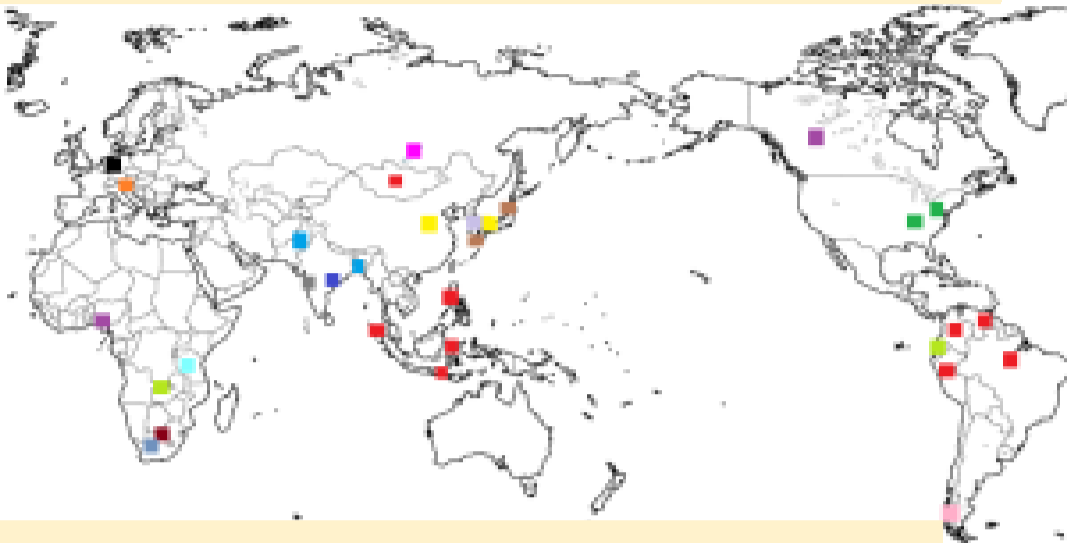


Research on Industries in Places Where Environmental Problems Occurred

2810 Kumamoto Prefectural Minamata High School

Type and Location of Environmental Problems



- Mining (Gold) ⇒ Mercury Pollution
- Mining (Gold) ⇒ Soil, Air, and Water Pollution
- Mining (Mercury) ⇒ Mercury Pollution
- Mining (Oil / Oil Sand) ⇒ Water Pollution
- Mining (Copper) ⇒ Soil Pollution
- Mining (Lead) ⇒ Water Pollution
- Coal Industry ⇒ Air Pollution
- Steel Industry ⇒ Air Pollution
- Steel Industry ⇒ Water Pollution
- Chemical Industry ⇒ Water Pollution
- Chemical, Steel, and Machine ⇒ Air Pollution
- Leather Industry ⇒ Water Pollution
- Leather, Oil, and Textile ⇒ Soil Pollution
- Fish-raising Industry ⇒ Water Pollution
- Papermaking ⇒ Water Pollution
- Agriculture ⇒ Water Pollution
- Uncertain ⇒ Water Pollution (Mercury)

Some Solutions to Environmental Problems

Ube City, Yamaguchi, JAPAN (Steel Industry ⇒ Air Pollution)

After 1945, Coal mining developed
↓
Lots of soot in the air

Quality

Citizens say, "We must do something!"
↓
1949 Started investigating and showing the results to the citizens

Measures Taken

1. Set ash collecting machines in the factories
2. Introduce water tanker
3. Plant trees in the city

1951 Established a committee

1951 1961

The amount of soot per 1 km³ / month

Success

1997 Received the UNEP's "Global 500" award

Industry, Academia, Government, City Council

Ube Method

Pittsburgh, Pennsylvania, USA (Steel Industry ⇒ Air & Water Pollution)

By 1911 Became a steel industry powerhouse ⇒ "the Smoky City"

1946-1973 Renaissance I

1. Urban Renewal Plans: Build a new park and office buildings
2. Regulations: No fuels or equipment causing smoke!

1970-1980 Collapse of steel industry ⇒ Factory closings and layoffs

1977 Renaissance II

1. Urban Renewal Plans: Construct subways, theaters, and buildings
2. Invite companies to the city

The University of Pittsburgh Organ Transplant + Carnegie Mellon University Computer Science

⇒ "High-Tech City"

Chattanooga, Tennessee, USA (Steel Industry ⇒ Air Pollution)

1950s Prosperity as a steel industry city ⇒ Serious air pollution

1970s Collapse of steel industry ⇒ Factory closings and layoffs

1983 New project

If the citizens don't work together, the city can't be rebuilt.

Mayor G. Roberts Dr.S.Watson, a famous urban planner

Actions Taken

- Involve the citizens in meetings
- Reconstruct downtown
- Develop electric buses & Free bus services

Aquarium 3D Theater Electric Bus

⇒ Growth of the tourist industry

Minamata, Kumamoto, Japan (Chemical Industry ⇒ Water Pollution)

1976 Reclamation of Minamata Bay

2000 Completed "Eco-Park"

2001 Approved Eco-Town Project

2008 Recognized as an Model Environmental City

2009 Started "Entaku-Kaigi"

2016 Established "Minamata Environmental Academia"(M.E.A)

Eco-Park Eco-Park Rose Garden M.E.A

What We Can Do to Make Minamata Even Better

Make Minamata a more attractive city which many people want to visit.

We should make the environment our first priority when taking action.

We must take an interest in the measures taken and know what's going on in our city.

We need to send out information about Minamata more.

The citizens' opinions should be included in the measures.

Our School's mascot SUIKO-san