

## Resilience under Climate Change

### Perspectives for Water, Energy and Food Security



The Japan International Cooperation Agency (JICA) together with the German Agency for International Cooperation (GIZ) held a side event with the theme of “Resilience under Climate Change - Perspectives for Water, Energy and Food Security -” at JICA Yokohama at 9:30 on June 2. From Africa, Mamounata Belem Ouédraogo, Minister of Water, Hydraulics and Sanitation of Burkina Faso took the stage. Hiroto Arakawa, Vice-President of JICA and Leonie Vierck, Health Advisor of GIZ represented the co-organizers. Other speakers and panelists included Kenzo Hiroki of UNESCO-ICHARM, Toshio Koike, professor of the University of Tokyo, Clayton Campanhola of FAO and Bethlehem Mengistu of WaterAid. They discussed the likely effects of climate change on water resources and possible adaptation measures against them from multiple and holistic perspective.

In Africa the significant impact of climate change on water resources is expected with increasing frequency and magnitude of floods and droughts in the future. The fluctuating water resources will seriously affect social and economic activities because they are a source of drinking water, food, and electricity among others that are indispensable to people’s lives. This side event was held to discuss how African countries can strengthen their resilience against the threat that climate change will pose on the stability of their precious water resources, and in what way should the international community continue to support them.

In the keynote speech, Vierck of GIZ introduced “The Water, Energy and Food Security Nexus” which is a concept that the German government is promoting, and showed there is a need for initiatives that encompass these three sectors which are closely inter-related. Following that, Koike of the University of Tokyo gave a presentation clearly showing likelihood of more frequent heavy precipitation and increasing droughts in Africa. He emphasized the importance of integrating earth observation data and reflecting science development (such as advanced modeling technology) into the policies and strategies so that precise estimation of climate change impacts can be provided for decision making and implementation of adaptation measures. In the subsequent panel discussion, Minister Ouédraogo of Burkina Faso indicated imminent effects of the climate change on water resources in her country and highlighted the importance of multiple and coordinated actions across the related sectors to address them.

Campanhola of FAO and Mengistu of WaterAid contributed to the discussion from particular viewpoints of promoting food security and WASH (Water, Sanitation and Hygiene) respectively. Koike expressed the science community's willingness to support the actions. In his wrap-up, the moderator Hiroki admitted the favorable trend that multi-sectorial and multi-disciplinary discussions are making progress towards the highly complex issue.

With valuable inputs from the experts of different disciplines, vulnerability of water resources in Africa under the climate change and necessity of a holistic approach involving related sectors together were shared with the audience. Based on the recommendations made in the discussions, GIZ and JICA will improve their respective aid programs related to water and the climate change, and also actively disseminate the holistic approach, or the Nexus approach, in international conferences to create effective solutions to the water problems in Africa.

■ Speakers at this Event

Opening Speech:

- Hiroto Arakawa, Vice-President, JICA

Keynote Presentation:

- Leonie Vierck, Health Advisor, GIZ
- Toshio Koike, Professor at the Department of Civil Engineering, University of Tokyo

Panelists:

- Mamounata Belem Ouedrago, Minister of Water, Hydraulics and Sanitation, Burkina Faso
- Toshio Koike, Professor at the Department of Civil Engineering, University of Tokyo
- Clayton Campanhola, Director of Agriculture Production and Protection, FAO
- Bethlehem Mengistu, Regional Advocacy Manager for Eastern Africa, WaterAid
- Katsuyoshi Sudo, Deputy Director General, Global Environment Department, JICA

Moderator:

- Kenzo Hiroki, Principal, UNESCO-ICHARM