 - 3 years. After that the quality of soil was improved by organic fertilizer, the rice production would slowly increased.

During the planting season, farmers faced problems such as insects, pest and diseases which could not be solved by using organic materials and information available in RKB CD. So farmers need a linkage of extension and research for improving rice production.



Seed Bank

The good quality of rice seed is an important factor for the yield. During the planting season of demonstration plots, farmers use RKB-CD to search for information needed and information from local wisdom.

The Seed Bank is planned to be done next year. many processes and activities; such



as building seed rice storage (clay cottage) ,selecting variety of paddy and seed rice, are under preparation.

Straw Management

During the crop season in Nakhon Ratchasima, farmers compared the rice yield in demonstration plot between with and without straw management plot. They learned that rice yields of straw management plot was higher about 12% (ph-less, N-less,P-more,K-more) because the quality of soil was improved.





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