

# **Progressive Public Choice and Conservative Policy Change: Political Economy of the Korean Environmental Policy**

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## **Abstract**

This paper examines the gap between seeming progressive public demand for cleaner environment and lagging policy responses of the government. Public attitude toward environmental protection has been analyzed along with four different categories of environmental conflict and problems. There are diverse inconsistency and discrepancy between public attitudes and their behaviors. Key policy outputs are reviewed with special emphasis on environmental investment. Several factors that may explain the passive and conservative government move toward environmental protection have been identified. Those include, inactive public pressure on the government and the industry, ineffective mechanism for transforming people's demand into government decision, the ideology of developmentalism in the policymaking circle, weak local politics and administration, and oligopolitic industrial structure.

## **I. Introduction**

Beginning the late 1960s, anti-pollution movements in industrial regions had been observed in Korea. Resident's protest in Ulsan, near the Ulsan Petrochemical Combinat, might be recorded as the first anti-pollution demonstration in Korea. After that there have been few serious pollution-related incidents that have involved casualties or heavy material damages. Nevertheless, the people's attitude toward pollution has been changed so drastically as environmental quality degrades down to a certain level.

As Korean people enjoyed the living standard of affluent society in the 1990s, their anticipation for cleaner environment become stronger than ever. In newspaper articles, the term ESSD(Environmentally Sound and Sustainable Development) has been used repeatedly for a long time. Many scholars are talking about the ways of introducing the Green GNP concept into the national economic accounting. However, the real response from the government and the industry to the vocal public opinion is not so keen. The aim of this paper is to analyze the gap between the public's demand for cleaner environment and lukewarm measures taken by the government and the industry. The two different faces of public attitude toward cleaner environment will be analyzed; the gap between the vocal demand for cleaner common good and stingy commitment for recycling society needs to be understood more precisely. The measures taken by the government and the industry are closely reviewed, and the reasons for the slow responses are sought; moreover, some prescriptions to put the pressure on the government as well as the industry are suggested.

## **II. Unbalanced Development and Degradation of Environmental Quality**

### **1. Rapid Industrialization and Urbanization**

For the Korean people, the last 30 years (1962-1992) have been the continuation of discontinuities in almost every sphere of their lives. This is true in the case of natural as well as artificial environment. The following table shows several important indicators related to the environment load and their changes in the last 30 years.

As following indicators show, the last 30 years can be fairly summarized as the age of compressed change. Although it is hard to link those indicators to the amount and category of pollutants, it is self-evident that those changes have raised serious problem of pollution. Korea may be in better position than Taiwan in terms of potential environmental load, but worse than Japan, France, U.S., and Germany in many respects.<sup>1)</sup> In GDP(Gross Domestic Product) per square kilometer of inhabitant land, Korea was ranked among the top group with Japan.<sup>2)</sup>

During the early stage of industrialization, environmental protection was not fairly treated and economic growth was one of the two national objectives along with national security. As the government and the industry were primarily possessed by the demon of economic growth, they were not able to be aware of environmental values. They had not recognized the simple fact that they were sowing the seeds of tremendous environmental disruption. During the early development stage, almost all the Koreans were not in the circumstance to enjoy the latitude of mind in balancing various human values, still less the environmental

**<Table 1>** Major Environmental Load Indicators

Indicators	1962 (a)	1992(b)	b/a
GNP (billion\$)*	23	2,945	128
GNP per capita (\$)	87	6,750	78
Petrochemical Industry (ton)	20,000	3,250,000	160
Electric Power (GWH)	1,470	115,244	78
Urbanization Rate (%)	29	79	(+50)
Automobile	30,000	5,200,000	170

Source: EPB(The Economic Planning Board) of Korea, *Economic Statistics*, 1965, 1970, 1993.

\*: current price

values: At the time, more than half of the population were below starving level.

During the last 30 years more than 50 percent of the whole population moved from the rural area to the urban area. Economic earning is found as the most significant determinant of the urban mobility during the period.<sup>3)</sup> Factories were built around the cities where needed manpower could be found easily. However, the urban physical infrastructure had not been properly reinforced in step with the rapid concentration of the factories and population.

To make matters worse, energy intensive heavy industry had been taken for strategic sector of industry for economic takeoff. Beginning mid 1970s, petrochemicals, cements, steels, and electric power generation industries had been vigorously promoted. These are the heavy polluting industries. Automobile and shipbuilding industries had been also stimulated in the mid 1980s. The industrial policy taken at this time proceeded to be a success factor in the Korean economic development.

Energy consumption had increased very steeply from the start of those industries. Energy elasticity to GDP of Korea had been larger than those of any other industrialized countries. Even after the experiences of the oil crises in 1973 and 1980, the industry and the government could not have taken any effective measures for efficient energy use pattern in the industrial sector. Experts point out the urgency of upgrading energy efficiency in manufacturing process and demand management in energy market.

In addition to the rapid growth of the polluting industries, the policy orientation during the development era must be attributed to delayed policy responses to ever deteriorating environmental quality. Economic growth-oriented ideology embedded in policymaking circle put restriction on ever weak attempts to mobilize public concern as well as financial resources for protecting environment. It has been also deeply engraved among the policy makers that there is square con-

flict (or trade-offs) between environmental protection and economic growth. Environmentally friendly development or compatibility of the two competing values was not heard at the time. The views of industrialist seems to have infused into policymaking circle without proper filtration. At the time, few experts pointed out that kind of argument was not valid nor based on empirical evidence.

## **2. Changes in Environmental Conditions**

The overall environmental condition in the Korean Peninsula can be fairly assessed still in deteriorating stage. Compared to the environmental indicators that describe environmental conditions before 1980, only a couple of indicators show improvement. SO<sub>2</sub> contents in terms of ppm in the air is in declining trend in big urban areas. The same is true in the areas of water, land, noise, etc..

However, there are also many exceptions to this kind of general trend. TSP(total suspended particle) is decreasing in the major metropolitan areas. The BOD (biochemical oxygen demand) indices of two long rivers, the Han river and the Nakdong river, become stabilizing after mid 1980s. On the other hand, qualities of other rivers are reaching serious pollution level. Especially, the qualities of the Youngsan River and the Gum River have been deteriorating in the worry of the residents.

Air conditions in several metropolitan areas are reported at serious level. As the number of vehicles jumps day by day, a large amount of nitrogenous pollutants have been discharged to the already heavily polluted air. Many specialists are concerned about the smog which appears in the Seoul sky. The contents of the smog have not been known scientifically, nor been reported the harmful effects on human health in detail. Although the exact size was not found, the value of clean air has been significantly materialized in housing and land prices in the big metropolitan areas.

Water contamination is believed to be serious. Every citizen distrusts the quality of public water. Some upstream water where the public water is taken for hygienic treatment is reportedly maintained as the second grade, not the first one. Private water industry is one of the fast growing businesses in Korea. Its total sale is far above 200 billion won a year. Almost all the students carry "private water" pots for their daily drinking in school. During the dry season, public water from main rivers could not be distributed, for a short period of time, due to hygienic problem. As far as ocean pollution is concerned, the situation is not better than any other field of pollution. The prospects of clean ocean around the Korean Peninsula is very bleak. Experts on soil contamination assess the present condition at bad state and the future prospects very gloomy.

**3. Changes in Public Attitude**

As environmental quality is deteriorating, people responded very sensitively. Beginning in the mid 1980s, environmental conditions were deteriorating seriously enough to result in several severe incidents. Many environmentalists actively protested government's inaction and tried to mobilize mass concern. There seems to have been three reasons why the environmental issue became salient in 1980s. The first one comes from the fact that environmental condition was really serious enough to activate people's action. Another seems to come from the democratic political atmosphere, after authoritative military regime, which enabled civil movement as the civic society becomes active. Lastly, people's environmental awareness begins to grow as their living standard improves.

Although there were no serious actual accidents, such as, Minamata, Itai-itai diseases in Japan and the notorious London Smog in which heavy casualties were involved, several cases in the industrial sites showed sufficient evidence that environmental qualities reached worrisome level. Recent incidents of river contamination in the Nakdong River and the Seomjin River in the Spring of 1991 and 1994 are of great significance in terms of scale and social impact.

People began to believe that natural as well as artificial environments must get proper consideration in regional development and resource allocation, involving environmental investment. This is especially true as the economic capacity of a country gets larger. The Ministry of Environment is trying to protect the environment. The actual effect of such endeavor, however, is not felt by ordinary citizen. People still think that the government policy is at the stage of the euphoric enthusiasm or symbolic phase in many aspects.<sup>4)</sup> In this stage, there are policy tools for all appearance but they are never effectively implemented to attack mounting pollutants. The public calls for solutions and the government and politicians promise action, but expected outcome hardly realizes.

However, people's responses were not the same among the types of pollution they experienced. Pollution may be experienced as an ordinary resident or as a member of specific pollution-injured group victim. Also polluters can be identified

<Tabel 2> Types of Pollution-related Interaction

the injured the injurer	specific	non-specific
specific	I	III
non-specific	II	IV

either as an injurer or cannot be identified as a specific injurer. There can be four types of categories according to the classification mentioned above. The groups can be classified as follows;

The conflict in Category I is at very serious level in Korea. So called NIMBYs (Not In My Back Yard Syndrome) is blowing the Korean society. For example, anti-nuclear protest from the local residents has made it very difficult for the government to carry out plans to build radioactive waste disposal facilities.<sup>5)</sup> Any facilities that will bring about negative aspects such as waste pumping site, cemetery, welfare facility, in the nearby villages must dare resident's violent protest. Local level expression of complaints against the one-sided government siting policy is a kind of fashion in the Korean society. Residents' organized demonstrations and direct confrontations are common feature; their solidarity is very high and their attitude is very stubborn.

In the case of Category II, where the injurers are not known but the injured (victim) are specified, people tend to blame the government. The government tries to find out real injurers, but usually in vain. Environmental groups should pay attention in this field; especially in water contamination of a certain rivers and area-specific air pollution. Organized environmental groups should carry out their watchdog activities with the help of scientists. Nevertheless, it seems to take a long time for Korean environmental groups to be able to take such effective measures.

Any pollution problem that belongs to the Category III must be controlled first by the government, but the monitoring system is not working effectively. Administrative infrastructures that enable the pollution control mechanism to work have not well developed. Especially, the local administrative capacities that deal with the pollution is very weak. There are allegedly various ways to evade environmental regulations skillfully in local level.

The Category IV indicates general public's awareness of generic level of pollution. Public concern on the seriousness of pollution grows by leaps and bounds beginning late 1980s. In 1982 survey, 71 percent of people responded that pollution, at its general sense, is 'very serious condition' and/or 'serious condition'. The ratio went up to 78 percent in 1990, and 90 percent in 1991.

When they were asked more specifically about ambient air pollution and drinking water contamination involving their daily lives, their response was, to our surprise, quite a bit lower than the general feeling. Only 34 percent of people responded that the environment of their neighborhood was 'very serious' and/or 'serious' in 1982. The ratio was maintained at 34 percent in 1987, and went up to 38 percent in 1991.<sup>6)</sup>

Based on the responses upon the surveys, it may be told that people showed keen awareness on the general condition of the national environment, but they

tend to evaluate their nearby neighborhood environmental condition is not so seriously bad. This is one of the important aspects of the people's attitude toward environmental condition. People are generally believed to be aware of environmental problems at abstract level not based on their direct experience. When the environmental protection measures put some burden on every citizen, many of them will complain because they can not see the benefits they can yield easily. This is the discrepancy between people's attitude toward pollution and their behavior toward approaches to pollution abatement.

When they were asked about the importance of environmental protection in comparison with other social issues, the urgency of the environmental issues goes up year by year. In 1982, only 6 percent of people responded environmental protection is the most important issue of the society, and its ratio went up to 17 percent, and 21 percent in 1987 and in 1990, respectively.

Another survey done in 1982 showed that environmental preservation and pollution abatement ranked the 7th important domestic social problems to be tackled urgently. This rank went up to the 3rd position in 1987 survey, and eventually arrived at the 2nd position in 1990. The 1990 survey is very interesting in several aspects: (1) 64 percent of the respondents said they were suffering from pollution more or less; (2) criminal problem was the most serious one, and environmental problem the second, economic problem the fourth urgent problem; and (3) more than 71 percent did not trust pollution-related information supplied by the government. Among the pollution problems, water contamination stands at the first front, followed by solid wastes and air pollution.

### **III. Ineffective Input Activities and Lagged Policy Responses**

#### **1. Political Concern**

Before mid 1980 it was not easy to find any independent environmental movements. The authoritative government prohibited the formation of civil movements or civil groups. The government regarded civil movements as challenge to the government authority, and discouraged formation of society. At the time anti-pollution movement was very meager and their activity, if any, was focused on opposition against the importation of the oversea pollutants from the industrialized countries. The government regarded such a movement as an obstacle to economic growth. After June 1987 the political atmosphere has been drastically changed. Students and civil groups pushed the government to respond to their request for democratization. Civil society became activated with the growth of the middle class as well as the working class. Various civic groups began to form. The emergence of intermediary groups in the Korean politics is another phenomenon

indicative of growing mass confidence in the citizen's role. The educated middle class has begun to be the protagonists in the new activation of civil society.<sup>7)</sup>

In 1992, 128 associations and groups are registered as environment-related organizations, and their legal statuses are diverse. Environmental groups have begun to form in local home town basis. Local men of letters are key members of those groups, and regional environmental groups have grown up to be nationwide organizations. There are many environmental groups with nationwide network; YMCA, Green Scout, Federation of Pollution Repellent Movement Association, BaeDal Federation of Environment, and so on.

The environmental movement was developed as a set of discrete and spontaneous events rather than as a coherent, consciously elaborated political campaign. Therefore, these groups have a hard time in mobilizing the members for an event, and membership fees are not efficiently collected, still less contributions from the concerned public. Even so, a flourishing press provocation of environmental problems are widely publicized and provoke public concern. Anti-pollution movement has begun with a series of local siting disputes that arouse local concern.

## 2. Governmental Responses

As the environmental condition degrades, the government, to a certain degree, tries to take measures to maintain the quality of environment. In 1980, the government established the Office of Environment as a sub-ministrial level agency. The status of the Office was upgraded to the ministrial level responding to the mounting public demands and ever deteriorating environmental quality in 1990. The ministry reshaped legal structure and tried to increase the environment-related budget. The following table shows the portion of the environment-related budget

<Table 3> Environmental Budget Share of MoE

(unit: Billion Won)

Year	Ministry's Budget	Total Budget	Ratio(%)
1980	12.1	6,467	0.187
1982	20.8	9,578	0.217
1984	34.3	10,967	0.313
1986	43.3	13,801	0.314
1988	77.3	18,429	0.419
1990	92.2	27,456	0.329
1991	243.4	31,382	0.776
1992	269.7	33,200	0.812

Source: MoE(The Ministry of Environment) of Korea, *Environmental White Paper*, 1992, p.



of the Ministry of Environment (MoE) out of total government budget. As can be seen in the following table, the absolute amount of the environment-related budget gets bigger and bigger, and the share out of total governmental budget becomes larger.<sup>8)</sup>

When we consider the budget included in the other environment-related ministries in the central government, the budget share become much larger. The following table shows the total environmental budget of the central government. As can be seen in the following table, total money used for environmental protection jumped in 1990. Such a trend seems to be maintained in the near future, but this level of investment is still far below when compared to those of the advanced countries.

<Table 4> Environmental Budget Share (Central Government)

(unit: Billion Won)

Year	Total Environ-mental Budget	Ratio(Budget)(%)	Ratio(GNP)(%)
1988	216.0	1.17	0.16
1989	180.6	0.94	0.13
1990	252.4	0.92	0.16
1991	496.3	1.58	0.24
1992	570.6	1.72	0.25

Source: MoE of Korea, *Environmental White Paper*, 1992, pp. 29-30.

The following table shows GNP share of environmental budget of central or federal government in several major countries. Although the figures cannot be used as indices for accurate comparison due to the difference of governmental budget system, the present level of resource allocation for the environmental protection programs in Korea is considered relatively very low.

<Table 5> GNP Share of Enviornmental Budget of Central Governemnt

(Unit: Percentage of GNP)

Country	Korea	Japan	U.S.	Sweden	Swiss
Year	1992	1985	1985	1985	1985
Percentage	0.25	0.34	0.57	1.69	1.03

Source: MoE of Korea, *Environment White Paper*, 1992 ; OECD, *Environmental Policy and Technical Change* (Paris, 1986).

The public expenditures made by the state and local governments must be added up to arrive at the total government expenditure figure. It is very hard to

find out any comprehensive environmental expenditure data made by the states and localities. The resource allocation function carried out by the local governments in Korea is very limited. The local government's financial resource used for environmental protection, in terms of ratio, does not seem to exceed those of the states and localities in the advanced countries.

### **3. Environmental Regulation and Investment**

Regulation game among the government, the industry, the environmental groups, and the general public is carried out in favor of the industry. The industry tries to find out every tactic to evade the cost of environmental regulation imposed. The government has carrots to induce private investment. The government can give preferential treatment to pollution prevention equipment, and research and development activities for clean technology. Policy tools include tax deduction, accelerated depreciation, exemption from import duties, low interest loans, and direct subsidies.

The public, especially environmental groups, blames the government for ineffective handling of the polluting industry. Pollution-related injured groups directly put pressure on the polluting industry which inflict harmful effects on them, but the pressure on the industry coming from the general public is hard to perceive.

Mass Media, very often reports on illegal pollution discharges and environmental incidents and accuses the polluting corporation. However, Mass Media's major activity has been focused on the wastes reduction and water contamination originated from the household. Mass Media launches campaign targeted at public's behavior rather than industrial compliance or technological development. The government, which is still strongly biased towards "short-run production-first principle," is hesitating to implement regulations that are allegedly too strict for the industry to accommodate.<sup>9)</sup> Often the ineffectiveness of government regulation has been criticized. The Ministry of Environment is not strong enough to exercise policy instruments stipulated in the related laws. Regional as well as local administrative infrastructures are not well developed. Equipments are outmoded and manpower is not properly trained. Government regulations are usually disturbed very skillfully by big corporations.

The government cannot strictly regulate the small and medium sized enterprises for fear of plant closing. At this stage, it will be too much burden for small polluting company to comply with all government regulations. Although the government introduced advanced system of regulation such as effluent charge system, it lacks monitoring network and administrative infrastructures which enables market oriented system works. Therefore, it is well known secret that small sized plants do not abide by standards set in laws.

The following table shows corporate pollution-control investments. The figure shows how much money is used in procuring pollution abatement facilities out of total new facility investment in the private sector. As can be seen from the following table, the present level of investment for pollution abatement by the industry in Korea is far below than the investments made in the other two countries. The industries in the other two countries spent much higher portion of their investments for pollution abatement during the 1970s when their environment was worse than these days.<sup>10)</sup>

Recent report made by the government estimated that the corporate pollution-control investment ratio (PCIR) made up 1.6% or so of total investment. Even this low level of investment is considered a cost that the industry tries to evade if possible. Moreover, some pollution control facilities are not being operated on a regular basis.<sup>11)</sup> It is noteworthy that Taiwan's PCIR reached 6.8% in weighted average term. The Taiwanese steel industry has the highest ratio of 12.5%, followed by cement, as 12.2%, and leather, as 9.4%.<sup>12)</sup> These ratios seem far less than the Japanese ones in the mid 1970, but clearly higher than those of Korea.

The total amount of investment used in pollution abatement activities in Korea, including government budget and private investment all together, seems to reach around 0.7%-0.8% of her annual GNP.<sup>13)</sup> It must be pointed out this estimation is very rough one and the reliability of the data used is not well proven. Industrialized countries with moderately sound environmental quality have been investing about 2% of their annual GNPs for environmental protection during 1970s. And the U.S. government plans to increase the share up to 3% in the coming 10 years.<sup>14)</sup>

<Table 6> Pollution-Control Investment by the Private Sector

(Unit: Percentage of total facility investment)

Year	Korea (a)	U.S.A. (b)	Japan (c)
1975	0.2 (0.3)	5.8 (8.7)	17.7
1981	0.7 (1.7)	2.8 (4.2)	4.8
1985	0.7 (1.2)	2.0 (3.3)	4.9
1988	0.6 (1.4)	1.9 (4.1)	4.1
1992	(1.6)		

Sources: Korea Industrial Bank, "Equipment Investment Survey," 1991; U.S. DoC, "Survey of Current Business," 1990; MITI (The Ministry of International Trade and Industry) of Japan, "Survey of Equipment Investments on Industrial Pollution Abatement," 1990.

( ) indicates pollution-control investment ratio(PCIR) in manufacturing industry.

(a): all industries except construction, inn and hotel, and power generation industries

(b): all industries except agricultural industry

(c): manufacturing and energy related industries.

According to an estimate by OECD, the ratio of Japan's expenditure for pollution control measures to the GDP(Gross Domestic Product) reached 3% in 1975. At the time the industry put more than 17% of their total facility investment for environmental-protection facilities.<sup>15)</sup> Japanese enterprises responded to the strict government regulations with increased investment and technological development. The government does not seem to judge this level of environmental degradation is dirty enough to initiate comprehensive clean up policy. She is eager to induce the industry to produce more and her appreciative eyes get made muddy through tactful maneuvering of the industry.

The recent government formulated "New Economy Plan" in order to stimulate the economy. The basic goals of the plan include, securing the growth potential, expanding the foreign market, and improving the nation's living conditions. The government emphasizes deregulation of economic activities. The policymakers did not pay ample attention to the social aspect of the environmental regulations. The Environmental Sector Plan of "the New Economic Plan" identified several goals such as technology development, expansion of protection facilities, securing financial resources, and so on. However, the plan lacks implementation strategy including resources mobilization scheme. During the first phase of the plan, even several environmental regulations seem to be deregulated at the implementation level. During dry season, the quality of rivers where public water was pumped out degraded, showing the seriousness of the water pollution. The Ministry of Environment emphasized the seriousness of the environmental quality and set up a couple of plans to increase the size of investment needed to upgrade the environmental quality. However, actual implementation seems to take time due to difficulties of securing approval from the economic and the industry-related ministries.

#### **IV. Explaining the Gap**

With the proceeding of democratization with the civilian government, the bureaucracy and the ways of administration should change to a certain extent. The new government is heading toward "small government" in terms of authority and size. Unfortunately, it is hard to find out any significant policy change in the environmental policy area. Recently, there are vocal campaigns and political flurry for environmental preservation. Government's environmental budget is increasing modestly. Nevertheless, economic-growth-first policy orientation is held very firmly in the government policymaking circle. The time of environmentally sound and sustainable development is far away and even environment-friendly development will take a long time to be realized. The priority of environmental preservation is moving upward but it is too slow.

Developmentalism which has long been embedded in the Korean policymakers cannot be easily balanced with environmentalism before serious environmental incidents happen. It has been hardly possible for the Korean government to change policy direction without experiencing tragic accidents. The Korean style of developmentalism is basically based on economic growth oriented industrial policy. Its elements include, (1) the principle of market competition with private ownership, (2) unbalanced approach to socio-economic development based on the economic planning, (3) economic growth oriented industrial policy, (4) boosting export oriented manufacturing, (5) the development of large scale enterprises, and so on. With this kind of developmentalism, "get dirty, then clean up development strategy," has been naturally taken.

There seem to be several factors which can explain the progressive public demand and conservative governmental action. The first reason is coming from the ineffective public participation. People are very sensitive to the direct harmful effects of pollution on them or facility location in their neighborhood, but it is really unknown that general public are truly ready to accept the potential burden in order to have better environmental quality. Average living standard is still low compared to other advanced countries; GNP per capita is just above US \$7,000.

Serious environmental accidents like Japan have not been happened. Many people are worrying about the deteriorating quality of environment but their attitude surveyed and behavior observed are not consistent with each other. Still the attitude of general public is clinging to the economic achievement. The voice of environmental group, coupled with militant demonstrations of potential victim groups, is heard loudly, but the behavior of general public is aloof.

Mass Media is focusing on the mass consumption related pollution rather than industrial pollution. Recently major daily papers launched long run campaign for cleaning up the dirty rivers and streams, but their focus is not well addressed to the core issues, such as, pollution prevention investment or tightening up environmental regulations. A couple of leading daily newspapers, including the Dong-A Ilbo, and the Chosun Ilbo, are focusing on stream cleanup and solid waste reduction. A few national politicians are also leading environmental movement, but their first concern seems to be on forming network as a vote mobilization mechanism rather than environmental protection.

The civil society had not been working before 1980s under the authoritative military dictatorship. At the time civil organization was recognized by the ruling politician and bureaucrats as anti-government political group. In 1990s the civil society became awake, but it will take a long time to work soundly. The environmental movement is, at this stage, not well organized. The leadership mainly comes from academic circle and their activities are limited. It is not easy to find out volunteers nor to expect contributions for environmental movement. The

mechanism to transfer the general will to substantive policy is not working effectively in Korea at these days.

The second factor, related with the first factor, is coming from the weak local government or local autonomy. Based on the experiences, local governments in the advanced countries play an important role in bringing better environment into their hometown. For example, Japanese local governments took initiative in environmental pollution prevention in 1960s and thereafter. Environmental regulations adopted by local governments were more progressive and stricter than those of the central government. Many progressive governors and mayors, elected in 1950s, were very active in protecting their region from pollution. Many local governments made agreements with local industries to define the essential duties of enterprises in protecting regional environment.

Just burgeoning local politics and weak local governments cannot be a good engine for effective environmental protection in Korea. Local councilmen were elected by direct resident vote about three years ago, but governors and mayors are still appointed by the president. The local politics is now burgeoning into reality, but majority of the councilmen are pro-industry or pro-business. The autonomy or latitude that local government can enjoy is quite restricted. The tasks and activities local government can carry out have not been well developed.

Recently the central government has intended to delegate authority of regulating environmental affairs toward localities. This has been believed to be a desirable policy direction in the long run, but the politics in the local arena is not favorable for the local executive body to carry out stricter environmental regulations. Local businessmen have developed a close connection with local politicians and local bureaucrats. Although it is a brief observation, the local government is not a better alternative to the central government in effective environmental protection.

The economic policy circle in the government, including central as well as local government, seems to be a blocking groups for improving environmental quality. The Ministry of Commerce, Industry, and Resources, the Ministry of Construction, and the Economic Planning Board comprise the core of the blocking body. Nowadays they are talking about importance of the environmental quality but real actions are not being taken.

There are a couple of coordinating bodies in the government in the area of economic affairs. The Economic Ministers' Conference functions as a formal mechanism for deliberating and screening economic plans and policies. In this forum conflicting views and positions of different ministries are exchanged and weighed against each other. There is very similar and more informal meeting among them, called the Economic Ministers' Consultation Meeting. More important policy proposals tend to be submitted to this meeting. Before going to this meeting the vice ministers of economic ministries get together regularly. Environmental issues are

debated in those coordinating bodies but their priority is still at lower position.

Environmental issues have long been classified as a social affairs and seldom appeared as an important agenda of the economic coordination meeting. Recently environmental issues are more frequently dealt in the economic policymaking circle, but their basic concern involves the ways stimulating industrial activity without instigating environmental conflict. Almost every economic and social policy is connected with the environment, but the perspective of the policymaker is still biased toward economic efficiency. The Economic Planning Board is legally bestowed policy leadership. The coordination is actualized through the resource allocation function the Board has. The Office of Budget, which belongs to the Board, exerts a strong power in allocating government budget. In the internal coordinating circle, the voice of environmental protection is still weak. It is especially true when the measure needs big investment.

Lastly, industrial structure seems to constrain the development of environmental policy. The growth of Korean economy has largely been led by several conglomerates, so called 'Chaebols' (financial cliques). Under the Korean developmentalism, the government exploited all sorts of policy tools in order to boost economy. It is also hard to deny that the government provided diverse assistances to encourage the growth of financial cliques. As a result, economic oligopolies have emerged. Because these conglomerates are an outcome of past industrial policy, they tend to be less sensitive to outside social circumstances.<sup>16)</sup> Their number one concern has been government not general public.

Bureaucratic authoritarian regime excluded citizen's participation in the process of industrialization: Public participation had been very limited in industrial policy-making process. Quite naturally big corporates have not been sensitive to public demand. Public's influence over corporate activities is limited in both production and consumption aspects. The big corporates would not pay serious attention to the public's requests for clean production and minimum in consumption stage. Recently, corporates try to hang up a flag of green image but substantive movement is very slow.

On the other hand, big corporates 'captured' the government as well as the Mass Media, to a certain extent, which is another conglomerate in nature in Korea. When the government moves a little bit toward stringent regulation, a serious worry about economic recess is coming from leading business circles. The Ministry of Trade, Industry, and Resources is at the head of such a procession. The Ministry always worry about slackness of production and export.

Six environmental bills, which were rather stringent, were passed in the 150th National Assembly, in July 1990. When the Ministry of Environment began to draw enforcement ordinance and detailed regulations for the application of the law, the Federation of Korea Industry, which is the association of Chaebol,

expressed its opinion against the new move. They asked much relief for a while: for example, the exclusion of noise category from the regulation, release of Environmental Impact Assessment for dumping site, relaxation of many standards, exemption from basic discharge dues for a certain type of corporates, and so on. The Ministry of Environment was later criticized for having accepted the FKI's requests to a general extent.<sup>17)</sup>

Many politicians in opposition camp criticize the Ministry of Environment for having neither will to regulate polluting industries nor capacity to abate pollution. It is true that the Ministry is not ready to fight down polluting industries, to a certain extent, but it is the economic ministries, holding up developmentalism, which must be blamed for.

## **V. Concluding Remarks**

The phase of environmental policy development now passes the euphoric enthusiasm or symbolic policy stage; no substantive policy change under vocal public demand. Public demand become more visible but the environmental quality indices are worsening. Between the public demand and the final quality of environment there may be policy output. Environmental investment, used as a main policy output here, is not increasing in accordance with the public demand, and the final outcome, i.e., environmental quality, is deteriorating.

There may be the various reasons why this stage is tardy in transforming into more effective policy stage. One of the major factors that explain the policy waver seem to come from the pro-growth orientation of policymaking body which has been somewhat detached from the public's pressure. There is no serious political channel to pass through public demand into political decision either. The legislative body, which has a special committee on environment, could not work actively for public's side. Industrial pressure is another element of bottleneck in the road of active movement toward environmental preservation.

## **Notes**

- 1) Potential Environmental Load is measured by several indicators, such as, primary energy consumption, number of vehicle, production of cement, etc. in per unit of land (km<sup>2</sup>). Detailed international comparison can be found in, Tadayoshi Teraro, "The Political Economy of Industrial Pollution in Taiwan," a paper presented in the International Workshop on Development and the Environment : The Experiences of Japan and Industrializing Asia, Dec. 20-21, 1993, Institute of Developing Economies, Tokyo.
- 2) For example, Japan ranked twenty times higher than the U.S.A., six times higher than



- Britain, and twice as high as the Netherlands. OECD, *Environmental Policies in Japan* (Paris: OECD), 1977.
- 3) HunMin Kim, "An Analysis of Individual and Family Migration Behavior: The Case of Korea" (Unpublished Ph. D. Dissertation), Harvard University, May 17, 1988.
  - 4) Anthony Downs, "Up and Down with Ecology : the Issue Attention Cycle," *Public Interest*, No. 28(1972), pp.38-50.
  - 5) There were serious anti-nuclear protests in recent years. One of the most serious case was the Anmyon Island one in 1991. For a detailed study on the residents' attitude, see KwangHee Jun, "Anti-Nuclear Protest and the Public Acceptance Program: A Sociological Experiment on Anmyon Island, Korea," *Korea Journal Of Population and Development*, Vol. 22, No. 1 (July 1993), pp. 119-135.
  - 6) Because the surveys carried different questionnaire, for different years, the above ratios could not be compared systematically. It is not easy to find any attitude survey done in the environmental area before 1980. The data analyzed in this paper coming from various sources: (1) 1982 - the Environment Agency; (2) 1987-the Environmental Agency; (3) 1990-the Ministry of Environment; (4) 1991-the Confederation of Anti-Pollution Movement. The population is almost same but the purpose and sampling of each survey is a little bit different: the sample sizes of the surveys are between 1,500-2,000. For complete analysis, see KyuHan Bae, "Changes of Citizen's Attitudes toward Environmental Preservation," *National Development Model (II)*, a Report by the Presidential Commission on the 21st Century, Korea, November 1991.
  - 7) SookJong Lee, "Political Liberalization and Economic Development in Korea," a paper presented at the Annual Meeting of the American Sociological Association, August 24-28, 1988 in Atlanta.
  - 8) The figure of 1992 in the above table seems somewhat misleading. The net budget which belongs to the Ministry is much smaller than the figure presented in the table; the share is 0.242. The figure in the table includes the local transfer tax amount which is transferred to the localities.
  - 9) Taegu Water Pollution in March 1991 is the case in point. Tap water was contaminated in the Taegu area, South Korea's third largest city, by the phenol released from the Doosan Electro-Material Co. in nearby the Kumi Industrial Park. Due to the incidents 85% of Taegu's total population of 2.2 million were unable to use tap water for a few days. The polluter was initially ordered to suspend operations for 30 days but the measure was lifted halfway through the suspension period because of intense pressure from electronic assembly industries which used the products of the Doosan company. Industrial pressure on local as well as central economic departments was very strong. Detailed analysis can be found in, Tamio Hattori, "Environment and Development: South Korea's Taegu Water Pollution Case," a paper presented in International Workshop on Development and the Environment: The Experiences of Japan and Industrializing Asia, Dec. 20-21, 1993, Institute of Developing Economies, Tokyo.
  - 10) OECD, *Macro-Economic Evaluation of Environment Programs* (Paris: OECD), 1978; and OECD, *The Macro-Economic Impact of Environment Expenditure* (Paris: OECD), 1985.
  - 11) The Ministry of Environment, *The Real Conditions of Environmental Problems and the*

*Direction of Policy Responses (memos in Korean)*, April 22, 1991.

- 12) Yusen D. Sung, "Tradeoff Between Economic Development and Environmental Protection: The Case of Taiwan," a paper presented at the international workshop on Development and the Environment: The Experiences of Japan and Industrializing Asia, Dec 20-21, 1993, Institute of Developing Economies, Tokyo.
- 13) This is a rough estimate based on author's calculation. Also see the research for a general information: Jeongjeon Lee & EuiSoon Shin, *Policy Instruments for Environmental Improvement* (Seoul: International Trade and Business Institute), 1991.
- 14) F. Henry Habich II, "Asian-American Partnership for a Better Global Environment," *Current Views*, No. 3 (1992), pp. 60-64.
- 15) Environmental Agency, Government of Japan, *Twenty-Year History of the Environmental Agency* (summary), 1991, p. 14.
- 16) Tamio Hattori, *op. cit.*, p. 24.
- 17) For detailed requests from FKI, see, FKI, "Opinions on the Laws Related to Environmental Preservation," Nov. 1990; and for general analysis of the interaction between the government and FKI, see TaeHoon Moon, "Evolution of Environmental Preservation Policy in Korea," in KwangWoong Kim and YongDuck Jung (eds.), *Korean Public Administration and Policy in Transition*, Vol. 2, (1993), pp. 217-244.

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