

# Is agricultural subsidy essential in Thailand to lift up farmer income?

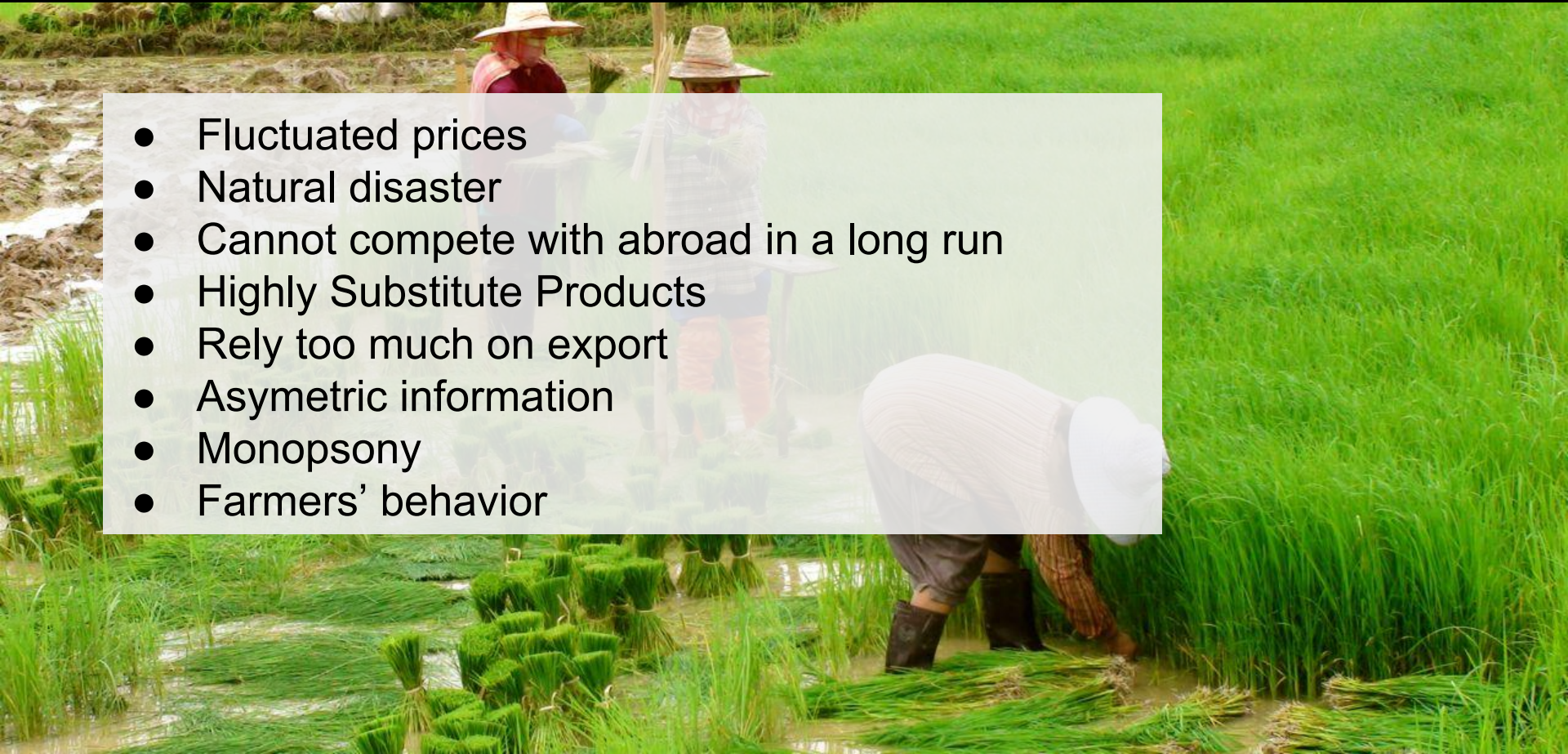


# PROBLEMS



# Problems

- Fluctuated prices
- Natural disaster
- Cannot compete with abroad in a long run
- Highly Substitute Products
- Rely too much on export
- Asymetric information
- Monopsony
- Farmers' behavior



# Rubber and rice

## RUBBER

- Easy to plant:
  - takes 6 years
- Low investment
- World rubber price sharply increase in 2011

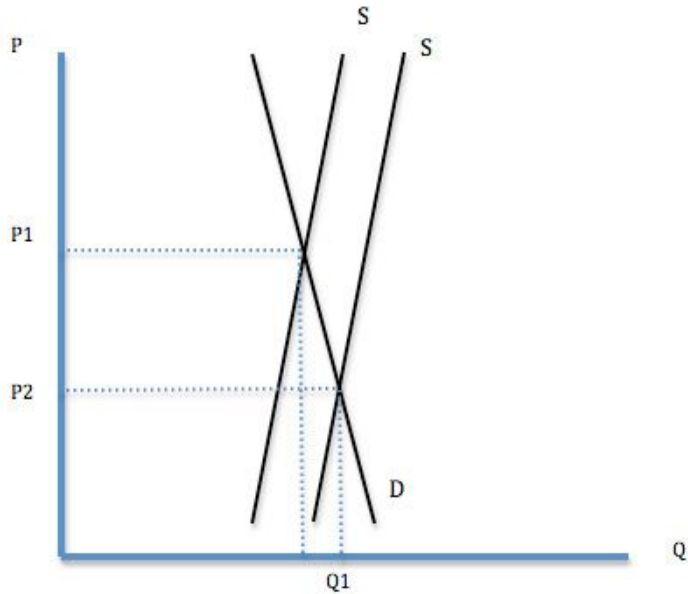


## RICE

- Easy to plant
  - takes 3 months
- Low investment
- Rice production is one of the biggest profession in Thailand. Shifting their production to other crop need large investment.



(c) ThaiWorldView.com



## Fluctuated Price

Nature of Agricultural product

- Demand and Supply are price inelastic  
Ex climate change, disaster

If good climate:      Quantity increase.  
                                 Price sharply decrease  
                                 Income drop

If bad climate:      Quantity decrease  
                                 Price increase sharply  
                                 BUT:      Agriculturer has no crop to sell  
                                 Government intervene to control the price



# Problems



## Natural disasters

- Natural disaster such as drought and flood are very common in Thailand.
- These problems make farmers cannot grow their crops.

Eventhough, Thailand is less vulnerable to natural hazards than many countries in the Asia-Pacific region according to CFE-DM. There still exists a cycle of flood and drought every year.

# Problems



## Cannot compete with abroad in long run

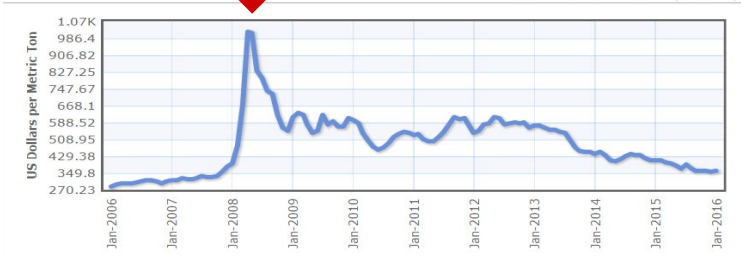
- We can compete only in term of quality not lower cost of production.
- Thailand is a highly labor-intensive country in term of agricultural products.
- Lack of machinery and technology improvement and usage
- Thus we may not be able to compete in long run when other countries catch up.

# Problems

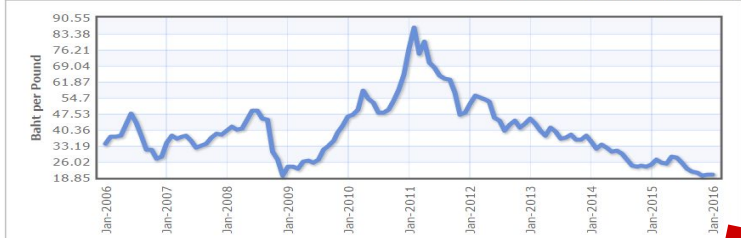
2008 Global rice crisis due to oil price rise  
- Restrict export in India and Vietnam to secure domestic food supply



Jan 2006 - Jan 2016: 75.030 (26.38 %)



Jan 2006 - Jan 2016: -13.986 (-41.15 %)



Larger demand from China and Japan  
- Vehicle industry expand

Price drop  
Oil price drop  
World economic downturn  
China demand less and produced substitute good

## Highly Substitute Products

Thailand is one of the largest world exporter does not mean Thailand can control world price.

- Rubber can be substituted by
  - Synthetic rubber (made by oil)
  - other countries: Indonesia, MalaysiaChina produce domestically and invest in Cambodia, Laos
- Rice can be substituted by
  - other countries

Rice and rubber market price controlled by buyers



## Rely too much on export

World price drop => domestic price drop as well

ตารางที่ 3 ปริมาณผลผลิต ปริมาณส่งออก ความต้องการใช้ในประเทศ และสต็อกยางธรรมชาติของไทย

หน่วย : พันตัน

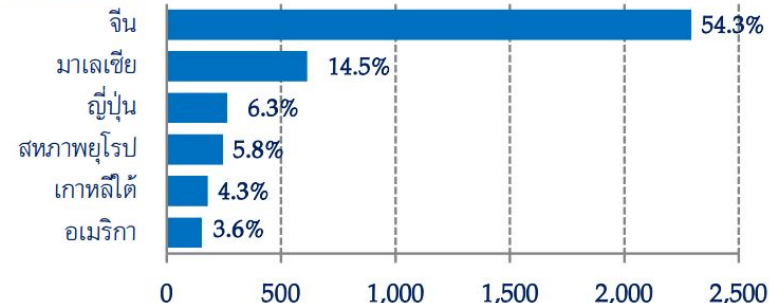
ปี พ.ศ.	ปี 2555		ปี 2556		YOY (%)	QOQ (%)
	ไตรมาส 3	ไตรมาส 4	ไตรมาส 3	ไตรมาส 4		
ผลผลิต	1,049	928	1,167	965	4.0	-17.3
ส่งออก	847	685	897	635	4.0	-29.2
ใช้ในประเทศ	203	243	269	330	35.7	22.6
สต็อก	1,052	1,296	1,565	1,895	46.3	21.1

ที่มา : สถาบันวิจัยยาง

หมายเหตุ : \*ประมาณการ

ตลาดส่งออกยางพาราของไทยปี 2557

หน่วย: พันตัน



ที่มา : กระทรวงพาณิชย์

# Problems



โกงตาชั่ง! สั่งได้ด้วยรีโมท  
หมกเม็ดน้ำหนักยางพารา

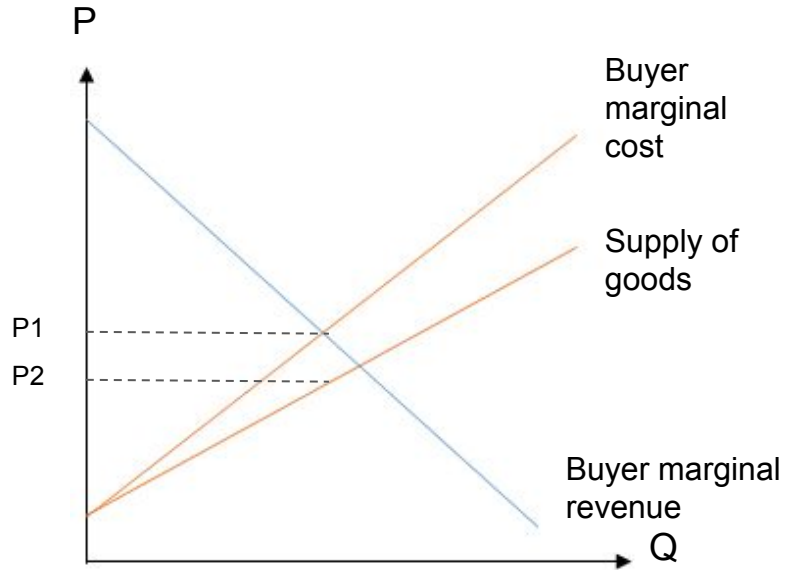


## Asymmetric information

### Middleman

- Corruption in weight measurement
- Corruption in humidity measurement  
(*In rice market*)
- Corruption in water contain in rubber  
(*In rubber market*)





## Monopsony

### Middleman

- *Monopsony*  
*Large seller- small buyer*  
*Lack of bargaining power*
- *Rice and Rubber have cost of stock*
- *Have to sell in a period of time*



# Problems



## (Thai) Farmers' Behaviors

- Lack of innovation
- Rely on one type product farming
- Cannot stand on their own legs
- Lack of market, goods and management knowledge
- Always ask government for help



# Agricultural subsidies



# Subsidy

**ANY** government intervention to the market either directly or indirectly.

We categorize subsidy into two types

- **Input subsidy**
  - Technology, machinery, fertilizer
  - Reduce tax of the input goods
  - Other government programs
- **Income subsidy**
  - Any action of government that increase the income that are not according to the market mechanism of farmers.
  - Including buying goods from farmers.



# Subsidy

## Why?

- To stabilize the price that farmers received
- To buy time for market to adjust itself when unusual events occur.
  - ex disaster and a drop in world price.
- To help new and small farmers in their early years
- To increase further development

## When and How?

- Depending on the situation, but **not** as a **daily basic!!!**.

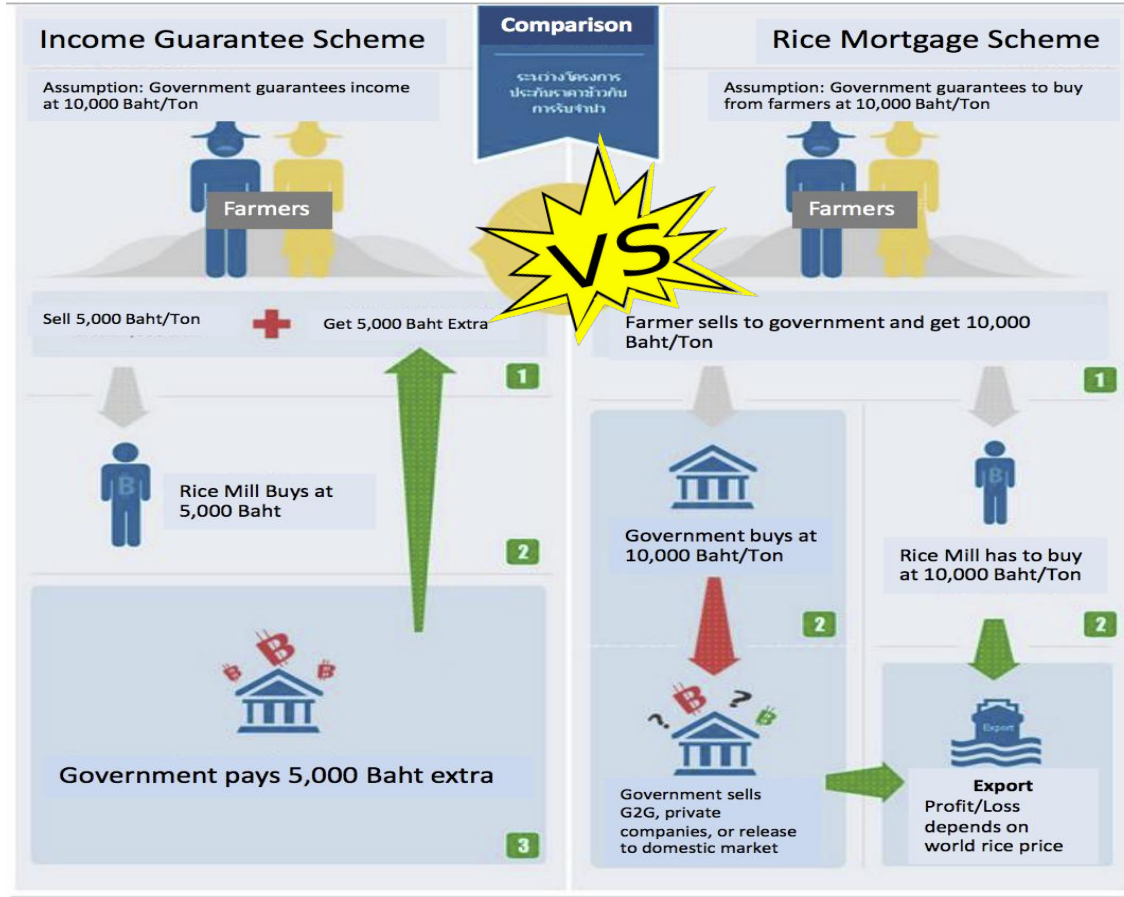
## Short-term strategy

- most of the income subsidy are short-term
- to help the market from failure

## Mid/Long-term strategy

- increase domestic demand
- decrease export (increase world price)
- building infrastructure
- develop technology

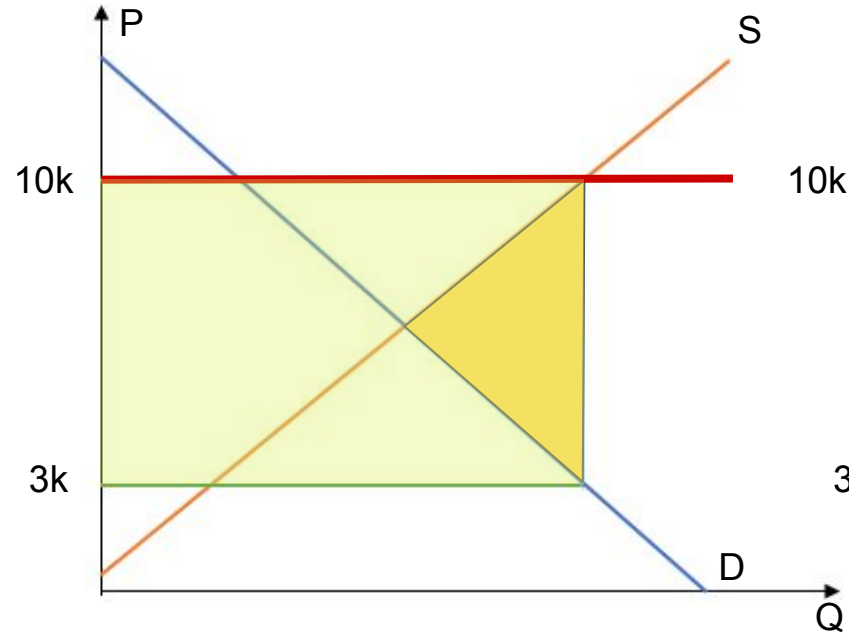
# Rice subsidy policies



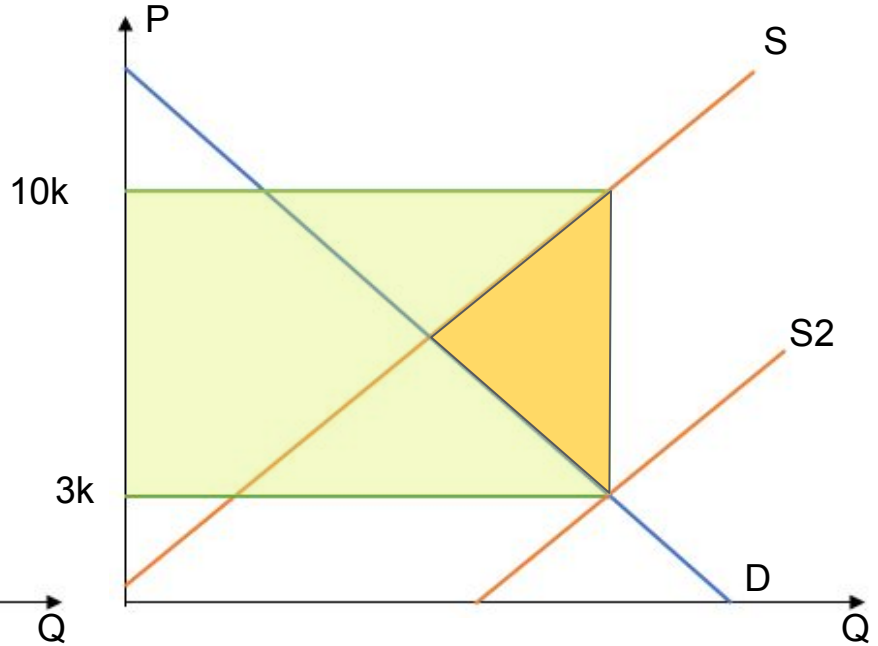
# Case studies: Price guarantee



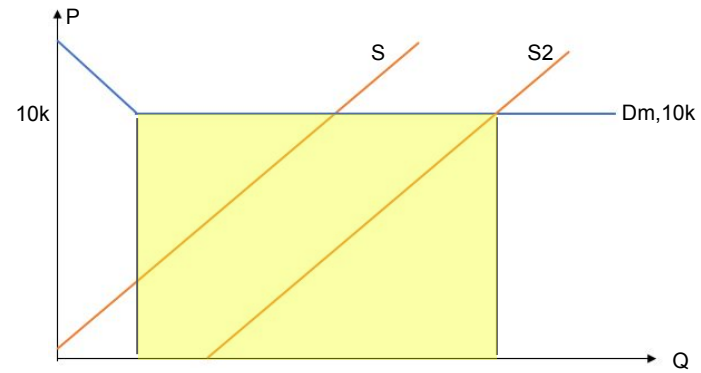
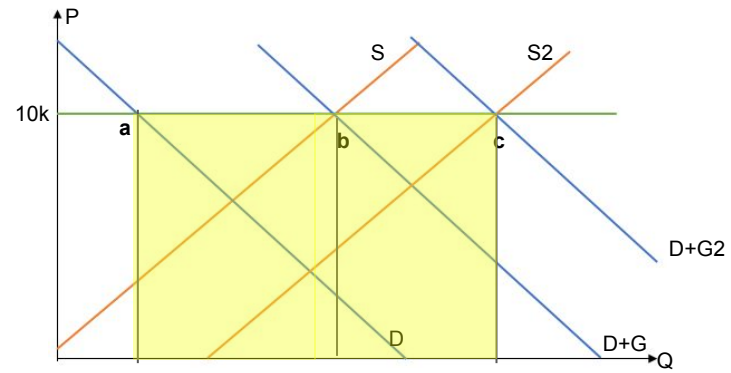
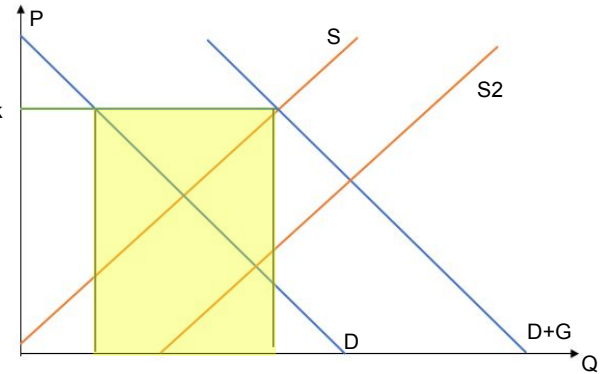
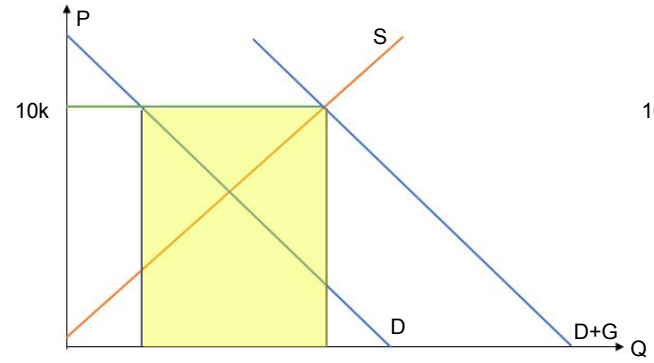
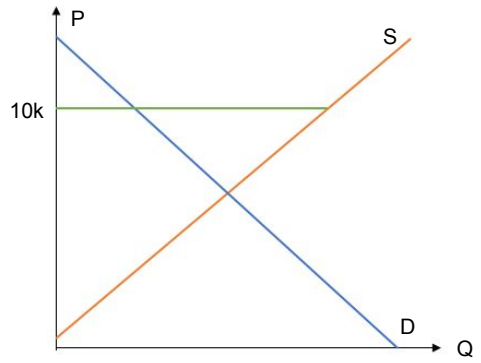
## Price Guarantee



## Subsidy

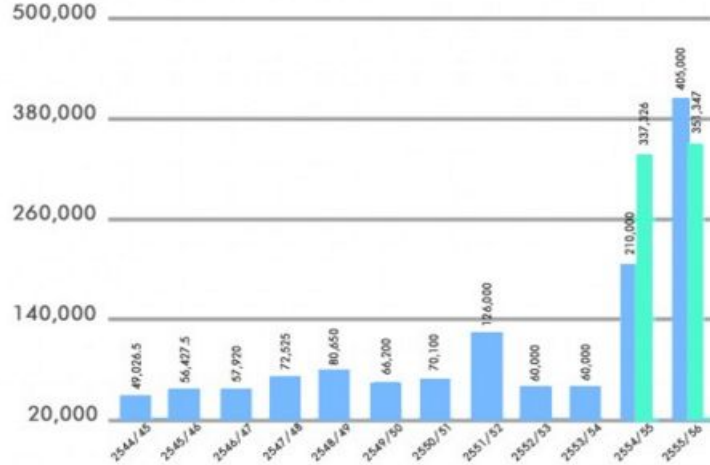


# Case studies: Price mortgage scheme



### เวินบประมาณที่ใช้ในโครงการจำนำข้าว

หน่วย : ล้านบาท



รวม 1.39 ล้านล้านบาท

- งบที่กระทรวงการคลังฯ กับ สกสว.
- สกสว. และ ธนาคารเพื่อการเกษตรและสหกรณ์การเกษตร (ร.ก.ส.)



- Not only the cost of buying the rice from farmers is very high, but there are other cost such as storage cost, interest expense, cost of survey and depreciation cost.
- The one who benefit from the policy is mainly those middle-rich income farmers due to high ability of production.
- Very high risk of corruption. Hard to keep track the rices, some rices may not come from Thailand or even exist. Low quality rice may also be included.
- Where did the rice go ?



## Before Prayuth

- Try to encourage rubber farming according to the world price.
- Rubber is a long term growing plant.
- Although, Thailand, Indonesia and Malaysia decided to cooperate, we still cannot influence the world price.
- Therefore, by the time these rubber can be harvested, the world price have already changed.
- Some policies in the past also support one type product farming leading to high risk investment.
- The one who bear the risk is farmers.

## Policy

- One shot subsidy supports improvement in rubber productivity
  - 1500 Baht/rai /owner
  - 900 to the owner or land renter
  - 600 to employee
- Government buy raw rubber products for use in 8 department.
- Open new 79 rubber transformation factories
- Decrease rubbers export along with Indonesia and Malaysia

## Analysis

- Equivalent to give out money
  - No restriction and no significance improvement
- Good purpose but still not well-planned
- Longrun policy, increase domestic demand
- Aim to increase the rubber's world price



# Misuse of Subsidy

## Moral hazard problem

- If the government always give subsidy to farmers, the farmers may think that the government always help them leading.
- Since we cannot keep in check with farmers all the time, the farmers may become unproductive and lack of innovation.

## Subsidy **cannot increase** the world price (in case of rubber market in Thailand)

- The factors that could change the world price are vary from one market to another market.
- Ex, rubber market is highly influence by oil price and big buyers (China and car producers).

# Is agricultural subsidy essential in Thailand to lift up farmer income?

- It is essential in short run during unusual crisis and for some small farmers, **but** it is not always necessary.
- The farmers should be able to survive during normal situation.
- Government should not intervene the market unless it is necessary or in case of development and long-term strategy.

# Alternative Solutions



# Alternative Solutions

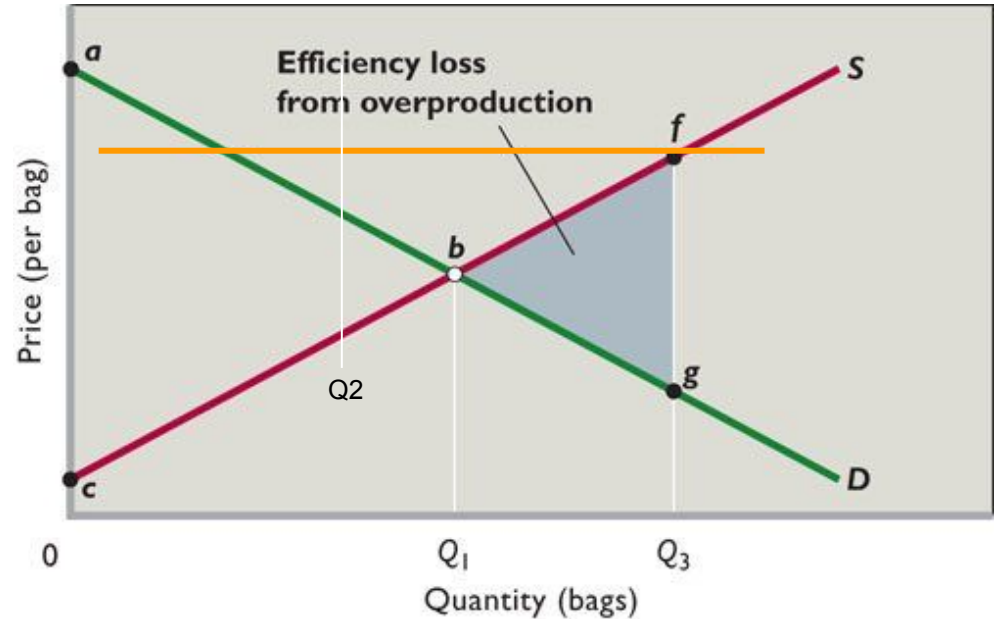
## Price support

### When to use?

Output at market price is too low

### Trade-off

- Production distortion
  - Over production ---> Price drop
  - inefficiency resources allocation
- Ex water is limited
- Decrease incentive to improve productivity.



# Alternative Solutions

## Increasing in variety of products

- growing different kind of agriculture products.
- **reducing the risk** of growing only one extreme product.
- making farmer to be able to adapt depending on situation.

### Trade off

- some farmers still need help from the government in the beginning
- financial support need



## Case studies: Prayuth

- Price support
- Increase variety of products

Similar to other previous governments, PM Prayuth also provided subsidy of 2,520 Baht/ rai as a short-term measure.

The Prime Minister pointed out that the farmers also need to think about helping themselves. He suggested that they can grow some other crops such as strawberries and banana to earn supplementary income.

## พลเอกประยุทธ์ ฟากบอกชาวสวนยาง



**เห็นว่าทำไรดี  
ก็มาปลูกกันเยอะ**  
แต่ความต้องการในตลาด  
มันน้อยลงไปมากทำไมไม่  
ลองไปปลูกพืชทดแทนอื่นๆ  
**แล้วมาเรียกร้องราคา  
จะเอาเท่านั้นเท่านั้น  
โลกนี้ไม่มีใครทำได้หรอก**

#พลเอกประยุทธ์ จินทรโอชา  
8 สิงหาคม 2557

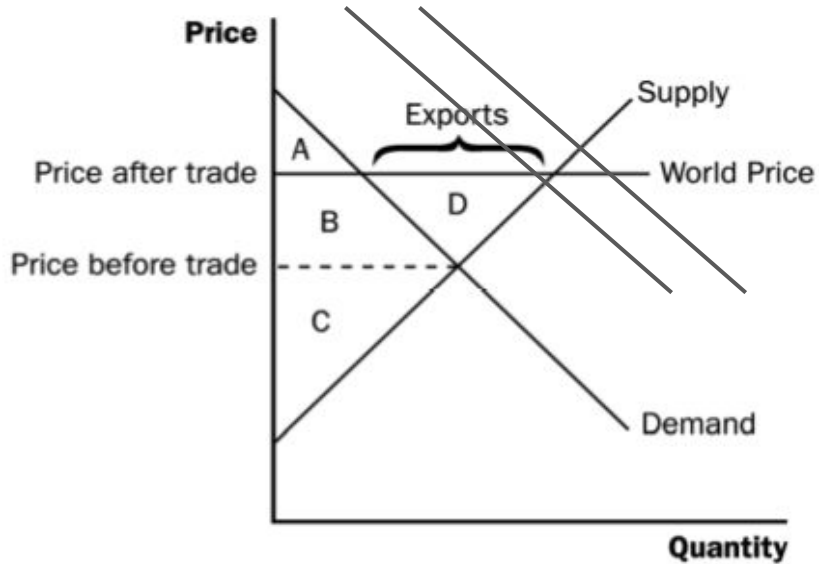
### Reaction of Thai rubbers



Rubber farmers were disappointed after the current government cannot meet their request for a price subsidy of 60 baht a kilogramme. At first, they said that if prices did not reach 60 baht within 30 days protests would take place.

# Alternative Solutions

## Increasing in the domestic demand



Ex Find new market  
Rubber/rice transformation  
Enforce domestic usage

### Benefit

- help stabilised domestic price
- even the world price drop, domestic market could relieve the effect

Trade-off high investment

ปี	ปริมาณการใช้ยาง (พันตัน)	อัตราการเติบโต (%)
2553	458.6	14.8
2554	486.7	6.1
2555	505.1	3.8
2556	520.6	3.1
2557	540.0	3.9
ค่าเฉลี่ย		6.3



from 2013-2014  
Domestic demand increase  
+20000 Tons

ปี	ยางแผ่น รมควัน	ยางแท่ง	น้ำยางข้น *	ยางผสม	อื่นๆ	รวม
2553	813,033	1,235,802	552,841	520,355	130,104	3,252,135
2554	892,249	1,455,094	713,804	428,276	79,610	3,569,033
2555	771,993	1,505,651	757,364	693,210	49,792	3,778,010
2556	912,676	1,579,788	775,662	804,784	97,518	4,170,428
2557	822,641	1,792,909	774,678	854,125	70,622	4,314,975



from 2013-2014  
Supply increase  
+140000 Tons

# Still have some spaces to expand

ประเภท	2553	2554	2555	2556	2557
ยางล้อรถยนต์	290,982	292,963	317,654	320,567	329,051
เส้นด้ายยางยืด	46,064	66,054	67,078	66,603	79,168
ถุงมือยาง	49,663	67,413	66,381	69,645	58,865
ยางรถจักรยานยนต์	24,262	20,858	21,958	23,417	23,811
ยางรัดของ	13,101	10,954	10,032	14,815	15,353
ถุงยางอนามัย	8,563	9,353	5,285	5,469	6,464
รองเท้า	4,950	3,765	3,032	3,146	4,769
กาว	2,036	1,961	2,274	1,510	2,985
สายพาน	2,763	1,557	1,513	1,573	2,499
อะไหล่รถยนต์	1,704	1,016	1,247	1,078	2,802
ยางหล่อดอก	2,452	-	1,057	1,274	2,128
พื้นรองเท้า	1,289	1,403	1,018	1,079	1,146
ท่อยาง	636	569	739	867	712
เครื่องมือทางการแพทย์/ วิทยาศาสตร์	1,185	650	684	841	952
ผลิตภัณฑ์ฟองน้ำ	326	260	262	233	234
อื่นๆ	8,661	7,969	4,838	8,511	10,064
รวม	458,637	486,745	505,052	520,628	541,003

Table show the quantity of Thai natural rubber used categorised by type of product (unit: Tons)

ประเภท	2553	2554	2555	2556	2557
ยางยานพาหนะ	8,821.87	10,441.43	13,046.5	11,654.60	10,674.40
ท่อยาง	4,097.21	4,733.48	7,358.70	6,948.70	6,147.10
สายพาน	1,894.25	2,180.60	2,810.20	2,172.70	2,405.80
ยางคอมพาวด์	1,422.22	1,486.29	1,539.00	1,460.20	1,210.83
ปะเก็น/ซีลยาง	953.02	995.33	1,234.70	1,144.50	1,163.90
ยางปูพื้น	305.60	745.77	1,130.00	39.60	57.60
ถุงมือยาง	837.65	1,037.60	1,093.90	1,196.90	1,373.00
ยางใน	876.45	821.62	1,009.80	757.40	704.10
ยางรีเคลม	161.00	223.29	229.00	243.10	324.20
ผ้ายาง	165.55	110.70	135.60	101.40	123.00
ยางลบ	51.40	51.85	92.80	64.10	59.70
ถุงยางอนามัย	37.20	76.67	76.70	119.30	47.20
ยางวัลคาไนซ์	29.36	45.69	60.20	51.60	103.30
หัวนมเหล็กทารก	16.42	19.36	24.30	15.00	12.70
ยางรัดของ	14.24	20.68	20.70	43.20	36.00
ยางยืด	43.22	12.95	4.70	9.10	12.70
ยางที่หล่อดอกใหม่	-	1,053.90	1,301.00	1,778.50	1,864.30
อื่นๆ	12,569.79	13,308.81	16,269.46	16,048.3	13,566.70
รวม	32,296.45	37,366.02	47,437.26	43,848.20	39,886.53

Table show the value of rubber products imported categorised by type of product (unit: million baht)

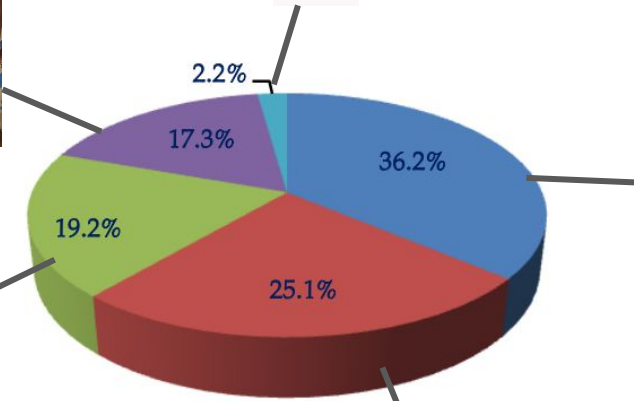
# Enforce domestic usage



**ถนนยางพาราคุ้ม! ทนนาน12ปี-ไม่ตีซ้อน**



# Export structure in 21014



ที่มา : กระทรวงพาณิชย์

- Block rubber
- Latex
- Compound rubber
- Rubber sheet
- etc.

## Law and regulation



**Check and Balance** increase bargaining power

- Anti-collusion law
- preventing both monopsony and monopoly
- Increase the punishment of corruption/cheating in term of progressive rate

# Alternative Solutions

## Infrastructure

such as

- Transportation helps reducing cost of production
- Irrigation system increases certain water level



## Government program

- Government should give education in order to minimize asymmetric information problems
- Implement rubber usage in government department  
Higher price--higher quality
- Limitation Rubber and Rice Plantation
- Encourage alternative job



# The End

