Dust and sandstorm (DSS) is a serious environmental phenomenon in Northeast Asia. DSS involves strong winds that blow a large quantity of dust and fine sand particles away from the ground, and carry them over a long distance, often across national boundaries, with severe environmental impacts and socioeconomic consequences. DSS has thus become both regional and global concern. The major sources of DSS are the desert and semi-desert areas of the People’s Republic of China (PRC) and Mongolia. Despite continued programs and efforts made in PRC and Mongolia to combat desertification, the frequency and severity of DSS have increased. This situation calls for joint yet coordinated interventions among the DSS-affected countries through well-organized regional cooperation to tackle this long distance and transboundary environmental problem.

At the request of the governments of four DSS-affected countries—PRC, Mongolia, Japan, and Republic of Korea, the Asian Development Bank (ADB) approved in December 2002 the regional technical assistance for Prevention and Control of Dust and Sandstorms in Northeast Asia (RETA 6068, the Project) to support the establishment of a regional cooperation mechanism and framework to guide and coordinate the interventions to combat DSS concerns. Under the overall coordination of ADB, United Nations Environment Programme (UNEP), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and United Nations Convention to Combat Desertification (UNCCD) Secretariat have also been actively involved in processing and implementation of this regional cooperation project as the partners. The Project is equally co-financed by Japan Special Fund (JSF) funded by the Government of Japan and the Global Environment Facility (GEF). The Project received substantial technical inputs at its outset from GEF under the land degradation focal area of GEF.

Objectives and Scope
The objective of the Project is to promote the establishment of a regional cooperation mechanism for prevention and control of DSS and to facilitate cooperation for and coordination among interventions by the major stakeholders in Northeast Asia. The Project is designed to help the DSS stakeholders in (i) establishing an initial regional institutional framework that will enable international policy and operational coordination at a regional level, and (ii) formulating a regional master plan for alleviating DSS, based on a comprehensive assessment of scientific findings. More specifically, the master plan is designed to include (1) a phased program for establishing a regional DSS monitoring and early warning network, and (2) an investment strategy to guide land rehabilitation and mitigation measures in DSS source areas including recommendations on sustainable financing mechanisms and identification of 8 priority demonstration projects to disseminate the best practices in addressing the causes of DSS: 4 in the PRC and 4 in Mongolia.

The Project was designed consistent with the Regional Cooperation Strategy and Program for Central Asian Republics, PRC, and Mongolia, as well as the respective Country Strategy and Programs for PRC and Mongolia. The objectives, scope, and implementation arrangement set for the Project has proven to be relevant, appropriate and feasible.

Evaluation of Inputs
Inputs of the Project comprised (i) international consultants for 10 person-months and domestic consultants for 50 person-months, engaged by ADB on an individual basis, (ii) services of national experts provided by the governments of Japan and Republic of Korea, and (iii) counterpart staff of UN partner agencies and the 4 participating governments. All these inputs were organized and coordinated by ADB project team, with administrative support of a project secretariat established at the Regional Coordination Unit for Asia, UNCCD. The terms of reference were relevant, adequate, and solid as the basis to guide the consultants. The consultants engaged were generally
competent and capable of submitting the deliverables in the expected quality on time. Involvement of experts from Japan and republic of Korea as the national experts is innovative. They provided background information and data concerning programs to combat DSS in their own countries, undertook critical review of the draft reports prepared by the consultants, and participated in all the workshops and technical committee meetings as both professionals and the stakeholders from DSS-affected countries to ensure a participatory consensus building process. UN partner agencies and the governments of the 4 participating countries have all provided counterpart staff as committed during project processing, which have ensured a smooth implementation of this regional cooperation project. The governments of the 4 participating countries and the UN partners have all expressed their satisfaction with ADB in its capacity as the Executing Agency of the Project.

**Evaluation of Outputs**

As the outcome of the Project, a regional steering committee comprising officials and representatives from 4 DSS-affected countries (PRC, Mongolia, Japan, and Republic of Korea) and 4 partner international institutions (ADB, UNEP, UNESCAP, and UNCCD) has been established as the coordination mechanism to guide regional cooperation to combat DSS concern in Northeast Asia. The Regional Master Plan for Prevention and Control of Dust and Sandstorms in Northeast Asia (the Master Plan) has met all the targets and specifications set in the TA Report. In addition to the requirements of identifying 8 pilot demonstration project areas, 4 in PRC and 4 in Mongolia, the Master Plan has identified one more project located in an area crossing the borderline between PRC and Mongolia as a joint project for collaborative implementation by both PRC and Mongolia. The Master Plan has been cleared by the steering committee, and well-received and endorsed by the governments of the participating countries through various official statements including the Communique of the Tripartite Environment Minister Meeting (of PRC, Japan, and Republic of Korea). The Master Plan has also been published and disseminated both in the participating countries and various international conferences including Fifth Ministerial Conference of Environment and Sustainable Development in Asia and the Pacific (Seoul, March 2005) and Seventh Conference of Parties of UNCCD (Nairobi, October 2005).

**Overall Assessment and Rating**

The Project has achieved its goals and objectives in an innovative way through collaboration and participation of all the major DSS-related stakeholders in Northeast Asia. Engagement of substantive inputs from the domestic consultants and involvement of the national experts from Japan and the Republic of Korea have proven to be cost-effective. This arrangement, compounded with strict financial management, has helped the Project achieve its goals with substantive savings. The regional framework established under the Project was shown to be a practical and effective mechanism to address the policy, institutional, and technical barriers to the regional cooperation against DSS. This framework will continue its function beyond the completion of the Project. Project completion date was extended from 30 June 2004 to 28 February 2006. The extension was needed to accommodate (i) the postponement in project commencement due to the outbreak of SARS in 2003, and (ii) the requests for translation and publication of the Master Plan in the national language of all the four participating countries. Despite the extension of project completion date, the Project is rated highly successful.

**Major Lessons Learned**

DSS is a complex transboundary environment problem of both regional and global concerns. Engagement of all 4 DSS-affected countries as equal partners through frequent regional interaction at both government and expert levels has proven to be an appropriate and effective vehicle to further the regional cooperation against DSS. The ADB-led partnership of the international institutions including UNEP, UNESCAP, UNCCD supported by GEF has enabled the Project to benefit from the latest knowledge on DSS management and a strong network of advocates for positive changes at both the national and international levels. More time should have been allocated to accommodate the technical complexities in publication of the translated versions of the project report, such as availability of layout artists for the translated editions of the report, and software availability in the other countries.

**Recommendations and Follow-Up Actions**

At the request of the four participating countries, a follow-up regional technical assistance on support for establishing a regional DSS monitoring and early warning network is already under processing.

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1 The performance of most of the consultants was rated as satisfactory, while the performance of 3 consultants was rated as excellent and 1 short-term consultant as marginal.