



# The Implication and Impact of Sustainability Standard on Smallholder



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# Outline

- ▶ Smallholder in a complex supply chain
- ▶ Implication of sustainability standard
- ▶ Lesson learnt: the project on sustainable Palm oil production in Thailand
- ▶ Impact of the certification
- ▶ Remaining challenges

# Smallholder in a complex supply chain



Upstream (millions) – downstream (hundreds)

# Smallholder in a complex supply chain

- ▶ Important primary raw material's supply base: mill's dependency on SH is varies from 50–100%

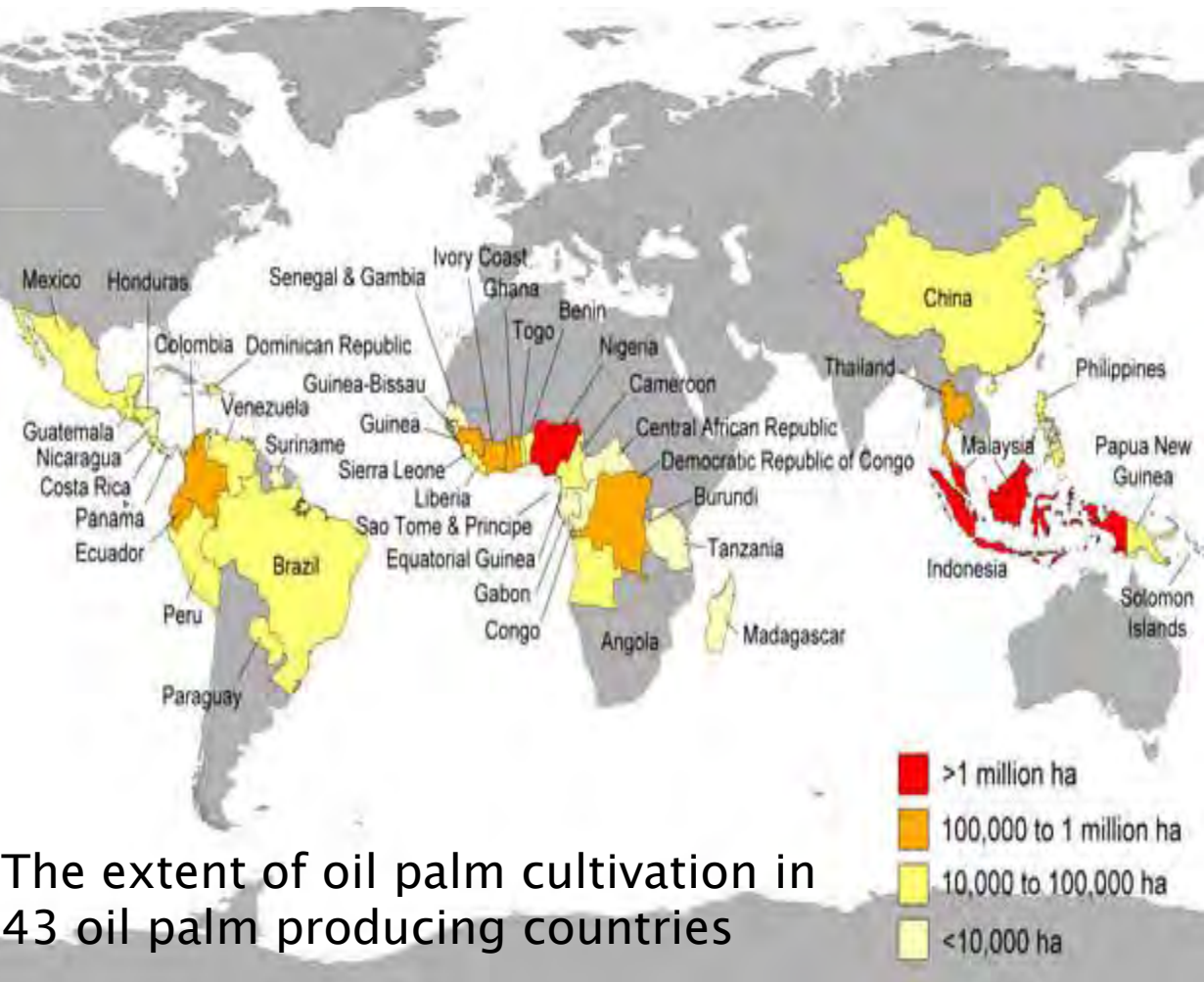
Item / country	Indonesia	Malaysia	Thailand	PNG	Africa
Area under smallholder(%)	33	11	76	50	70-80

- ▶ Smallholder settings

- Yield gap: 4 FFB t/Ha (Africa), 15+ (Asia, PNG) compared to 30+ in good managed plantation
- Poor Infrastructure (farm organization, financial, transportation, etc)
- Information & knowledge
- Subsistence – semi commercial farming



# Smallholder in a complex supply chain



The extent of oil palm cultivation in 43 oil palm producing countries

Palm Oil (2011 /F)* Million ton	48.97
Production under smallholder (%)**	33
SHs average ton oil per Ha** (average)	2.51 (3.74)
Palm oil from SHs Million ton	16.16
No. of SHs: Million (calculated)	
A: 1.0 ha / farmer	6.438
B: 1.5 ha / farmer	4.292
C: 2.0 ha / farmer	3.219

How many smallholders are **RSPO certified?** **25,000 farmers\*\*\* (0.77%)**

Source: FAO (2007). Cited by World bank (2010)  
 \* Oil World (vol.54, 2011); \*\* World Bank (2010); \*\*\* Sawit Watch(2011)

# Implication of sustainability standard:

## RSPO

### A. Evidence-based certification:

- Book keeping and farm records
- Land title, trainings



# Implication of sustainability standard:

# RSPO

## B. Good agricultural practices (GAP & BMP)

- Farm management
- Soil, water and resource conservation
- IPM

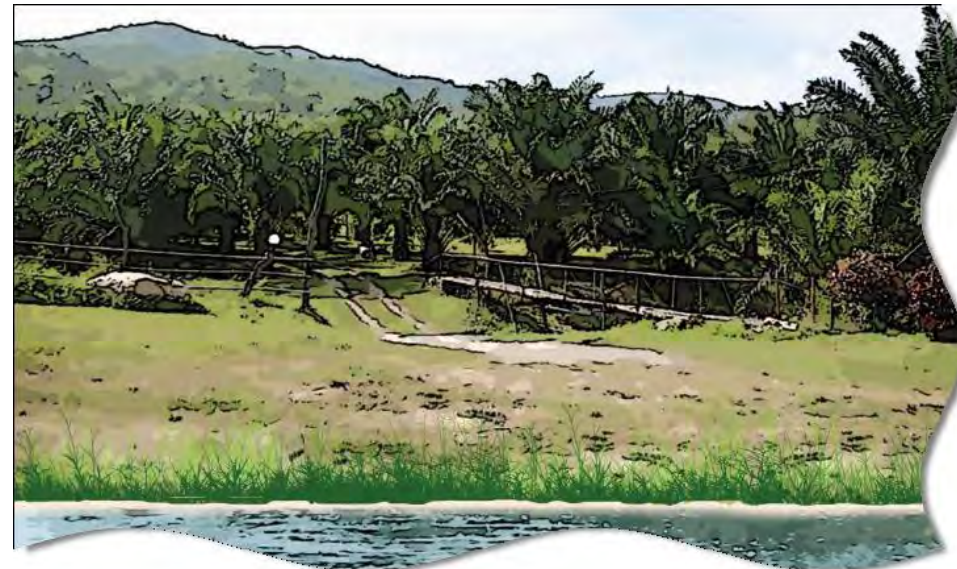


# Implication of sustainability standard:

## RSPO

### C. Compliance with environmental P&C

- HCVs assessment
- Fire use forbidden
- Buffer zone and riparian





# Implication of sustainability standard:

## RSPO

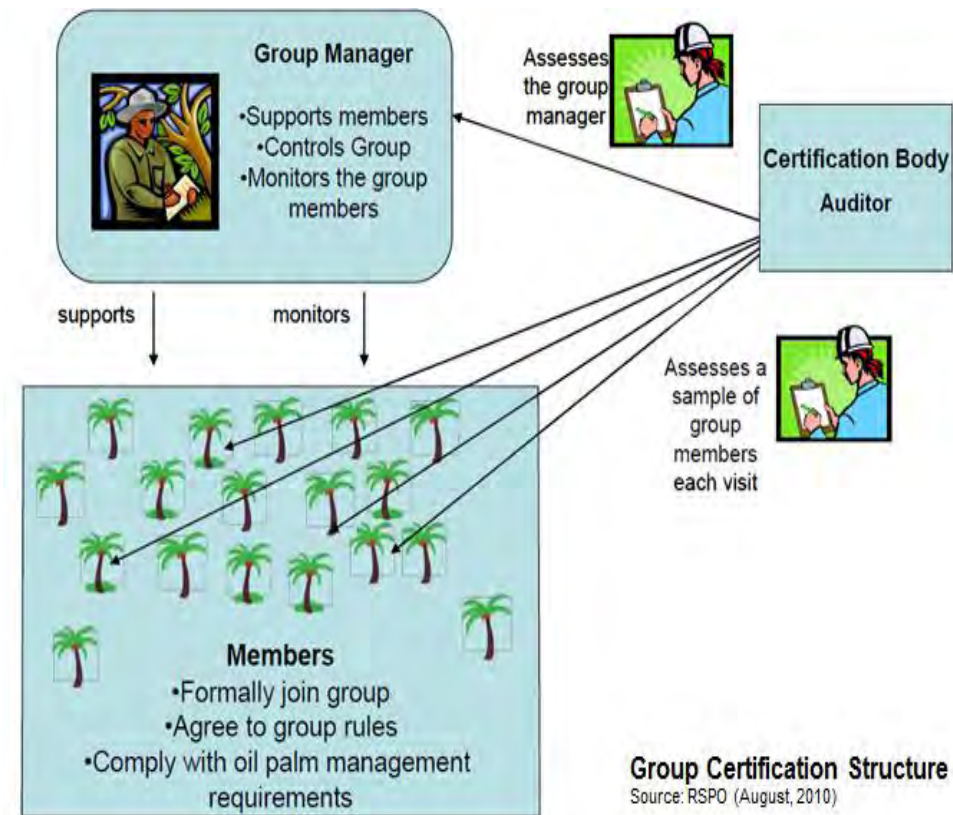
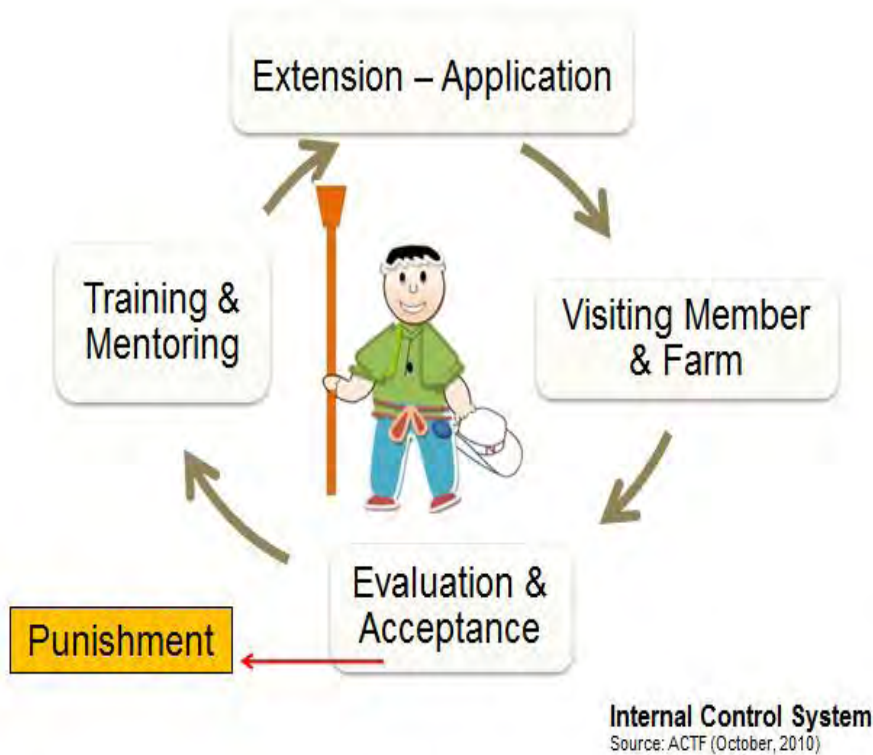
### D. Compliance with social related P&C:

- FPIC & Social impact assessment
- OHS
- Worker's rights and working conditions (woman & child)



# Implication of sustainability standard: RSPO

## E. Internal control system for group certification (Independent smallholder)



# Lesson Learnt: the project on Sustainable Palm Oil Production in Thailand- **The context of palm oil industry**

## INDEPENDENT & LOOSE COOPERATION

Poor agri. practices & management

Lack of Agricultural knowledge & inputs: fertilizer, credit, etc.

Low quality seedlings

Harvesting of unripe fruit bunch

Poor ramp management: water spray and sand mixture

**“Market Failure”**  
Loss of 0.4 billion USD / year\*

Low quality control of FFB purchasing

Low OER (ineficient) of crushing mill

Smallholder

Harvest team

Ramp (middleman)

Palm Oil Crushing Mills

Ministry of Agri. (DoAE, DoA, ACFs)

Academic Institutions

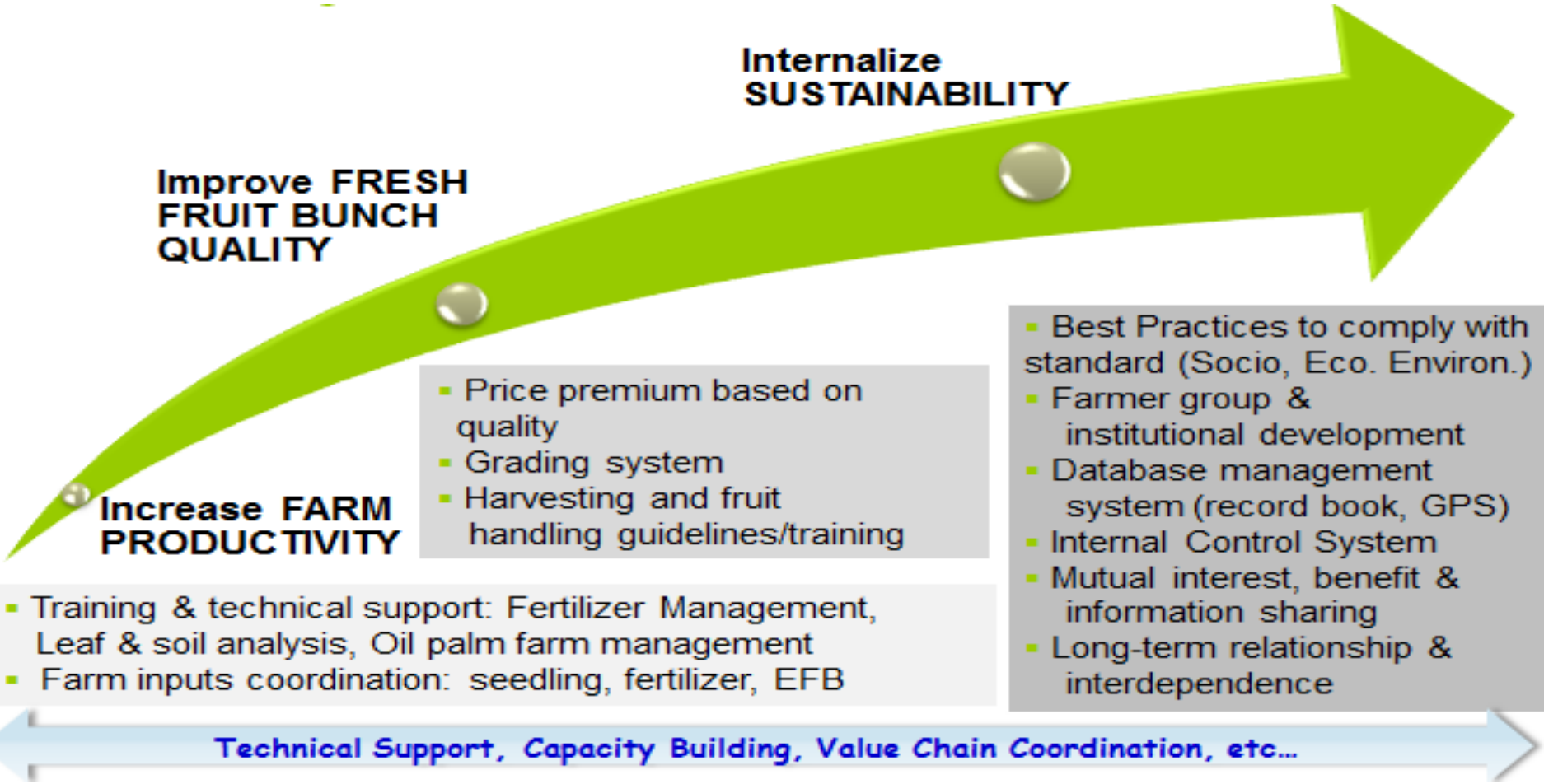
Provincial Govt. Office

Agr. Inputs Supplier

Asso. of Palm Oil mills/refinery

National Palm Oil Board

# Lesson Learnt: the project on Sustainable Palm Oil Production in Thailand– **Project's intervention approach**



# Lesson Learnt: the project on Sustainable Palm Oil Production in Thailand– **Capacity building package**

1. Farm record book
2. Oil Palm Fertilizer Management
3. Oil Palm Farm Management
4. Occupational Health and Safety
5. High conservation Values guidelines
6. Integrated Pest Management
7. Soil, Water, and resources conservation
8. RSPO practical guidelines for smallholders
9. Internal control system for group certification
10. Sustainability Manual

**R** Roundtable on  
**S** Sustainable  
**P** Palm  
**O** Oil



# Lesson Learnt: the project on Sustainable Palm Oil Production in Thailand– *The Business Case (an example)*

A. Business Case Formation	Before	After	Diff.	% Changed		
	FFB (ton)	18.50	21.28	2.78	15.00	No. of Farmer
OER (%)	17%	18.50%	1.50	8.82	Average farm size (Ha)	8
CPO ton/Ha	3.15	3.94	0.79	25.15	FFB price (THB/ton)	5,350
CPO increased/farmer (ton)	25.16	31.49	6.33	25.15	Exc. rate 1 € : US\$	1.3
CPO increased- all farmers (ton)	37,740	47,231	<b>12,654</b>	25.15	5 years Av. CPO price (\$)	906.50
					Project Investment (€)	1,600,000

B. Direct Benefit Value (Million/year)	THB	%	US\$	Euro	Rebate Rate (%)	Breakeven (year)
	To all Farmers	271.58	70	8.76	6.74	5
To processing mill	116.02	30	3.74	2.88	7	2.59
Total value added:	<b>2387.60</b>	100	12.50	9.62	10	1.81

The business case is aimed to combine the Partnership Farming approach into a private investment perspective. The surplus values generated by the win-win partnership (*Box A*) will finance the initial phase of the project (*Box B*) and long term local services.

# Impact of the Certification

- ▶ Farm household level (yield increased, reduced health risk, access to farming knowledge and agri. Inputs, etc.)
- ▶ **Tangible Benefits** to the project participating farmers

Tangible Impacts	Addition of Monetary value in a year (Euro)	
	Per Ha	Per Household
+ Increased yield of 2.58 FFB t/Ha (from 17.17 to 19.75 t/Ha)	354.06	2,209.35
+ Premium price (0.05 THB/kg FFB)	24.69	154.05
+ Reduced fertilizer price (2 THB/Kg Fertilizer)	43.28	270.25
Total	422.03	2,633.65

Source: Project Impact Study, GIZ (September, 2012)  
Remarks: average farm size (6.24 Ha), 1 Euro: 40 THB

# Impact of the Certification

- ▶ Group or community level (self-help group/network, info. Exchange, cohesive collective action)
- ▶ Trading partner (securing supply base, improved OER, better understanding working with SHs)
- ▶ Regional & national level (knowledge-based economy, Industry's efficiency, value added, and saving land area for expansion)
- ▶ Global-GHG emission from land use change (Carbon sink, except primary forest to palm)



# Remaining Challenges

- ▶ Market uptake (incentive) of the certified products is very weak– Price premium may not cover auditing and certification cost
- ▶ Who will invest for smallholder supply base?
- ▶ Practical mechanism for smallholder certification is needed
- ▶ Numerous number of smallholders around the world
- ▶ Successful business cases are needed
- ▶ Risk of exclusion of poorest group of smallholders

# Summary

- ▶ Smallholders' sustainability is crucial for global primary supply base.
- ▶ It needs a special attention in integrating smallholder in a supply chain
- ▶ Improvement of yield gap is the most crucial entry point for including smallholder in a value chain
- ▶ Core funding should come from private sector investment, while donor agency shall trigger some activity only



# Thank you very much

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