



# Fire Prevention and Control Mechanism in Peatland of Thailand

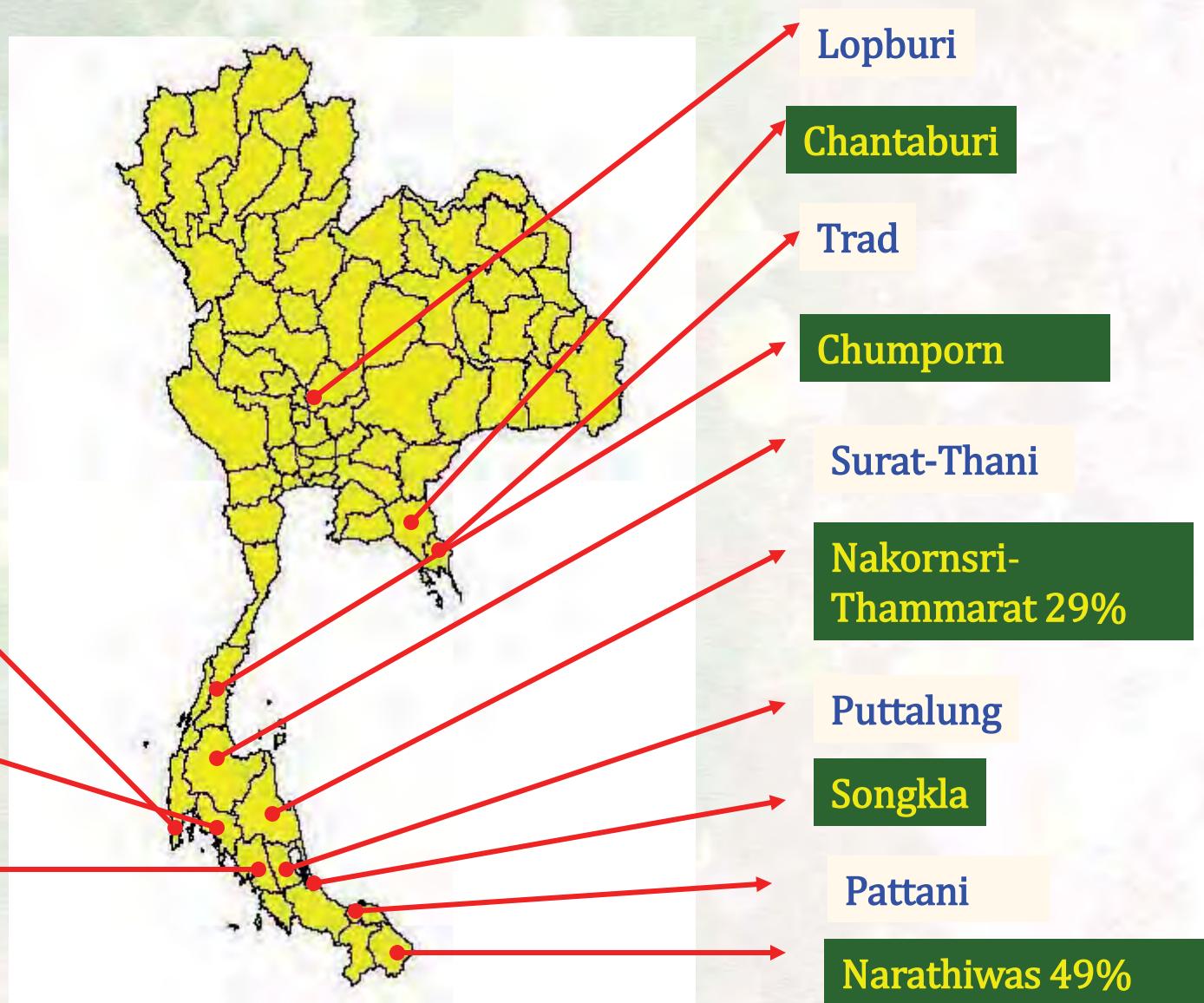
ASEAN Technical Workshop on Development of The ASEAN  
Peatland Fire Prediction and Early Warning System  
20 – 21 March 2012, Kuala Lumpur, Malaysia

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# Outline

- 1. Status of Peatland in Thailand**
- 2. Forest Fire Organization**
- 3. Fire Prevention**
- 4. Fuel management**
- 5. Fire Detection**
- 6. Fire Suppression**

# Peatland Distribution in Thailand



# Area of Peatland in Thailand



Total Area of Peatland in Thailand is 64,555 ha.  
**(0.13 % of country area)**

Primary Forest 14 %



Secondary Forest +  
non Forest 86 %



# Threat to Peatland



Forest Fires

# Causes of Fire in Peatland

Cause	Percent
1. Agricultural debris burning	40
2. Illegal logging	35
3. Gathering forest non-timber products	10
4. Other causes	10

# Forest Fire Organization



## Department of National Parks, Wildlife and Plant Conservation (DNP)

Forest Protection and Forest Fire Control Office

21 Protected Area Regional Offices

Other Offices

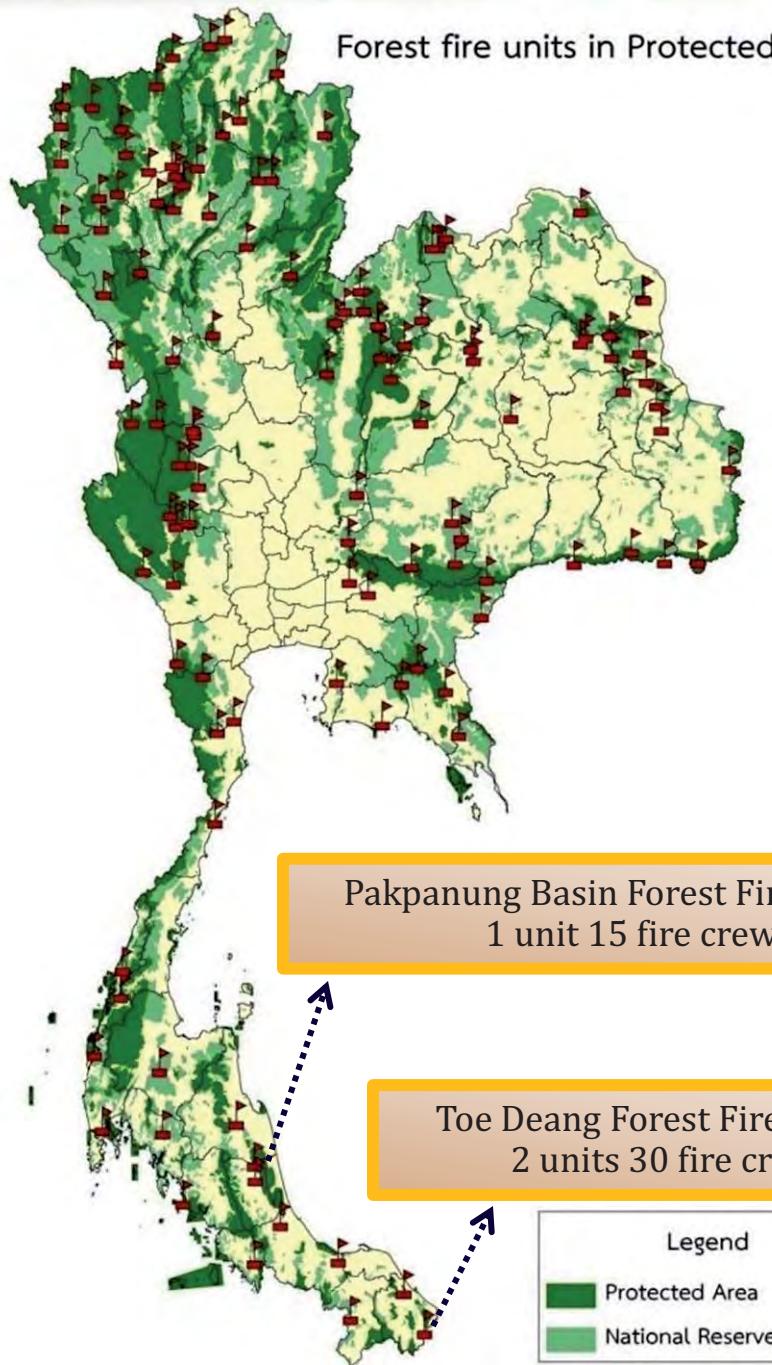
Forest Fire Control Division

126 Forest Fire Control Stations

15 Forest Fire Control Coordinating Centers

4 Forest Fire Control Training Centers

Forest Fire Control Research Center



# Fire Prediction



กรมอุตุนิยมวิทยา

Thai Meteorological Department

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**Weather KML**

14/03 Thu 15/03 Fri

33°C 35°C 30°C 35°C

Bangkok max 36°C wind 9 km/hr min 26°C rain 10 % on area

**Aviations**

Shipping Forecast

Ocean Waves

Daily Forecast 7-day forecast

Daily Summary Weekly Summary Mar 3, 2012 - Mar 11, 2012

Three Monthly Forecast [Mar 1, 2012 - May 1, 2012]  
 Summer 2012 Forecast [February till May]  
 Rainfall and severe flooding over Thailand in 2011  
 Natural Disasters 2011

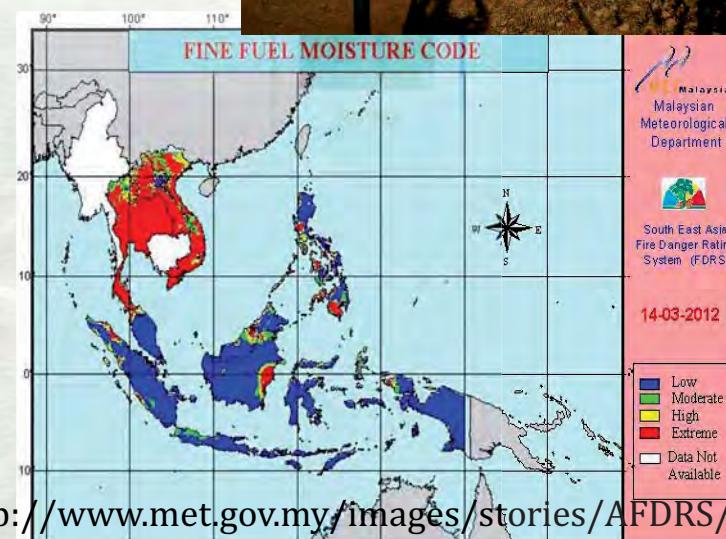
## การพยากรณ์สถานการณ์ไฟป่า

12-19 มีนาคม 2555

### 1. สภาพอากาศ

#### 1.1 อุณหภูมิ

- ภาคเหนือ อุณหภูมิต่ำสุด 22-23 องศา สูงสุด 30-34 องศา
- ภาคตะวันออกเฉียงเหนือ อุณหภูมิต่ำสุด 19-23 องศา สูงสุด 31-34 องศา
- ภาคกลาง อุณหภูมิต่ำสุด 24-26 องศา สูงสุด 32-34 องศา
- ภาคตะวันออก อุณหภูมิต่ำสุด 25-26 องศา สูงสุด 32-36 องศา
- ภาคใต้ฝั่งตะวันออก อุณหภูมิต่ำสุด 24-25 องศา สูงสุด 32-34 องศา
- ภาคใต้ฝั่งตะวันตก อุณหภูมิต่ำสุด 23-26 องศา สูงสุด 33-35 องศา



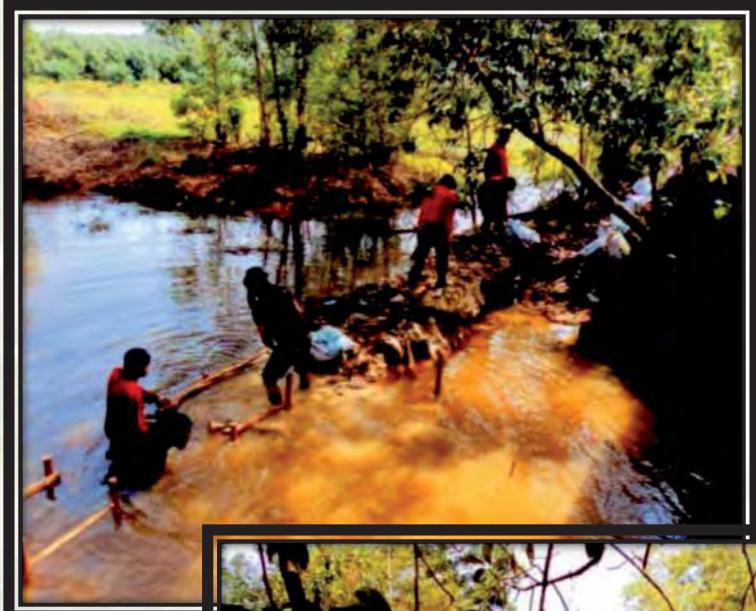
# Fire Prevention: Maintain Water Level



Water Control Gates

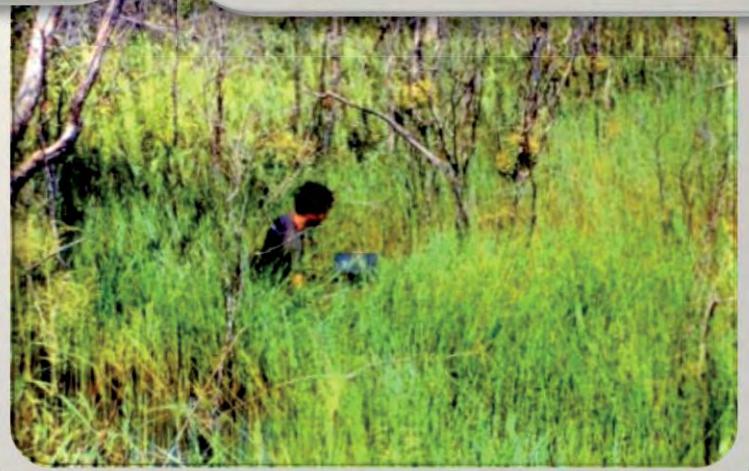


# Fire Prevention: Maintain Water Level



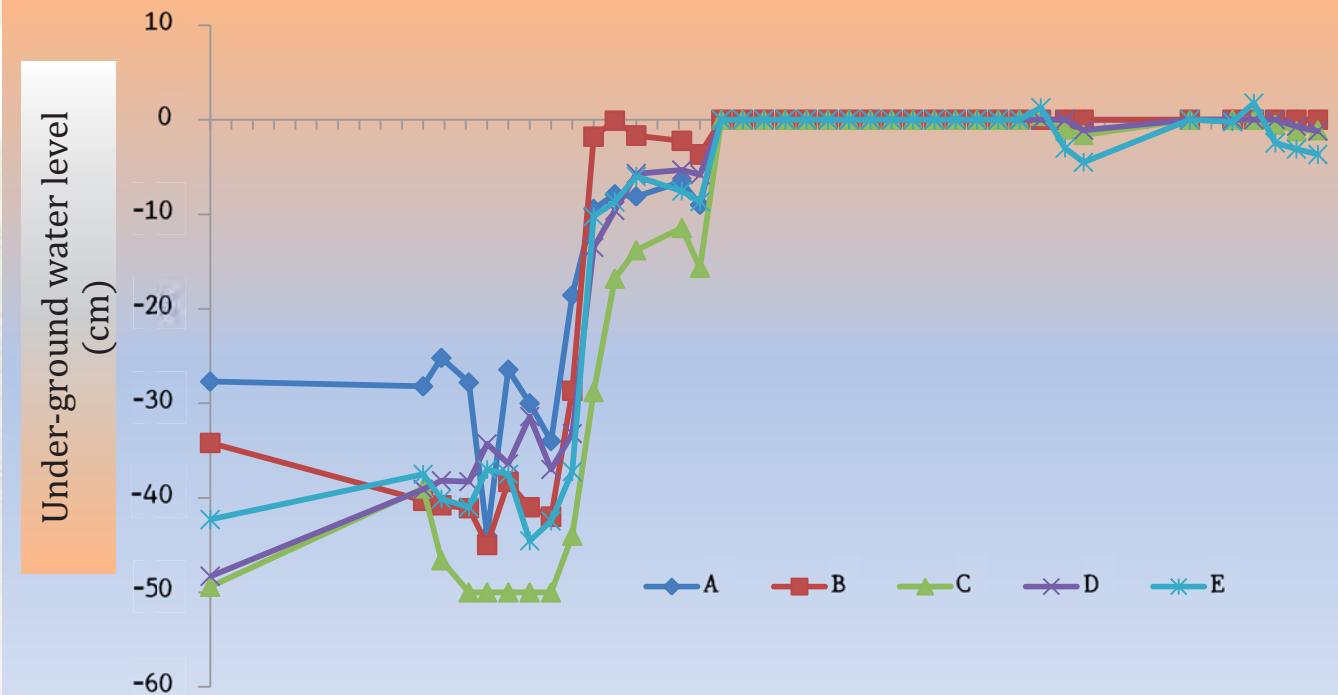
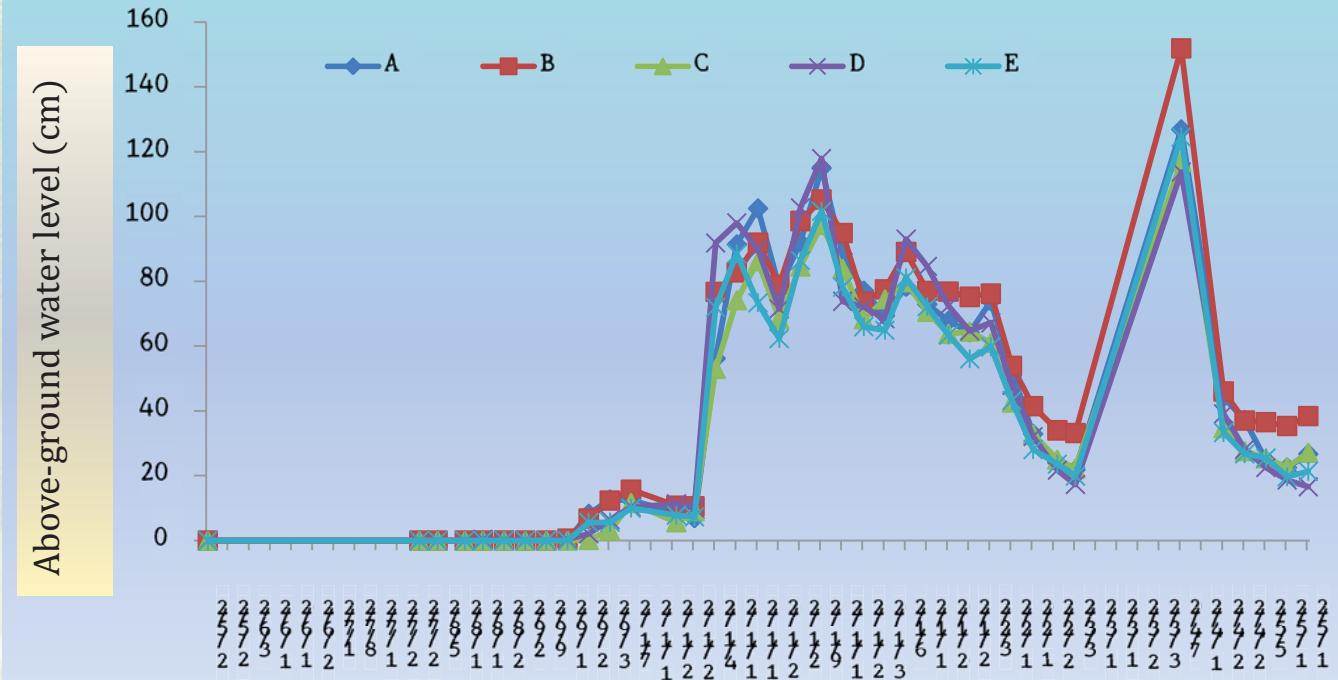
# Fire Prevention: Maintain Water Level

Water level  
measuring  
point



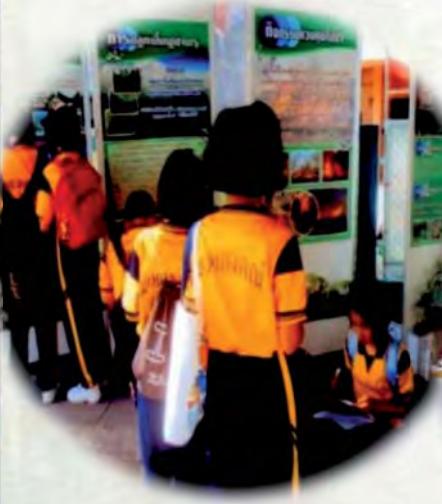
# Water Level at Kuan Kreng Peatland

20 May 2010  
-  
19 May 2011



# Fire Prevention Campaign:

## 24 February "National Fire Campaign day"



# Fire Prevention Campaign:

## Fire Campaign Mobile Unit



# Fire Prevention Campaign :

## Education Program



# Fire Prevention Campaign :

## Campaign on mass media



# Fire Prevention Campaign :

## Fire Exhibition



# Fire Prevention Campaign :

## Billboard



# Fire Prevention Campaign : Printed Materials



# Fire Prevention Campaign :

## Fire Volunteer Brigade



# Fuel Management:

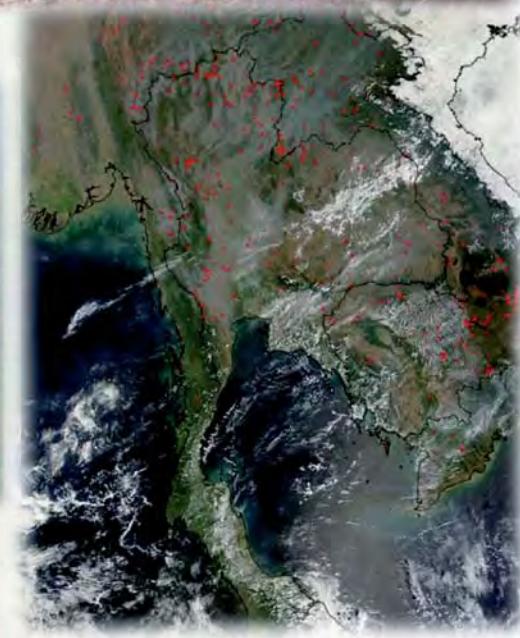
## Study on thickness & quantities of peat



# Firebreak Construction

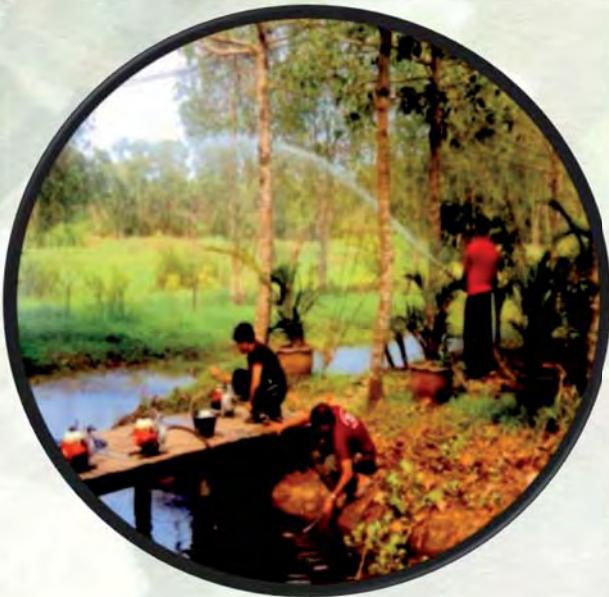


# Fire Detection



# Fire Suppression: Prepare the Equipments

Water Pump & Rubber Tube



Collapsible Tanks



# Fire Suppression: Fixed the Fire Tower



# Fire Suppression: Training

Used the equipments on the water tank



# Fire Suppression



# Conclusion

- **Fire Prevention in Peatland of Thailand**
  - Maintain water level
  - Awareness & education campaign
  - Fire volunteer brigade
- **Fuel Management**
  - Study on thickness & quantities of peat
- **Fire Detection**
  - Ground and air patrol
- **Fire Suppression**



**Thank you for your attentions !**