





**TRANSFER AND ADOPTION OF  
FERTILIZER BEST MANAGEMENT  
PRACTICES : FROM BASICS TO  
INNOVATIVE APPROACHES**

**MARCH 16-17 , 2015  
IFA – FAI NATIONAL SEMINAR  
NEW DELHI , INDIA**



**ATLAS FERTILIZER CORPORATION**

- **Oldest existing NPK-NP-NK fertilizer manufacturing and distribution company in the Philippines**
- **Controls minimum 42% of the DOMESTIC NPK-NP-NK market**
- **Member of the SOJITZ Fertilizer Group, Tokyo, Japan**
- **Sister companies are the Thai Central Chemical Corporation (TCCC) of Thailand and Japan Vietnam Fertilizer Co. (JVF) of Vietnam**
- **Will be celebrating 58 years of CULTIVATING LIFE & ENHANCING THE SOIL by October 10, 2015**

 <b>ATLAS FERTILIZER CORPORATION</b> THE CROP-SPECIFIC SITE SPECIFIC FERTILIZER COMPANY 	
<b>MAJOR PHILIPPINE CROPS</b>	
CROPS	AREA (hectares)
<b>Rice</b>	<b>4.04 M</b>
<b>Corn</b>	<b>2.66 M</b>
<b>Coconut</b>	<b>3.0 M</b>
<b>Banana</b>	<b>0.40 M</b>
<b>Sugarcane</b>	<b>0.39 M</b>
<b>Tobacco</b>	<b>0.04 M</b>

 <b>ATLAS FERTILIZER CORPORATION</b> THE CROP-SPECIFIC SITE SPECIFIC FERTILIZER COMPANY 	
<b><u>ATLAS EXPERIENCE: OUTREACH TO FARMERS 2004 – PRESENT</u></b>	
<b>1. ORGANIZATION</b>	
<b>2. TECHNICAL SUPPORT</b>	
<b>3. HOLISTIC “CHAMPION” APPROACH</b>	



## FERTILIZER BEST MANAGEMENT PRACTICES

### ATLAS EXPERIENCE

#### ORGANIZATION

##### 1. Mindset

- Commitment to the vision, providing fertilization technologies that will assure consistency of profitability in agribusiness
- Empowering the farmer/agripreneurs
- Innovativeness so that agribusiness is profitable
- Corporate social responsibility to educate agripreneurs is a financial asset
- Not just higher fertilizer sales



## FERTILIZER BEST MANAGEMENT PRACTICES

### ATLAS EXPERIENCE

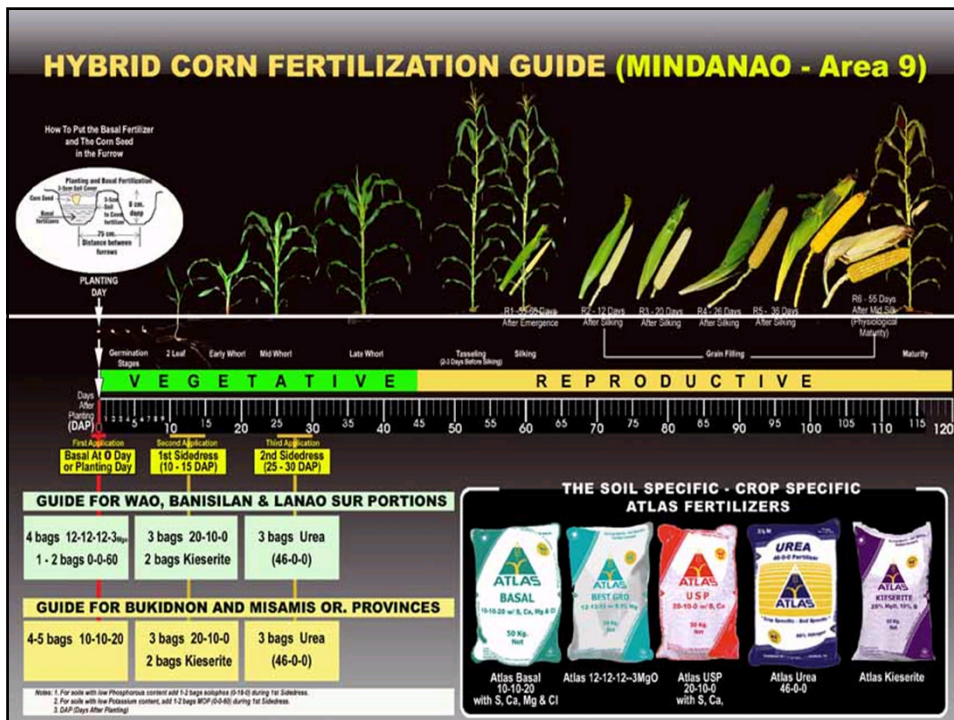
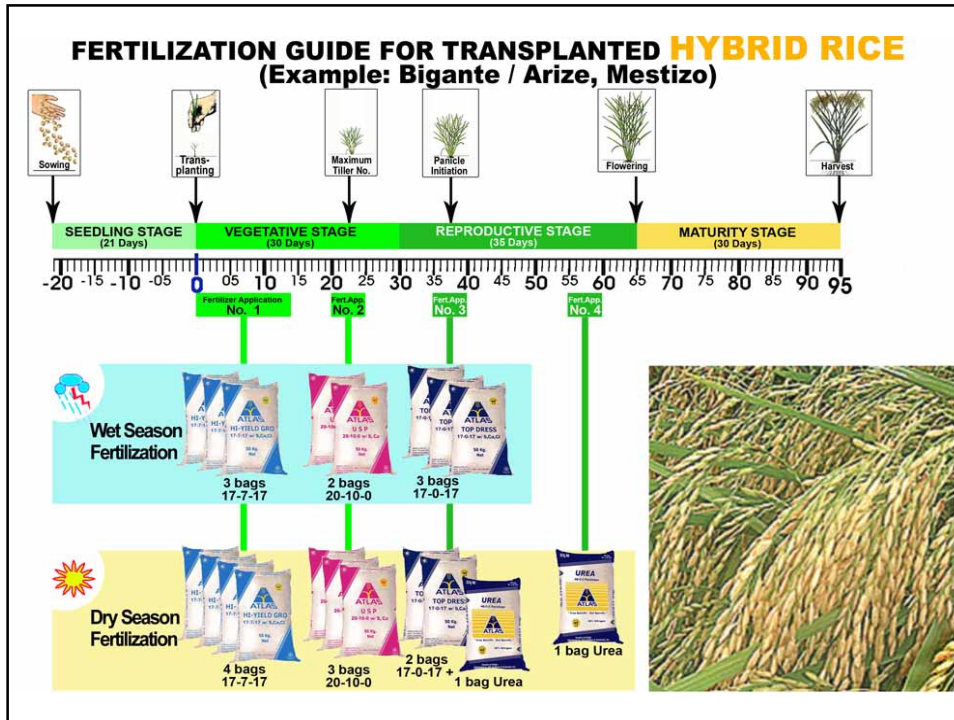
#### ORGANIZATION

##### 2. Technically Competent

- Agronomists must be appropriately trained in the correct and updated concepts of fertilizer application
  - ex.: **Transplanted hybrid rice (Wet Season)**
  - Basal (0-14 DAT): Apply 30%N, 100%P<sub>2</sub>O<sub>5</sub>, 50%K<sub>2</sub>O
  - Tillering (20-25 DAT): Apply 35%N
  - Before PI (30-35 DAT): Apply 35%N, 50%K<sub>2</sub>O
  - Flowering (55-60 DAT): Apply additional 10%N  
(optional during dry season only)

Note: Basal N should not be >30 kg

If K<sub>2</sub>O requirement is > 40 kg, splitting is recommended





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### ATLAS EXPERIENCE

#### ORGANIZATION

#### 3. Field-Based Approach

- Agronomists make use of various field-based “Gimmicks” to lure agripreneurs to attend information dissemination coupled with account servicing (one-on-one sessions):
  - ❖ Lecture sessions
  - ❖ Field trials
  - ❖ Demonstration farms
  - ❖ Harvest festivals
  - ❖ Free snacks/lunches with raffles
  - ❖ Coffee sessions
  - ❖ Comics
  - ❖ Radio/Television spots





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## FERTILIZER BEST MANAGEMENT PRACTICES

### ATLAS EXPERIENCE

#### ORGANIZATION

#### 4. Networking with Synergistic

##### Companies/Entities/COMPETITORS

- Seed Producers/Chemicals Distributors/Feeds/Local Government Agriculturists/Integrated Agricultural Research Centers/Government Institutions
- To reduce information dissemination costs, tie-ups (formal/informal) are made with Chemicals/Seed & Producers, etc, in the conduct of field activities

- **Complementation instead of competition**



## 5. PATIENCE

-- 3 YEARS TO TEACH A  
RICE & CORN FARMER

-- GROWTH IS GEOMETRIC

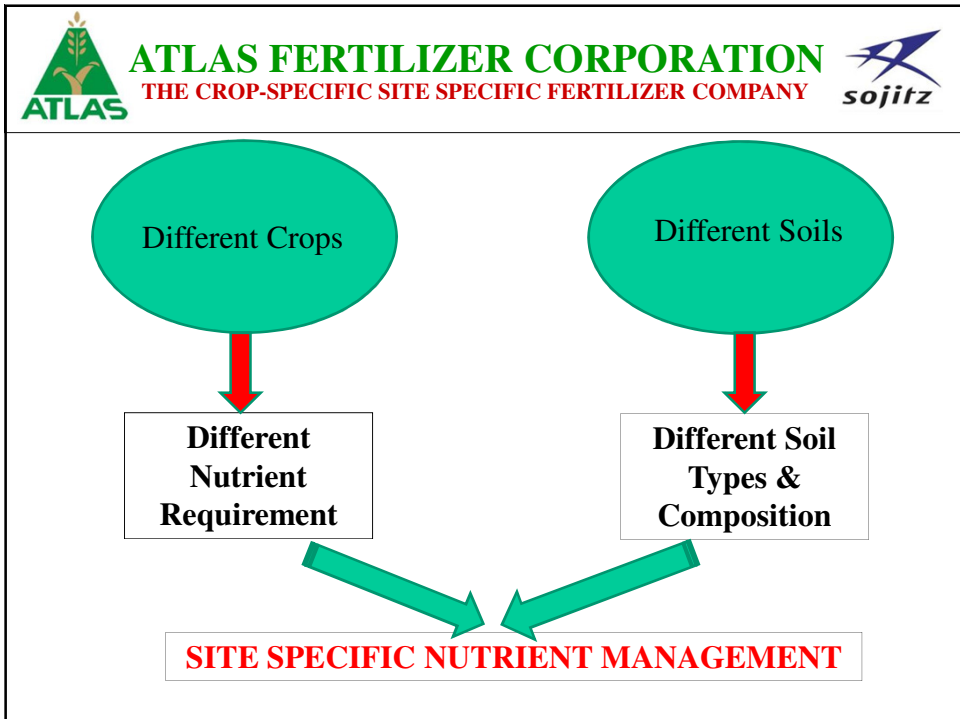


## TECHNICAL SUPPORT

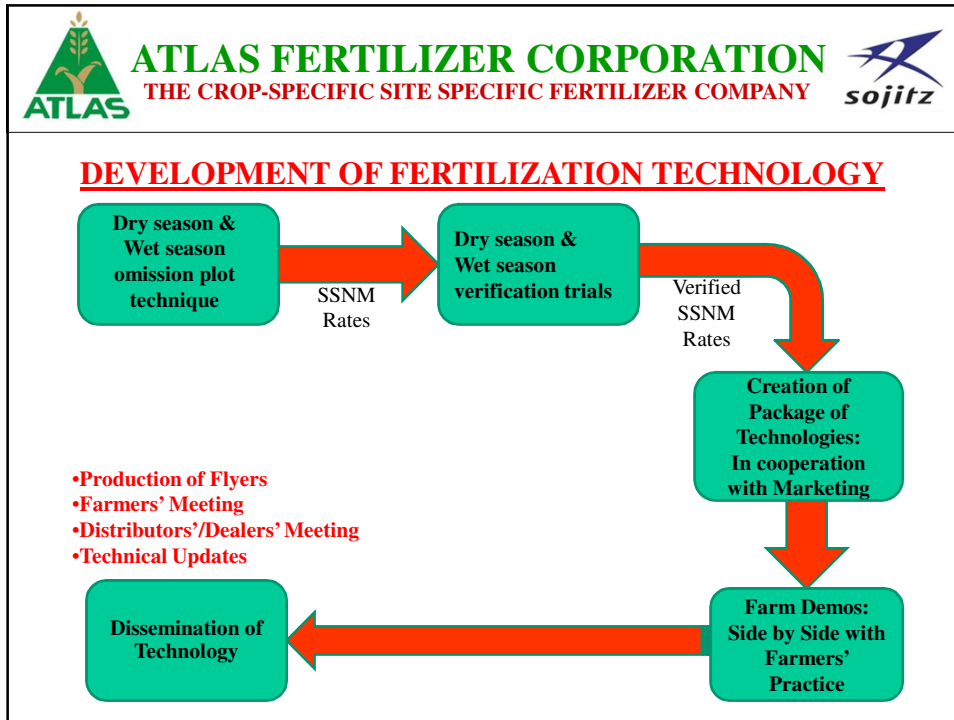
❖ From trial and error approach



✓ To scientific approach







**IRRI** IRRI with partners developed *Nutrient Manager for Rice* to provide rice farmers with 'precise' fertilizer management

- Used scientific principles of site-specific nutrient management (SSNM)
- Provided a customized recommendation for a farmer's field through LAPTOP COMPUTERS & IVR MOBILE PHONES
- Aimed to increase income of farmer by US\$100 per hectare per crop

**Nutrient Manager for Rice Philippines Version 2.2**

Decision tool for providing field-specific guidelines on nutrient management for rice

IRRI

Rice Science for a Better World

**IRRI** **Our Approach:** Use ICT (Information and Communications Technology) to deploy improved nutrient and crop management practices to farmers

- Use results of research to develop decision tools providing field- and farmer-specific farming advice
- Use advances in ICT to deploy farming advice through computers and mobile phones.



Rice Science for a Better World


**IRRI** **The Opportunity:** Upgrade the existing *Nutrient Manager* to *Rice Crop Manager*

**Nutrient Manager for Rice Philippines Version 2.2**



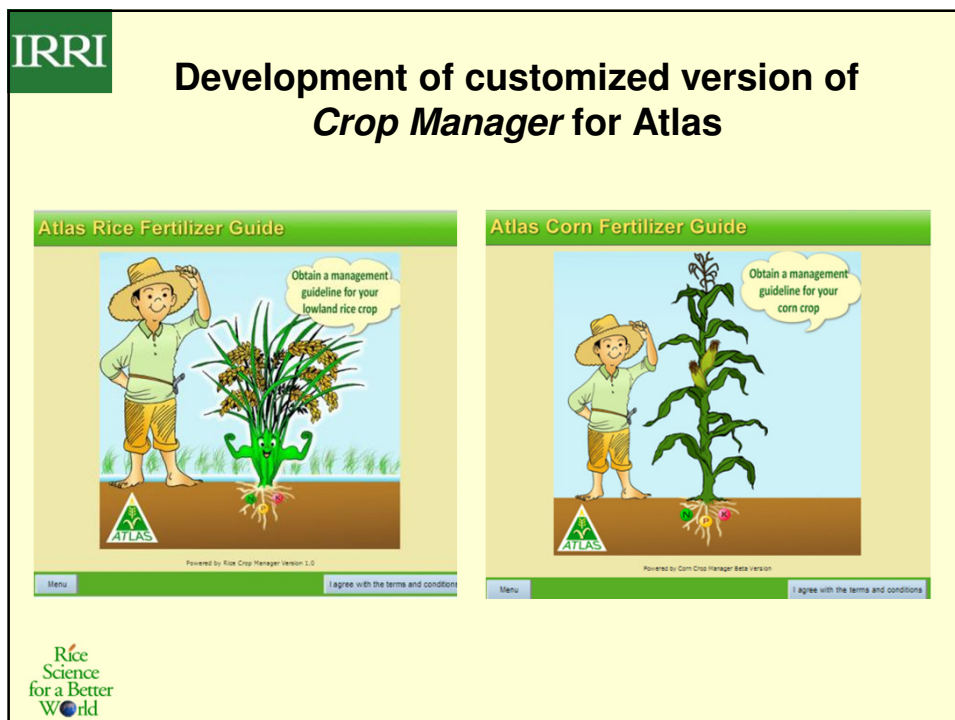
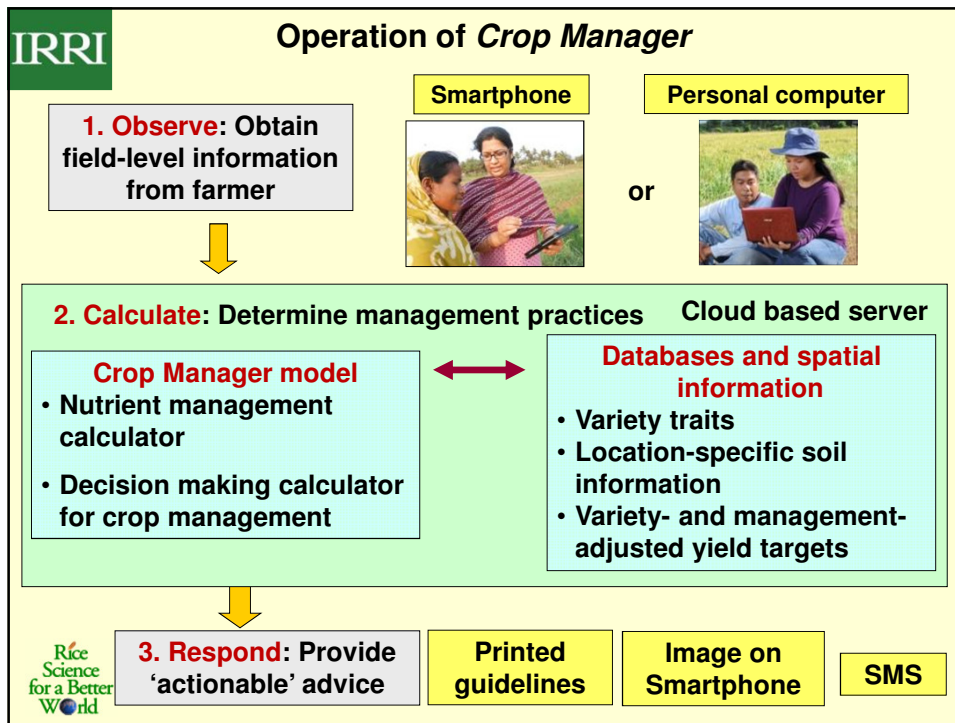
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**Rice Crop Manager Philippines Version 1.0**



**Nutrient Manager was upgraded to Crop Manager.**

Rice Science for a Better World



## Output pages for Atlas Rice Fertilizer Guide

### Atlas Rice Fertilizer Guide

**Reference Number:** 423  
**Field name:** .  
**Location:** Guimba, Nueva Ecija, Region III  
**Date generated:** July 18, 2014  
**Water regime:** irrigated  
**Crop establishment:** manual transplanting  
**Variety:** NSIC Rc238 (Tubigan 21)  
**Sowing date:** June 25, 2014

**Note:** Use this recommendation for wet season 2014 only.  
**Target yield (total harvest):** 56 sacks at 50 kg/sack, 4.9 t/ha (14% MC)  
**Manage rice as shown below:**

**Do not spray insecticide within 30 DAT.** pests compensate for early damage caused by defoliators; no spray also conserves beneficial organisms.

**Apply fertilizer as indicated below:**

Growth stage	DAT*	Fertilizer amount for 0.5 ha		
		17-7-17	20-10-0	17-0-17 urea
Early	Basal to 10	100 kg	---	---
Active tillering	21-25	---	150 kg	---
Panicle initiation	35-39	---	---	50 kg 100 kg

\* DAT = days after transplanting

Powered by Rice Crop Manager Version 1.01

### Atlas Rice Fertilizer Guide

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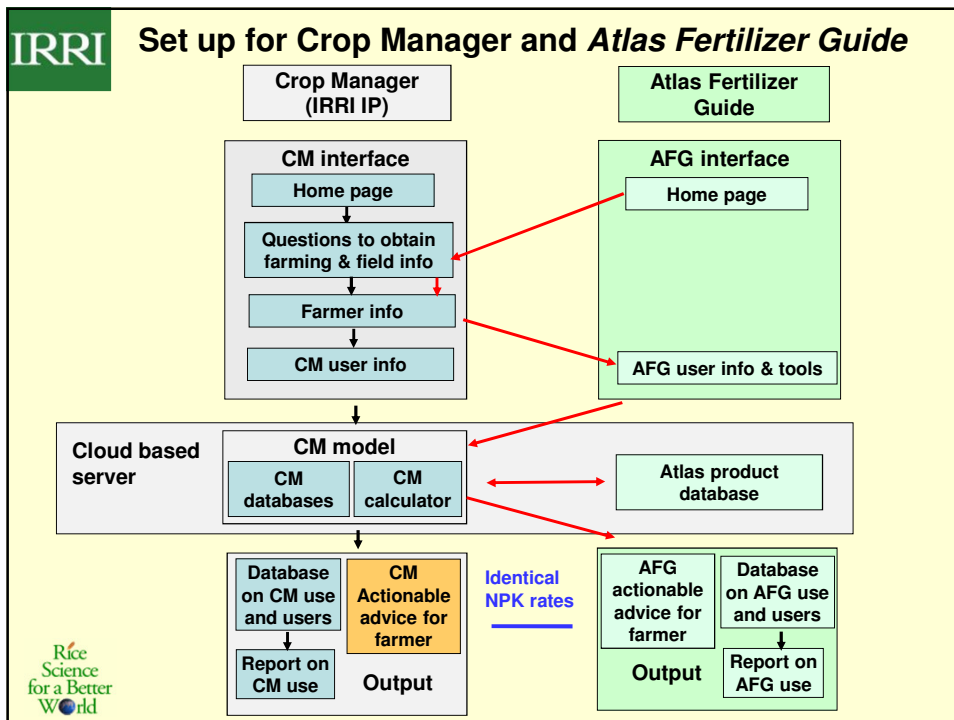
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		18-6-6	20-10-0	17-0-17 urea
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Active tillering	21-25	---	150 kg	---
Panicle initiation	35-39	---	---	100 kg 50 kg

\* DAT = days after transplanting

Powered by Rice Crop Manager Version 1.01



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FERTILIZER BEST MANAGEMENT PRACTICES

**ATLAS EXPERIENCE**

**HOLISTIC “CHAMPION” APPROACH**

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    graph TD
      SOCIAL((SOCIAL)) --> AGRIPRENEURS((AGRIPRENEURS))
      FINANCIAL_ECONOMIC((FINANCIAL/ECONOMIC)) --> AGRIPRENEURS
      POLITICAL((POLITICAL)) --> AGRIPRENEURS
    
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FERTILIZER BEST MANAGEMENT PRACTICES

**ATLAS EXPERIENCE**

**HOLISTIC “CHAMPION” APPROACH**

**SOCIAL:**

- Kinship
- Financiers
- Progressive farmers/cooperators
- Big landowners
- Cooperatives/irrigation organizations
- Planters associations



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FERTILIZER BEST MANAGEMENT PRACTICES  
**ATLAS EXPERIENCE**  
HOLISTIC “CHAMPION” APPROACH  
**FINANCIAL/ECONOMIC:**

- Local financiers
- Distribution network (distributors/dealers)
- Grains traders
- Financial institutions (Rural Banks/ governmental institutions)



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FERTILIZER BEST MANAGEMENT PRACTICES  
**ATLAS EXPERIENCE**  
HOLISTIC “CHAMPION” APPROACH  
**POLITICAL:**

- Government agricultural programs:
  - National (i.e. hybrid rice/ bio-fuels)
  - Local (i.e. food sufficiency)
- Funding Programs
  - Credit facilities



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**WE CONSIDERED OUR APPROACH AS AN  
ASSET RATHER AS AN EXPENSE AS IT  
PROMOTES AWARENESS FOR A PROFITABLE  
AGRICULTURE**