

Fact-finding Efforts on Dust and Sandstorms

The following measures are being taken in Northeastern Asia to grasp the facts about DSS.

DSS Research

The onset and movement of DSS depend on various factors such as regional weather, land use, topography and geological features and these mechanisms are the subject of continuing research. Even though the direct damage to the environment and industry caused by DSS is known to some degree, its relation to global warming and acid rain is still not clear.

Therefore, it is important to understand the phenomena, by accumulating scientific findings.



Observations of blowing up of dust



Observations of aerosol using balloons



■ DSS sampling bases



A high volume sampler for aerosol collection

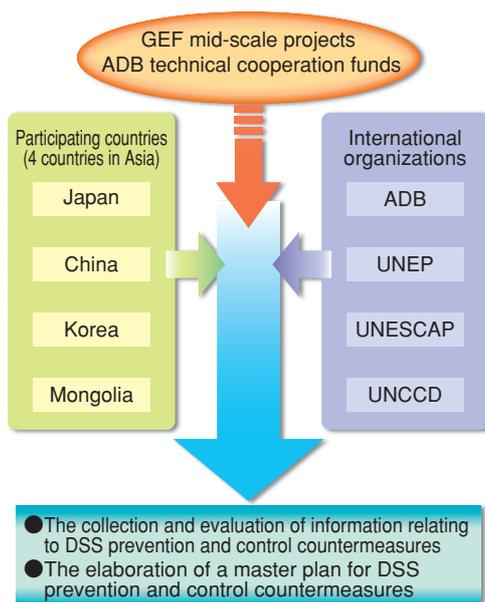


Yellow sand collected on filter paper

Fact-finding Study on DSS

To understand the characteristics of the DSS that fly over Japan, aerosol (fine solid or liquid particles that float in the air) was collected simultaneously at many points during a DSS event. By examining the size distribution and analyzing the chemical components of the collected aerosols, the quantity of DSS aerosol reaching Japan and its physical and chemical properties are scientifically understood.

ADB/GEF Project on Prevention and Control of Dust and Sandstorms



As DSS is a transboundary environmental problem, cooperation between affected countries is vital so as to realize effective investigations and countermeasures. Particularly, as the DSS source areas are not in Japan, joint international cooperative efforts are necessary for the implementation of countermeasures and the collection of data in these areas.

For that reason, one of the preliminary investigations of Global Environment Facility (GEF) was to launch a joint project (ADB/GEF Project on Prevention and Control of Dust and Sandstorms in Northeast Asia) in January 2003 by 4 international organizations (United Nations Environment Programme (UNEP), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), United Nations Convention to Combat Desertification (UNCCD), and Asian Development Bank (ADB)) and 4 countries (Japan, China, Korea, and Mongolia).

Elaborated in this project are the phased program of a monitoring and early warning network in Northeast Asia, and a master plan relating to prevention and control skills in the source areas and investment strategies.



The ADB/GEF Project on Prevention and Control of Dust and Sandstorms Report