# 'Capacity Enhancement and Leadership for Farmers' a Lesson Learn from F2F Extension Approach Development in Thailand



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## OBJECTIVE

❖ To review an experience : the use of Farmer to Farmer Extension Approach to make widespread adoption

To identify the success of the System and What are the Opportunity for further Development





## Digital Technology





**Information technology Change the World of Learning&Technology transfer** 

## TT & ES bottleneck

### What do we understand our Customer/ Farmers

- Variety/Technology
- Attitude to Change
- The Need of capital &technology
- Information Accessible

## What do we need to Share

- Farmers:offices ratio
- Limit personnel /tools/budget
- Expertise dimension
- Working Structure/System

## What do we know ourselves

- Availability of appropriated
   Varieties /technology
- Personnel /Equipment
- Budget

## What are the working Framework we need to create?

- App. Organizing Structure
- App. Working Procedure
- Clarifying

### **General Rationale**

- Government Service Framework
  Change
- **Limit of Government staff**
- The Change of Government Playing Role
- Information technology Change the World of Technology transfer

## Farmer to Farmer Extension Program was established since 2006



## **Key F2F Extension Approach in Thailand**

- 1. Proper Extension Framework Design both Hardware & Software
- 2.Systematic Led Farmer selection to be Smart Farmer
- 3.Key Characteristics and indicators of Smart Farmers be established and developed
- 4.Capacity Building design as new Learning Program-PBLS
- 5.frequency AAR
- 6. Continuous monitoring and evaluation





## **Community Rice Center (CRC)**

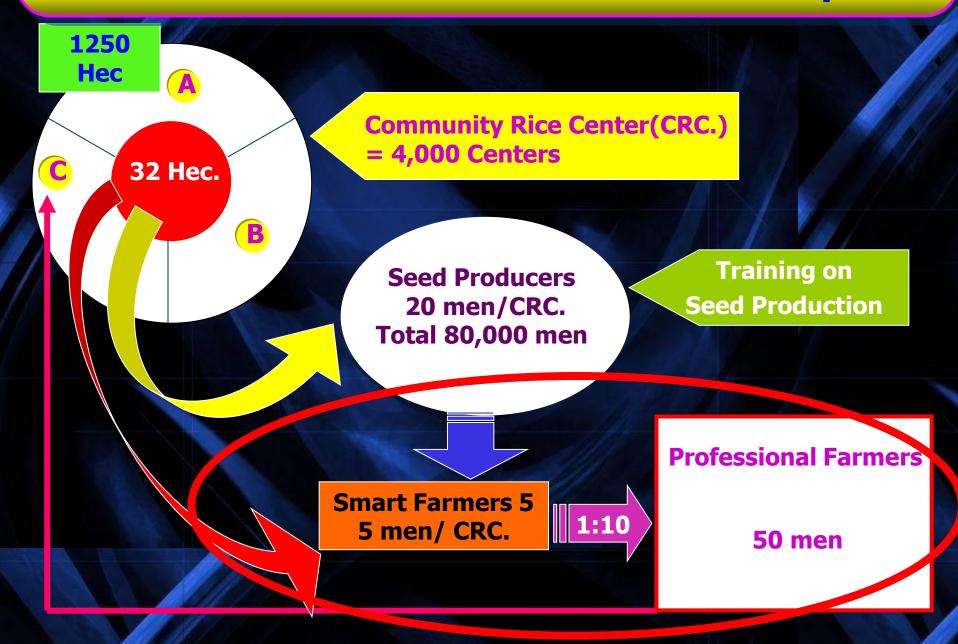
Community Rice Center (1,280 Ha.)



### **Community Rice Center (CRC)**



#### **Farmer to Farmer Extension Model Development**





## Systematic Led Farmer selection

#### **Led Farmer Selection**



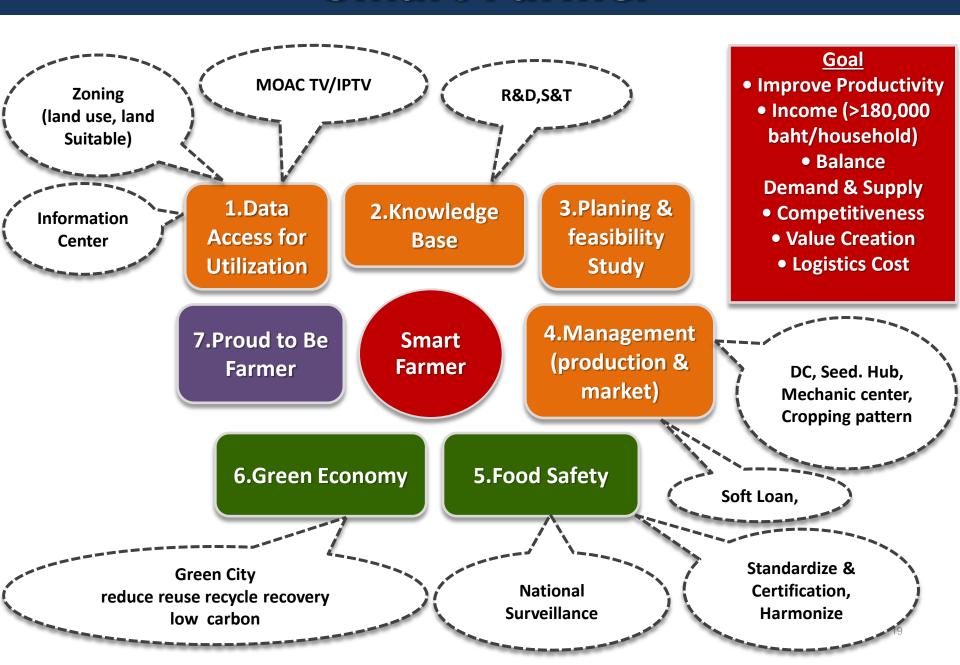


3. Leadership indication



# 3.Key Characteristics and indicators of Smart Farmers be established and developed

#### **Smart Farmer**





#### Smart Farmer Qualificatiion/Indicator



#### 1. Annual Family Income <6,000 US\$



#### 2. Passing the 7 SF Indicators

#### **Farm** Knowledge

#### Indicator

Advise & Trainers Ability

Farmer Model/Learning Center

Data Support **Decision System** 

#### Indicator

IT Ability as Internet, Mobile Phone etc.

Farm Record and Analysis

มีการนำข้อมูล

มาใช้ในการแก้ไขปัญหา และพัฒนาอาชีพของ

ตนเองได้

Products & **Market Management** 

#### Indicator

Farm Management **Ability** 

Market Linkage Abilty

Waste Management(Zero Waste

management)

**Quality and** Safety **Awareness** 

#### Indicator

Farm Standard Management Ability as GAP GMP Social&Enviro nmental Responsibility

#### Indicator

Green Farm Production (Green Economy)

Community Charity

**Farmer Proudness** 

#### **Indicator**

มีความมุ่งมั่น ในการประกอบ อาชีพการเกษตร

รักและหวง แหนพื้นที่และอาชีพ ทางการเกษตรไว้ให้

มีความสุข และพึงพอใจในการ ประกอบอาชีพ การเกษตร

ร่นต่อไป

20



# Smart Farmers Capacity Building Program

(Software Development)









## **Knowledge Management Model**

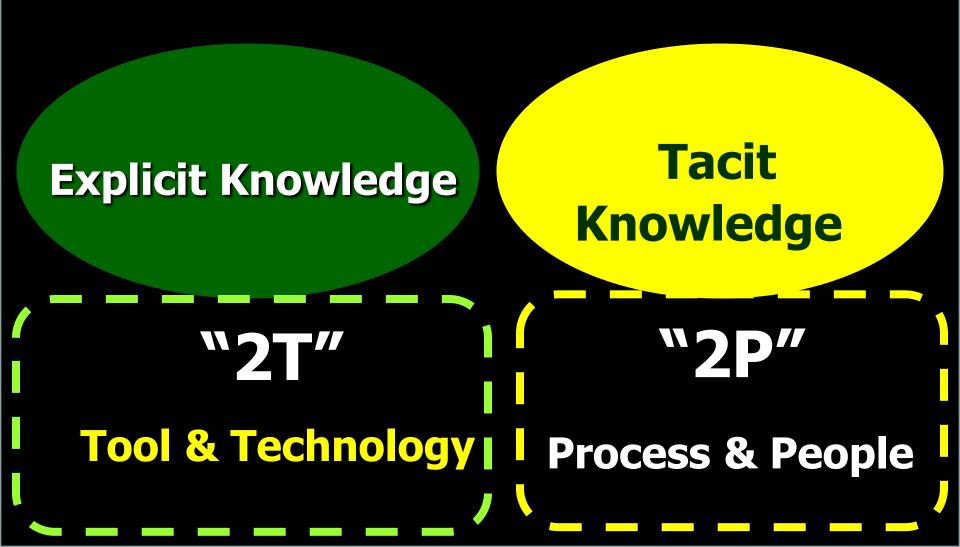


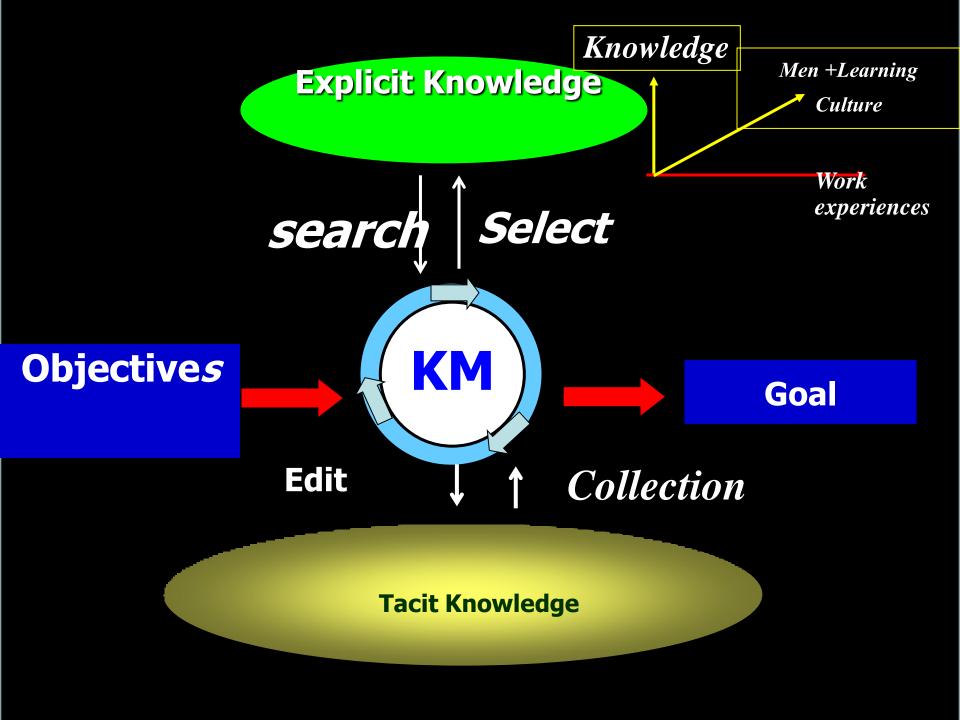
## Knowledge Management Model

**Explicit Knowledge** 

Tacit Knowledge

## Knowledge Management Model



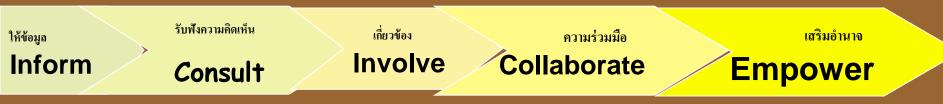


## **Empowerment Paradigm**



## **Empowerment Model**

**Empowerment Paradigm** 



รับรู้ knowing ให้ความเห็น

ร่วมคิด

ร่วมตัดสิน

ร่วมทำ

ownership

ร่วมตรวจสอบเป็นเจ้าของ

Opinion sharing idea sharing Sharing Decision

action

#### **New Learning Model for Change**



#### **Old Learning Model**

#### **Old Paradigm**

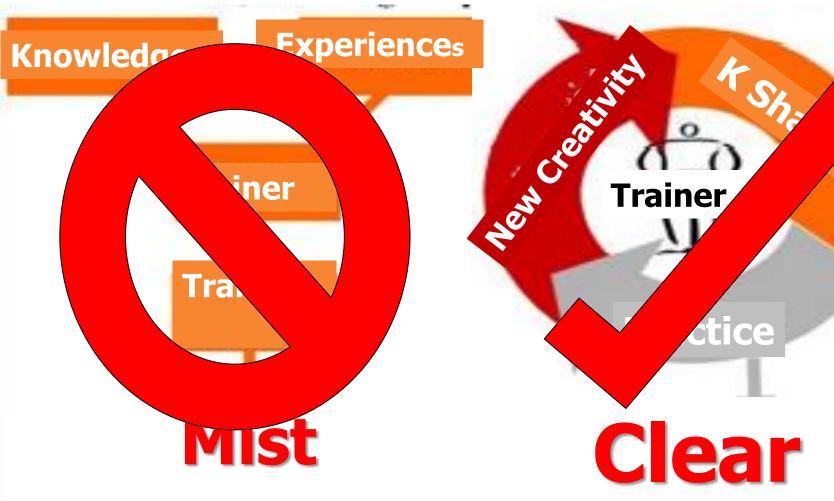


#### **Result-Impacts**

#### **New Learning Model for Change**

**Old Paradigm** 

**New Paradigm** 



**Result-Impacts** 

**Result-Impacts** 



## **Smart Farmers** Capacity Building Program as Software Development





## 4.New Learning Paradigm a key CB activities

# 4. New Learning Program-PBLS



# **Smart Subject for Change**

# Farm Knowledge

Advise &
Trainers Ability

Farmer

Model/Learning

Center

Data Support
Decision
System

IT Ability as Internet, Mobile Phone etc.

Farm Record and Analysis

มีการนำข้อมูล
มาใช้ในการแก้ไขปัญหา
และพัฒนาอาชีพของ

ตนเองได้

Products & Market Management

- Farm

  Management

  Ability
- MarketLinkage Abilty

Waste
Management(Zero
Waste
management)

Quality and Safety Awareness

- Farm
  Standard
  Management
  Ability as GAP GMP
- Social&Enviro nmental Responsibility
- Green
  Farm Production
  (Green Economy)

Community Charity Farmer s
Proudness

- มีความมุ่งมั่นในการประกอบอาชีพการเกษตร
- รักและหวง แหนพื้นที่และอาชีพ ทางการเกษตรไว้ให้ ร่นต่อไป
- มีความสุขและพึงพอใจในการประกอบอาชีพการเกษตร



# Project Base Learning System

# 



### **Project Base Learning System-PBL process**

- awareness raising for change
- Goal set up
- Solution & Appropriated Knowledge / Practice from KM
- Community Practice Management
- Community and Individual work plan

## Step1:Problems Analysis& Goal for Change

• เวิเคราะห์ปัญหาและกำหนดเป้าหมายที่ดีกว่า Identify Problems and Goal setup

\*สังเคราะห์ประเด็นเพื่อการเปลี่ยนแปลงที่ดีขึ้นตามเป้าหมาย Impacts for Change Synthesis

• .การประเมินความสำคัญและการจัดลำดับ Scoring & Priority

### **Problems Analysis& Goal Set up Practice**

# Objective

- □ To raise their Awareness
- □ To encourage the Ownership of their Problems
- □ To make better understanding to the Cause and Effect Principle

# **Step2:** Impact for Change Module Learning process

1

 Farmer Practices Review and Identify their limitation

2

 Knowledge Management for Change Impacts

3

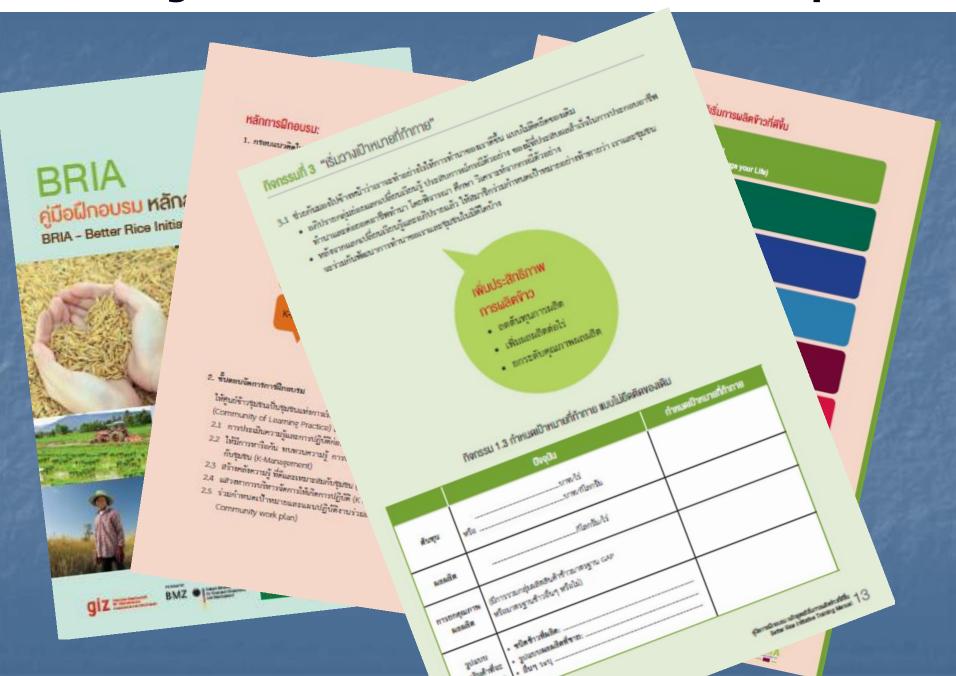
Community Selected
 Appropriated Recommendation for Change





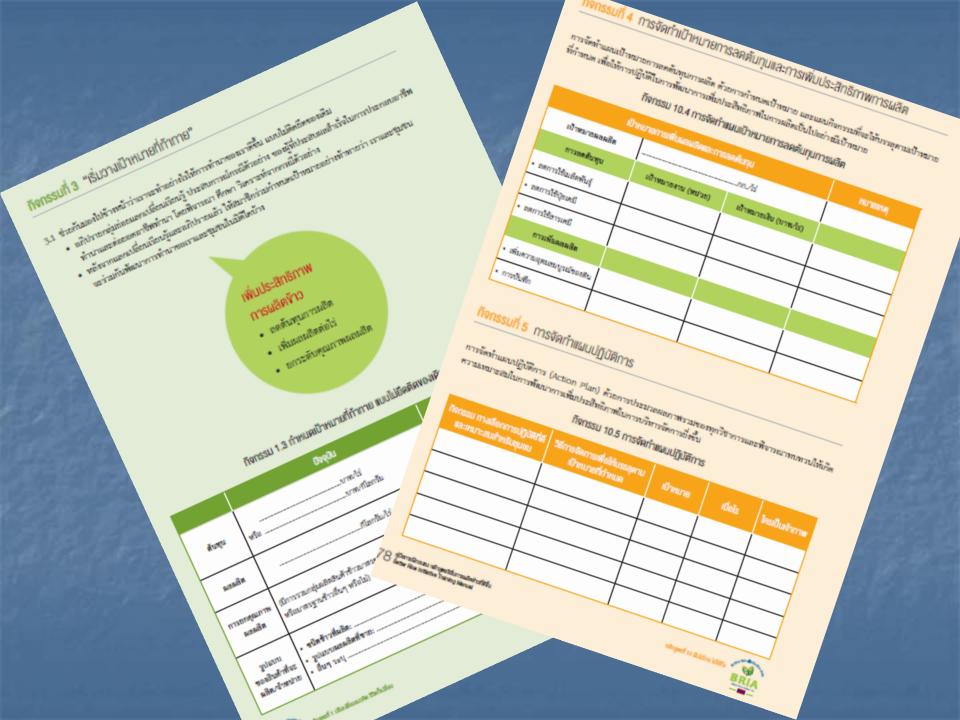


### **Learning Manual for Smart Farmer Development**



### A sample of Learning Manual for Smart Farmer Development





# F2F work plan of each SF

#### ทิจกรรมที่ 5 การจัดทำแผนปฏิบัติการ

การจัดทำแผนปฏิบัติการ (Action Plan) ด้วยการประมวยผลภาพรวมของทุกวิชาการและพิจารณาทบทวนให้เกิด ความเหมาะสมในการต้อนาการเพิ่มประสิทธิภาพในการบริหารจัดการยิ่งขึ้น

#### กิจกรรม 10.5 การจัดทำแผนปฏิบัติการ

| กิจกรรม กางเลียกการปฏิบัติที่คื<br>และเหมาะสมสำหรับซุมชม | วิธีการจัดการเพื่อให้บรรลุคาม<br>เป้าหมายที่กำหนด | iOnnuns | ıdels | ใครเป็นเจ้าภาพ |
|----------------------------------------------------------|---------------------------------------------------|---------|-------|----------------|
|                                                          |                                                   |         |       |                |
|                                                          |                                                   |         |       |                |
|                                                          |                                                   |         |       |                |
|                                                          |                                                   |         |       |                |
|                                                          |                                                   |         |       |                |



# 5. Assessment

- Smart Farmer Competency Assessment (software monitoring)
- F2F Extension Approach Assessment SWOT analysis (Hardware monitoring)

# Smart Farmer Competency Assessment (software monitoring)

## **Smart Farmers competency Assessment**

|                      | Number of <b>smart</b> farmer                                                                    |                          |                          | <b>C</b>                 |                          |            |
|----------------------|--------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| Competency component | <b>Level1</b> 1.00-1.80                                                                          | <b>Level 2</b> 1.81-2.60 | <b>Level 3</b> 2.61-3.40 | <b>Level 4</b> 3.41-4.20 | <b>Level 5</b> 4.21-5.00 | Competency |
| Knowledge            | <ul> <li>5 Level of competency</li> <li>1 Level = the competency less than the others</li> </ul> |                          |                          |                          |                          |            |
| Experiences & skill  | <ul> <li>3 Level = the competency slightly over than the others</li> </ul>                       |                          |                          |                          |                          |            |
| Attitude             | 5 Level = the competency over than the others                                                    |                          |                          |                          |                          |            |
|                      |                                                                                                  |                          |                          |                          |                          |            |

| Sinait i aimers competency Assessment |                               |  |  |  |
|---------------------------------------|-------------------------------|--|--|--|
|                                       | Number of <b>smart</b> farmer |  |  |  |

Level<sub>1</sub> Level 2 Level 3 Level 4 **Competency component** 1.81-2.60 4.21-5.00 1.00-1.80 2.61-3.40 3.41-4.20

22(13.2)

2(1.2)

Knowledge

**Experiences & skill** 

**Attitude** 

**Average** 

# Level 5

48(28.7)

8(4.8)

4(2.4)

2(1.2)

68(40.7)

29(17.4)

6(3.6)

52(31.1)

24(14.4)

66(39.5)

35(21.0)

63(37.7)

Competency

2.62 **Level** 3

Medium

4.07 **Level** 4

High

4.65Level 5

very High

3.96 **Level** 4

High

4(2.4)

62(37.1)

122(73.1)

50(29.9)

### Level of subject for competency development

| Level 1 less than average (1.00-1.80) | Level 2 average or slightly less (1.81-2.61) | Level 3 slightly higher (2.61-3.40) | Level 4  higher (3.41-4.20)                                                             | Level 5 very higher (4.21-5.00)  |
|---------------------------------------|----------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------|
| Trainer<br>Skill                      |                                              | GAP-Rice<br>Knowledge               | Average Competency Attitude to be technology transferring agents Rice Cultivation Skill | Attitude to be the smart farmers |

# F2F Extension Approach Assessment

SWOT analysis (Hardware monitoring)

# Smart Farmer Development Strategy for Better Farmer to Farmer Extension Approach

|               | Strengths                                                                                                                                                                            | Weaknesses |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Opportunities | 1. smart farmer competency development continuously 2. New Learning Paradigm for change is one better solution 3. App. K and App. appropriated Management are key impacts for change |            |
|               |                                                                                                                                                                                      |            |

**Threats** 

# **SWOT Analysis on**

**Threats** 

| Farmer to Farmer Extension System Approa | ach |
|------------------------------------------|-----|
|                                          |     |

| Opportunities | Rectify Strategy  1. Increasing efficiency of core trainer  2. Cooperation system among involving agencies  3. Develop Monitoring evaluation and supervision |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | evaluation and supervision system                                                                                                                            |

# Weaknesses **Strengths**

# Farmer to Farmer Extension System Approach

**SWOT Analysis on** 

|               | Strengths | Weaknesses |
|---------------|-----------|------------|
| Opportunities |           |            |

Protection Strategy 1. Cost reduction Technology transfer 2. Rice value added **Threats** 3. Advanced research and development 4. To succeed the rice culture for the new generation

# **SWOT Analysis on** Farmer to Farmer Extension System Approach

| Strengths | Weaknes |
|-----------|---------|
|           |         |

sses

**Opportunities** Risk Management Strategy 1. All level Strategy planning for both national and local government **Threats** 2. To build a new rice generation 3. Set up the Risk Warning System RWS

4. Cost reduction program

# **SWOT Analysis on**

## Farmer to Farmer Extension System Approach

| Strengths                                                                 | Weaknesses                                                 |  |
|---------------------------------------------------------------------------|------------------------------------------------------------|--|
| Development Strategy  1. smart farmer competency development continuously | Rectify Strategy  1. Increasing efficiency of core trainer |  |

#### iency of 2. Cooperation system among 2. New Learning Paradigm for **Opportunities** involving agencies change is one better solution 3. Develop Monitoring 3. App. K and App. appropriated evaluation and supervision Management are key impacts for system change

Risk Management Protection Strategy **Strategy** 1. Cost reduction Technology 1.All level Strategy planning transfer for both national and local 2. Rice value added **Threats** government 3. Advanced research and 2.To build a new rice development generation 4. To succeed the rice culture fro 3. Set up the Risk Warning the new generation

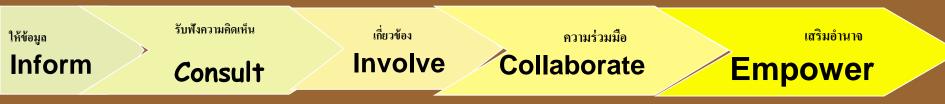
### **LESSONS LEARNED& RECOMMENDATION**

### WHAT ARE OUR KEY SUCCESS:

- √The Changing of the Training methodology to the New Paradigm of Learning as PBL.
- ✓The Knowledge Management Model was given an effective solution for a local appropriated technology finding.
  ✓The CB activities design may be followed the Empowerment model

# **Empowerment Model**

**Empowerment Paradigm** 



รับรู้ knowing ให้ความเห็น

ร่วมคิด

ร่วมตัดสิน

ร่วมทำ

ownership

ร่วมตรวจสอบเป็นเจ้าของ

Opinion sharing idea sharing Sharing Decision

action

### LESSONS LEARNED& RECOMMENDATION

The key success:

- **Better Qualification of SF and its Criteria designed be used as a goal of CB Development**
- ✓Better design for both hardware and software of F2F extension Program ✓Making Better linkage of the stakeholders in the f2f extension system,
- **√Continuously monitoring and assessment of the program.**

