

Cambodia, the stunning story

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Master course

English course in The Graduate School of
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Dominated Species

- *Ceiba pentandra* – silk-cotton tree
- *Tetrameles nudiflora* – thitpok or spung
- *Ficus religinsa* - strangler fig
- *Diospyros decandra* – Gold Apple

→ designed as a UNESCO World Heritage property

General Introduction

- Population
 - Around 16 million
- Religion
 - Buddhist in South Asia
- Language
 - Khmer
- Political system(regime)
 - National name: Kingdom of Cambodia
 - Constitutional monarchy
 - Democracy – misunderstanding of communism
- Quinary(5進法)

Climate

- High temperature
 - Ultimately 40°C (but, annual average 27°C)
- Low humidity
 - Laundries get dried completely on the air
- 2 season
 - Dry season (November to March)
 - Rainy season (April to the end of October)
- Low nutrient soil
 - Excepting for red soil(loess - loam)

Rubber Tree plantation



Introduction of Company

- Roughly 2,000ha by 2012
 - Section 1 (around 800ha, 4 km*2km)
 - Section 2 (around 1200ha, 4 km*3km)
- Workers: 800 workers per a day
- Eventual purpose to produce latex

Species

RRIVS



RRIC 101



GT 1

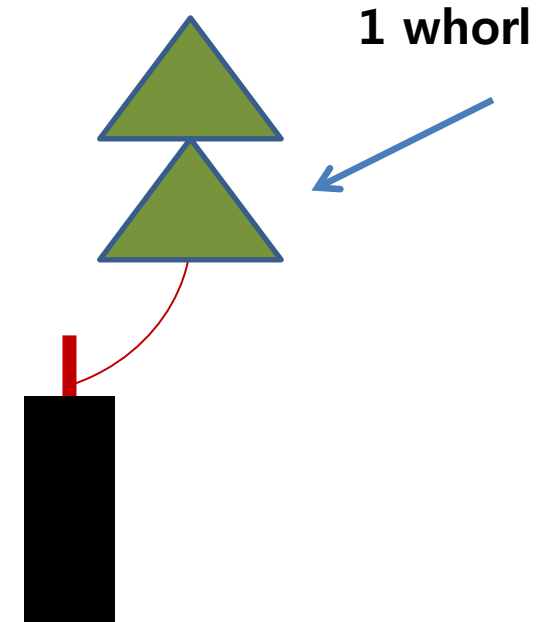


PB 600



Process from the initial to the final

- Germination of Seed
- Seeding in pots
- Grafting – bud-grafting
- After formation of 2 whorl
- Planting in the field
- After 5 years - First harvesting for Sap, "Latex"



Characteristics on Growth

Characteristics

- Concentration on height growth
 - During approximately 2~3 years, since planted
 - Especially, stem development is dominated
- After 2~3 years,
 - Crown make big and spread branches

Difficulties of Cultivation in Farm

- Water control
- Soil condition
- Lack of experience

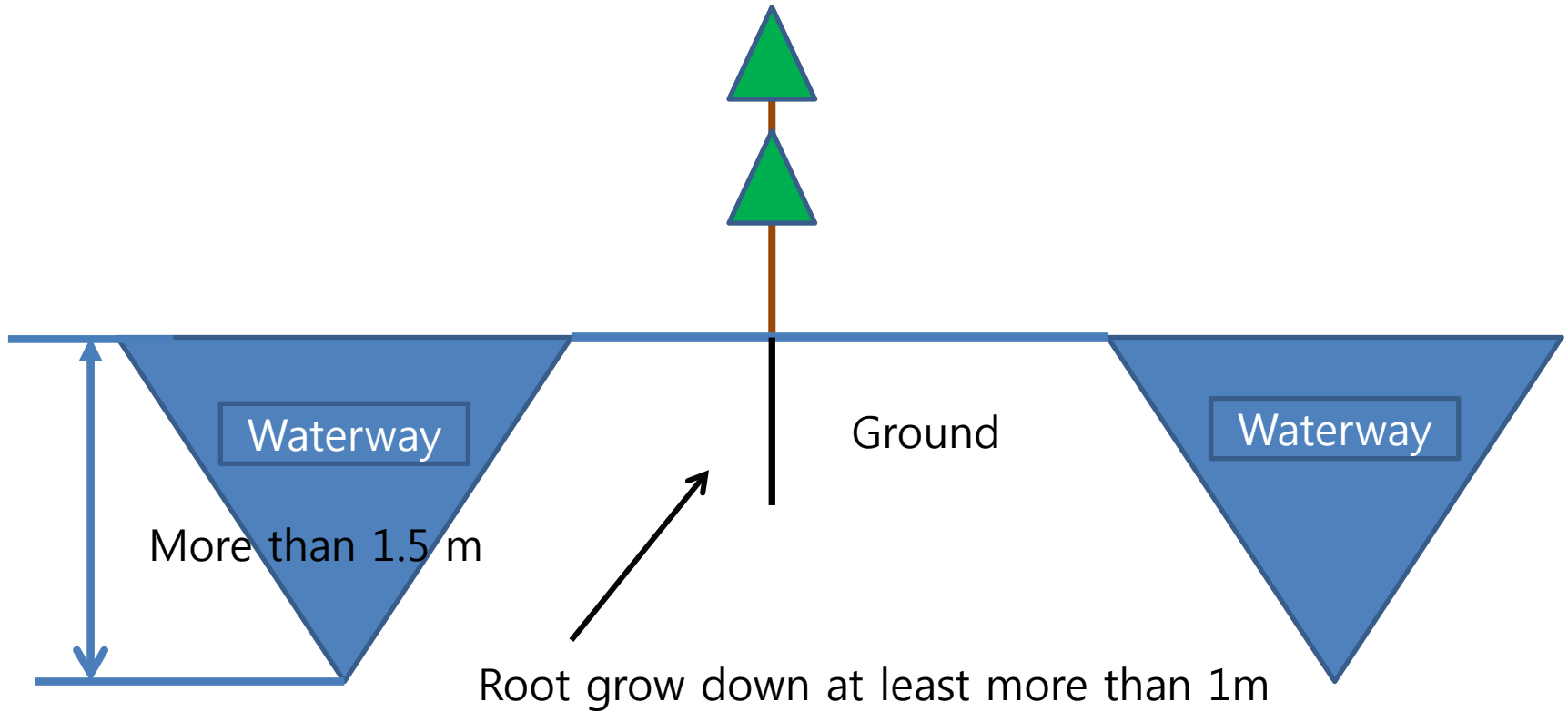
Asking advice to RRIC

(Rubber tree Research Institute in Cambodia)

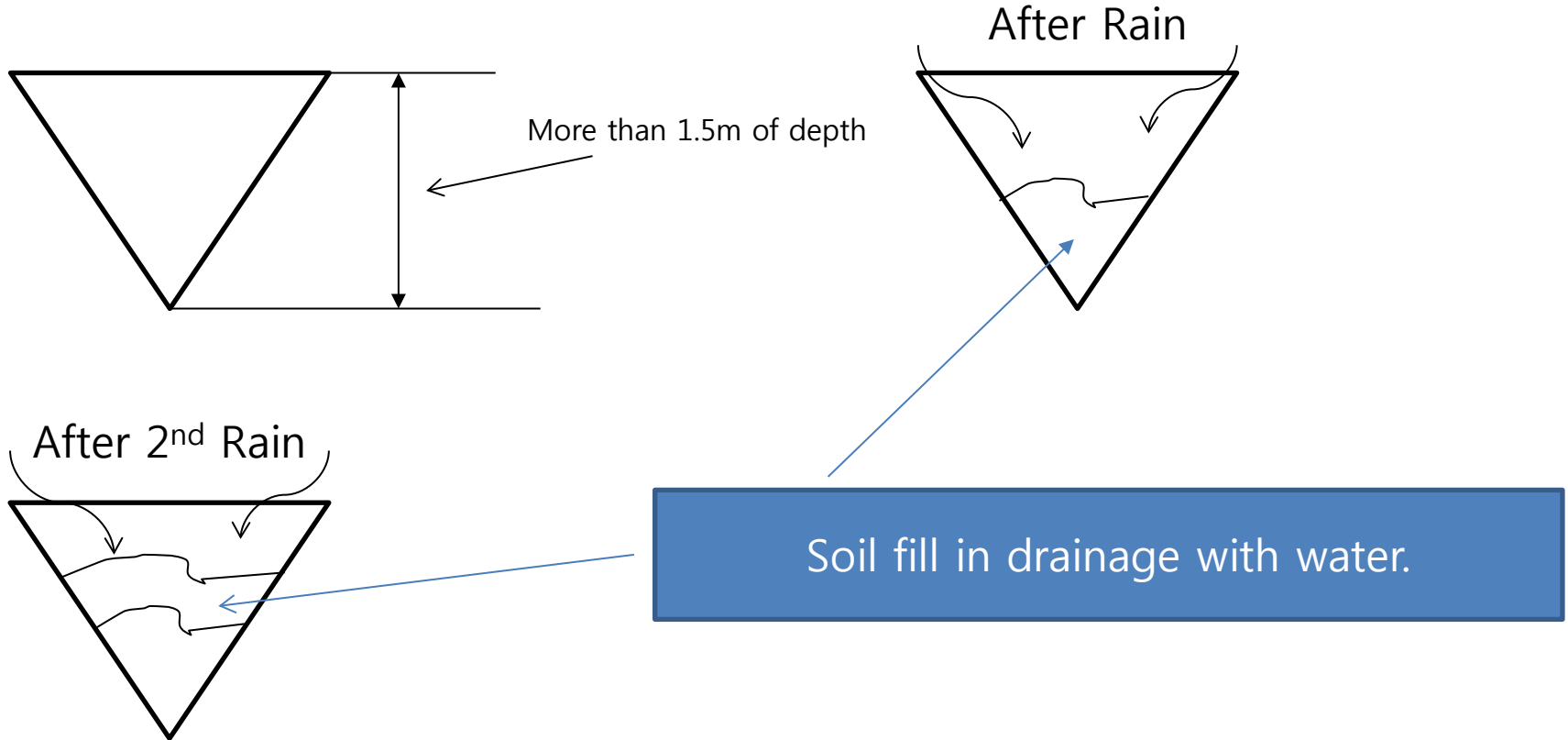
- To Resolve problems and find out suitable regime and practice for farm.
 - Water, drainage, soil nutrient condition and etc.

Need to make up drainage

Drainage regime



Repeated Water and Drainage Problem





Soil condition

- Too much sandy soil
 - Similar sandy soil at seashore
 - blown over by the wind
- Absence of windbreak
 - Fallen by strong wind
 - Shook stem
- ineffective fertilizer & compost
 - Water wash out and flush all materials

How about black soil(peat)?



Problem

- In dry season
 - It got solid like rock and induced injuries by heat with sandy soil

- In Rainy season
 - It got clay grasping water

In dry season.....

Water Storage

- Build artificial reservoirs for irrigation to nursery

Conclusion

- Failed to control water table
 - Productivity zero
 - Low quality of latex
- Competition
 - High amount of expense to maintain nutrient condition, artificially
 - Product price increases
- Land availability zero
 - Difficulty of intercropping

Human under the nature

