

ENVIRONMENT RESEARCH AND TECHNOLOGY DEVELOPMENT FUND FY2012



Ministry of the Environment



What is the Environment Research and Technology Development Fund?

Objective

To preserve the environment in order to establish a sustainable society while promoting survey-style research and technical development

The Environment Research and Technology Development Fund (ERTDF) is a competitive research fund oriented toward policy contribution. It is based on a recognition of the serious and severe impacts of environmental problems on the foundations of human existence, and was established for the purpose of promoting survey-style research and technical development in a comprehensive manner from an interdisciplinary, international viewpoint, bringing together the total capabilities of researchers in various fields in order to contribute to preservation of the environment and establish a sustainable society.

Features

A clearly defined orientation toward support for environmental policy

The ERTDF has a clear orientation toward contribution to environmental policy, promoting the discovery of solutions to various environmental problems and working toward establishing a sustainable society, through support for accumulation of scientific knowledge by survey research and technical development in the field of environmental science.

The calls for proposals and evaluation of research projects are oriented toward strong promotion of strategic research development built on administrative needs, based on the concept of "A promotional strategy of environmental research and environmental technology development" which highlights crucial issues and goals from a middle- to-long-term perspective. The selection system for the "Strategic Research and Development Area" consists of competition among research teams based on the outline for selecting research themes and project leaders established by the Ministry of the Environment.

A competitive research fund ensuring transparency and fairness

The ERTDF has a committee and some subcommittees comprising outside specialists. A separate subcommittee is established for each research field. Proposals are competitively examined and selected by the committee and appropriate subcommittees in terms of effectiveness of the research and efficiency of the use of funds. Approved research projects are evaluated on the degree of progress in research and the cost performance at the mid-point of the research period. The results of the evaluation are used in allocating the research budget in order to maintain appropriate progress in the research projects.

Research Fields

• Global System Change

Global-scale problems, including destruction of the ozone layer, global warming and the impacts of water circulation and oceanic currents on global environmental changes

• Environmental Pollution

Pollution of domestic/overseas atmospheric environments, urban environments, water environments and soil environments, and transboundary pollution of those environments

• Health and Ecological Risks

Environmental risks and health risks associated with chemical substances and other environmental factors

• Protection/Restoration of Nature and Ecosystems

Protection and restoration of ecosystems in view of problems of ecosystem disruption, reduced biodiversity, diminished tropical forests and desertification with an aim toward harmonious coexistence with nature

• Research on Sustainable Society/Policy

Integrated research from environmental, economic and societal perspectives related to protection of the environment and establishment of a sustainable society

• Cross-field Studies

Cross-sectional research projects in comprehensive initiatives such as Low-carbon Society, Recycling-based Society, Harmonious Coexistence Society, and Safe and Secure Society

• Establishment of a Sound Material-cycle Society and Next-generation Waste Treatment Technology

Technical development regarding appropriate disposal of waste materials and establishment of a recycling-oriented society

A website has been created which explains the ERTDF system and provides information on calls for proposals.

<http://www.env.go.jp/policy/kenkyu/suishin/english/index.html>

History of the ERTDF

The ERTDF originated through the integration of three competitive research funds, the Global Environmental Research Fund (GERF), the Environment Technology Development Fund (ETDF) and the Grant-in-Aid for Scientific Research about Establishing a Sound Material-cycle Society.

In April of 2010, the GERF and the ETDF were integrated into the ERTDF, and in April of 2011, the Grant-in-Aid for Scientific Research about Establishing a Sound Material-cycle Society was further added. Thereby, the contact point of the ERTDF has been centralized and convenience for applicants has been improved. At the same time, it is expected to better facilitate the development of cross-field research in environmental sciences.

Establishment of a Special Account for the Great East Japan Earthquake Rehabilitation (Rehabilitation Adoption Budget)

In fiscal 2012, in addition to the General Adoption budget of the ERTDF funded by the general account, the Rehabilitation Adoption budget has been established funded by a special account for the Great East Earthquake Rehabilitation, soliciting proposals for "contribution to earthquake restoration and reconstruction." It was created to promote technical development and accumulation of scientific knowledge absolutely necessary for early rehabilitation in disaster areas.

(→see p.10)

Numbers of Research Projects Underway and Budget in Fiscal 2012

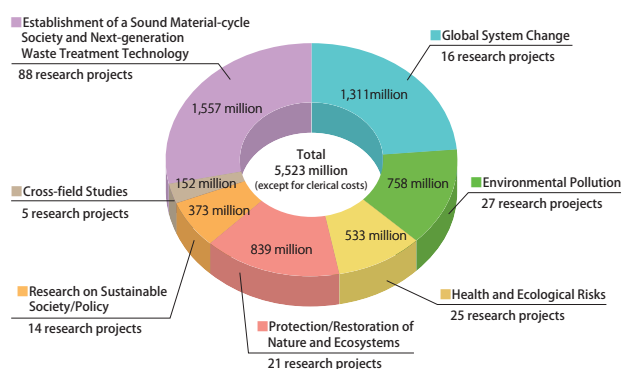
Under the General Adoption budget, a new strategic project in the Strategic Research and Development Area ("Integrated Research on the Development of Global Climate Risk Management Strategies") has been launched along with 54 new research projects in the Environmental Problem Research Area. The research projects conducted in fiscal 2012 comprise five strategic projects and 191 research projects, in addition to continuing projects (four strategic projects and 137 research projects).

Meanwhile, under the Rehabilitation Adoption budget, 29 research projects are striving toward resolution of the various problems caused by the influence and damage from the Great East Earthquake.

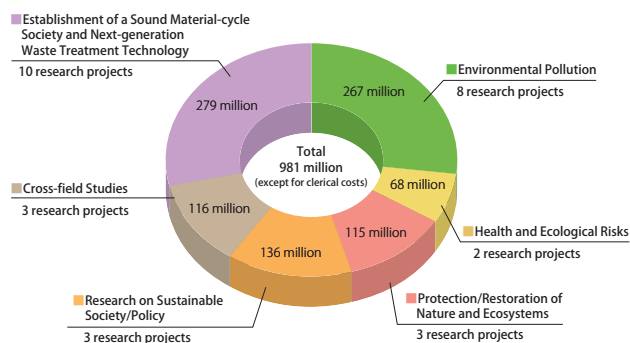
In fiscal 2012 budget, the General Adoption budget is ¥5,670 million. Of that, ¥1,480 million are allocated to new research projects. Meanwhile the Rehabilitation Adoption budget allocates ¥1,000 million for new research projects.



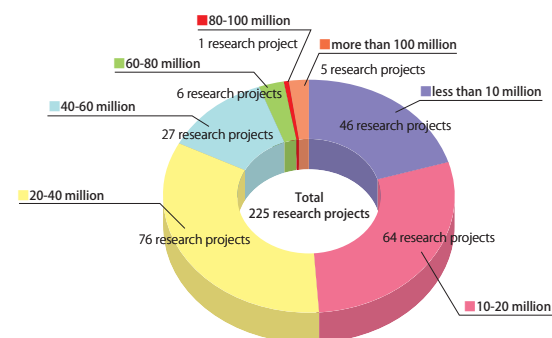
Research Projects Conducted in Fiscal 2012



Budget in General Adoption allocated for research fields (unit: yen)



Budget in Rehabilitation Adoption allocated for research fields (unit: yen)



Numbers of research projects per budget size (unit: yen)



Research Project to Establish a Methodology to Evaluate Middle to Long Term Environmental Policy Options toward Asian Low-Carbon Societies (Low-Carbon Asia Research Project)

(Period I: FY2009-2011)
(Period II: FY2012-2013)
Budget in FY2012: JPY 229,694,000

Mikiko KAINUMA, National Institute for Environmental Studies (cooperation of 15 institutions)

<S-6>

The international community has recognized the need to reduce greenhouse gas (GHG) emissions by 50% until 2050 in order to keep the change in global mean temperature within two degrees centigrade compared to preindustrial times. In order to achieve this target, it is imperative to develop low carbon societies (LCS) in Asia, as the Asian countries will account for more than half of the global population and GHG emissions in 2050.

The objectives of the Asia LCS Research Project are to establish a vision of LCS in Asia, and to develop comprehensive methodologies to design and evaluate policy options based on robust scientific knowledge and the multifaceted needs of each country. The project explores and identifies such development pathways through four research perspectives: (1) LCS scenario development, using global-, national-, subnational- and city-scale models, (2) institutional architecture for LCS, (3) resources management, and (4) low carbon transport systems. By

integrating the outcomes of these studies, this project will identify policy roadmaps to facilitate a transition to Asian societies characterized by low carbon emissions, low resource consumption and robust economic growth.



Scientific Analysis of Regional Air Pollution and Promotion of Air Pollution Management in East Asia Considering Co-benefits

(Period I: FY2009-2011)
(Period II: FY2012-2013)
Budget in FY2012: JPY 140,746,000

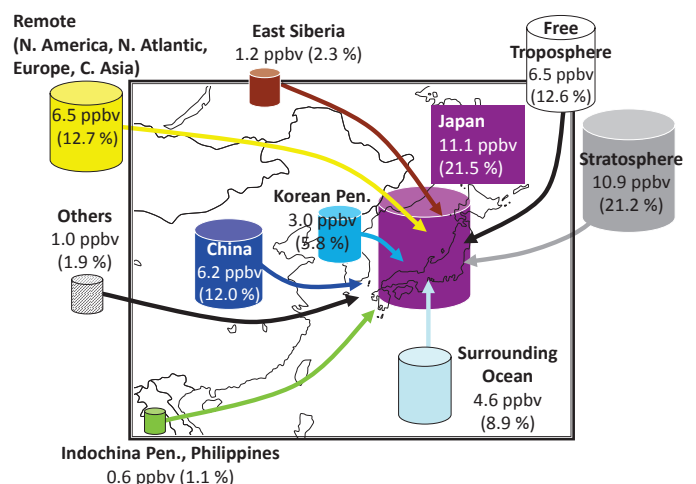
Hajime AKIMOTO, Asia Center for Air Pollution Research (cooperation of 8 institutions)

<S-7>

In recent years, emissions of ozone and aerosol precursors (NO_x, VOC, etc.) have been increasing rapidly in East Asia. From the standpoint of atmospheric environmental impacts in Japan, the contribution of transboundary air pollution to increased concentrations of ozone and aerosols (particularly PM_{2.5}) is a significant issue. In order to resolve this regional issue, there is a strong need to elucidate the present situation of regional air pollution in East Asia scientifically and to establish measures to promote strategic atmospheric environmental management in East Asia through international collaboration.

The objectives of this project are to quantify contributions of regional air pollution in East Asia and hemispherical inter-continental transport of ozone and aerosol pollution affecting Japan. It also aims to develop a scenario for reducing regional air pollutants in East Asia considering a co-benefits approach that is effective for mitigating both transboundary air pollution and global warming, with a

focus on the reduction of Short-Lived Climate Pollutants (SLCP), and to consider routes for reaching an international agreement on the basis of scientific knowledge.



Source- Receptor Analysis of Ground Level Ozone in Japan



Comprehensive Study on Impact Assessment and Adaptation for Climate Change

(Period I: FY2010-2012)
(Period II: FY2013-2014)
Budget in FY2012: JPY 345,577,000

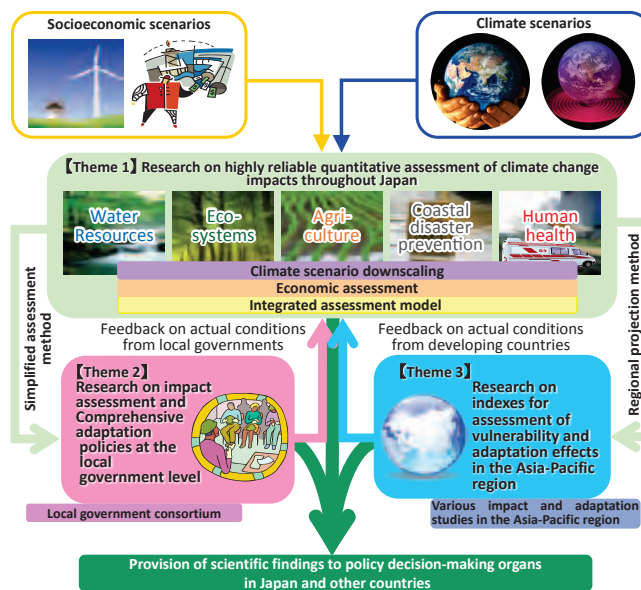
Nobuo MIMURA, Ibaraki University (cooperation of 30 institutions)

<S-8>

As the impacts of climate change differ by region and locality, one challenge of this project is to form a scientific basis for more detailed projections of climate change and resultant impacts so as to enable development of adaptation policies. This project aims to promote research to meet this challenge with three concrete objectives. The first is to present a more detailed estimate of physical and socioeconomic impacts induced by climate change and to evaluate the effects of adaptation measures, focusing on Japan. The second is to create information on particularly effective impact assessment methods and to introduce adaptation policies at the local Japanese government level. The third is to help promote adaptation in Asian developing countries through development of indexes for impacts, vulnerability and effectiveness of adaptation. This project is expected to contribute to the establishment of a safe sustainable society which can adapt to climate change.

To achieve these goals, we will pursue a systematic

approach featuring active interaction among different fields.



Integrative Observations and Assessments of Asian Biodiversity

(Period I: FY2011-2013)
(Period II: FY2014-2015)
Budget in FY2012: JPY 301,205,000

Tetsukazu YAHARA, Kyushu University (cooperation of 18 institutions)

<S-9>

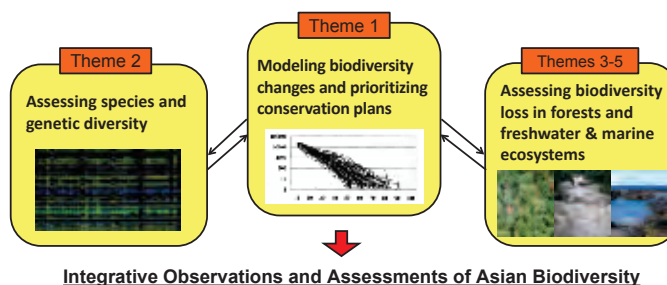
In this project, we are conducting an integrative observation of species and genetic diversity and biodiversity of forest, freshwater and marine ecosystems; and we are assessing where, how and how much biodiversity is being lost in Asia.

Our specific tasks are as follows:

- Developing methods and models to quantify the rate of biodiversity loss in Asia.
- Exploring methodology to assess biodiversity loss from time-series data.
- Developing a database of the ground-based observations in the Asia-Pacific area so as to enable assessment of biodiversity loss on the Asia-Pacific regional scale.
- Modeling the relationship between species richness and ecosystem functions/services.
- Designing conservation plans by prioritizing terrestrial and marine candidate areas for protection.

By resolving these issues, we will provide a scientific

basis for developing and prioritizing policies effective at reducing biodiversity loss. We also expect that the results of this project will contribute to global efforts in biodiversity assessment and national efforts to revise Japan's biodiversity strategy and outlook.





Integrated Research on the Development of Global Climate Risk Management Strategies

(Period I: FY2012-2014)
 (Period II: FY2015-2016)
 Budget in FY2012: JPY 302,476,000

Seita EMORI, National Institute for Environmental Studies (cooperation of 15 institutions)

<S-10>

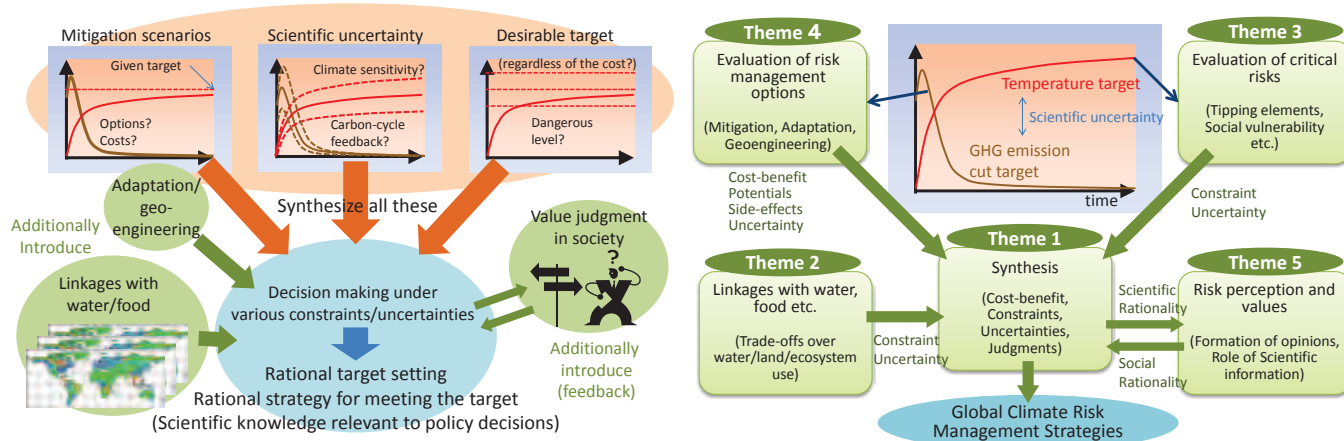
Agreement has been reached in the United Nations' climate negotiation process that from a scientific perspective, the global average temperature should not exceed two degrees above the preindustrial level. The sum of bottom-up targets pledged by individual countries, however, does not reach such an ambitious global target, and a new framework to reach the target is still under debate. In the first place, a temperature limit to be avoided cannot be determined solely by science but it must involve the value judgment of society. There is also a large scientific uncertainty between temperature targets and emission targets. Furthermore, linkages between climate change policy and other global issues, such as a potential conflict between large-scale deployment of biomass energy versus food and biodiversity issues, are insufficiently understood. To resolve this complex problem is a fundamental challenge for human beings.

In this study, we adopt a risk management standpoint to tackle this problem. Namely, we comprehensively assess risks due to the impact of climate change and climate change policies, explicitly deal with uncertainties, utilize the best available information, and consider every possible condition and option. We regard the problem as one of decision-making at the human level, which involves social value judgments and adapts to future changes in circumstances.

We are conducting research under the following five themes:

- (1) Synthesis of global climate risk management strategies,
- (2) Optimization of land, water and ecosystem uses for climate risk management,
- (3) Analysis of critical climate risks,
- (4) Evaluation of climate risk management options under technological, social and economic uncertainties, and
- (5) Interactions between scientific and social rationalities in climate risk management.

Through this research, we will develop and provide concepts and options for climate risk management strategies which can be considered rational both scientifically and socially, by comprehensively taking into account various constraints, uncertainties, risk management options, social value judgments and other factors. This will lead us to contribute to international consensus building, national policy planning and deeper public understanding on climate issues.





Assessment of the Effects of Reductions of Black Carbon Aerosols as a Measure for Slowing down Global Warming

(FY2011-2013)

Budget in FY2012: JPY 59,119,000

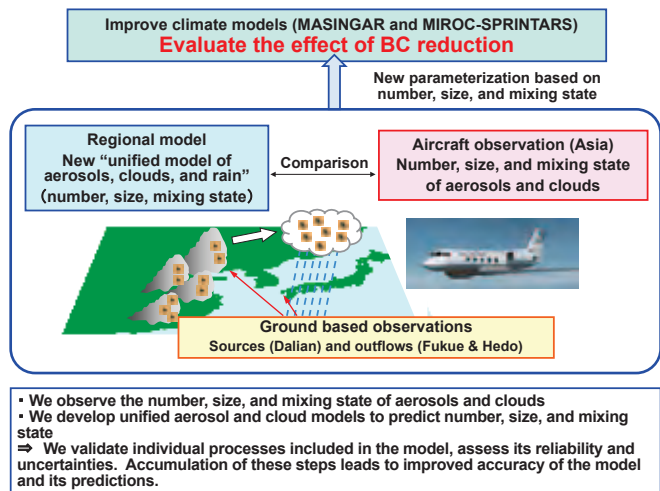
Yutaka KONDO, The University of Tokyo (cooperation of 4 institutions)

<A-1101>

Black carbon (BC) aerosols strongly absorb visible solar radiation in the atmosphere and are believed to have substantial positive radiative forcing (one-third of carbon dioxide). Reduction of BC is considered a potential measure of slowing down global warming.

To estimate the effect of BC reduction accurately, it is critical to understand its microphysical and chemical properties (e.g., size distribution, mixing state, and chemical composition) of BC and the other types of aerosols. In this study, we elucidate these properties by surface and aircraft measurements using advanced technologies. Regional three-dimensional models representing detailed aerosol properties are being developed and validated by these measurements. The representations of this model are used to reduce the uncertainties in the calculations using climate models. We evaluate the effects of reducing the emissions of BC and other anthropogenic species on the climate on the global and Asian scales. Based on improved model

predictions, we can achieve improved scientific assessment in planning effective strategies for BC reduction.



Development of Monitoring Technique to Assess Impact to Benthic Life by Hypoxia and of Achievement Evaluation Method for Bottom DO Criteria

(FY2010-2012)

Budget in FY2012: JPY 19,452,000

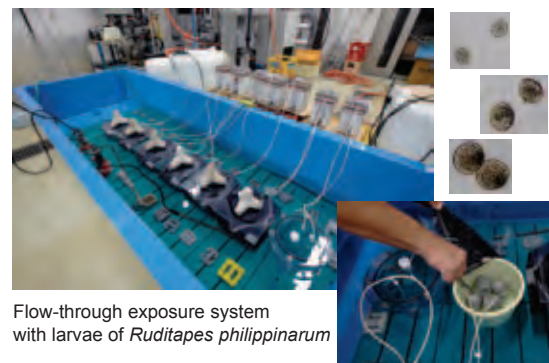
Toshihiro HORIGUCHI, National Institute for Environmental Studies (cooperation of 7 institutions)

<B-1003>

A testing method was established to evaluate the effects of hypoxia on the early life history of benthic organisms. Other laboratory experiments were also conducted to evaluate avoidance by marine benthic organism larvae of hypoxic waters when they encounter them. Monthly field studies were carried out to assess the impacts of hypoxia on early life stages (e.g., horizontal and vertical distribution of larvae and juveniles) of marbled sole (*Pseudopleuronectes yokohamae*) in Tokyo Bay and Japanese short-necked clam (*Ruditapes philippinarum*) in Mikawa Bay. Computer simulations on the basis of results of laboratory experiments and field studies suggested that water quality criteria values of dissolved oxygen (DO) for survival and reproduction of *R. philippinarum* should be 2 and 3 mg/L, respectively.

Meanwhile, statistical methods were developed to determine whether or not water quality criteria for DO had been achieved. Computer simulation analysis of the relationship between the number of DO measurement taken

at a certain monitoring site and the arithmetic mean of probability of mis-evaluation of DO values suggested that the arithmetic mean of probability did not decrease to less than 1/2 even if the number of measurements of DO was doubled.



Testing of Tolerance to Hypoxic Waters



Research to Reveal Association of Human Health and Asian Dust by the Clinical and Basic Study

(FY2011-2013)
Budget in FY2012: JPY 21,651,000

Masanari WATANABE, Tottori University (cooperation of 2 institutions)

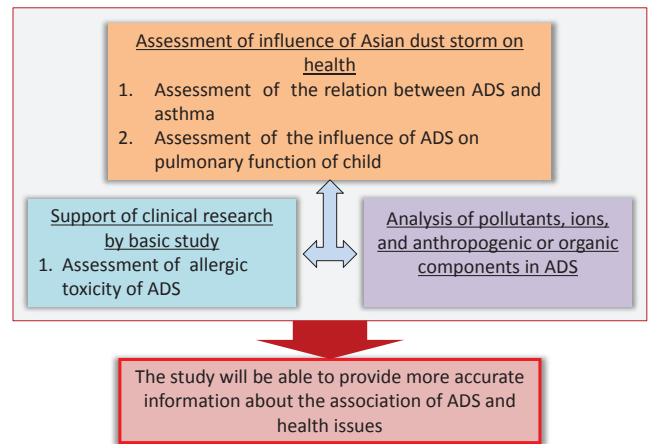
<C-1154>

Asian dust storms (ADS) have become a serious problem due to heavy pollution and an increase in the frequency and duration of these storms. ADS contain various pollutants, with anthropogenic and organic components. Therefore, health problems related to ADS have attracted attention.

We have been investigating more accurately the relationship between ADS and asthma, and are trying to reveal which components have a stronger effect on asthma. In addition, we are studying the influence of ADS on pulmonary function in children to verify the safety of outdoor activities during ADS. The effects of ADS on human inflammatory cells are being evaluated to support the clinical data.

This study is providing more accurate information about the association of ADS and health. We intend to reveal an asthmatic phenotype that is more sensitive to ADS, and an effective treatment. We also plan to prevent the exacerbation of health issues caused by ADS. Through

this study, we will endeavor to educate people about environmental problems, because the cause of increasing health related issues from ADS is strongly associated with desertification and air pollution.



Protection/Restoration of Nature and Ecosystems



Development of Integrated Control Methods and Systems for Invasive Alien Animals

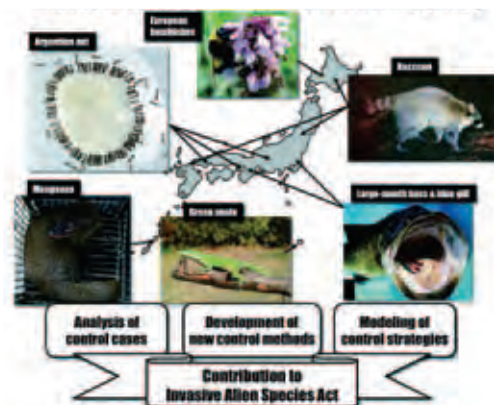
(FY2011-2013)
Budget in FY2012: JPY 45,590,000

Koichi GOKA, National Institute for Environmental Studies (cooperation of 6 institutions)

<D-1101>

International cooperation for control of the serious invasive alien species was included among the goals of Aichi Target 20, decided at COP10, as Target 9. Thus, it should be an important priority for Japan from the viewpoint of biodiversity conservation not only in Japan but also around the world, to seek successful cases of controlling alien species and promote their wide adoption. This study project aims to establish effective strategies for controlling important invasive animal species causing serious ecological impacts on the native fauna of Japan, such as the Argentine ant, European bumblebee, large-mouth bass, green anole, mongoose and raccoon. We gathered information on any attempts to control these species in Japan and worldwide, and analyzed the factors influencing the effectiveness of control. Based on ecological data, we are developing new adaptive control methods for each invasive species. We will construct a mathematical model for estimating the cost and

probability of control success. From these results, we will provide manuals for control of invasive alien species and strengthen the national control system against biological invasion.



Invasive Alien Species Which Must Be Controlled Quickly



Strategy to Enhance Resilience to Climate and Ecosystem Changes Utilizing Traditional Bio-production Systems in Rural Asia

(FY2011-2013)

Budget in FY2012: JPY 40,852,000

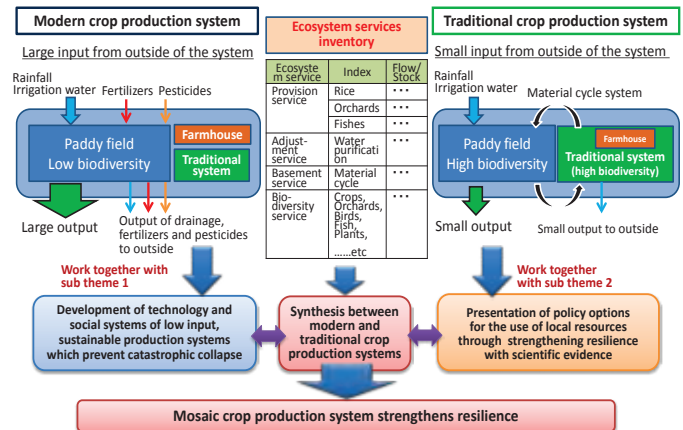
Kazuhiko TAKEUCHI, The University of Tokyo (cooperation of 3 institutions)

<E-1101>

Global climate change is predicted to affect regional ecosystems and have major effects on bio-production, particularly agriculture. Therefore, many countries throughout the world are urgently establishing bio-production systems that are highly resilient and capable of adapting flexibly to uncertain climate and ecosystem variations. This study focuses on fragile rural areas in Asia and provides a re-evaluation of traditional bio-production systems, including the Vietnamese VAC system, home garden systems of Indonesia and Sri Lanka and the tank irrigation system of Sri Lanka. This study aims to establish a strategy for enhancing resilience by integrating traditional and scientific knowledge. The outputs of this study will make the following contributions: adaptive measures for climate change, which are required by the United Nations Framework Convention on Climate Change and the IPCC; the sustainable use of biodiversity, as recommended by the Convention on Biological Diversity and IPBES*1; enhanced cooperation between these conventions by providing a scholarly perspective;

and the development of the *Satoyama* Initiative, which is jointly promoted by Japan and the United Nations University.

*1 Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES).



Strategy for the Enhancement of Resilience in Bio-Production System



Cross-field Studies



Development of Evaluation Method of Ecosystem Services to Find Good Balance between Climate Change Prevention and Biodiversity Conservation

(FY2011-2013)

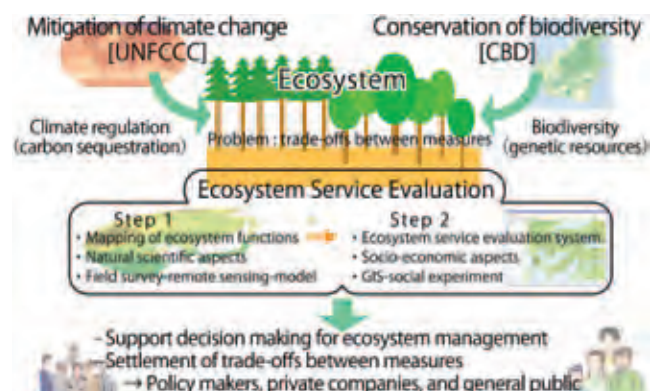
Budget in FY2012: JPY 52,020,000

Akihiko ITO, National Institute for Environmental Studies (cooperation of 3 institutions)

<F-1101>

Ecosystem services provide an indispensable foundation for our daily life, and are also deeply related to environmental issues such as global warming and biodiversity loss. This project aims at contributing better ecosystem management through development of methodology to evaluate ecosystem services, focusing on a feasible balance between climate change prevention and biodiversity conservation. Our studies are conducted in different types of ecosystems: a pastoral site in Kushiro, Hokkaido, an urban/green mixture site in Yokohama, and a land-use conversion site in Lambir, Malaysia. This project is composed of ecosystem survey groups, in which ecosystem functions are assessed by field work, remote sensing, and ecosystem modeling; and socio-economic evaluation groups, in which ecosystem services are evaluated using questionnaire surveys and geographical information systems. Through the collaboration between natural and social sciences, we are collecting data on ecosystem functions and services,

which are used by evaluation systems such as InVEST. Finally, the system which we are developing can contribute to decision-making for a better balance of diverse services to prevent further problems with environmental issues.





Recycling Process of Wasted Ink for Fabrication of High Strength Titanium Reinforced with Carbon Black Particles

(FY2010-2012)

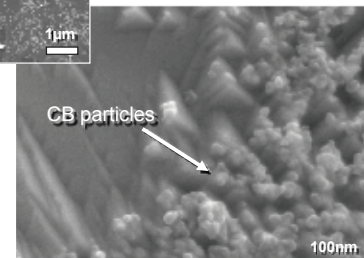
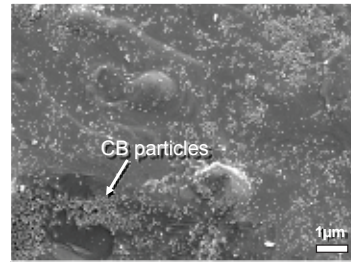
Budget in FY2012: JPY 29,093,000

Katsuyoshi KONDOH, Osaka University

<K2408>

An organization for recycling used printer ink-cartridges was established in 2008 with the collaboration of six private companies. Their increased collection resulted in economic and environmental problems regarding disposal of the ink solution dregs. The objective of this study is the development of a recycling process for ink solution dregs containing carbon black (CB) particles, having a particle size of 80-100 nm, to be used in fabricating advanced pure titanium materials strengthened by carbon solid solution effects. As shown in the photos, the process of coating CB particles on a pure titanium powder surface has been established by mixing the ink solution with titanium powders after diluting the raw ink with water. Wrought pure titanium powder materials with a suitable content of CB particles have indicated significantly high tensile strength and elongation compared to the commercialized titanium alloy. In fiscal 2012, a large-scale process for fabricating

titanium materials using ink solution dregs will be established and its practicality will also be evaluated by process and materials cost estimations.



What is the "Rehabilitation Adoption budget" research?

In fiscal 2012, the Environment Research and Technology Development Fund has established the Rehabilitation Adoption budget funded by a special account for the Great East Earthquake Rehabilitation, in addition to the General Adoption budget for the ERTDF, funded from the general account, and has promoted environmental research and environmental technology development in order to resolve the various problems caused by the Great East Earthquake --tsunami damage, radioactivity and other environmental impacts which need to be clarified-- and to rehabilitate the disaster areas generated by the Great East Earthquake.

Under fiscal 2012 calls for proposals (solicited in October-November 2011), special major themes (see 1-4) have been indicated as the most urgent research and development projects. Proposals from researchers in industry-academic-government research agencies have been evaluated through initial screening and interviews by outside specialists, and finally approved as new research projects.

In fiscal 2012 budget, the Rehabilitation Adoption budget is ¥1,000 million. 29 research projects expected to contribute to the earthquake restoration and reconstruction have been selected

and work has begun mainly under special major themes (the research projects listed on the following page are examples).

Under the Rehabilitation Adoption budget, all researchers involved in the projects are required to achieve early research and development results and put the results to practical use in the disaster areas. The research projects under the Rehabilitation Adoption budget are required to reduce their research terms, and concentrate their work on research and development, while many research projects under the General Adoption budget have three-year research terms.

Special Major Themes

1. Dynamic clarification of radioactive material and development of practical technology for decontamination of contaminated soil.
2. Treatment technology and systems research for speedy and smooth treatment of disaster debris.
3. Research on community-building for rehabilitation of the disaster areas, based on a recycling-oriented society.
4. Clarification of ecosystem effects caused by the Great East Earthquake.



Rehabilitation Adoption Budget: Health and Ecological Risks



Diffusion Process of Radioactive Materials in Ecosystems of Coastal Sea Areas

(FY2012-2014)

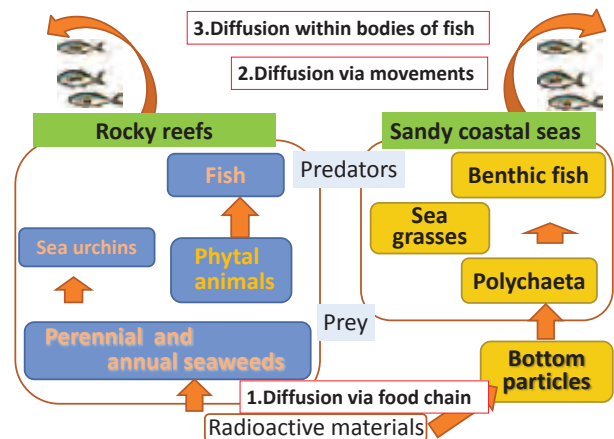
Budget in FY2012: JPY 70,000,000

Hisayuki ARAKAWA, Tokyo University of Marine Science and Technology (Cooperation of 3 institutions) <ZD-1201>

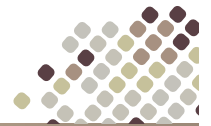
A large quantity of radioactive material was emitted into the sea as a result of the Fukushima nuclear power plant accident of March 2011. Many marine resource organisms with high radiation levels were reported in the sea along the Fukushima Prefecture coast. In this research, two survey lines have been set in the southern (Iwaki) and northern (Souma) parts of Fukushima, and the distribution and diffusion processes of radioactive materials in the ecosystems of the coastal sea area are being investigated.

(1) Diffusion via the food chain: Radioactive material analysis and stable isotope ratio analysis of various organisms on the Iwaki and Souma coasts are being conducted. The transport of radioactive materials is associated with the predator-prey relationships among these organisms. (2) Diffusion via movements of various organisms within both study areas is being investigated, using the methods of biotelemetry and/or tagging. (3) Diffusion within the bodies of fish: uncontaminated organisms are being bred in a contaminated area, and the accumulation and

elimination of radioactive materials is being evaluated. These results are expected to contribute to understanding of temporal changes in radioactive contamination of the coastal sea ecosystem in Fukushima.



Rehabilitation Adoption Budget: Cross-field Studies



Study on Scenarios and Measures for Realizing Changes in the Electricity Supply Mix after the Great East Japan Earthquake

(FY2012-2013)

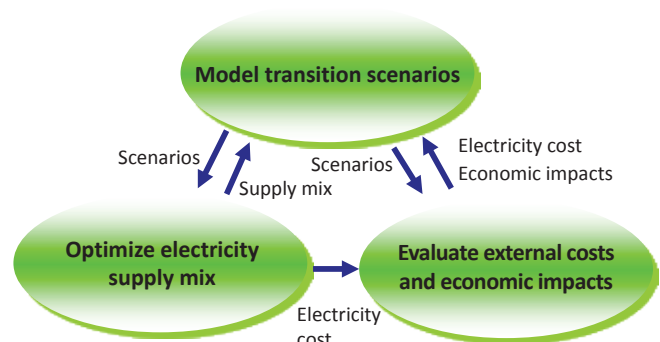
Budget in FY2012: JPY 51,459,000

Yoshikuni YOSHIDA, The University of Tokyo

<ZF-1201>

After the accident at the Fukushima No.1 nuclear power plant, the utilization of nuclear energy in Japan is increasingly uncertain, while renewable energy is expected to be a promising technology. There are no countries in the world that have realized the great change in electricity supply mix that accompanies massive introduction of renewable energy, which is characterized by unstable output and low power-density. This study aims to show a path and measures for facilitating a smooth change of electricity supply mix. For this purpose, we first examine institutional issues of several scenarios involving massive introduction of renewable energy, while we assume that nuclear energy will be reduced according to the government's goals. Next, we will develop a model for optimizing the electricity supply mix with extremely high geographical and temporal resolution, which is absolutely necessary in order to evaluate the massive introduction of renewable energy.

We also evaluate the economic cost of realizing the new electricity supply system and the impact on the economy of Japan.



Information on calls for proposals

Schedule

The schedule and arrangements are announced on the ERTDF website, as well as on environmental and scientific websites. A call for applications is announced every October. Applications are accepted with a deadline of mid-November.

Application Procedures

All necessary application forms for proposals can be downloaded from the ERTDF website. The proposals are accepted through the Cross-ministerial R&D Management System (e-Rad).

Selection of Research Projects

After the application forms have been checked, the Planning Committee for Environment Research and its subcommittees, composed of outside specialists, will evaluate the proposed research projects. First, the proposals will be narrowed down in an initial screening of the written description. The remaining proposals will then be evaluated for final selection on the basis of interviews. Notification of approved proposals will be made every March. The results of the evaluation will include comments on the proposals and will be sent to the applicants after the selections have been made.

Inquiries

Ministry of the Environment, Government of Japan

- General inquiries, Environmental pollution, Ecological risks, Cross-field studies
Environmental Policy Bureau
Office of Environmental Research and Technology
- Health risks
Environmental Health Department
Environmental Risk Assessment Office
- Global system change, Protection/Restoration of nature and ecosystems, Research on sustainable society/policy
Global Environment Bureau
Research and Information Office
- Establishment of a sound material-cycle society and next-generation waste treatment technology
Waste Management and Recycling Department
Waste Management Division

1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975, Japan

Tel: +81-3-3581-3351 (Main)

<http://www.env.go.jp/policy/kenkyu/>

published in September 2012