

SUMMARY

[Title] A Study on the Current State of Environment Technology in North Korea for S&T Cooperation Methods between South-North Korea

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Because of the rapid climate change, North Korea is suffering from flood, drought, and devastation of forests damage. And North Korea puts a lot of effort to solve the environmental problems. But, lack of capability of self problem solving has exacerbated the environmental problems. Hence, this study focused on the present condition of environmental problems in North Korea and effort to solve the problems; policy and science and technology efforts. And based on the current condition and the effort, this study proposed science and technology cooperation methods on environmental field between South-North Korea, which can lead to a substantial results.

First of all, this study examined environmental problems of North Korea divided into climate change, air, water, forest and soil section and found out that environmental pollution in North Korea is deepening; use of coal intensifies air pollution, water pollution cause shortage of drinking water, and deforestation makes climate change faster. Secondly, the study focused on policy efforts of North Korean Government to solve environmental problems. North Korean Government amended and legislated specific environment-related laws and regulations to strengthen national management of environmental issues. But, North Korea is lack of monitoring system as well as measuring equipments, and short of information causes hardship of analysing current status. Therefore, it is hard to make policies and also having a difficult of effective problem solving and management. To find out activities of research and development of science and technology in North Korea in environmental technology, 246 environmental- related research papers, which have been published in North

Korean major journals from 2000 to the present, were analysed. The analysis showed that researches of environmental technologies in North Korea were just about the understanding current state of environmental problems. And the level of researches on practical problem-solving, managing methods of pollutions, etc were low and less concrete.

Considering practical and also achievable outcomes, this study suggested S&T cooperation methods for environmental section between South-North Korea as follows. First, derivation humanitarian cooperation method by constructing environmental pollution monitoring system in domestic. Second, conducting S&T cooperation between South-North Korea to strengthen the capability of environmental problem-solving of North Korea. Third, suggesting a collaborative research project to solve environmental problems in North Korea. Fourth, discovering possible collaborative project of environmental issues for Korean peninsula which is beneficial to both South-North Korea. Last, proposing making a test site in North Korea to solve environmental problems in North Korea.

This study also suggested three demonstration projects: a cooperative project for managing water quality of Lim-jing river; a cooperative project for management of environmental pollution in Rajin-Seonbong special economic zone; a cooperative project for joint response to yellow sand problem.

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