

Chapter 4

Agricultural Policy for Natural Rubber Farmers in Thailand

October 2016

This chapter should be cited as

ERIA (2016), 'Agricultural Policy for Natural Rubber Farmers in Thailand', in Yamamoto, H. (ed.), Research for Consideration of a Policy Proposal to Reform the Natural Rubber Industry's Structure and Stabilise Farmers' Dealing Conditions in Thailand. ERIA Research Project Report 2015-12, Jakarta: ERIA, pp.63-76.

Chapter 4

Agricultural Policy for Natural Rubber Farmers in Thailand

In this chapter, recent government policies on NR are studied, focusing on the replanting policy to control or reduce NR production, the establishment of the Rubber Authority of Thailand (RAOT) and the government’s NR purchase policy (100,000 tons) to help support farmers’ incomes.

4.1 Government Policy Outline

Current government policies can be classified into three: supply-side policy (reduction of NR plantations), demand-side policy (expansion of domestic consumption), and social policy (farmers’ income support) to tackle declining prices and the impact on farmers’ livelihoods.

Figure 4-1: Government policy outline

		Short term policy	Mid/long term policy
Supply side Policy	Reduction of supply	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • The project of production and plantation area control
Demand Side Policy	Increasing of demand for rubber	<ul style="list-style-type: none"> • 100,000 tons Rubber Purchase Policy • Direct purchase from farmers 200,000 tons by Public Warehouse Organization (budget 12,000 MB) to sell to Sinochem 	<ul style="list-style-type: none"> • The plan of seeking new markets for rubber exports • The project of investment support in rubber products in Thailand /support for rubber product’s traders • Rubber City • Loan support to agricultural institution to transform rubber
Social Policy	Farmer income support policy	<ul style="list-style-type: none"> • A buffer fund scheme to stabilize rubber prices • Subsidy for rubber farmers 1,500 baht/rai • The project of solving rubber system’s problems, year 2014/ Support production factors for farmers 	<ul style="list-style-type: none"> • The project of producing for income support based on the sufficiency economy theory • Credit support for small rubber farmers to do part-time self-employment
Technology support		<ul style="list-style-type: none"> • Market development project (The structural adjustment policy of rubber market) 	

Source: NRI.

4.1.1 Government policy outline: Master Plan (Table 4-1)

The Prayuth government has recently announced its Master Plan of the Rubber Authority of Thailand (2016-20).

Organisational Indicators

- The average income of rubber farmers/households is over THB 200,000/year.
- The level of rubber consumption in Thailand at the end of the year plan (2020) will increase to 650,000 tons, or at least 20 percent more than the level of rubber consumption in 2014, which was 541,000 tons.
- The number of rubber farmers, institutions and entrepreneurs who obtain knowledge from technology transfer of production processes should be implemented (not less than 10 percent of the target).

Table 4-1: Master Plan (2016-20)

<p>Strategic 1: Improve production efficiency</p> <p>1.1 The number of replanting areas that used to plant higher quality types of rubber trees instead of type RRIM 600 must be more than 50%/year of the replanting target.</p> <p>1.2 The number of replanting areas compared with the target number must be not less than 90%.</p>	<p>Strategic 4: Improve earnings and implement efficiencies in organisations</p> <p>Rubber exports that are tariffed must be not less than 60% of total rubber exports.</p>
	<p>Strategic 5: Improve rubber farmers and rubber agricultural institutions</p> <p>Develop rubber farmers, rubber agricultural institutions, and rubber entrepreneurs.</p>
<p>Strategic 2: Research and develop supporting production efficiency and value creation</p>	<p>Strategic 6: Efficiencies in organisational management</p> <p>6.1 Individual development plans.</p> <p>6.2 Information system management plan.</p> <p>6.3 Efficiency improvements in administration.</p>
<p>Strategic 3: Improve market and logistic efficiency</p> <p>3.1 Develop and increase market potential.</p> <p>3.2 Improve potential in logistic management and supply chain.</p>	
	<p>Strategic 7: Supporting government policies</p> <p>7.1 Making rubber system development plan.</p> <p>7.2 Follow the policies assigned by government.</p>

Source: Rubber Authority of Thailand.

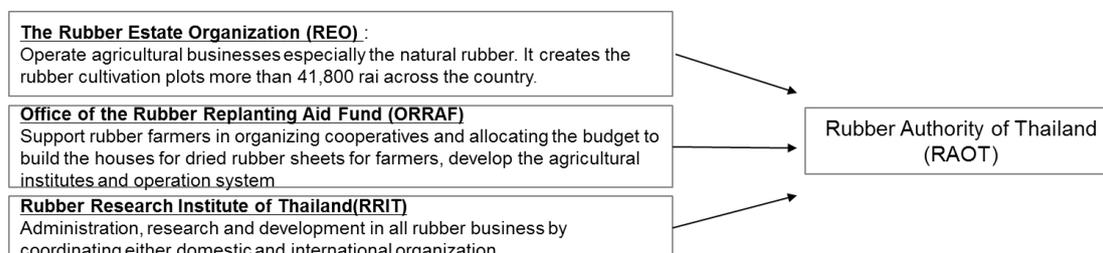
4.1.2 Government policy outline: Establishment of RAOT

Three rubber-related organisations, the Rubber Estate Organization (REO), the Office of the Rubber Replanting Aid Fund (ORRAF), and the Rubber Research Institution of Thailand (RRIT), have been combined into the “Rubber Authority of Thailand (RAOT)” since July 2015 to operate with one policy direction and with greater efficiency:

The purpose behind establishing RAOT is as follows;

- Central organisation to manage Thailand’s overall rubber industry, and fund and promote the country to become a centre for rubber products.
- Encourage and support study, R&D, and information distribution related to para rubber.
- Encourage and support rubber farmers, farmer associations and rubber businesses to increase revenue and improve the quality of life.
- Stabilise rubber price levels.
- Encourage and support alternative plantations and new plantations.

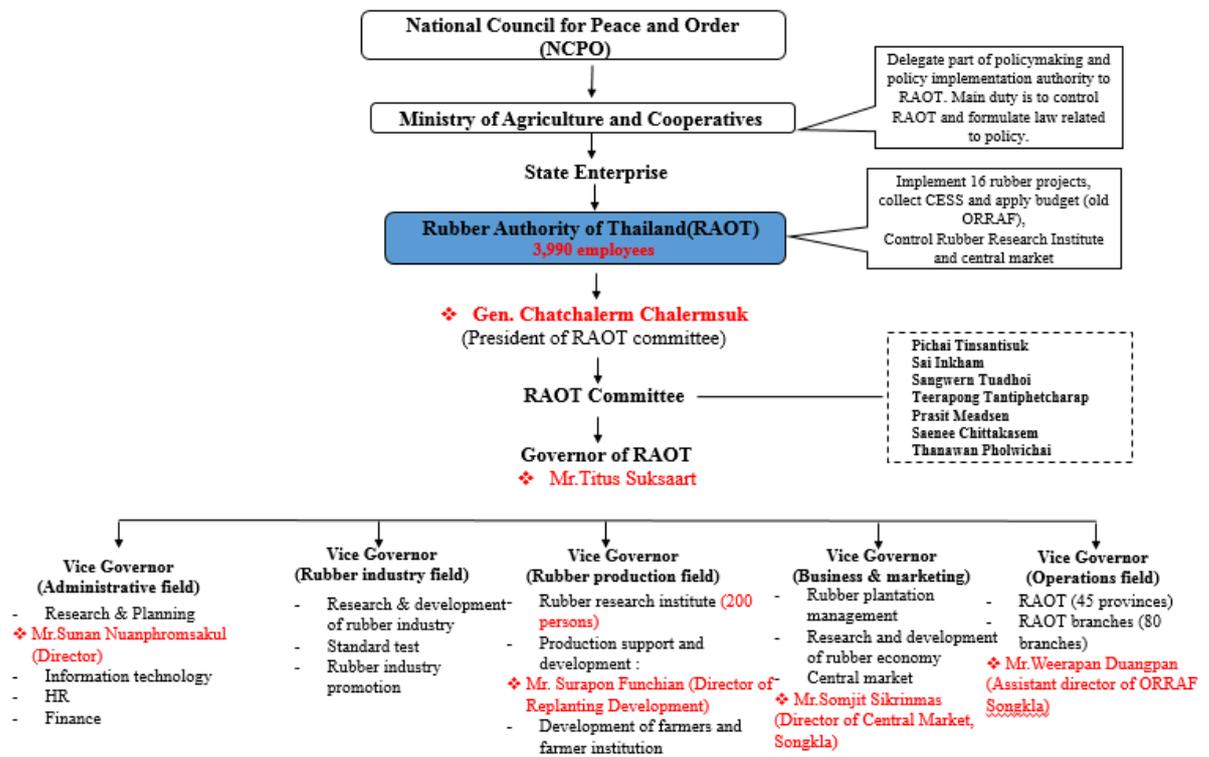
Figure 4-2: Unification of rubber organisations in Thailand



Source: Rubber Authority of Thailand

The Rubber Authority of Thailand (RAOT) was founded as a state enterprise under the Ministry of Agriculture and Cooperatives. Not only does it implement government policy, but it is also responsible for strategy planning. As a state enterprise, it can start new businesses to earn alternative revenues.

Figure 4-3: Organisational chart of RAOT



Source: Thai PBS.

4.2 Subsidies and Their Application: 16 Projects

Sixteen projects have been implemented under the Prayuth government to tackle the decline in NR prices. The largest of these projects is the reduction in the number of plantations that use budget from CESS.

Table 4-2: Projects to reduce production

Measure/Projects	Organization	Budget (MB)/ (Budget source)	Period
1. Reduce production			
The project of production and plantation area control (cutting rubber plants (700 thousand rai, 7 years)	- The Ministry of Agriculture and Cooperatives - Ministry of Natural Resources and Environment	42,144 (CESS)	Oct 14 – Sep 21 (7 years)
Income compensation program for rubber farmers 1000 baht/rai; maximum 15 rai/household (Target 850,000 households)	Bank for Agriculture and Agricultural Co-Operatives	8,200 (from BAAC)	Oct -31 Mar 2015 (6 months)
Credit support for small rubber farmers to do sideline jobs (maximum 100,000 baht/person) Interest rate 5%/year (farmers 2%: gov. 3%) / Target 100,000 households		10,000	Start 21 Oct 14

Note: MB= Million THB

Source: Office of the Permanent Secretary for the Ministry of Agriculture and Cooperatives

- RAOT also implements farmers' support policies through agricultural institutions (cooperatives) that purchase NR from farmers and sell to the central markets.

Table 4-3: Projects to increase liquidity

Measure/Projects	Organization	Budget (MB)	Period
2. Increase liquidity			
Loan support (revolving fund) to rubber traders with interest rate 5%/year (entrepreneur 2%: gov. subsidy 3%)		10,000	Start 21 Oct 14
Revolving fund support for agriculturalist's institution to purchase rubber from rubber farmers to sell to central market or local markets of ORRAF	- The Ministry of Agriculture and Cooperatives - Bank for Agriculture and Agricultural Co-Operatives (BAAC)	10,000	1 Nov 14 - 31 Dec 15
Loan support to agricultural Institution to transform rubber		5,000	1 Sep 14 - 31 Aug 24 (10 years)
Loan support to private corporation to transform rubber	- Ministry of Industry Thailand - Government Savings Bank	15,000	1 Sep 14 - 31 Aug 24 (10 years)

Note: MB= Million THB

Source: Office of the Permanent Secretary for the Ministry of Agriculture and Cooperatives

The government also plans to pursue an NR purchase policy, and at the same time to strengthen the role of central markets to improve connectivity between producers and markets.

Table 4-4: Projects to increase production and marketing efficiencies

Measure/Projects	Organization	Budget (MB)	Period
3. Increase efficiency of production and marketing			
A buffer fund scheme to stabilize rubber prices (first round in Nov 2014- Mar 2015) buying rubber 120,000-130,000 tons for moving stock) <ul style="list-style-type: none"> • 6,000 MB approved on oct 2014 • Approved more 6,000 MB on feb 2015 	The Ministry of Agriculture and Cooperatives	Credit limit 20,000 (loan from BAAC)	18 months (Nov 14 - Apr 16)
Market development project (The structural adjustment policy of rubber market) <ul style="list-style-type: none"> - Central market development in rubber supply chain to have more linkage between product management system, information, marketing and monetary system - Rubber quality development by using technology transfer of the experts 	- The Ministry of Agriculture and Cooperatives - Ministry of Commerce - Ministry of Finance	1,369 (From CESS 600 MB)	Oct 14 - Sep 17 (3 years)
The plan of seeking new markets for rubber exports (Assign to Thai commercial emissaries in each country to seek for rubber market)	Ministry of Commerce	(Budget from Ministry of Commerce)	2015 onwards
Reducing cost production's project	The Ministry of Agriculture and Cooperatives	179 (Ministry's budget)	Oct 14 – Sep 15
The project of producing for income enhancement based on the sufficiency economy theory <ul style="list-style-type: none"> - Plant other crops on empty area in rubber farm such as cover crops - Replantation aid fund 	The Ministry of Agriculture and Cooperatives	25.6 MB /year Total 179.20 (From CESS)	Oct 14 – Sep 21 (7 years)

Note: MB= Million THB

Source: Office of the Permanent Secretary for the Ministry of Agriculture and Cooperatives

- Launch a production cost reduction policy, while also strengthening agricultural institutions (cooperatives) in order to help farmers.

Table 4-5: Projects to increase rubber consumption in country

Measure/Projects	Organization	Budget (MB)	Period
4. Increase the rubber consumption in country			
The project of technology transfer for reducing cost of rubber production	The Ministry of Agriculture and Cooperatives	NA (Ministry's budget)	Oct 14 – Sep 15
The project of solving problems of overall rubber system , year 2014/ Support of production factor costs for farmers (2,520 baht/rai) ; max. 25 rai/person)	The Ministry of Agriculture and Cooperatives	21,000 (approximately)	
The project of investment support in rubber products in Thailand / support for rubber product's traders	BOI	(BOI's budget)	2015 onwards
The project of setting up the rubber industrial development institution (cooperatives)	- The Ministry of Agriculture and Cooperatives - Ministry of Industry Thailand		

Note: MB=Million THB

Source: Office of the Permanent Secretary for the Ministry of Agriculture and Cooperatives

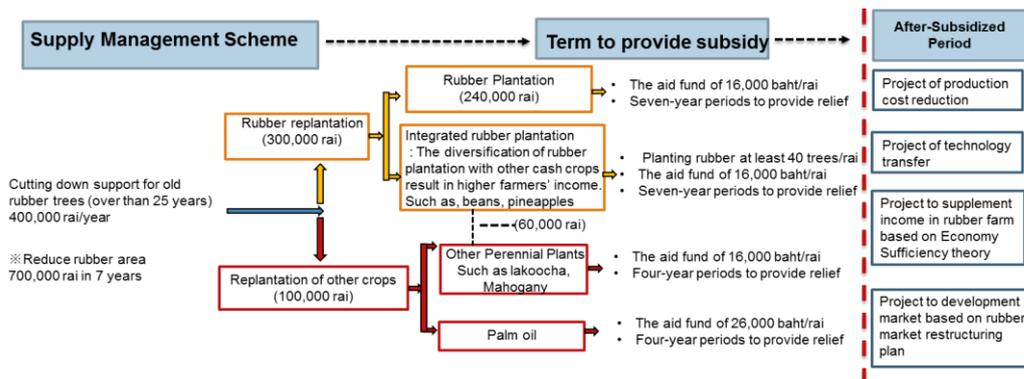
4.3 Subsidies and Their Application: Rubber Plantation Control Plan

Implement a rubber plantation control plan to resolve oversupply and improve production efficiency

The rubber production reduction plan is as mentioned below: (Figure 4-4)

- Support for felling rubber trees aged 25 years and over.
- Support rubber farmers who planted rubber trees in inappropriate areas to change to other agricultural activities or other types of tree.
- Take legal action to fell rubber trees in invaded forest (3-4 million rai)

Figure 4-4: Rubber plantation control guidelines



Note: *Period plan 7 years (Oct 14 – Sep 21).

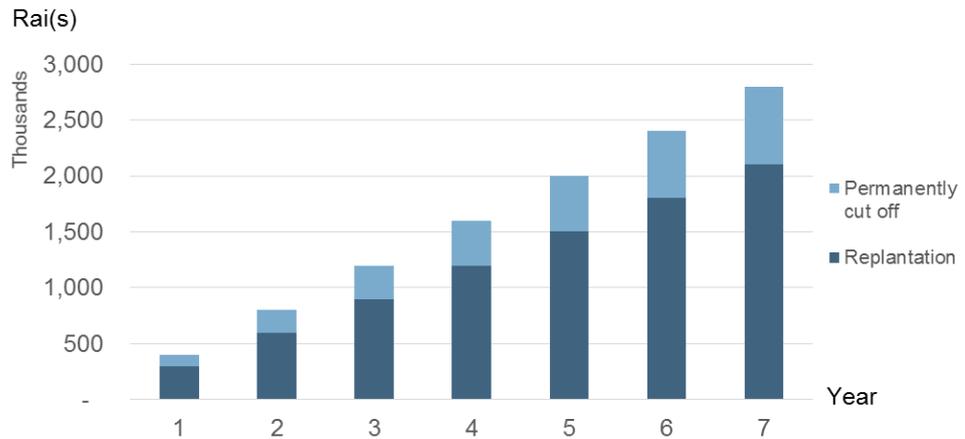
*Reducing of production about 100,000 tons/year

*Budget: 42,143 MB for 7 years by CESS

Source: Office of the Rubber Replanting Aid Fund

In total, 2.1 million rai will be replanted in 7 years, or 0.3 million rai will be replanted per year, while 0.7 million rai in 7 years, or 0.1 million rai per year, will be felled. The expenses incurred in replanting/felling are supported by the CESS fund in full.

Figure 4-5: Rubber replanting plan

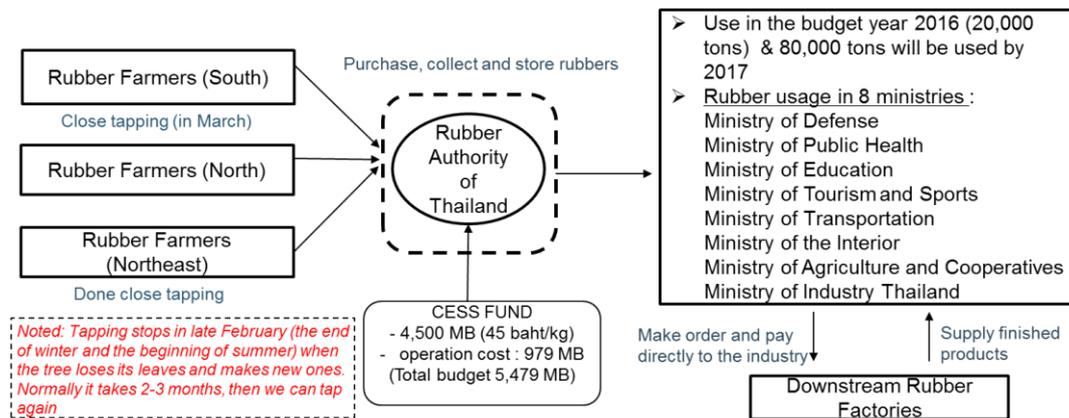


Source: ORRAF, RAOT

4.4 Trends and budget on spot price purchases and financial resources

Under the 100,000-ton purchase policy announced in January 2016 by the Prayuth government, RAOT will directly purchase 100,000 tons of rubber from Thai rubber farmers (150 kg/farmer) in order to address the declining NR price.

Figure 4-6: Flow chart of the 100,000 tons rubber purchase policy



Source: Rubber Authority of Thailand

- The Cabinet has approved the NR usage plan for seven ministries, not including the Ministry of Defence. NR usage volume is set at 108,825.18 tons with a total budget of THB 93,422.88 million (Table 4-6).

Table4-6: Rubber usage programmes of Thai government agencies

Ministry	Project	Rubber Use (Tons)	Budget (MB)	Year
Ministry of Defense	Road construction and roadworks in 3 southern border provinces	813	164	
	Macadam road 76 areas	285		
Ministry of Public Health	Purchasing of surgical gloves, Foley Catheter and condoms		1,050	Q2 of year 2016
Ministry of Education	Ground for sport improvement & construction; road enhancement in schools	N/A	25,231	
Ministry of Tourism and Sports	Road construction in 12 provinces	230	120	2016
	Football field, rubber racetrack & stadium	763	389	
	Rubber lucky doll, welcome gift set	2,500	329	
	10 sports stadiums	108	114	
Ministry of Transportation	Asphalt concrete paving (latex mixed with asphalt concrete)	57,713 (latex)	36,503	2016-2017
Ministry of the Interior	Sport stadium construction 46 projects ; road construction and maintenance 2,071 projects	9,808 (latex)	13,130	2016-2017
Ministry of Agriculture and Cooperatives	Rubber pavement for stall; Improving of road surface; road construction; Pond coating (latex mixed with reinforcement materials) and rail pads etc.	36,606	16,395	2016-2017
Ministry of Industry	Open more rubber industrial factories		N/A	

Source: Nation TV News

Figure 4-7: Major pilot projects of the government in the rubber usage plan

Rubber usage's plans from 100,000 tons rubber purchase project

- Rubber water confine for making fish pond, catchment etc. (Making rubber water confine or pool coating by using latex compound coat on unbleached cloth)
 - (Pond size 1 rai uses latex about 2 tons)
 - Model project: (the right photos : Pond rubber coating; the model project in highland villages in Lampang's Ngao district, Thailand. The project of cooperation between The Thailand Research Fund and ORRAF to solve the problems of drought in some area in Thailand.
- Rubber rail pads to reduce shock and vibration
- Vibration control for building
- Para slurry seal
 - Natural Rubber Modified Asphalt Concrete (NRMAC)
 - Model project (Right photo) The project of rubber asphalt pavement at Mae Kuang Udom Thara Dam , Chiang Mai 6.6 km., 26 million Baht (Done on December, 2014).
 - Also, there are many rubber road project in south (37 routes, 164 km.)



Photo from The Thailand Research Fund (TRF) website (2015)





Photo from Prachachart News Website

Source: Office of Industrial Economics

4.5 CESS Condition and Funds Utilisation

CESS is a tax levied on rubber exporters and is allocated in six parts (Table 4-7).

The CESS budget allocation changed significantly in 2015. The allocation for replanting was reduced from 85 percent to 40 percent, while support for domestic processing was increased to 35 percent, reflecting the change in priority from replanting rubber plantations to increasing local value for domestic consumption.

Table 4-7: The Rubber Act 2015, Section 49

Budget allocation of CESS		
Past	Present	
10%	10%	Administrative budget of The Rubber Authority of Thailand
85%	40%	Replantation support
-	35%	Promote and support farmer institution, processors, and also creating rubber products in country
5%	5%	Research and development
-	3%	Promote and support farmer's institution in education and strengthening farmers such as, training
-	7%	Expenses of welfare for rubber farmers

Source: Office of the Rubber Replanting Aid Fund

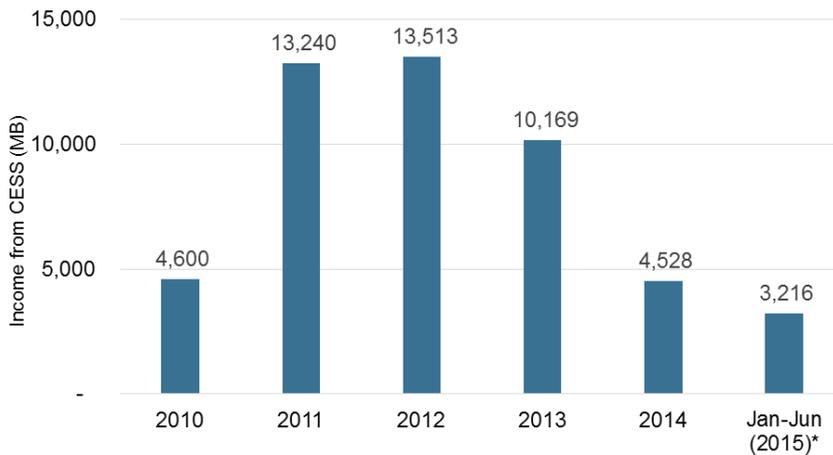
Table 4-8: CESS rate calculation (effective from 1 October 2010)

Rubber Price (Baht/kg)	CESS Rate (Baht/kg)
Not more than 40	0.90
41-60	1.40
61-80	2.00
81-100	3.00
More than 100	5.00

Source: Office of the Rubber Replanting Aid Fund

- CESS revenue has been affected by the decline in NR prices and has significantly decreased. This imposes limitations in terms of securing sufficient financial resources for supporting farmers in the future.

Figure 4-8: Income from CESS collection



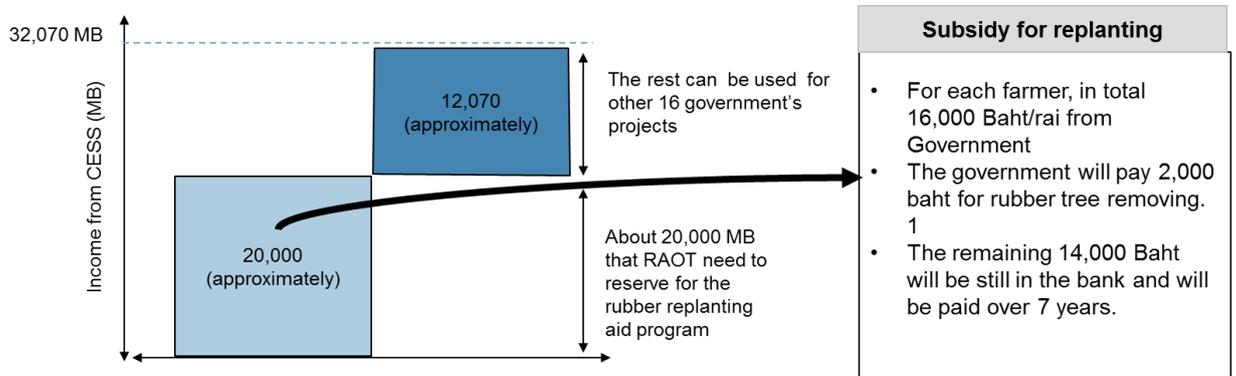
Note: MB=Million THB

Source: State Enterprise Policy Office

Total funding of CESS is about THB 32,070 million, of which about THB 20,000 million is allocated for replanting. (The replanting aid fund will be paid to farmers over 7 years after first felling their trees.) The rest is planned to be used to fund 16 projects, but may prove to be insufficient. This implies that RAOT will need to find new sources of revenue in order to support the 16 projects. The solutions mentioned by RAOT managers during the survey were: (i) subsidies from the government; (ii) borrowing money from the BAAC (Bank for Agriculture and Agricultural Cooperatives), which the government guarantees; and (iii) revenue from new enterprises which, as a state enterprise, RAOT can develop.

However, as of February 2016, the third option had not been utilised, as RAOT is still in the process of selecting its director and in managing the structure of the organisation

Figure 4-9: The budget of CESS



Source: Replanting Development Department, RAOT.

4.6 Issue of NR Purchase Policy by the Government

The government has conducted direct purchasing of NR on several occasions as a way of helping to support farmers' incomes. However, the direct purchase policy has encountered several issues and failed to produce the expected results. This implies that the effect of direct subsidies to improve farmers' livelihoods through direct purchases is somewhat limited and other policy options should be considered.

4.6.1 The 100,000-ton purchase policy in 2016

According to one RAOT official, RAOT encountered problems in conducting its 100,000-ton direct purchase policy, such as the purchase volume from farmers/cooperatives failing to reach the target volume. Since the project started on 25 January 2016, about 28,000 tons of rubber had been collected from farmers as at the end of February. This was because some farmers found it unattractive to sell rubber, due to the numerous rules for selling, such as the maximum volume to be sold by each farmer and the location of the sale.

Also, RAOT has not been informed on how much of each type of rubber, such as TSR, RSS, and latex, will be required and used by government agencies due to a lack of specific instructions.

Table 4-9: Limits of rubber purchasing

Major limiting factors	Details
<u>The purchase quota per person is very low</u>	Maximum 15 rais (10 kg./ rai) . So, totally 150 kg./person. So they think that it is not worth for transportation
<u>Rubber types in purchasing condition and standards of each type</u>	<p>➢Some farmers think that they are not sure whether their products will pass the standard test as below</p> <ul style="list-style-type: none"> - USS 3 (humidity not more than 3%) (Price 45 Baht/kg.) - Field latex: Dry Rubber Content(DRC) in latex is not less than 28% (Price 42 Baht/kg.)
<u>The collecting points are hard to access</u>	- Due to the limits of RAOT's staff in each province, thus, the purchase points are not enough. Also, staffs who has been sent from the military government and the Agricultural and Cooperatives ministry have no knowledge about rubber so they cannot determine the quality of latex and rubber sheets.
<u>Tight time limit</u>	- Need to purchase from each farmer registered with in the limits of time (End: Jun,30, 2015). It is hard for RAOT's staffs to know that which areas have farmers who will have the rights to sell rubber.

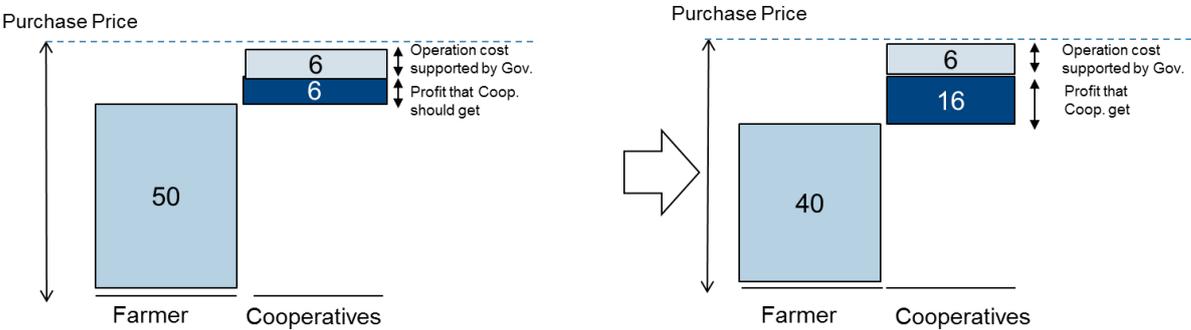
Source: ORRAF & Manager Newspaper Website.

4.6.2 Purchase policy in 2015

Another purchase policy implemented in 2015 also faced problems. Contrary to initial policy intentions, cooperatives took higher margins under the purchase policy, resulting in lower-than-expected purchase prices from farmers. Ultimately, the policy was not as effective as intended (Figure 4-10).

- In the buffer fund scheme to stabilise rubber prices (October 2014 to March 2015), the government set the price for purchasing rubber from farmers at THB 62/kg. Government support to cooperatives for the operation cost THB 6/ kg. (THB 62-6 = THB 56/kg.)
- Government let cooperatives purchase latex from farmers at THB 50 (so the profit would be THB 6). However, some cooperatives bought latex from farmers at THB 40 (lower than the price set by the government) in order to make higher profits by claiming that the quality of latex was not good and the price should therefore be lower (Figure 4-10, LHS). The government expected farmers to receive THB 50 and the profit for the cooperatives to be THB 6 (Figure 4-10, RHS). In fact, the cooperatives purchased latex from farmers at THB 40/kg, so the cooperatives made profits of THB 16/kg.

Figure 4-10: Initial plan to support farmers (LHS) and the actual project (RHS)



Source: Replanting Development Department, RAOT.