

*Taebaek, a Highland Resort town*

*Environmental Issues*



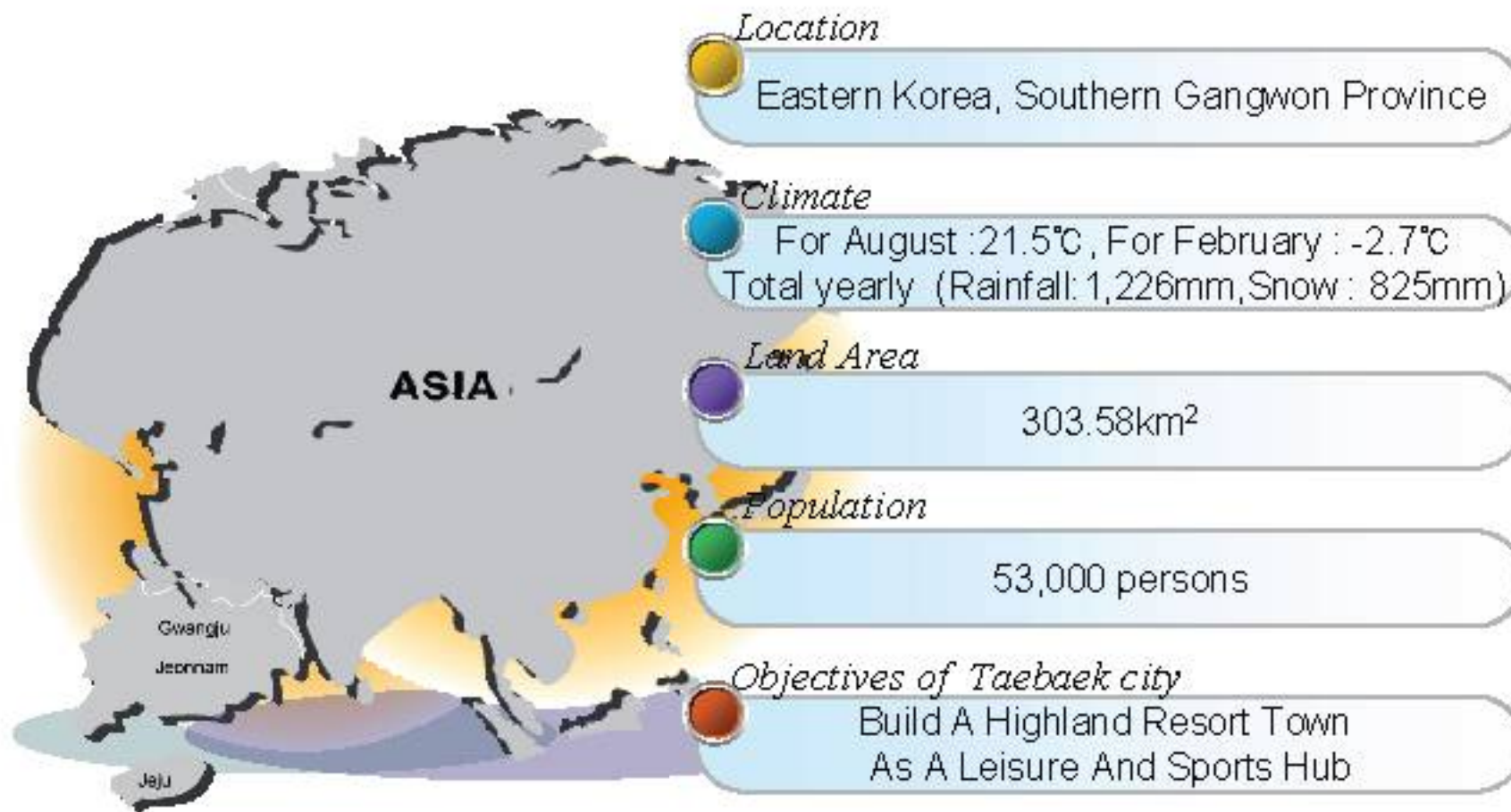


# Contents



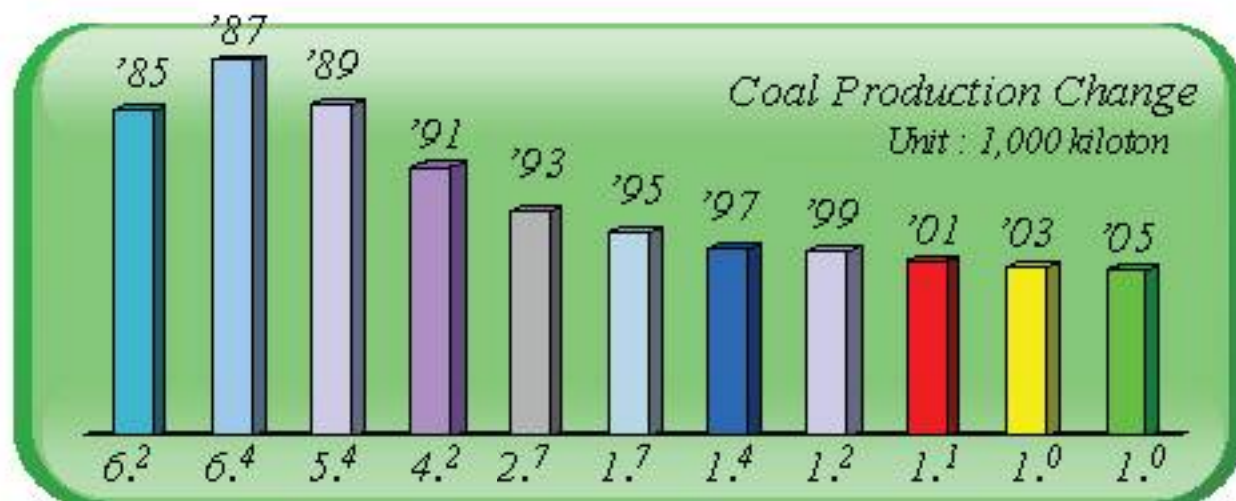
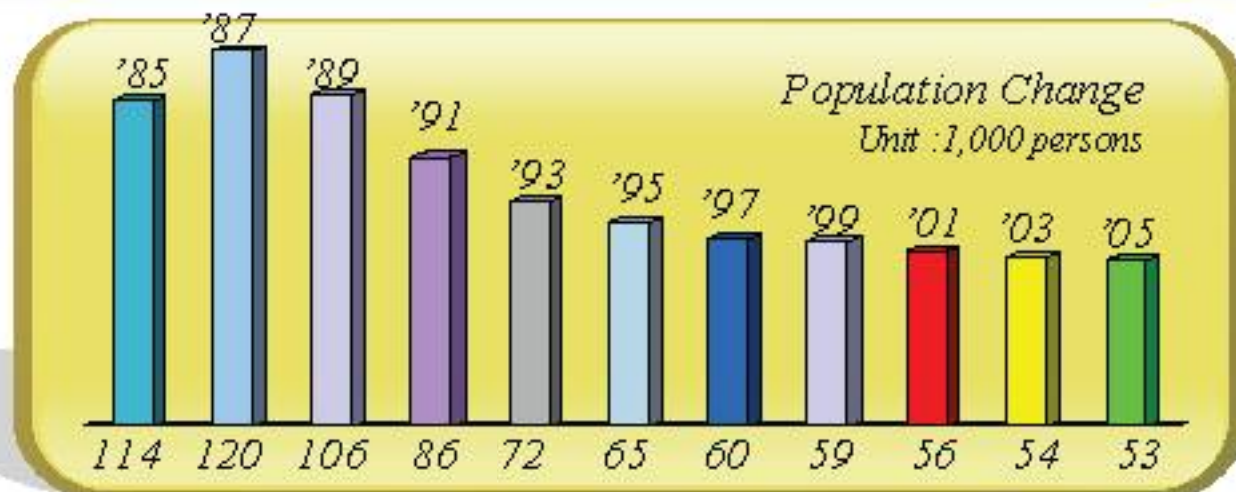


# Overview of TaeBaek City





# Overview of TaeBaek City



# Environmental Characteristics

## Geographical Characteristics

Located in the highland of  
The Baekdu Mountains  
in the Korea Peninsula

- Average altitude of 700m  
above sea level

Located at the fountainheads  
of the Han River (Seoul-  
bound) and Nakdong  
River(Busan-bound)

## Regional Characteristics

Known as one of prosperous  
coal mining regions in Korea  
until 1989

Developing as a tourism,  
leisure and sports city in the  
present day

## Topographical Characteristics

Located in one of typical  
mountainous terrains with  
steep ravined slopes.

Easily vulnerable to a  
variety of damages by the  
outbreak of swift currents  
during the summer rainy  
season /With cool weather  
and dry season (Spring,Fall)  
/known as a typical region  
with severe winter weather





# Environmental Characteristics



## Air Pollution

**Pass Conditions**  
Nuisance by  
coal mine  
dust

### Current Conditions

**Only a few mining stations being operated,** which diminished from 45 to 3  
-Taebaek being acknowledge as a very popular summer retreat with clean air

## Water pollution

**Pass Conditions**  
Severely  
contaminated  
streams

### Current Conditions

**Rather clean water** being retrieved in the streams thanks to the mine water and sewage disposal facilities.  
However, difficulties still lingering to retrieve uncontaminated water condition

## Garbage Disposal

**Pass Conditions**  
Self-imposed  
Separate garbage  
collection

### Current Conditions

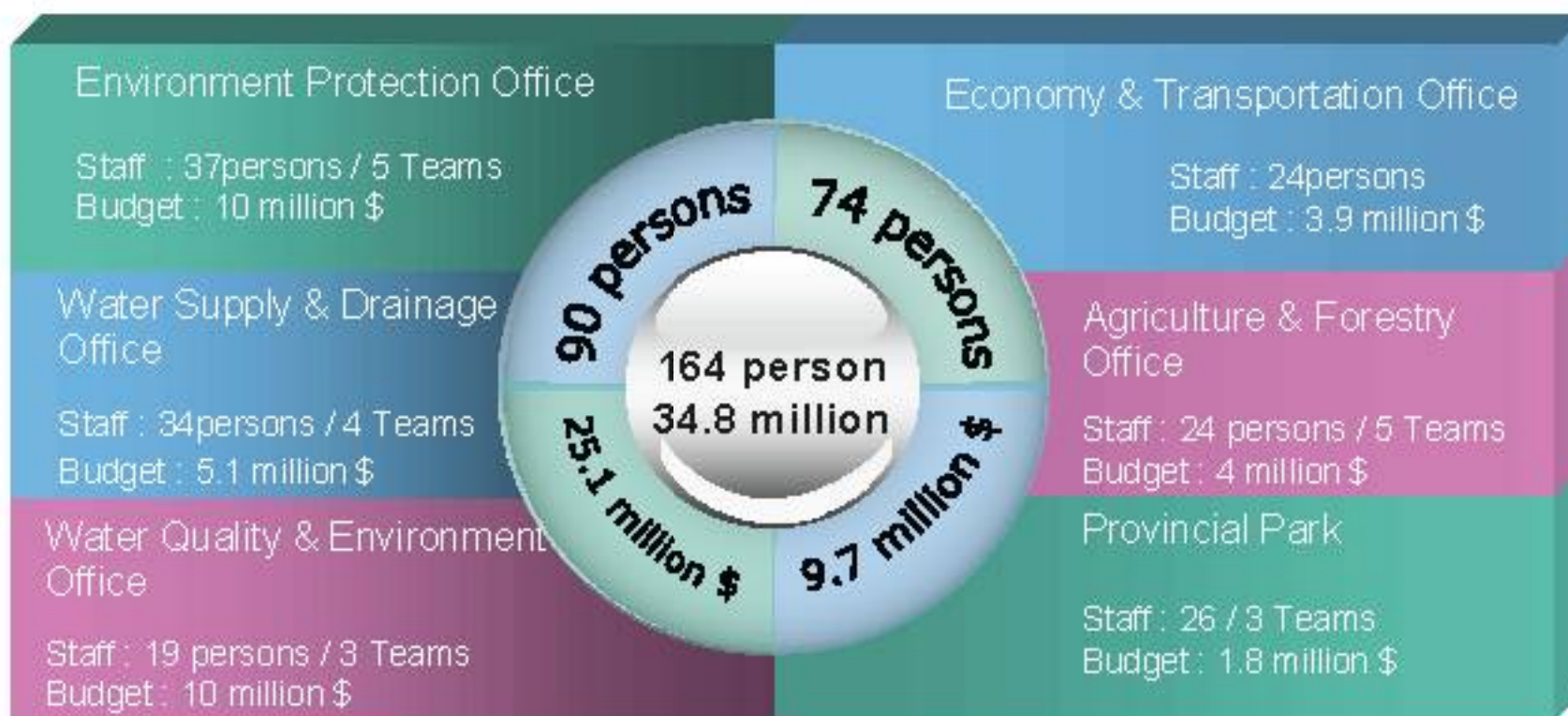
**The volume-rate garbage disposal system established**



# Operating System



## City Affiliated Offices & Budget



*Environmental Offices*

*Support Offices*



# Operating System



- **Central Government organizations :**

- Taebaek National Forestry Bureau of Korea Forestry Office
  - Coal Damage Prevention Group
- 

- **Private Organizations :**

- 15 Organizations including the Coal-Mining Region Environment institute, etc
- 

- **Major Citizens' Participation Programs**

- Forest Experience Event
- School Forest Growing Project
- Garbage Disposal Collection Education
- Living Garbage Reduction Education
- Ecological Experience program





# Environmental Measures



## *Operation System*



## Contaminant Discharging Factories

- **Total : 784**
- Air : 62
- Sewage : 109
- Noise/vibration : 17
- Dispersing dust : 60
- Soil Pollution : 32
- Livestock Sewage : 72
- Sewage Disposal : 222
- Domestic sewage odor : 210



# Air Pollution



*Coal Mine Damage  
Prevention Project*



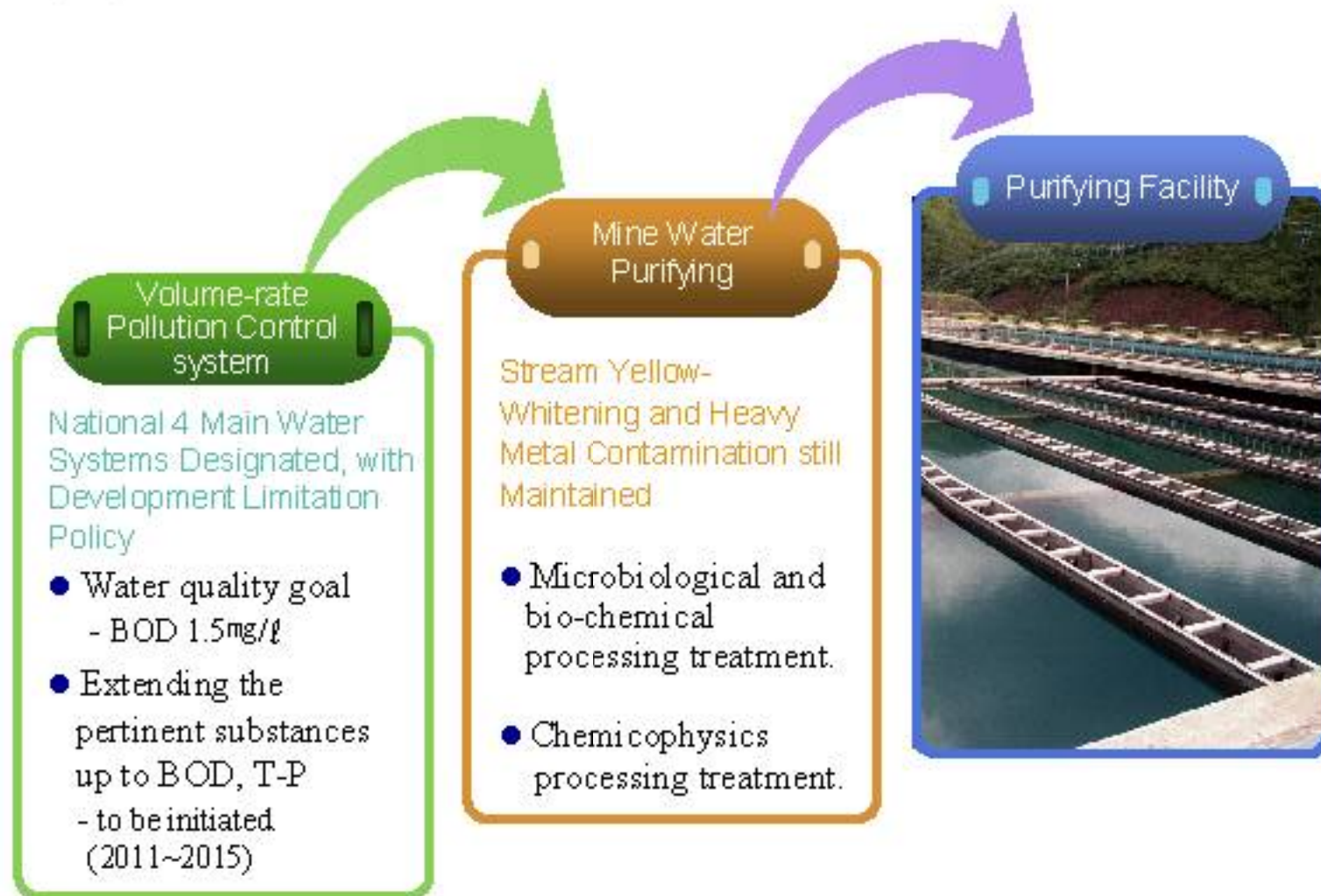
*Repress Coal Dust-Dispersing*



*Fine Air Conditions*



# Water Pollution



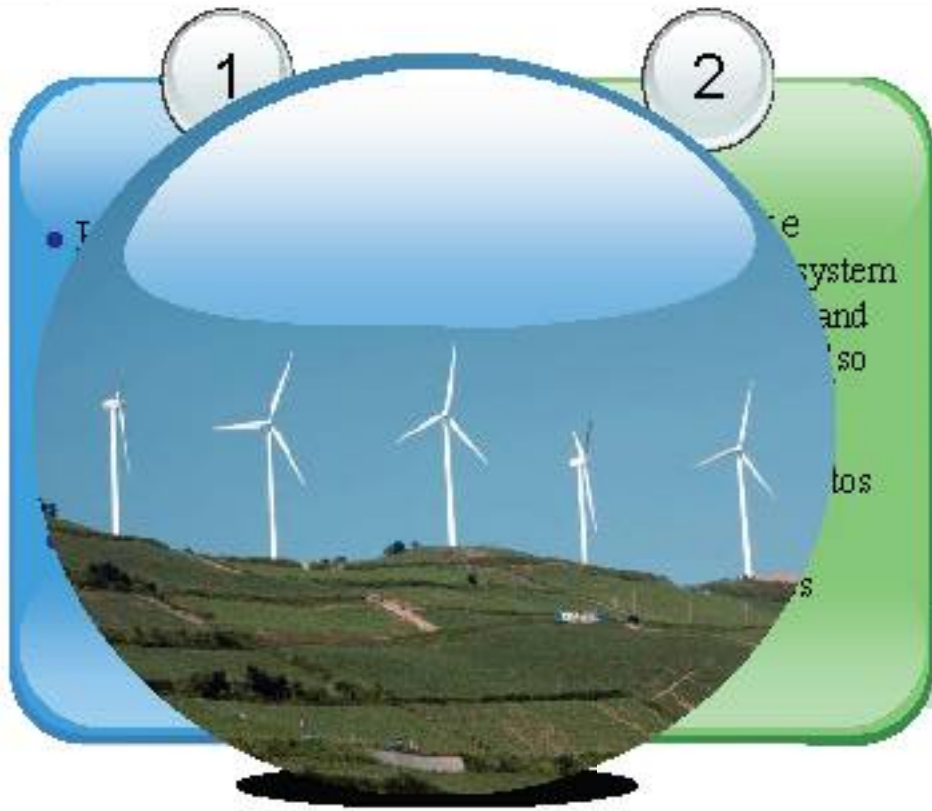


# Volume-rate Garbage Disposal System





# Energy Problems



3

- Wind Farm Established
- Maximum wind velocity (Yearly average 8.3m/sec)
- 8 wind mills (5 operated currently) 6.8MW
- Project expenses (1.36 million \$)
- Revenue (0.4 million \$) /2006

- Private Investment - 10 windmills(20MW)
- Investment from an outside fund
  - 54 windmills (80Mw)



# Benchmarking



1

Mine Water Purifying Method

Operating  
Micro-biological,  
Chemical treatment.



High concentrated  
slack lime sludge  
return engineering.

*Requesting Assistance : Purifying Methods to meet Taebaek's needs*



# Benchmarking



2

## Muck Use and Disposal

Even when muck landfill is molded and afforested

A

If rainwater flows deep into the ground of the landfill

B

It causes heavy metal leakage into streams and water whitening

C



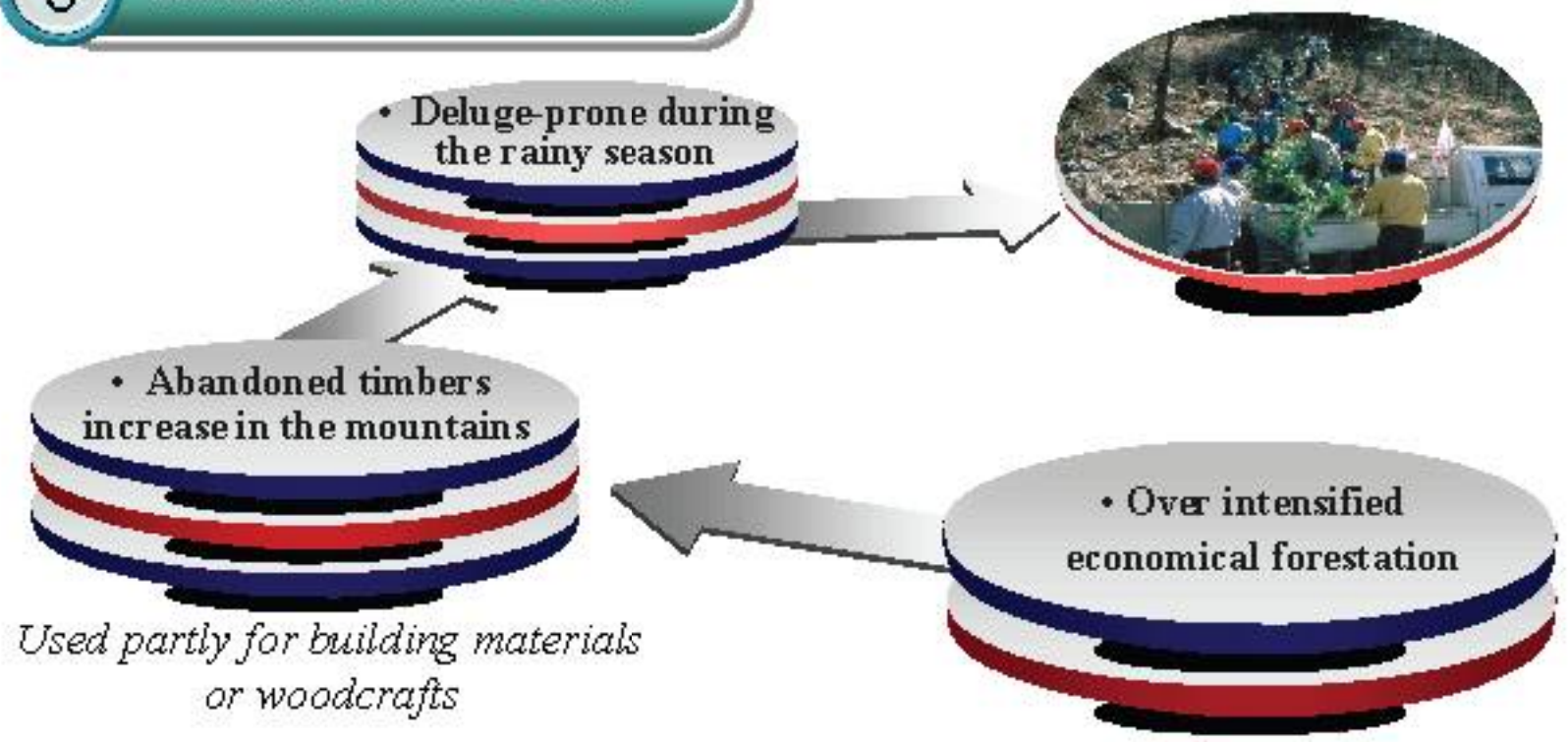
*Requesting Assistance : Introducing excellent cases from WWCAM member cities which have abandoned coal mining stations*



# Benchmarking



## 3 Methods to use Bio-mass

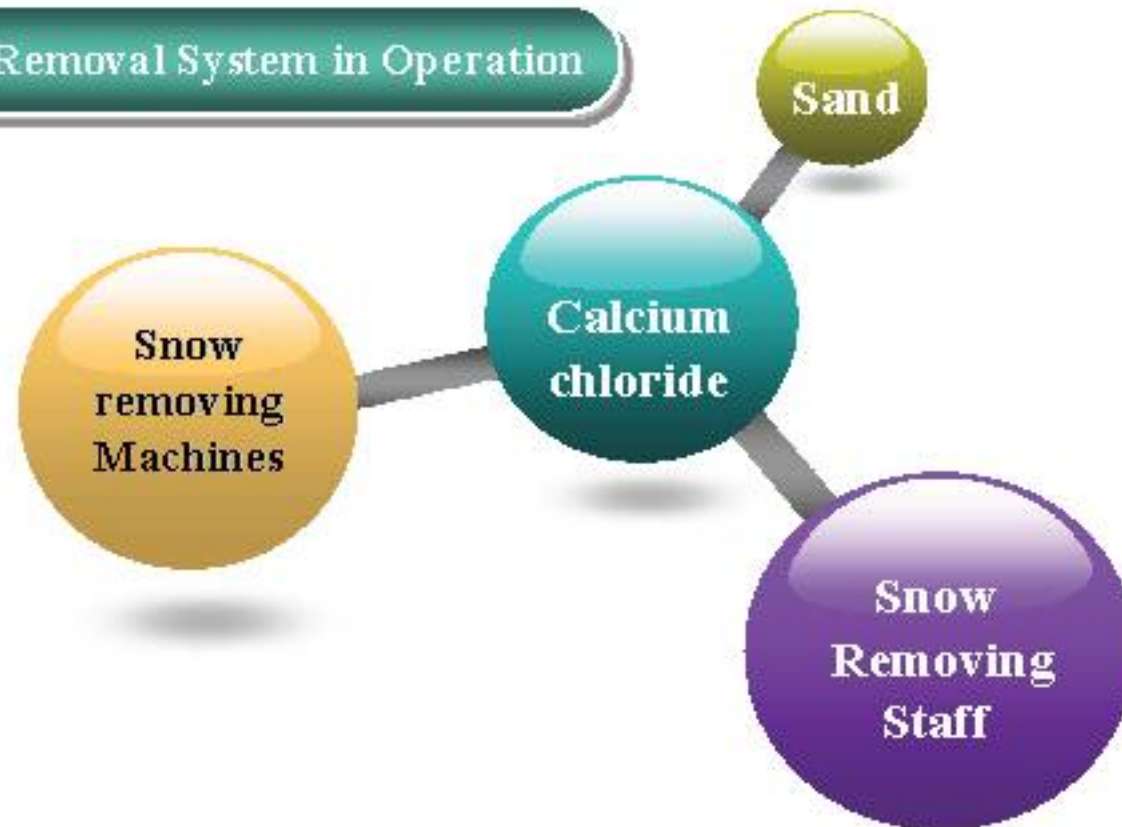


*Requesting Assistance : Introducing cities which use bio-mass fuel*



4

Snow Removal System in Operation



*Requesting Assistance : Excellent cases on snow removal from  
WWCAM Members Cities*



# Conclusion



*Thank you*

