

Global Environment Research in Japan

Hajime Akimoto

National Institute for Environment Studies

Global Environment Research in Japan

MOE (Ministry of Education)

STA (Science and Technology Agency)

EA (Environment Agency)

MAFF (Ministry of Agriculture, Forestry and Fisheries)

MITI (Ministry of International Trade and Industry)

MOT (Ministry of Transport) - MA (Meteorology Agency)

Global Environmental Protection Budget in Japan

Category	Budget (M\$)
Investigation / Research	263
Observation / Monitoring	197
Technological Development*	2,947
Total	3,408

*Includes Nuclear Energy Development (M\$ 2002)

Global Environment Research Program

(JEA)

Budget

FY 1990 M\$ 9.2

1991 13.1

1992 14.6

Research Areas

(1) Depletion of Ozone Layer

(2) Global Warming

(3) Acid Precipitation

**(4) Marine Pollution (including
marine environment change)**

(5) Loss of Biodiversity

(6) Tropical Deforestation

(7) Desertification

Organization

Environment Agency

National Institute for Environmental Studies (NIES)

- Global Environment Division
- Regional Environment Division
- Social & Environmental Systems Division
- Environmental Chemistry Division
- Environmental Health Sciences Division
- Atmospheric Environment Division
- Water & Soil Environment Division

Center for Global Environmental Research (CGER)

Global Warming

1. Temporal and Spatial Variability of GHG's
2. Emission Sources of CH₄ and N₂O
3. Atmospheric Chemistry of GHG's
4. Carbon Cycle in the Ocean
5. Climate Change Studies by a Climate Model
6. Global Warming Feedback in Siberia

Depletion of Ozone Layer

1. Temporal and Spatial Variability of Ozone Layer
2. Physical and Chemical Processes in the Stratospheric Ozone Layer

Acid Precipitation

1. Variability of Acidic and Oxidizing Substances in the East Asian Region

The Mission of Center for Global Environmental Research (CGER)

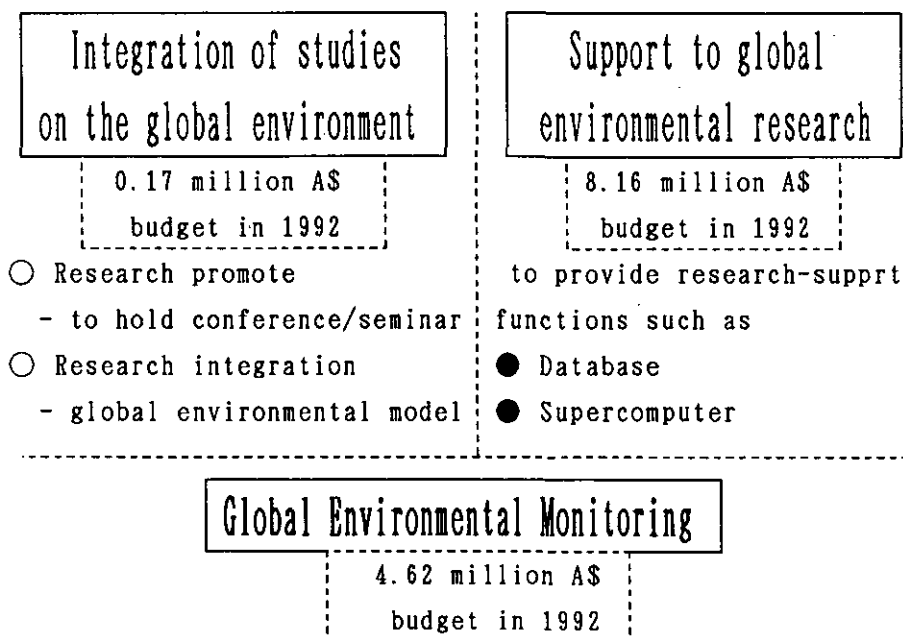
Shinichi Araki

The head of administrative team for Monitoring of CGER
NIES, Japan Environment Agency (JEA)

1 What the CGER ?

- Establishment 1st October 1990
- Position The branch of NIES
- Aim The elucidation of, and solution for our pres
global environmental problems
- Character — interdisciplinary
 (keyword) — inter-agency and ministry
 — international perspectives
- Mission There are 3 parts in CGER.

2 3 parts of mission



3 Substance of Global Environmental Monitoring

where	what	how
Stratosphere	ozone layer UV-B	ozone laser radar brewer ozone spectro-photometer
Troposphere	green house gases - CO ₂ , CH ₄ , N ₂ O, CFCs, ...	airplane ground station bottle sampling voluntary container cargo boat (to Sydney from Yokohama Japan)
Hydrosphere (Marine)	nutrients, in vivo fluorescence	voluntary ferry ship -to Korea from Japan
Biosphere	vegetation index	satellite