

Research on Development of Environment Policy Subject and Evolution of Environment Governance to Cope with Future Environment Issues

• CONTENTS •

1. Purpose of Research	1
2. Major Aspects	2
3. Results	3
4. Applications	4
5. Source	4

1. Purpose of Research

- The purpose of present research is to cope with the current & future environment issues, and develop the policy subjects for evolution scheme on environment administrative affairs & governance system based on the diagnosis conducted on the result and limitation of key environment issues & countermeasures related.
- Diagnosis on the present & future environment issues such as humidifier disinfectant, fine dusts, climate change & etc. and results & limitation of related countermeasure, and the preparation of effective countermeasure policies on these issues are required.
- Development of evolution scheme on environment administrative affairs such as clear division of tasks among central government agencies, among Ministry of Environment offices & bureaus, between central & local governments together with the decision making system, and the heightening the effectiveness of governance system are required.
- The result of present research is to be utilized in coping with the key environment issues, and establishing relevant policies for evolution of environment administrative issues & governance system.

2. Major Aspects

1) Environment Risks and People's Health

■ Fine Dust Reduction Policy

- Average PM10 concentration by May 2016 in Seoul metropolitan area recorded 56ug/m³ not only exceeding the reference standard of 50ug/m³ but also retaining the concentration values higher than that of 44ug/m³ recorded during the same period of last year.
- PM2.5 of 28ug/m³ as well exceeded the reference standard value of 25ug/m³. When applying 20ug/m³ (PM10) & 10ug/m³ (PM2.5), the standard values of WHO, the number of days meeting these reference standard value requirements were only two days of March 13th & May 3rd.
- Several alternative plans such as revision of automobile fuel price system structure, introduction of nitrogen oxide gas emission site levies, and establishment of index system verifying the fine dust generating sources for reduction of fine dusts were suggested.

■ Biocide Control

- Biocide refers to the controlling non-agricultural pesticides, all the products controlling & removing the organic matters not desired, which include the products such as Active substance : Pyrethrin, Treated article : MOS-LOCK, & Biocidal product : NaturKill.
- Biocide control system verifies the status of damages inflicted by biocide in Korea, diagnoses the problems of biocide control system, and conceives the improvement plans.
- The current biocide control systems are distributed to various government agencies & bureaus and individual laws & regulations, which make the integrated management of system complicated. The integration of biocide control systems, plan for introduction of biocide control relevant laws & regulations, and supplementation of Environmental Impact Assessment Act have been reviewed and discussed.

2) Environment Administrative Affairs and Governance

■ Establishment of Environmental Governance

- Adjustment on the scope of environment related works among the offices of central and local governments is required based on the review and discussion conducted on the need changing the structure of environment administrative affairs in order to effectively implement the functions of Ministry of Environment.

■ Integrated Natural Environment Management

- Needs of verifying the time & space status and trend related status of natural environment, plus the continuous renewal & accumulation of relevant observation data have increased.

- Plans for application of citizen's scientific activities (Activities on fundamental environment related ecosystem information conducted by citizens & semi-professionals in natural environment field) were explored, and its reasonable utilization, and suggested the integrated DB among the local governments, people and country were suggested.

3) Climate Change and SDGs

- Practical effort & result regarding the reduction of greenhouse gases in Korea were assessed, and the plan for raising effectiveness of Greenhouse Gas Reduction System was reviewed.
- Practical effectiveness issue of international cooperation system regarding the climate change was discussed reviewing the improvement scheme on Korea domestic policies related to climate change.

4) Environment Fund and Taxation System

- Planning of environment fund performance result by reviewing the renovation of government budget and Funding Performance Management System.
- Alternative plans linking the performance results between central & local governments, unit project & control system issue, and budget accounts discussed.
- Environment friendly revision plans on environment related taxation systems focused on the energy tax system suggested.

5) Earthquake Forecast and Response System

- Characteristics of earthquake occurrences in Korean peninsula diagnosed, and response plan minimizing the environmental impact of earthquake discussed.
 - An earthquake of 5.8 seismic intensity, the largest one in Korean peninsula's earthquake record, occurred around Kyeongju. Kyeongju area was announced as the Special Disaster Area caused by earthquake related damage for the first time in Korean history on September 22nd, striving to recover the damages inflicted on housing, cultural treasures & others but the fundamental nation-wide earthquake response system stays under insufficient level.
- Preparation of risk related regulation with the off-site impact assessment and risk management plan is necessary, suggesting the alternative plans such as detailing of earthquake zone diagram, data accumulation, tap water facility management plan, establishment of master plan for local government tap water system & others.

3. Results

- Possibility of reappearing the damage like humidifier disinfectant still exists, which may induce the lung damage out of such damage.

- As for the wide area water supply system, being mostly embedded in big cities and large scale industrial complexes containing heavy human & factory populations, the tremendous social & economic loss may occur if the disaster damage risk and run-down of facilities are left alone.
- Current environment related tasks are divided by the central government and local municipal, yet many of those local government tasks are practically engaged with the involvement of central government.
- Having the local government hold equivalent legal status with the central government is the fundamental rule in the local municipal system. However, the content of relevant laws & regulations assumes the central government position as higher than the local government, which in many occasions no financial supports were materialized in fact.

4. Applications

- Either additionally supplement and/or revising the legal contents of Chemical Assessment Act for biocide control, or establishing & introducing a separate Biocide Control Act [provisional name] regulating only the biocide is required.
- Preparation of regulations considering the off-site impact assessment and earthquake danger in risk management plan are required.
- Establishing of programs for forecasting damage and responding the disaster recovery in the event of earthquake disasters is required.
- Establishing of long term and systematic greenhouse gas reduction goal considering the future energy utilization is required.
- While the climate change field is the one of areas showing the highest tendency of integration with environment area, yet most probably the role of competent environment task related government ministry seems to be staying in the preparation of national schemes or being a window for overseas cooperation. Having the climate change responding control tower belong directly to the President's Office as a form of adjustment mechanism (e.g. committee) may be considered.
- Need of returning Specific Consumption Tax, equalization of taxation, appropriate tax income distribution of energy related taxes, and reinforcing the power consumption are increasing.

5. Source

- Korea Environment Institute (www.kei.re.kr)