

15 May 2007

ENGLISH ONLY

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention

Third workshop

Bonn, 16–17 May 2007

Dialogue working paper 5 (2007)

Submission from Japan*

* This submission was submitted on 15 May 2007 and has been electronically imported in order to make it available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the text as submitted.

International Cooperation for Adaptation to Climate Change in Developing Countries (Recommendations by Experts Committee)

Summary

May 2007

Ministry of Foreign Affairs of Japan

1. Introduction

The Working Group I contribution to the IPCC Fourth Assessment Report “The Physical Science Basis of Climate Change” released in February 2007, concludes it is highly probable that global warming of the climate system is unequivocal due to remarkable increase in global atmospheric concentrations of the anthropogenic greenhouse gases as a result of human activities. Global warming has significant impact on earth systems and human society, and it is a major responsibility incumbent on mankind to cope with its progress. In order to avert the devastating impact that abrupt climate change would have on natural and social systems, there is a great need to reduce emissions of greenhouse gases and also to implement adaptation measures to the risks of climate change that are unavoidable at least for the coming decades, such as increasingly serious water shortages and increases of damages in frequency and scale of such extreme weather events as drought, flooding and tropical cyclones.

Due to variation in phenomena like drought and flooding and also in the vulnerability of social systems, the impacts of climate change and the corresponding adaptation measures are diverse among countries and regions. Developing countries, in particular, have yet to take adequate measures to cope with current climate variability, and their vulnerability exposes them to the danger of being affected by the adverse effects of future climate change. Furthermore, within a given region or a single country, it is the socially disadvantaged and the poor communities, who reside in areas vulnerable to natural disasters and live heavily depending on natural resources, are more likely exposed to environmental changes brought by climate change. The issue of climate change is therefore tightly bound up with the concept of “human security” and with the long-term perspective of “sustainable development.”

Internationally, adaptation is also an important issue in international negotiations on post-Kyoto regime to address climate change beyond the first commitment period (2008-2012) of the Kyoto Protocol. The adaptation has also been an important issue in venues such as G8 Summits and the OECD.

The challenges of climate change are global in scale, and the international community must engage with them as a whole, but while adaptation is an important challenge involving the restructuring of social and economic systems, the international discussion of how it should be implemented and supported remains ongoing. The recommendations herein both set forth the key issues on adaptation approach, and describe required policies to promote adaptation measures in developing countries, and appropriate assistance that the international community including Japan should pursue.

2. Key Issues on Adaptation Approach

(1) Human security and sustainable development

Adaptation in order to improve society's resilience to climate change and to secure human security also constitutes an important policy towards achieving sustainable development. Adaptation measures are therefore unlikely to be a single policy aimed at adapting to the adverse effects of climate change but a comprehensive policy issue to be addressed in the context of development policies on poverty reduction, agricultural development, water resources development and disaster prevention. Due care must be given to the preservation of the natural environment and the sustainable utilization of natural resources from a long-term perspective when implementing the adaptation measures.

(2) The resilience approach

Enhancing adaptive capacity or resilience to the current climate variability and future climate change at the national and regional levels is one of the most important goals of an adaptation policy. When formulating adaptation measures, it is also necessary to consider how to utilize and enhance the local and indigenous resilience practices and knowledge possessed by local communities.

(3) The relevance between development and adaptation and mainstreaming adaptation

An effective point of departure for adaptation measures is to pursue that adaptive endeavors to current climate variability such as shortages of water resources and foods, prevention of meteorological disasters and health diseases, which will reduce vulnerability to future climate change. Another important perspective is to mainstream adaptation to climate change by proactively taking future climate change risks into account in current development planning and assistance.

(4) Regionality of adaptation approach

Impact, vulnerability and adaptation to climate change can not be predicted and investigated uniformly without considerations on local conditions in a targeted area. Therefore, adaptation approach should be considered with the situation of each targeted area such as the scales and types of impact, the capacity to adapt and vulnerability.

3. International Assistance for Building Adaptation Capacity in Developing Countries

Recommendations:

- (1) Assistance should be participatory, based on the attributes of a region and its residents, and enhance resilience at the level of individuals, especially the socially disadvantaged, and communities adversely affected by climate change.
- (2) Adaptation measures should be integrated into comprehensive development strategies at national and regional levels based on a long-term, cross-sectoral perspective to cope with the compound impacts of climate change. Adaptation policies should also aim at producing benefits in multiple areas at the project level.
- (3) International cooperation in observation, forecasting, impact assessment and other aspects of climate change (in particular, participatory frameworks of cooperation to strengthen the capacity of experts in developing countries) should be pursued to enable developing countries to ascertain and forecast the regional and domestic impacts of climate change and to perceive the risk of climate change.
- (4) Steps should be taken towards the aggregation and sharing of information on adaptation relevant technologies and knowledge.
- (5) Guidelines for mainstreaming adaptation considerations in development assistance projects should be formed. Support should also be provided to build the capacity required for responsible

parties in developing countries to mainstream adaptation strategies when drafting and implementing national development plans.

- (6) Training and public education programs should be put in place to raise awareness of climate-change risks among the public.
- (7) Those areas and tasks that are especially urgent, such as water resources, food supplies (agriculture), healthcare, disaster prevention, infrastructure and ecosystems, should be selected on a regional basis, in accord with the regional nature of impacts, vulnerability and adaptation. The selection of priority regions must take into account not only the magnitude of climate change, but the magnitude of impact risk are also based on regional population density and other factors.

4. International Collaboration on Supporting Adaptation in Developing Country

Recommendation:

It is important to form a common understanding of adaptation strategies among each party responsible for development and for climate change policy worldwide. Developing countries, donor countries, international organizations and like parties should share their expertise in fields relevant to adaptation and investigate cross-sectoral approach. Aid coordination in line with the respective comparative advantages of donors, coordination with NGOs and other community-level actors, and trans-national regional cooperation should also be positively promoted.

5. Conclusion: How Should Japan Contribute?

Recommendation:

Exploiting its experience and expertise based on its past performance in development assistance in fields with relevance to adaptation, Japan should play a leading role in promoting the coordination in the international community with respect to adaptation. To this end, Japan should identify good practices conducive to adaptation from its past aid experience, make intellectual contributions to the international momentum in adaptation to climate change, and exploit outstanding Japanese experience, policies and technologies within the context of international aid coordination. Furthermore, Japan should contribute to stimulating interest in adaptation within the development agencies of developing countries, for example by prioritizing projects that take account of adaptation in future Japanese development aid.

[Reference]

The table below gives specific examples of Japanese expertise and technology.

Sector	Japanese Expertise & Technology
Water resources	<ul style="list-style-type: none"> * Effective utilization of water resources through water treatment technologies (recycling of industrial water, wastewater purification, rainwater utilization) * Integrated catchment management technologies * Hydroelectric dams
Food supplies & agriculture	<ul style="list-style-type: none"> * Irrigation drainage technologies, with a focus on rice cropping, and agricultural facilities in general (e.g. paddy construction) * Crop development technologies, including biotechnology * Environment-friendly cultivation technologies (greenhouse gas reduction, low-input agriculture, multiple cropping, agro-forestry, rotational cropping technologies) * Food security policies (supply-demand planning, stockpiling, etc.) * Farmer organization and community support * Integrated rural planning, land use planning * Afforestation and greening technologies, forest management * General fishery technologies, including fish farming * Alley cropping (the cultivation of annual crops between rows of planted trees; combining wooded areas and grasslands in silvo-pastoral systems, with promising applications in Africa) * Fishery resource management, fishing harbor and fishing grounds improvement, etc.
Human health	<ul style="list-style-type: none"> * Protection against communicable diseases after flooding, health management for large events * Monitoring of harmful organisms (e.g. mosquitoes) * Airport and other quarantine systems * Installation and improvement of water supply and sewerage systems, other public sanitation system support * Installation and improvement of waste collection and processing systems * Provision of heatstroke-prevention information
Disaster prevention & relief	<ul style="list-style-type: none"> * Risk (hazard) mapping (earthquake, flooding, landslide and other micro-zoning) * Integrated disaster planning (applicable to the preparedness-response-aftermath cycle) * Building community disaster-response capabilities (public education and organization of local residents) * Building construction and operational capabilities in observation and communications systems
Social infrastructure	<ul style="list-style-type: none"> * Enhancement of disaster-capability functions in critical infrastructure * Urban planning and coastal management planning
Ecosystems	<ul style="list-style-type: none"> * Afforestation and vegetation restoration technologies * Vegetation mapping, biota surveys, ecosystem observation * Sanctuary planning and construction
Other	<ul style="list-style-type: none"> * Application of experience in social considerations (policy measures for migrants when building large infrastructure projects)

For further information including the full paper of the recommendation, see <http://www.mofa.go.jp/mofaj/gaiko/oda/bunya/environment/reference.html>
