



agri benchmark
Sugar Industry in Thailand

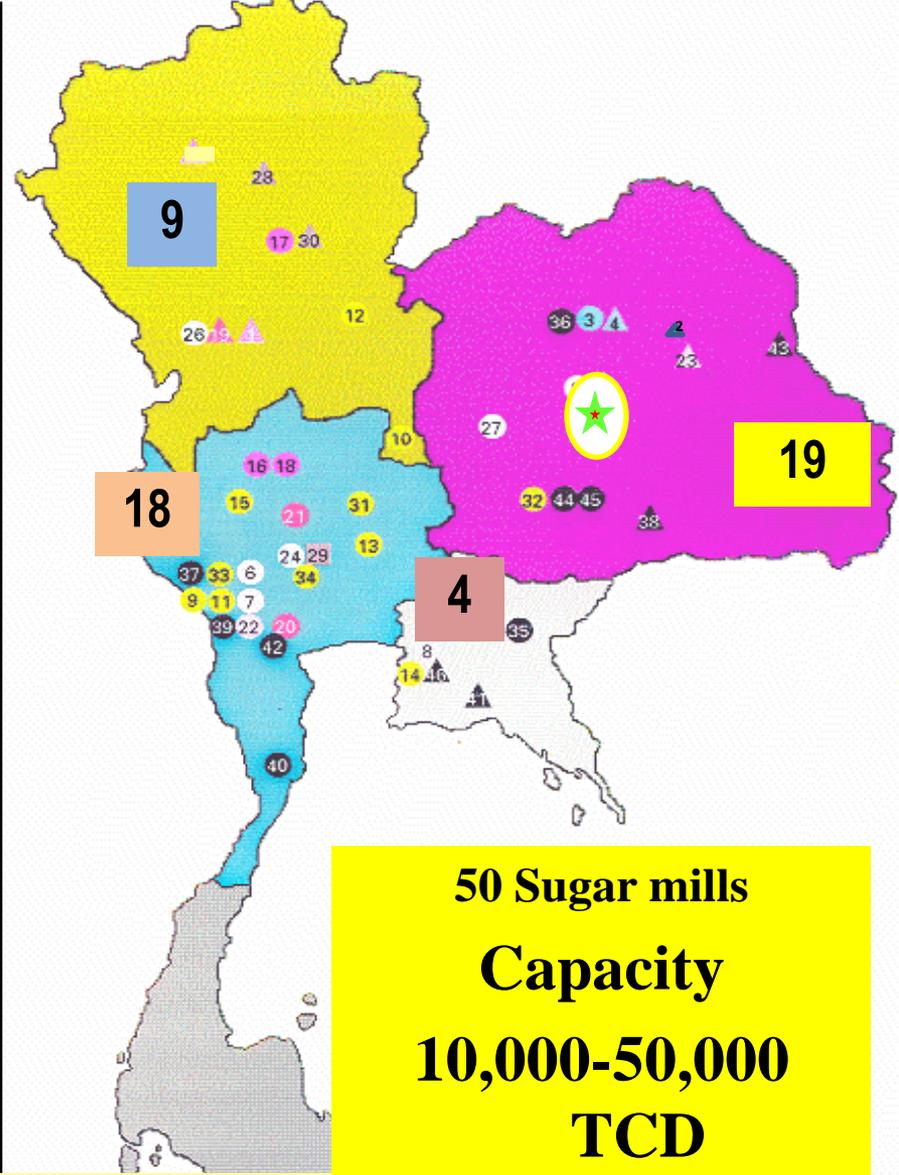
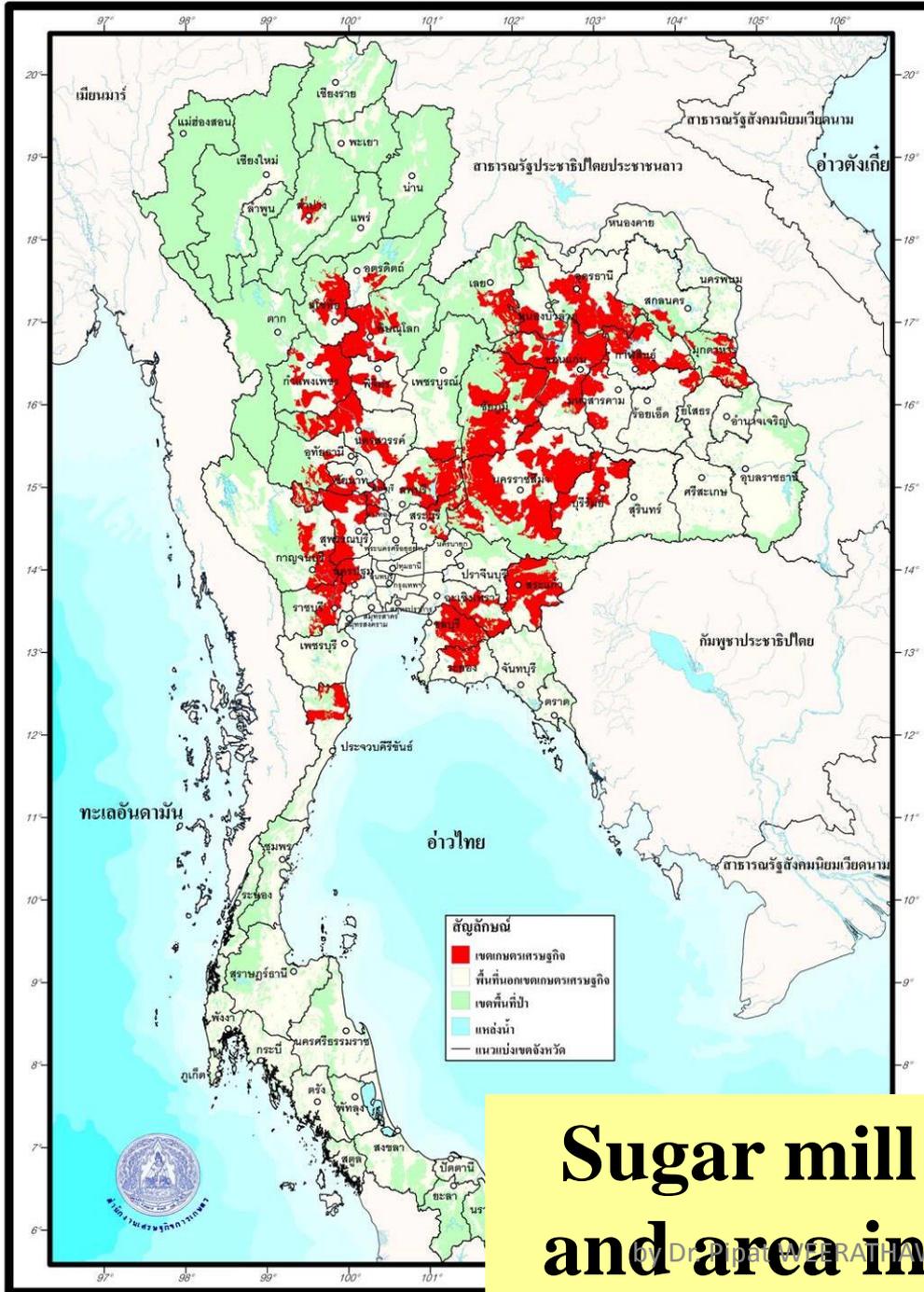
Pipat Weerathaworn

A committee for Agricultural and Biological Researcher group

National Research Council of Thailand

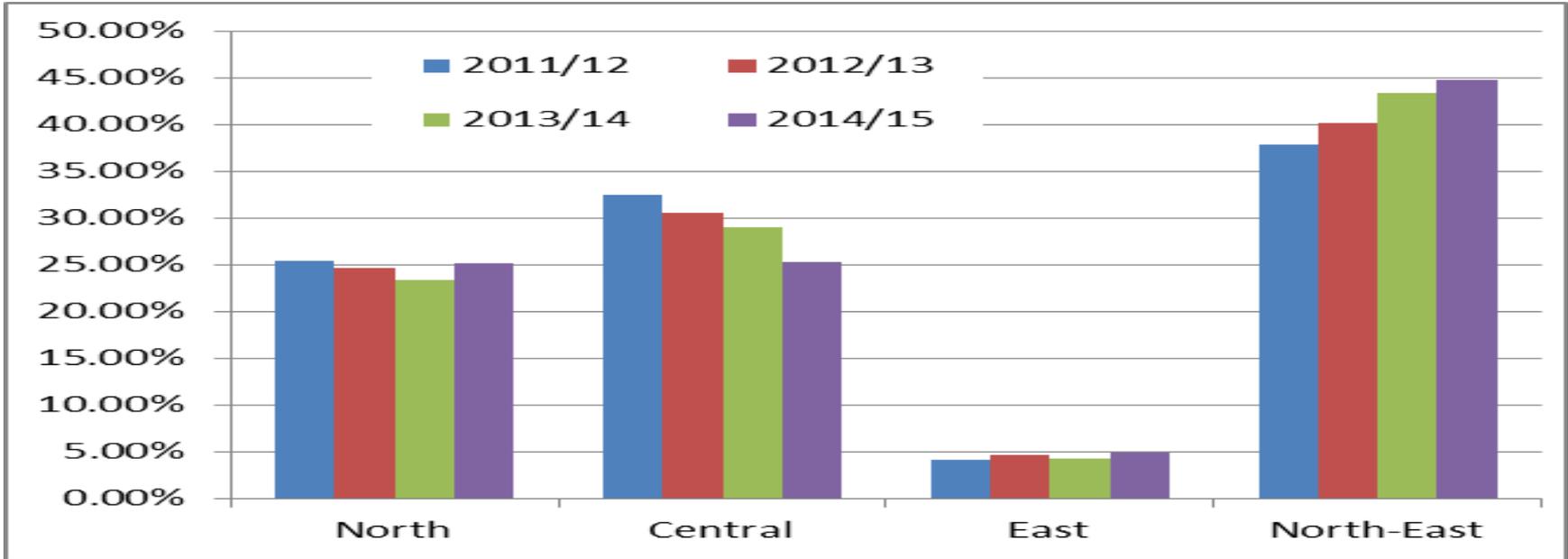
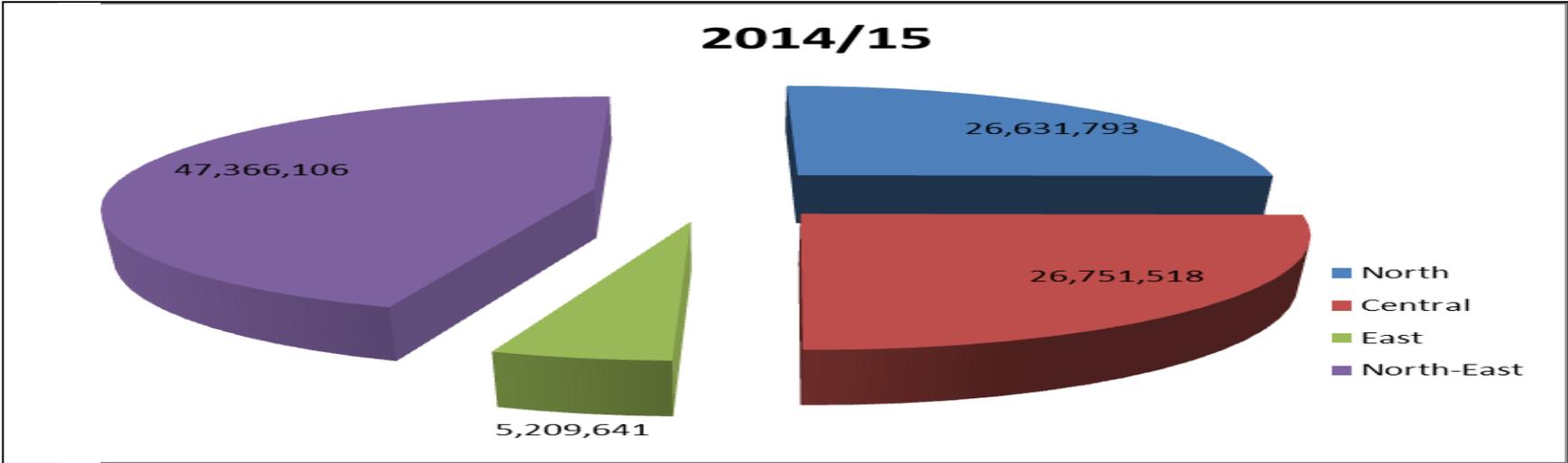


agri benchmark Cash Crop Conference
Goiania, Brazil, July 2015



Sugar mill locations and area in Thailand

(by Dr. Pipatwan RATHAWORN Aug. 2014)



Production System by region & Typical Farm

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

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**



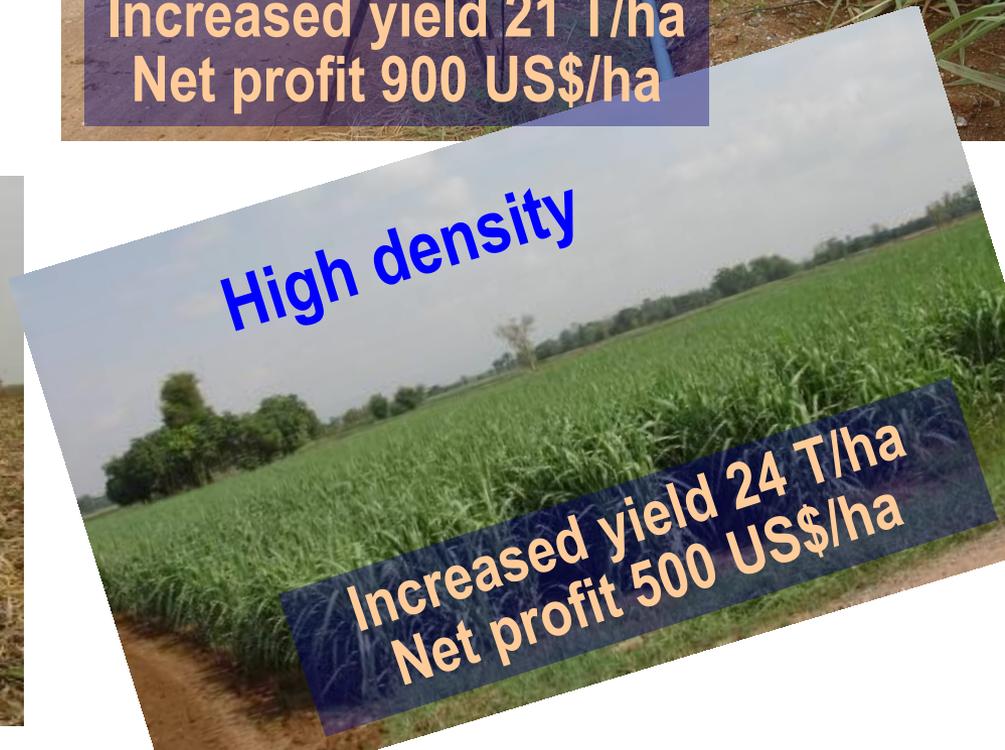
Supplement. irr

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



Trash incorp.

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



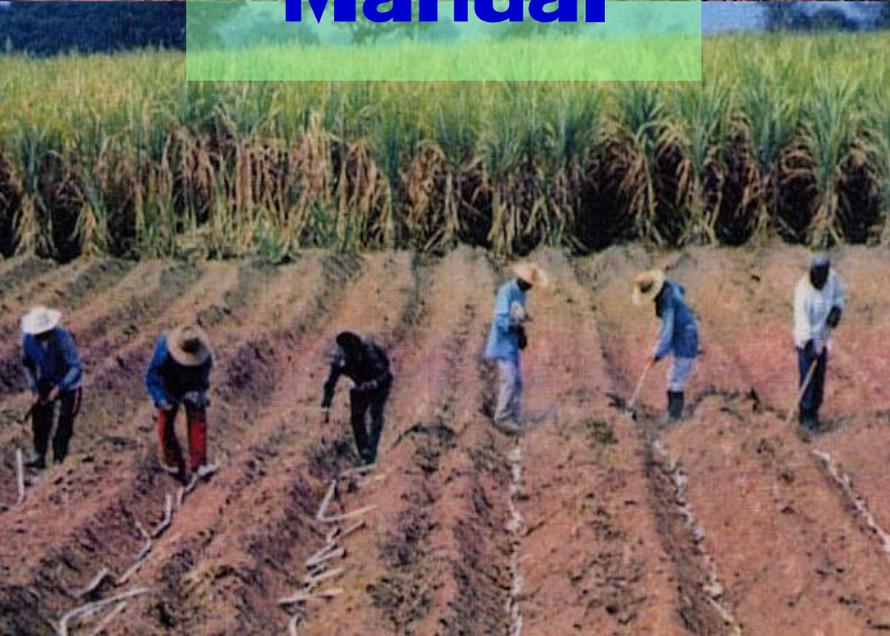
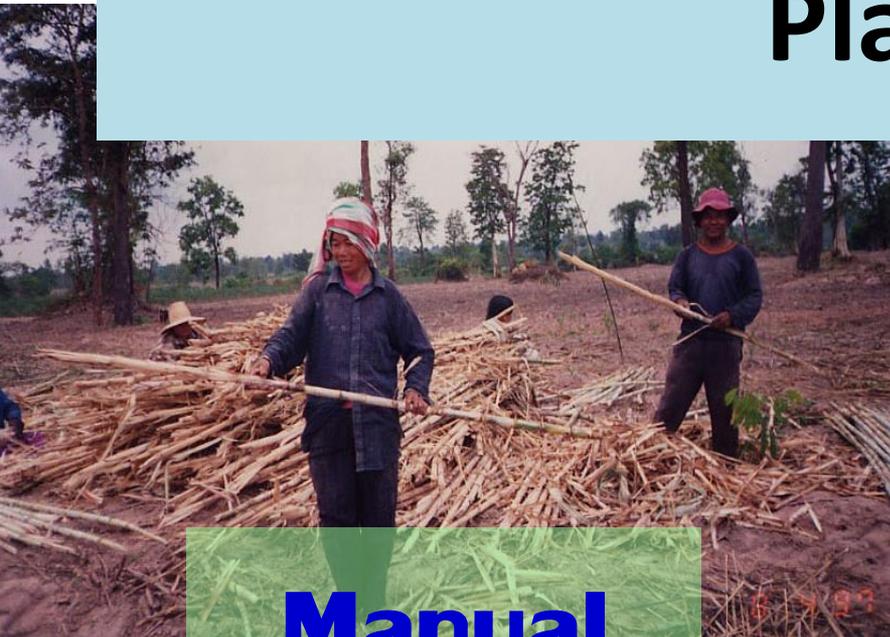
High density

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

Land preparation



Planting



Irrigation



Fertilizer application



Green Blanket



Supplementary Irrigation



Fertilizer application



Trash incorporation

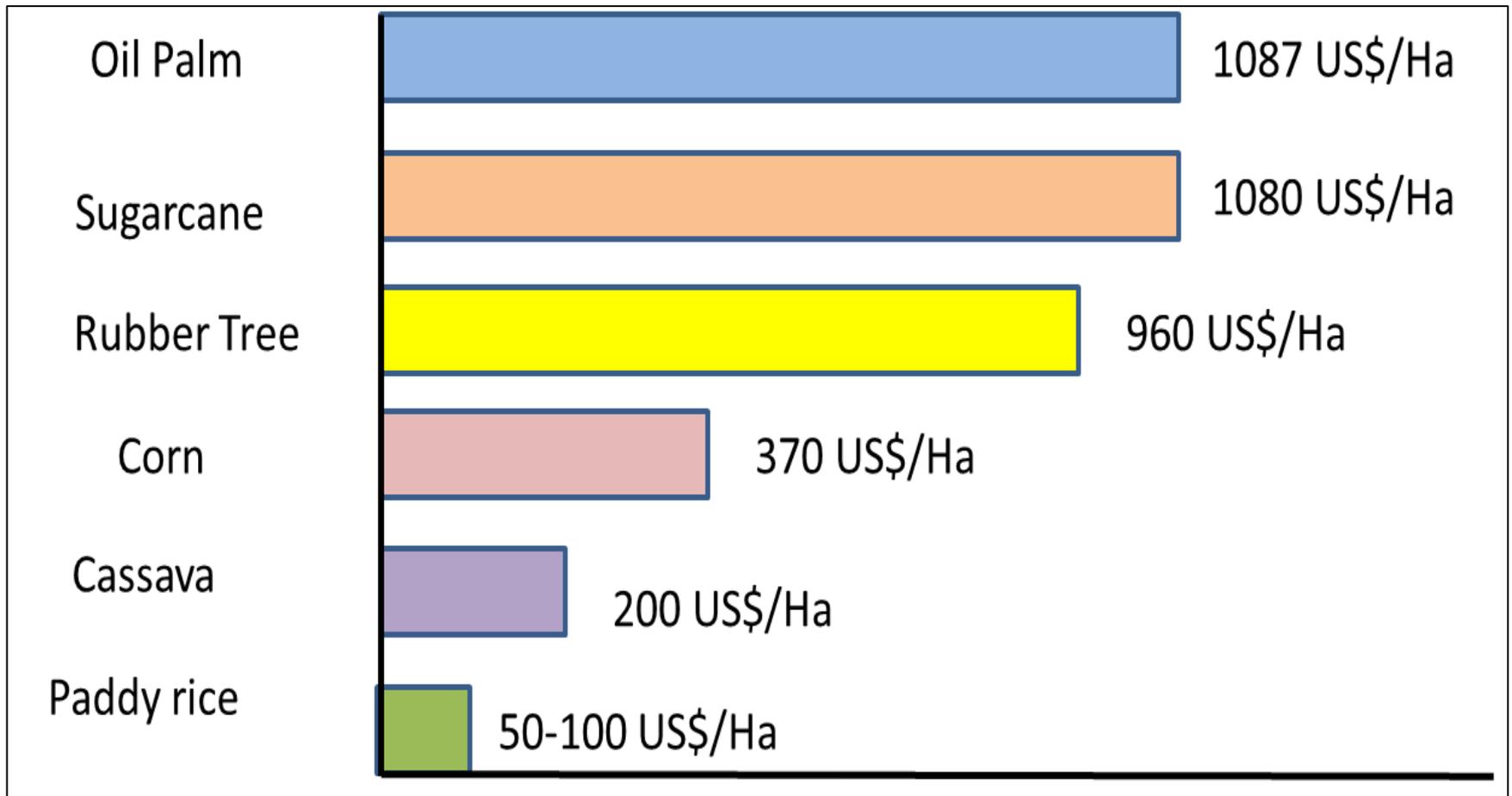
Herbicide application



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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