

# BIODIVERSITY AS AN ESSENTIAL - CONSERVATION AND SUSTAINABLE USE -

Working Group on Living Organisms and Ecosystems Research and Development  
Environmental Research and Development Promotion Project Team  
Council for Science and Technology Policy, Cabinet Office, Government of Japan



3-1-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8970, Japan  
<http://www8.cao.go.jp/cstp/project/envpt/english/>



## 1. Introduction

### Background:

- Five research initiatives being implemented under the Promotional Strategy in the environmental field
- Biological and ecological aspects should be more emphasized in the current research projects

### Mission of the Working Group:

- Discuss the current state of research & development in Japan, the issues and methods to be addressed in the future
- Research and development on the technology for the restoration and conservation of the environment using biological function
- Research and development on the conservation of biodiversity and management of ecosystem
- Propose a hierarchical structure research and development on living organisms and ecosystems spanning from recognition of current status to countermeasures for conservation

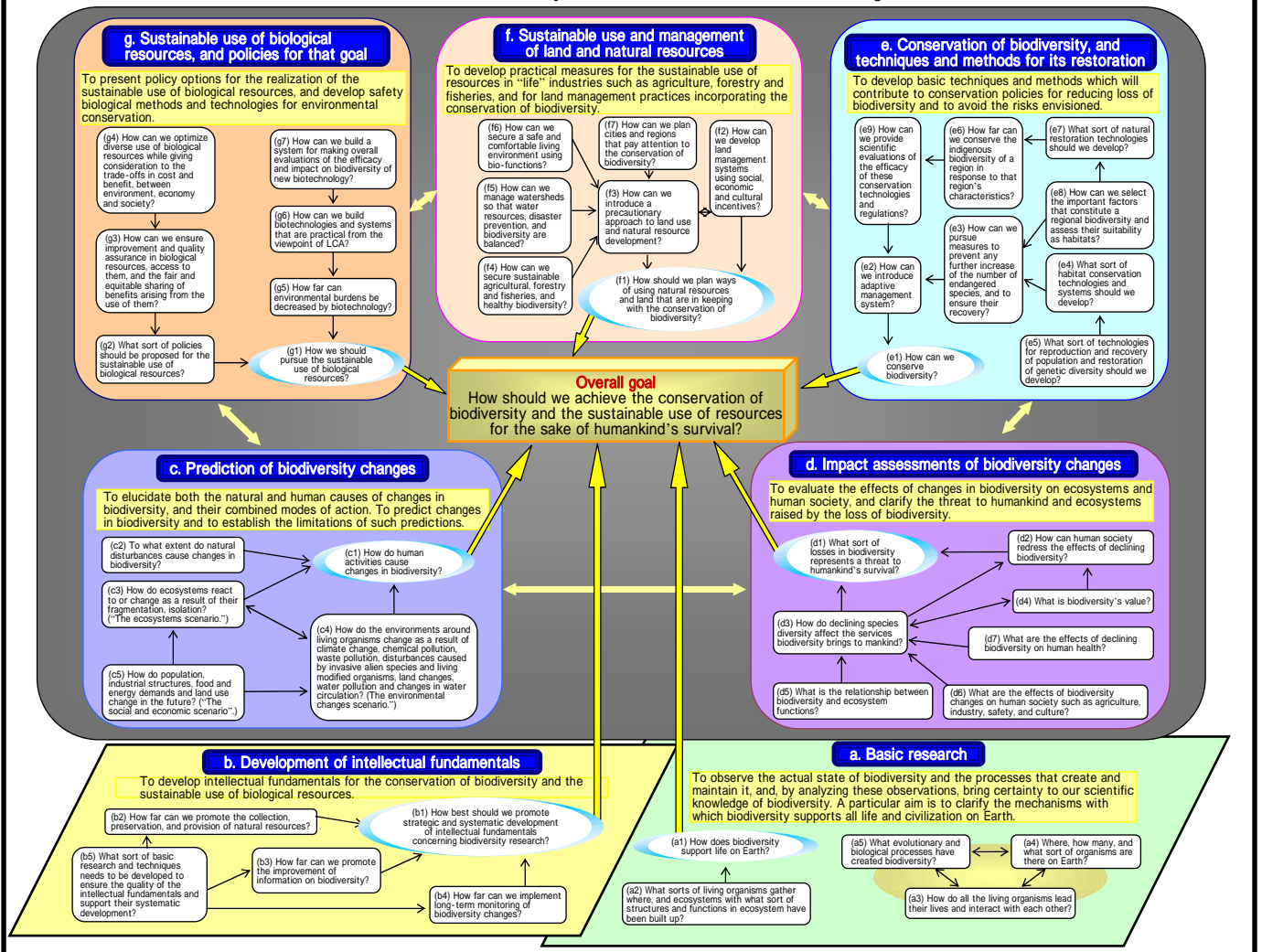
## Basic Recognition

- Conservation of biodiversity is essential to the survival of mankind and conservation of cultural diversity.
- Emphasis should be placed on the conservation of biodiversity and sustainable use of biological resources
- Predictive and precautionary approach should be taken.

## 2. Background of the study

- 1992: Adoption of the CBD (Earth Summit)
- 2001: Development of the Second Science & Technology Basic Plan (Promotional Strategy in environmental field)
- March 2002: New National Biodiversity Strategy of Japan
- September 2002: World Summit on Sustainable Development (WSSD)
- May 2003: Recommendation on the importance of a biological aspects in Japan's environmental research (Expert Panel on Promotional Strategy of Prioritized Areas)
- July 2003: Establishment of the Working Group

## 3. The conservation of biodiversity and the sustainable use of biological resources



## 4. The current state of research and development in the field of living organisms and ecosystems

- (1) The state of research and development in Japan
  - Government and agency activities, their state and their needs
  - The international direction of biodiversity R & D
- (2) The state of international research and development
  - International research frameworks
  - The state of biodiversity outside Japan (USA, EU)

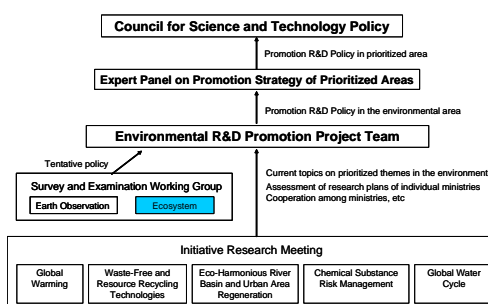
## 5. R&D issues of biodiversity that Japan will have to deal with in the future

- Evolutionary process, biological interactions, inventory of species)
- Development of intellectual fundamentals
- Prediction of biodiversity changes
- Value of biodiversity - ecosystem function and ecological service
- Development of technologies and systems for conserving and restoring biodiversity
- Sustainable use and management of land and natural resources
- The sustainable use of biological resources and policies to achieve it

## 6. Important related matters

- (1) The promotion system of R & D of biodiversity
  - Development of action plan
- (2) Improvement of legal and institutional issues in living organism and ecosystems research
- (3) International cooperation and international leadership
- (4) Industry, academia, government - their roles and cooperation
- (5) Linking regional efforts, and providing a platform for interdisciplinary research
- (6) Spending, infrastructure and management for the promotion of human resource development

### Promotion Structure in Japan's Environmental R&D



### Roster for the Working Group on Living Organisms and Ecosystems Research and Development

As of July 30, 2003

HIDAKA Toshitaka : Director-general, Research Institute for Humanity and Nature  
OKA Mitsunori : Director, Department of Biological Safety, National Institute for Agro-Environmental Sciences  
SUMIDA Seizo : Managing Director, Japan Bioindustry Association  
NAKASHIZUKA Toru (ASANO Toru) : Professor, Research Institute for Humanity and Nature  
HAYASHI Yoshihiro : Professor, Graduate School of Agricultural and Life Sciences, The University of Tokyo  
FUJITA Kouichi : Head, River Environment Division, Environment Department, National Institute for Land and Infrastructure Management Ministry of Land, Infrastructure and Transport  
WASHITANI Izumi : Professor, Graduate School of Agricultural and Life Sciences, The University of Tokyo  
WATANABE Makoto : Director, Environmental Biology Division, National Institute for Environmental Studies

(The mark indicates the general manager)

### Contact:

MIZOGUCHI Masaru, TSUBOYAMA Yoshio, TAKEYAMA Norio, KAJIHARA Hideo, KITAGAWA Hiroyuki, NOJIRI Yukihiko  
Secretariat for Science and Technology Policy, Cabinet Office, Government of Japan  
3-1-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8970, Japan  
Phone: +81-3-3581-9265; FAX: +81-3-3581-9969  
<http://www8.cao.go.jp/cstp/project/envpt/english/>