



agri benchmark  
**Sugar Industry in Thailand**

**Pipat Weerathaworn**

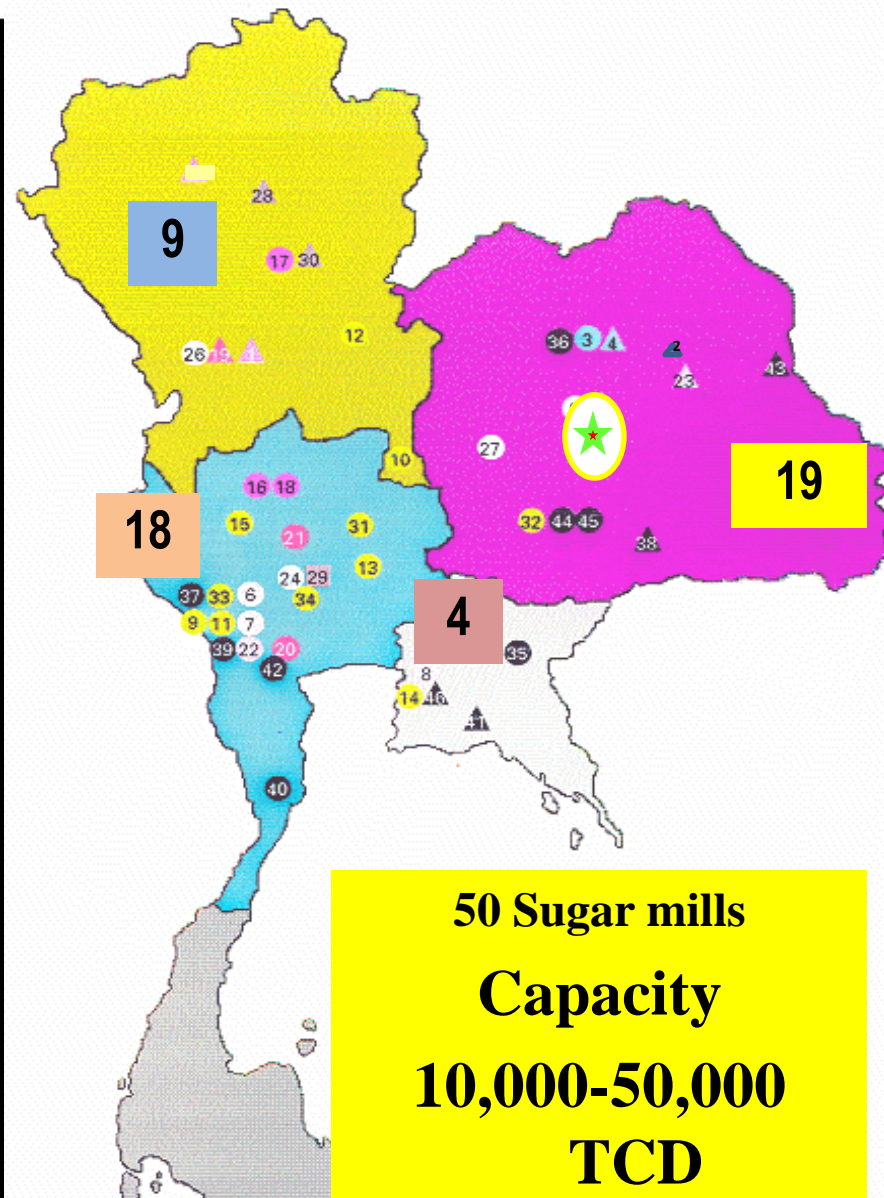
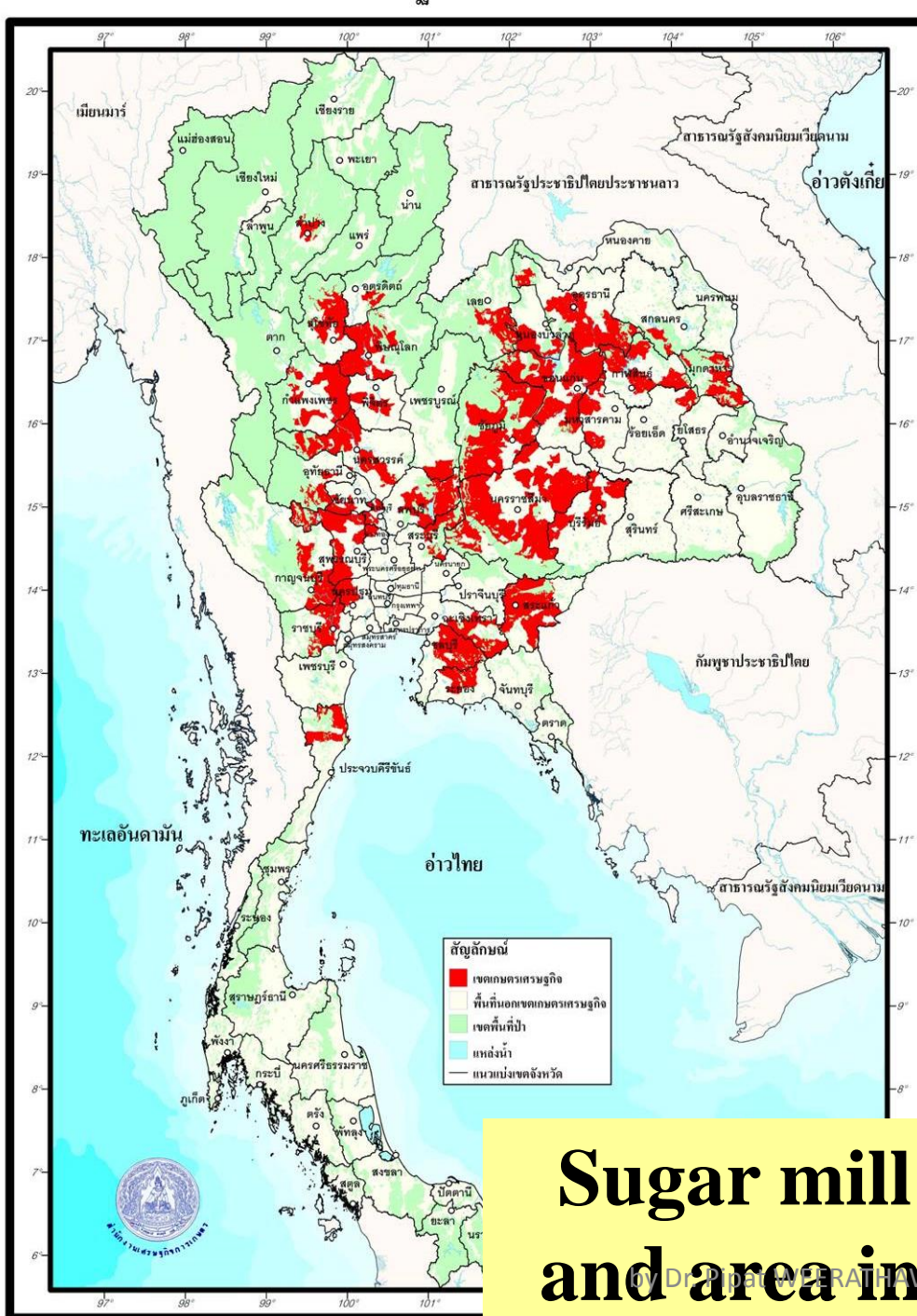
**A committee for Agricultural and Biological Researcher group**

**National Research Council of Thailand**



*agri benchmark* Cash Crop Conference  
Goiania, Brazil, July 2015

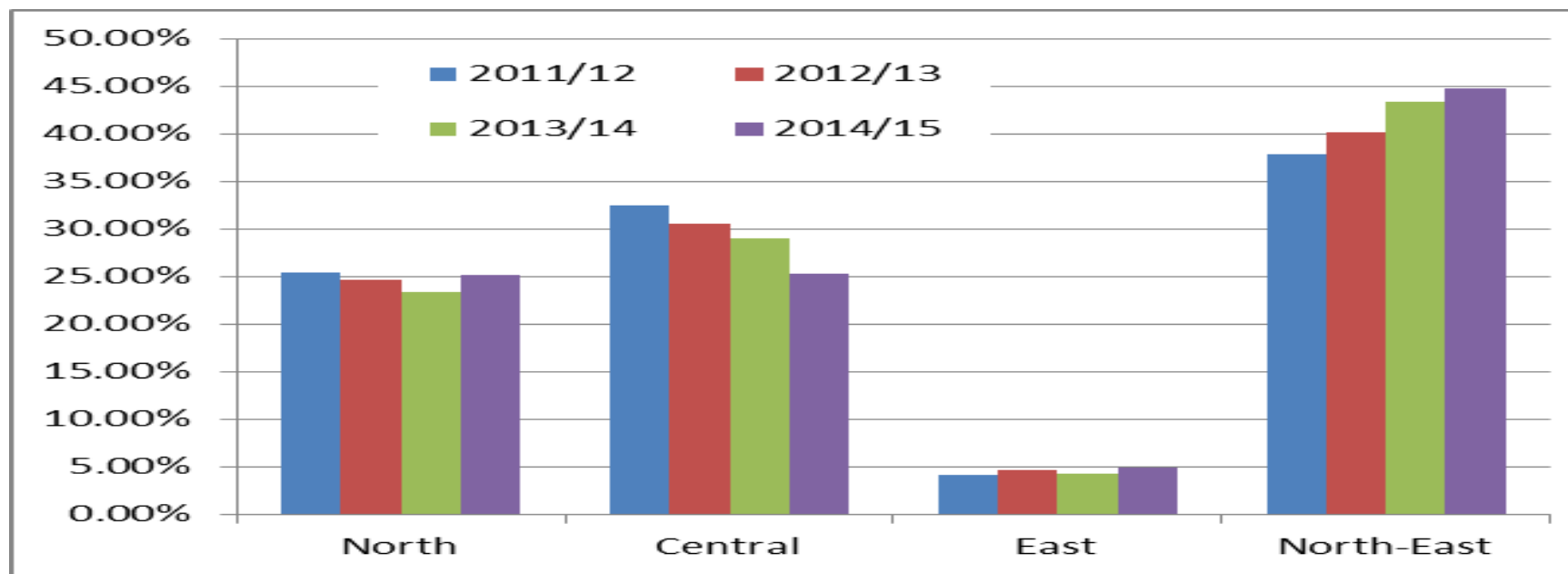
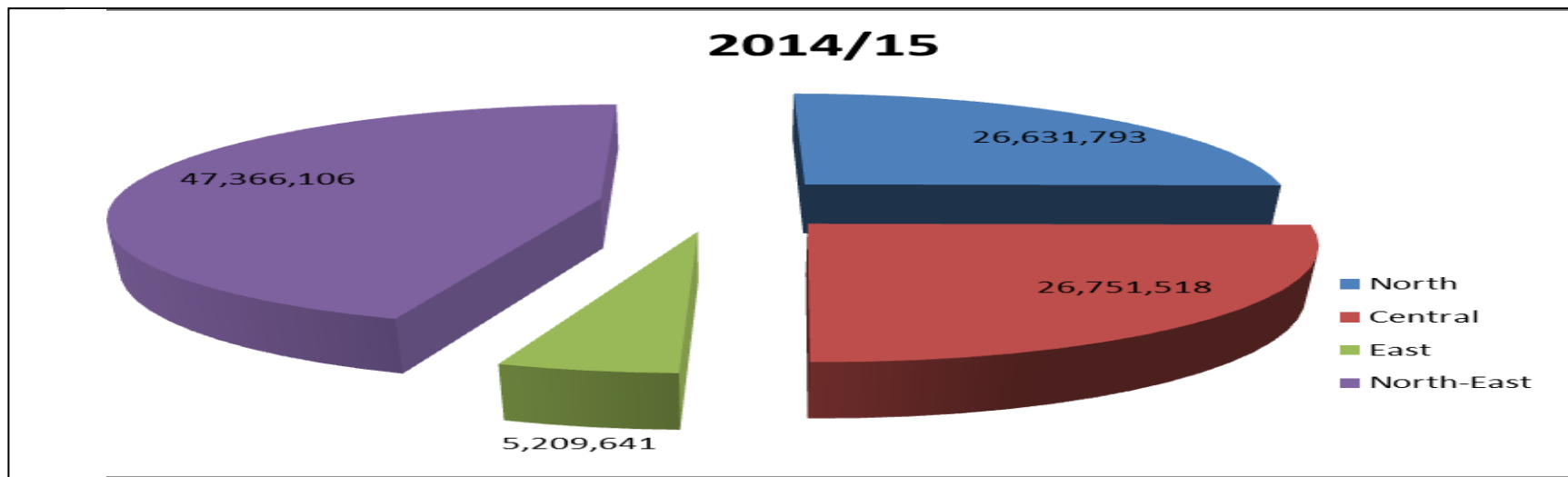




**50 Sugar mills**  
**Capacity**  
**10,000-50,000**  
**TCD**











# Sugar mill locations and area in Thailand

(by Dr. Pipat WERATHAWORN Aug. 2014)





# Production System by region & Typical Farm

	Central / North	Northeast	Typical Farm
<b>Farm size (ha)</b>	10-150	2-100	15.6+80.0
<b>Small-medium-large ratio</b>	30-50-20	50-30-20	M
<b>Own - rent land ratio</b>	80-20	50-50	own
<b>Mechanization</b>	more-own	less-hire	own
<b>Land preparation</b>			same
<b>Compound Fertilizer (kg/ha)</b>	400-600 	300-500 	625 kg/ha
<b>Weeding</b>			same
<b>Harvesting</b>			Manual, 4 US\$ Loader, 2 US\$ truck, 4 US\$
<b>Transportation</b>			

# The Differences between 2014 & 2015

	2014		2015
t of sugar cane seeds per ha	12.5	T	12.5
seed costs per ha	782	\$/ha	782
sugar yield (Three harvesting times/crop)	8.48	T/ha	6.80
sugar content	11%	%	11%
labour costs	9-11	\$/day	11
sugar cane price	32-35	\$/T	32
type of mechanisation	S-M	S-M	S-M
harvest	3-4	\$/T	4
loading costs	2-3	\$/T	2-3
transport costs to sugar cane mill	5	\$/T	4



# Key success → returns

**Early planting**

Increased yield 21T/ha  
Net profit 500 US\$/ha

**Supplement. irr**

Increased yield 21 T/ha  
Net profit 900 US\$/ha

**Trash incorp.**

Increased yield 16 T/ha  
Net profit 700 US\$/ha

**High density**

Increased yield 24 T/ha  
Net profit 500 US\$/ha

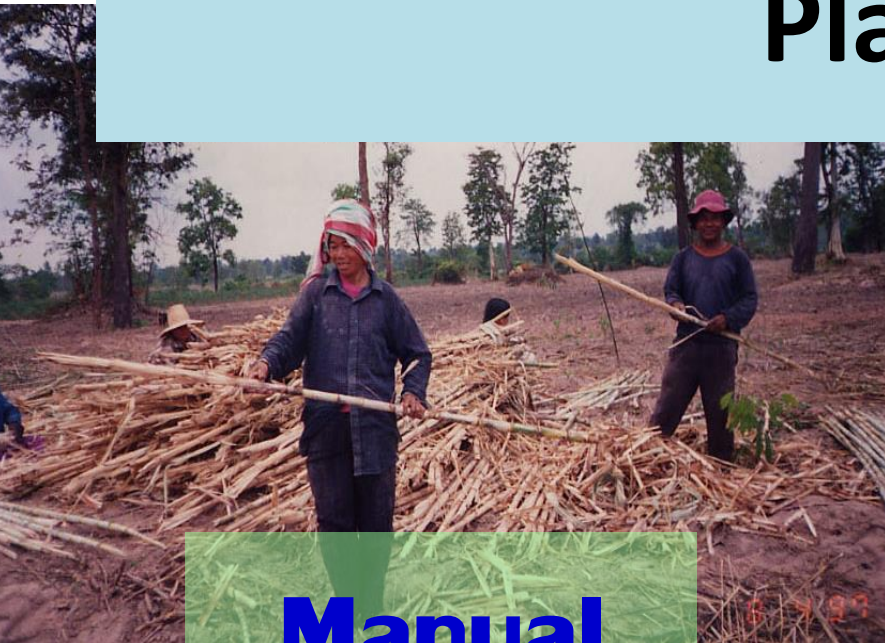


# Land preparation





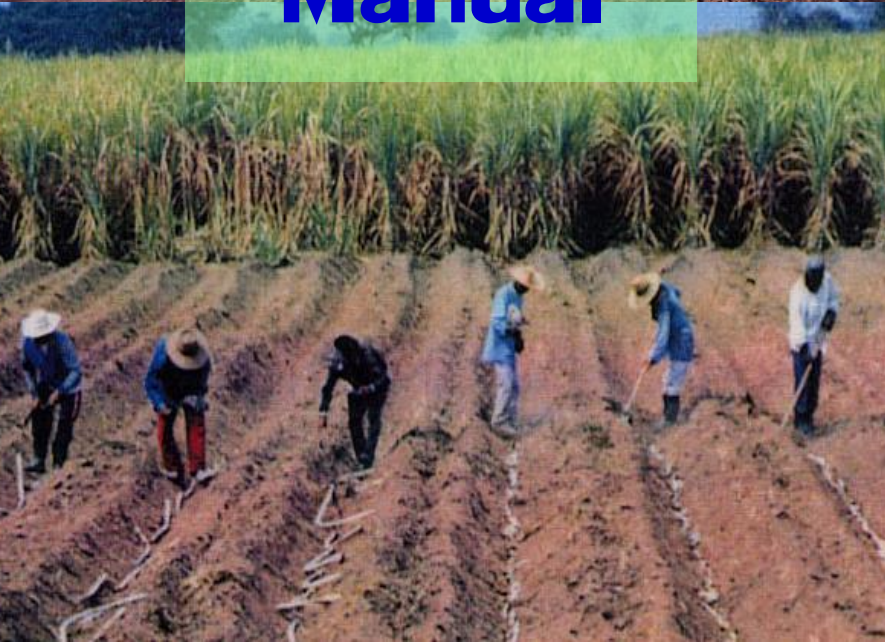
# Planting



**Manual**



**Planter**





# Irrigation



# Fertilizer application





# Green Blanket





# Supplementary Irrigation





# Fertilizer application



# Trash incorporation



# Herbicide application



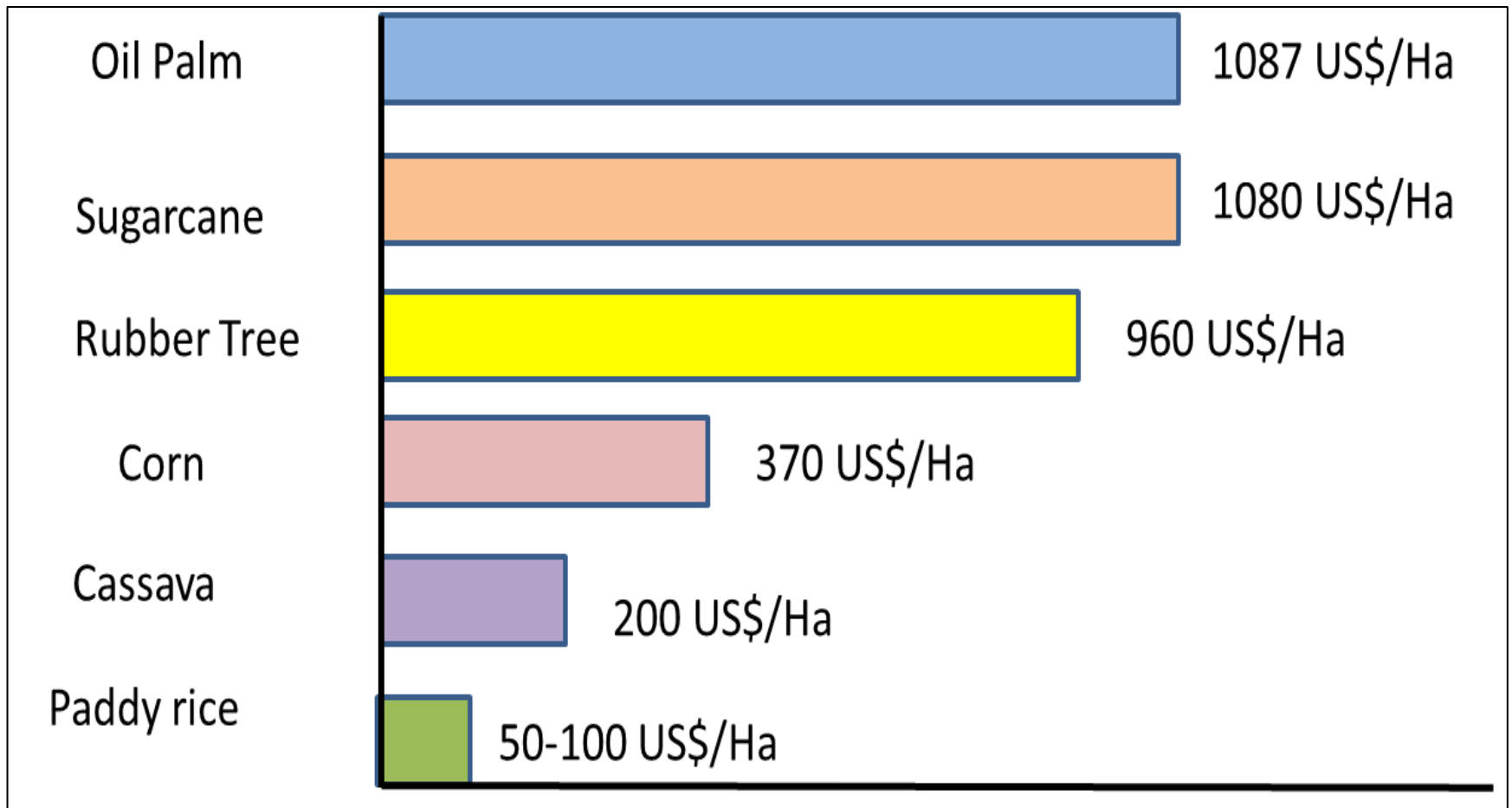


# Manual to Mechanization





# Net profit at farm of crops



Source: OAE, Thailand 2014



# Conclusion

- Thai cane production was a new record at 105.7 MT cane due to the stable cane price from previous year or the past few years
- Farmers have faced the intermitted drought period causing the yield losses
- Thai policy will support sugar industry by transferring some rice area to cane area
- The productivity improvement for reducing cost has to be focused and implemented from now onwards due to the low sugar price



# Thank you for your attention!

## Questions & Answers

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