

# Success Factors for Smallholder Rice Production in Thailand

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# Outline

- ▶ Thailand is a major exporter in the world rice trade.
- ▶ The Agricultural sector and Rice Production Profile
- ▶ Success Factors for Smallholders in Thai Rice Production
- ▶ Conclusion

# Thailand is a major exporter in the world rice trade.

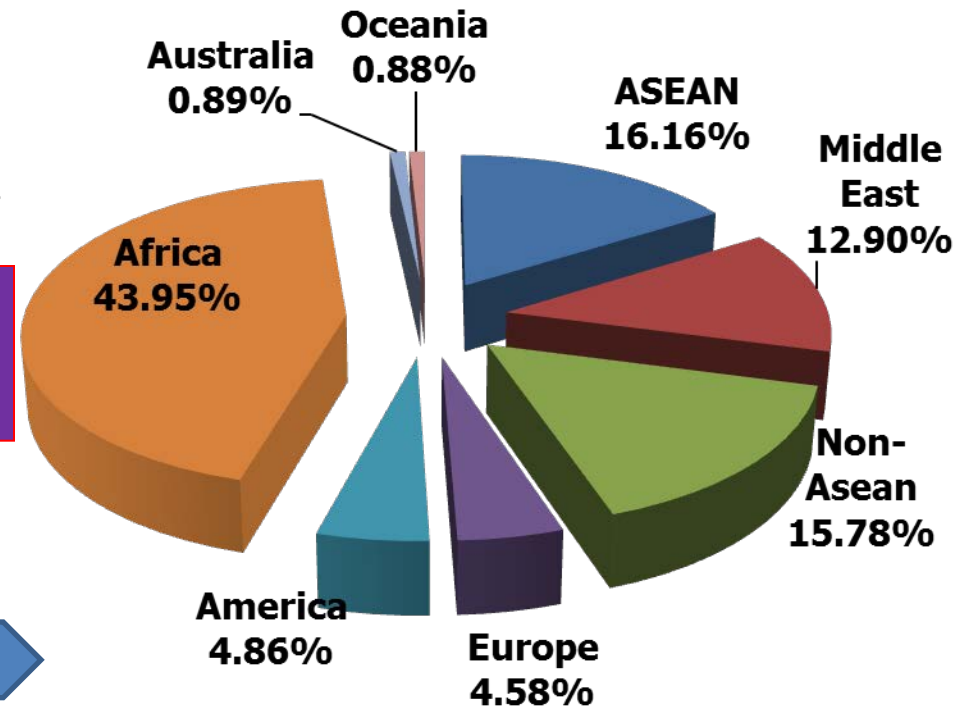
## ➔ The contribution of Thai rice for the world market

➔ Half of the production is exported. Thailand is ranked No.1 in international rice market. Its export shares about 28% (10 mil. ton) of the world rice trade (35 mil. ton).

➔ In 1974-78, Thailand was exported average only 2 mil. ton or about 20% of total production.

## ➔ Destination markets of Thai rice by regions in 2011

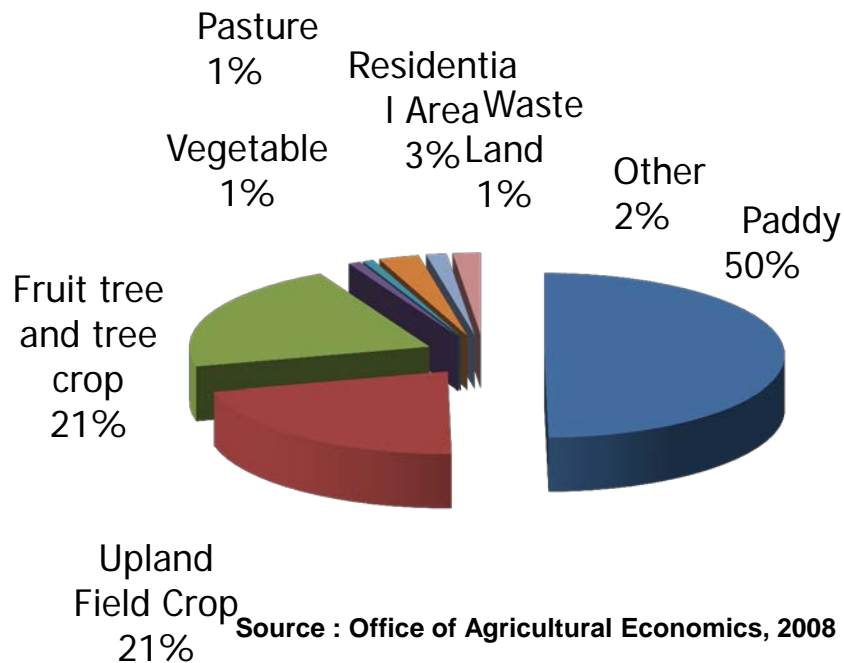
➔ Thai rice is mostly export to Africa continent.



# The Agricultural Sector and Rice Production Profile

## ➔ The Country's Land Utilization

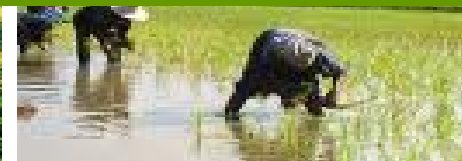
### Land Utilization of Thailand, 2008



## ➔ The share of agriculture in National Economy

- ➔ 9.37 % share of Agr. GDP in national economy.
- ➔ 31% share of agro-based industry.
- ➔ Total export in agr. and agr. product was about 162 billion US\$.
- ➔ Major exported commodities are para-rubber, rice, sugar cane, and cassava.

➔ 41% (21 mil ha.) of the country area is cultivated .



## ➔ The rice production profile

➔ Rice is produced by smallholder farmers with ave. farm size around 3.5 ha/HH.

➔ About 65% (3.7 mil. HH) of farm HH engages in rice farming.

➔ Planted rice area in Thailand was 12.6 million ha. The production is recently about 20 mil. ton of milled rice (31mil. ton of paddy).

Farm size	%
3.2 ha and less than	56.26
>3.2-9.6 ha	37.21
> 9.6 ha	6.53
<b>total</b>	<b>100.00</b>

Source:OAE

## ➔ Farming Situation



➔ Rainfed rice region with local varieties.

➔ At least two Rice crops a Year with HYVs

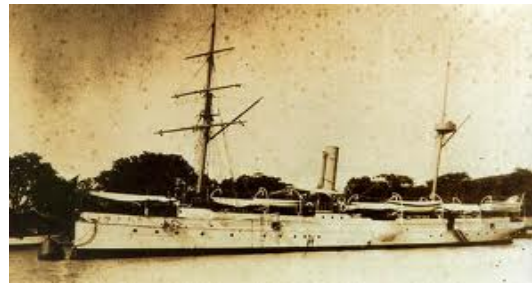
Items	2011 Annual	Dry season(%)
Area (mil. ha)	12.56	21.23%
Production(mil. ton)	31.47	35.30%
Yield(ton.ha)	2.51	4.16

# Success Factors for Smallholders in Rice Production

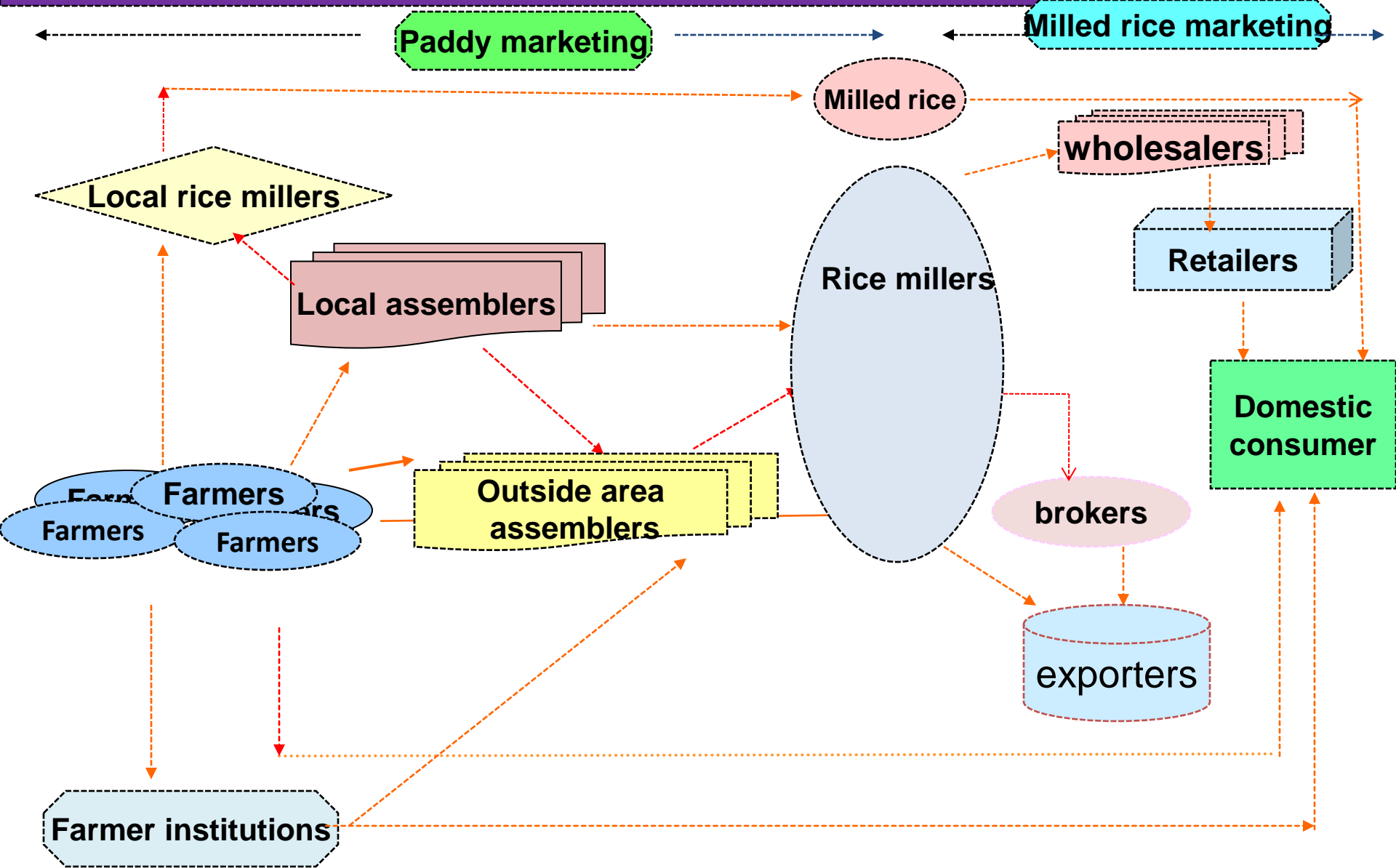
## ⇒ A brief look for rice area expansion before 1960

☞ Rice has long been Thailand exported commodity for nearly two centuries ago and mostly exported to a deficit countries in the Asian region.

☞ Ingram (1955) indicated that rising demand for rice export in those time encouraged the country extensive development in canal system and induced rice area expansion, essentially in Central Plain.



# ➔ The Rice marketing channels development



## ➤ Ensuring the private land ownership creating a development in farm land market and smallholder response

- A development of private property rights for ensuring land ownership more than a century ago encouraged smallholder farmers to settle in further away areas and occupied new land for farming.
- Land document or title deed has been previously used as a collateral for borrowing money from informal sources.

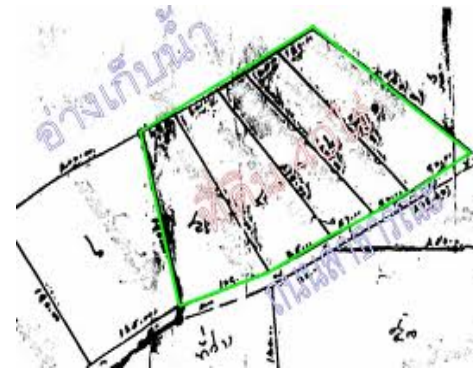


Figure: from google.com

## ➔ An intensification development in rice production since 1960

### ✓ Irrigation development and HYVs adoption

➔ During 1960s and 1970s, basic infrastructure improvement as a part of the country's development plans stimulated changes in production environments.



➔ HYVs were introduced and the rapid adoption of HYVs in irrigated areas had importantly raised productivity and farmers' profit, particularly in irrigated areas.

➔ Increasing rice cropping intensity consequently raised the demand for hired labor. An increase in wage rate and a shortage of farm labor supply led farmer turn to adopt labor saving technology.

☒ A pre-germinated direct seeding technique was used to replace transplanting method.



➔ Rising in rice cropping intensity and production

**Production(million ton)**

Year	Wet season	Dry season	Total
1967	13.73	.06	13.79
1987	16.27	2.77	19.04
2011	20.36	11.11	31.47

**Planted area wet and dry season(million ha)**

เฉลี่ยปี	Wet season	Dry season	Total
1967	7.43	0.04	7.47
1987	9.27	0.58	9.85
2011	9.91	5.13	15.04

## ✓ Inducing Mechanization use

- ☞ For quick land preparation, farmers mostly owned the machine since the price of power tiller (8-10 hp.) is not expensive (2,000US\$).
- ☞ However for combined harvester (240HP), the machine is too expensive for farmers (45,000US\$).
- ☞ In recent years, a market for farm machines services was help farmers to access to combined harvester. The services are available throughout the country at very reasonable cost and relatively cheaper to use hired labor.



☒ Service cost per ha for plowing and puddling activities is around US\$121per ha. But that for harvesting is about 111US\$ per ha.

☒ Daily wage rate in rice farming around 8 -10 US\$.



## ➔ Establishing formal farm credit helping farmers access to loan at a cheaper cost.

➔ Previously farm credit was provided by informal lenders, particularly merchants in villages charging very high interest rate.

➔ Establishing the BAAC in 1966 was a crucial change for farm credit market. Since then the share of informal lenders were enormously declined within a few decades. Currently, 65% of farm credit is provided by formal institution.

➔ In 2011, the BAAC has 2,098 branches throughout the country. The bank provided total credit in the amount of 20,610 million US\$ covering 4.67 million farm HH. and 1,097 agricultural cooperatives.

Using owned asset as collateral.

Using a group guarantee.

## ➡ Open up market opportunity for Off-farm and non-farm employment

➡ In Thailand, rice is not the only income sources of smallholders . Since rice is an easy crop, many farmers have other off-farm and non-farm activities for their incomes.

➡ A higher development of non-agricultural sector in the past few decades also helped to improve the employment opportunity since significant number of their family member left villages and worked in the non-farm sector, sending the remittance back home.

➡ Percentage share of Farm household income in 20091/

Items	HH. Income structure(%)
Agriculture	45.1
-Rice	21.3
-other	23.8
Non-agriculture	54.9
-non-farm employment	9.6
-other	45.3
Total	100.00
HH. Annual income(US\$)	8,345
Ave.Farm size(ha)	3.5

Note: 1/ survey of farmers in Central plain and Northeast for 240 samples. Source: Sakondhavat ( 2012)

## Conclusion

- Ensuring land property rights and land market development in combined with the rising demand for rice export has previously created rice area expansion for smallholder farmers.
- Basic infrastructure development, including R&D in a later period induced the intensification in rice production. Also, Access to the formal credit market at a reasonable interest rate played essential role in making Thailand success in rice production.
- For smallholders in Thailand, sources of farm income was not relied on rice alone but other off-farm and non-farm activities played essential role.



**Thank you**



Figure: from google.com