

Environmental Policy and Green Government in Korea

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Abstract

The purpose of this paper is to examine the evolution of Korea's environmental policy from the 1960s to the early 2000s from a sustainability perspective. Since the first environmental law was enacted in 1963, the Korean government has made substantial progress in related laws and governmental organizations. However, development of laws and organization did not bring commensurate changes in environmental policy. The government placed priority on economic policies, failing to meet the surging public demand for a clean environment. This paper attempts to explain the gap between the development of laws and organizations and the actual achievement of environmental policy objectives. It examines the underlying structure that persistently generates a large disparity between the stated policy objectives and the actual achievements, how "green" the Korean government is, and what kind of constraints the Korean government is facing in its attempt to achieve sustainable development. To answer these questions, this paper presents and explains three levels of constraints on sustainable development from global, national, and local sources in a causal loop diagram.

Keywords: sustainable development, Korea environmental policy, green government, causal loop diagram

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Introduction

The following incident reflects the prevailing atmosphere of the government regarding environmental policy during the 1970s. In August of 1971, an official of the Ministry of Health and Social Affairs (MOHSA) reported a draft of an enforcement decree for the Pollution Prevention Law (PPL) to the Economic Council Meeting. After a brief look at the draft, Kim Hak-ryeol, then Vice Prime Minister and the Minister of the Economic Planning Board (EPB), said to him,

Did you write this? Idiot! We are developing our economy with money borrowed from abroad. I know the environmental issues are important, but any money that might be available for the environmental problem can be used to build one more factory. We can think about it again in ten years—it won't be too late then (KPPRI 1986, 35; see also Moon 1993, 219).

However, it took more than ten years for the government to even "think about" the environmental problem. In fact, it took more than twenty years for the Korean government to bring about major developments in environmental policy with regard to laws and organizations. In 1990, six environmental laws were enacted and the Environmental Administration (EA) was upgraded to the Ministry of Environment (MOE). But substantial changes in environmental policies themselves were less than apparent. The development of environmental laws and organizational expansion was one issue; achieving the environmental policy's objective was another. Economic policy was almost always first on the priority list of government policies, and environmental policy lagged behind, failing to meet the surging public demand for a clean environment and criticism of environmentalists.

This paper examines the evolution of Korea's environmental policy from the 1960s to the early 2000s from a sustainability perspective. In so doing, this paper attempts to explain the gap between the development of laws and organizations and the actual achievement of policy objectives. Also, the paper will identify and discuss the

underlying structure of environmental policy that has generated the persistent gap between the stated policy and its achievement.

Environmental Policy, Sustainable Development, and Green Government

In the 1987 *Brundtland Report*, commonly known as *Our Common Future*, “sustainable development” was defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Even though this definition has been criticized for its ambiguity, it has been generally agreed that the concept has three different but closely interrelated components: environmental, economic, and social (Munro 1995, 27-35; DEFRA 2000). The environmental component of sustainability refers to ecological sustainability, which means the capacity of an ecosystem to support healthy organisms while maintaining its productivity, adaptability, and capacity for renewal. The economic component of sustainability depends on the relationship between benefits and costs; more precisely, it requires that benefits exceed or balance costs. The social component of sustainability reflects the relationship between development and current social norms. An activity is socially sustainable if it conforms with the social norms or does not stretch them beyond the community’s tolerance for change.

Thus, to achieve sustainable development, economic and social development needs to be attained in a balanced way without deteriorating the natural environment. These three—the economic, social, and environmental components—can together achieve sustainable development.

If sustainable development is a balanced development that simultaneously achieves environmental preservation, economic development, and social development, then a government that achieves sustainable development can be defined as a “green government.” A green government is a cooperative government that places sustainable development as the most important guiding principle to be fol-

lowed and fulfilled by all policies and that cooperates closely with all segments of society.

Previous studies in the area of sustainable development and environmental policy in Korea have been centered around several issues. Those studies can be grouped into several subjects, including evolution of environmental policy (Moon 1992, 1993; KETRI 1996; Heo 1998; Ahn and Moon 1999; Ju 1999), sustainable development strategies both for the national and local level (Moon 1998, 2003; Jeong 2002; Ji 2002; Kim et al. 2002; Jang and Song 2000), environmental conflict resolution (Sa 1999; Moon 2001; Kim S. G. 2002), the relationship between central government and local government (Yi S. 1993; Kim J. 1997; Moon and Kim 2000), the role of NGOs in sustainable development (Ku D. 1996; Yi G. 2000; Im 2000; Cho 2001; Bae 2002), and sustainable urban management (An, Moon, and Hong 1999; Cho 2003; Ha et al. 2003). It is worth noting that environmental concerns and research interests in Korea have developed rapidly within the short period of time since the early 1990s. Given such a short time span, previous studies were quite successful in arguing the importance of sustainable development, suggesting policy measures to achieve it, and documenting the importance of NGOs in developing environmental policy in Korea. However, there have been few studies that identify the underlying structure that obstructed the successful transformation of Korean society into a more the sustainable one.

The remainder of this paper reviews Korea’s environmental policy from a sustainability perspective. It asks the following questions: How effective was Korea’s environmental policy in achieving its stated policy objectives? If not, what were the reasons? What is the underlying structure that persistently generated a large disparity between the stated policy objectives and actual achievements? How “green” is the Korean government? What kind of constraints does the Korean government face in achieving sustainable development?

Evolution of Korean Environmental Policy from 1960–2000

Environmental Policy before the 1980s

Environmental policy in Korea was negligible before 1980. The Pollution Prevention Law (PPL) enacted in 1963 was merely symbolic, because no government agency existed to deal with pollution problems and no budget was allocated for its implementation. The former minister of the Ministry of Health and Social Affairs (MOHSA) during the mid-1970 recalls,

During the 1960s and 1970s, President Park's utmost concern was how to develop the national economy more rapidly. This strong desire to develop the economy was shared by the general public. Naturally, all ministries were deeply engaged in developing policies that could contribute to economic development. Under such circumstances, no ministry could dare propose a policy that could possibly deter economic development. The government did not have time to spare for anything other than economic development.¹

Under such circumstances, there was little room for environmental policy. Strong opposition from other governmental agencies based on economic reasons and business noncompliance were major factors for weak environmental policy during the 1960s and the 1970s.

In 1977, the comprehensive Environmental Preservation Law (EPL) was promulgated in response to the rapidly worsening pollution problems caused by the establishment of large-scale industrial complexes across the country. The initiation of this policy was made by President Park, when he showed concern over environmental problems in his New Year's Press Conference in 1977. The new law replaced the Pollution Prevention Law, and the Bureau of Environmental Management was established under the direct control of the

Vice-Minister of MOHSA to administer environmental law. The EPL established new environmental quality standards, required environmental impact assessment, environmental monitoring, designation of special measure zones where pollution was particularly serious, and regular survey of the environment. It also established a new Environmental Conservation Committee and an environmental research institute.

Although the new law established environmental initiatives in several areas, the initiatives were not implemented effectively. Policy was characterized by fragmented, weak implementing authority and a negligible environmental budget. For example, nature conservation was administered by the Ministry of Home Affairs; water management and land use were controlled by the Ministry of Construction; pesticides were regulated by the Ministry of Agriculture and Fishery; and radioactive pollution was regulated by the Ministry of Science and Technology (Jang 1979; Ku Y. 1979). Besides, the new EPL delegated the authority to give details concerning the environmental impact assessment to the enforcement decree. However, no decree was promulgated until the early 1980s due to strong opposition from other government agencies (Kim S. S. 1989, 83). From the total government budget, the environmental budget accounted for only 0.059% in 1976, 0.077% in 1977, and 0.071% in 1978 (EA 1986, 79).

Business investment in pollution prevention facilities as required by law was negligible as well. Even though the government provided low-interest rate funds for installing anti-pollution facilities, they were not fully used by businesses. Businesses thought that government enforcement would not be effective enough to force all firms to install the equipment. Given the large number of firms without pollution prevention facilities, businesses felt that the government would not be able to manage the enforcement task (*Chosun Ilbo*, 25 May 1979).

In 1979, the Environmental Preservation Law was amended and the Environment Administration (EA) was established with its own implementing authority to strengthen environmental policy.

1. Interview with Shin Hyeon-hwak (a former minister of the MOHSA, Economic Planning Board, and the Prime Minister), 16 July 1991; quoted in Moon (1993).

Environmental Policy during the 1980s

Progress in environmental policy was made during the 1980s in related laws and organizations. Gaining momentum since the late 1970s, environmental preservation was declared a constitutional right by Chun Doo-hwan's administration in 1981. Promising to build a welfare society, Chun's regime included environmental rights as a constitutional right, manifesting the government's strong intention to actively deal with environmental problems, which had been previously neglected.

The Environmental Preservation Law was strengthened in 1981 and 1986. The Emission Charge System, which imposed tax according to the volume of pollutant emission, was adopted, and the scope of environmental impact assessment was expanded to include public as well as private sector projects. The revised law also required the restriction of new pollution-causing businesses in heavily polluted areas, and required the submission of exhaust gas inspection results for new cars.

The Environment Administration was expanded as well. The Solid Waste Management Bureau was established and local environmental offices in Seoul, Busan, Daegu, Gwangju, Daejeon, and Wonju were established in 1986 to strengthen local environmental pollution management. The Environment Administration regarded the changes in the 1980s as a fundamental shift in the government's standpoint toward environmental policy in Korea (EA 1987, 24-25). However, the former minister of MOHSA was of a different opinion,

It is true that the government put some effort into environmental policy during the 1980s. However, the environmental policy was not able to counter the economic argument. Economic ministries argued that if economic development were sluggish due to environmental preservation, Korea would not be able to afford the enormous financial burden for environmental preservation. This argument prevailed in the government throughout the 1980s. Thus, businesses felt no urgent necessity to vocally oppose environmental policy, and no incentive to faithfully comply with environmental

policy as long as the government kept such a viewpoint on environmental policy.²

One official in the business association said the following,

Businesses did not have serious concerns about environmental policy during the 1980s even though the Environment Administration began to operate and the EPL was revised twice to improve the policy. However, the lack of opposition from businesses was not because they were well prepared for pollution abatement, but because the government was not strict enough to raise business concerns. Businesses knew that the government would not sacrifice economy for environmental preservation.³

During the 1980s, lack of cooperation from other government agencies and business noncompliance to the regulations were important factors for a similarly weak environmental policy as during the 1970s. However, business opposition and specific policy recommendations from businesses in formulating and implementing environmental policy emerged as additional factors for a weak environmental policy during the 1980s. Business associations, including the Federation of Korean Industries (FKI) and the Korean Federation of Small Business (KFSB), opposed restrictions on pollution emission facilities in designated areas, adoption of the strengthened Emission Charge System, and the requirement to submit exhaust gas inspection result for new cars (FKI 1986, 153-155; KFSB 1987, 93). With opposition and economic concerns raised by the business associations, the EA abandoned the attempt to strengthen the Emission Charge System, and relaxed the strict requirement of inspections on exhaust gas (Moon 1993, 229-230).

2. Interview with a former Minister of Ministry of Health and Social Affairs, 15 July 1991; quoted in Moon (1993, 228).

3. Interview with Kim Chang-ho, a researcher in the Korean Chamber of Commerce and Industry, 2 August 1991; quoted in Moon (1993, 229).

Environmental Policy during the 1990s and the Early 2000s

During the 1990s, Korean environmental policy made major progress in environmental organizations and related laws. In 1990, six new environment-related laws were enacted⁴ and the Environment Administration was upgraded to Ministry of Environment. A number of additional environmental laws were enacted during the 1990s, including the Soil Environment Conservation Act (1995), the Management of Drinking Water Act (1995), Air Quality Control in Underground Locations Act (1996), Promotion of Installation of Waste Disposal Facilities and Assistance, etc. to Adjacent Areas Act (1999), the Toxic Chemicals Control Act (1999), and the Act on Assessment of Impacts of Works on Environment (1999). Furthermore, the Special Law on Hangang River Watershed was enacted in 1999 to implement comprehensive water improvement measures, including designating riparian buffer zones, adopting a total pollution load management system, levying a charge on water use and establishing a watershed management fund.

Special laws for the other three major rivers, the Nakdonggang, Geumgang, and Yeongsangang, were enacted in 2002, completing water management measures for four major rivers in the country. Also, the Act on the Promotion of Saving and Recycling of Resources was enacted in 2002. As of May 2003, there were 33 environmental laws under the jurisdiction of the Ministry of Environment.

Important arrangements in implementing authority were made during this period. For example, in 1994, the Water Supply and Sewage Bureau of the Ministry of Construction, the Potable Water Management Division of the Ministry of Health and Social Affairs, and the Water Quality Inspection Department of the National Health Institute were transferred to the Ministry of Environment. Also, Regional Environmental Management Offices were reorganized into

4. They are the Framework Act on Environmental Policy, the Clean Air Conservation Act, the Water Quality Conservation Act, the Noise and Vibration Control Act, the Toxic Chemicals Control Act, and the Environmental Dispute Adjustment Act.

four River Basin Environmental Offices, each responsible for one of the four major rivers, the Hangang, Geumgang, Nakdonggang, and Yeongsangang rivers. In 1998, the Natural Park Division of the Ministry of Domestic Affairs was transferred to the MOE.

The Korean government's concern over sustainable development began after the Earth Summit in 1992. Since then, the government has formulated environmental policies for both the short and long term in order to address environmental problems in a systematic and an effective manner. In this context, the Ministry of Environment formulated a long-term comprehensive environmental preservation plan called "Green Vision 21" in 1996, and the second comprehensive mid-term plan in 1997. The latter included a review of the results of the first comprehensive mid-term plan and specified the plan that was included in "Green Vision 21." In addition, President Kim Young-sam announced the "Vision for Environmental Welfare" in March 1996. It envisioned a new society and a new environment-friendly way of life in the coming era.

However, despite all the plans for sustainable development, environmental policy in Korea had to struggle with unfavorable conditions, such as a national priority of economic development, lack of cooperation from other related government agencies, and business non-compliance. Integration of developmental and environmental objectives did not take place, and environmental concerns were regarded as the sole responsibility of the environmental agency. Furthermore, the fact that the authority concerning environmental laws is still dispersed to many ministries raises many problems regarding efficiency and coordination. Further, since the policy direction of each ministry differs substantially, conflicts and friction between ministries persist. Conflicts almost always end in favor of the economic ministry's interests. Problems seem to have worsened since the economic crisis, because heavier emphasis has been placed on economic matters.

Table 1 shows Korea's environmental budget trends since 1990. Before the economic crisis, the environmental budget was increasing more rapidly than the GDP and the total government budget increase

Table 1. Environmental Budget by Year

(Unit: hundred million won)

	1990	1995	1997	1998	1999	2000	2001	2002	2003
GDP (A)	1,787,970	3,773,498	4,532,794	4,443,665	4,827,442	5,321,556	5,427,987	5,699,386	6,423,457
% change	111	20	-2	9	10	2	5	13	
Government budget (B)	325,369	745,344	983,299	1,103,139	1,200,206	1,251,792	1,398,487	1,459,602	1,556,659
% change	129	32	12	9	4	12	4	7	
Total environment budget (C)	3,447	17,801	27,747	28,121	27,636	30,581	32,236	33,465	34,262
% change	416	56	1	-2	11	5	4	2	
MOE budget (D)	1,172	6,729	10,802	11,131	11,536	13,023	14,143	14,336	13,816
% change	474	61	3	4	13	9	1	-4	
C/A (% of GDP)	0.19	0.47	0.61	0.63	0.57	0.57	0.59	0.56	0.53
D/B (% of government budget)	0.36	0.90	1.10	1.01	0.96	1.04	1.01	0.97	0.89

Source: Ministry of Environment (1997, 1998, 2000, 2001, 2003).

rate. In 1998, however, the environmental budget decreased to 1.01% of the total budget, while the overall government budget showed a 12% increase, reflecting economic difficulties. The problem is that even before the economic crisis, the total environmental budget was only 0.61% of the GDP. This small environmental budget had been continuously criticized by environmental experts, who claim that the government pledge for environmental preservation is mere rhetoric. Even worse, the proportion of the environmental budget has been decreasing since 2000.

In addition, as shown by Table 2, more than half of MOE's budget has been allocated to water supply and maintenance of water quality, meaning that most of the environmental budget was allocated to constructing environmental infrastructure, such as water supply and sewage treatment facilities. Environmental efforts in other areas such as natural preservation that gained importance for ecological sustainability have still been lacking. Recently, however, the budget for natural preservation has increased.

Table 2. Budget Allocation of MOE by Activities

(Unit: hundred million won, %)

	1995		1997		1999		2001		2003	
MOE Budget	6,729		10,802		11,536		14,143		13,816	
Tap water supply	2,212	32.9	2,727	25.2	2,416	20.9	2,836	20.0	2,433	17.6
Water quality	1,726	25.7	2,957	27.4	3,552	30.8	3,691	26.1	3,146	22.8
Waste management	1,456	21.6	2,717	25.2	2,686	23.2	3,024	21.4	3,086	22.3
Air quality	29	0.4	89	0.8	95	0.8	615	4.3	856	6.2
Natural preservation	30	0.4	63	0.6	592	5.1	848	5.9	913	6.6
Environmental technology	747	11.1	1,335	12.4	1,140	9.9	1,875	13.3	1,816	13.1
Environment management, etc.	529	7.9%	914	8.5%	1,055	9.1	1,254	8.9	1,569	11.4

Source: MOE (2003, 570).

With this small environmental budget and development-oriented policies, environmental protection activities in Korea show mixed progress. In terms of air quality, the average concentration level of SO₂ and CO in major cities has been decreasing continuously while NO₂, O₃, and TSP levels show unstable trends largely due to rapidly increasing traffic volume. The volume of general waste has been reduced from 83,962 tons per day in 1990 to 44,583 tons per day in 1998. Since then, however, the volume started increasing again to 48,499 tons per day in 2001 (MOE 2003, 489). The volume of industrial waste and specific wastes, which are usually toxic and hazardous, has been increasing from 130,648 tons per day in 1996 to 212,258 tons per day in 2001 (MOE 2003, 489). Water quality in the major rivers—the Hangang, Nakdonggang, Geumgang, and Yeongsangang—was deteriorating up until 1997 (KNSO 1998, 369), but has improved gradually due to the increased investment in environmental facilities (MOE 2003, 371). The valuable and natural resources of green spaces in urban areas had been decreasing rapidly. For example, Seoul's total forested area was 159.19 km² in 1995 and 14.7 m² per person. But in 1972, the forestry area was 31.7 m² per person, twice larger than that in 1995. Besides, forested area within the green belt around Seoul decreased from 121.97 km² in 1974 to 108.95 km² in 1996 (MOHA 1997, 1975). This decreased forested area is equivalent to an area 4.5 times larger than that of Yeouido in Seoul.

Furthermore, government has been deregulating green belt areas scattered around 14 major urban areas. In July 1999, the Kim Dae-jung government announced that it would completely deregulate the green belt areas around 7 medium-size cities, and would ease regulations on green belt areas around 7 large metropolitan areas. Environmentalists and other concerned people bitterly criticized the government for abandoning the precious green space that had been kept for almost 30 years to prevent urban sprawl and environmental deterioration. Environmental groups voted president Kim Dae-jung as “Polluter of the Year” for his administration's policy of easing restrictions on the nation's green belt areas (*Korea Herald*, 19 December 1998). In actual fact, the green belt regulation began to be lifted from

June 2002 in 1,800 villages nationwide.

It is encouraging to know that, since the beginning of the local government era in 1995, many local governments formulated the so-called “Local Agenda 21.” As of March 2004, 226 local governments out of 250, equivalent to 90.4% of all local government, are involved in formulating and implementing Local Agenda 21. Among these, 195 local governments have completed formulating Local Agenda 21 and 31 local governments are preparing it (Korea Council for Local Agenda21, 2004. <http://www.la21.or.kr/>).

However, the implementation of Local Agenda 21 is not active in many cases. This is because many local governments tend to neglect environmental preservation in favor of developmental policies for regional economies. Coupled with the deregulation of environment-related laws, regional environment deteriorated further. According to the MOE, for example, since the deregulation of the Enforcement Decree of the Act on the Utilization and Management of the National Territory in 1994, and since advent of local government control from 1995, pollution sources and pollutant discharge in the Paldang Special Preservation Areas that were preserved as major drinking water reservoirs for metropolitan areas increased dramatically as shown in Table 3.

Table 3. *Pollution Sources and Amount of Pollutant Discharge in the Paldang Special Preservation Area Water Reservoirs (2,102 km²)*

	1990	1997	% increased
Hotel, restaurant	2,585	8,956	246
Industrial facilities	143	510	257
Livestock	272,000	378,000	38.9
Population	400,000	513,000	28.3
Apartment	2,677	34,418	1185
Domestic sewage	100,000 ton/day	142,600 ton/day	42.6
Industry waste water	49,000 ton/day	56,500 ton/day	15.3
Livestock waste water	4,200 ton/day	5,800 ton/day	38.1

Source: *Seoul Shinmun Daily*, 7 May 1998.

As public awareness of environmental problems increased, public opinion turned critical of government policy. According to a survey conducted by the National Statistical Office in 1997, 70% of the respondents replied that environmental pollution was worsening, 28.3% replied that it was unchanged, and only 1.7% replied environmental problems have been “improving” (KNSO 1998, 377). Another survey conducted in 1999 revealed similar results. According to the survey, 94.6% of the respondents replied that the environmental problem was serious, 4.6% replied that the problem was acceptable, and only 0.66% said it was not serious. With regard to questions asking for the cause for environmental deterioration, 53% of the respondents blamed the government for its “propensity for development-first policy,” 16.8% for “the president’s lack of concern for the environment” and 14.8% for a “lack of public concern.” For the questions regarding levels of satisfaction with government policy, 68.2% of respondents answered that they were dissatisfied with Kim Dae-jung government’s environmental policy while only 1.98% replied that they were satisfied. In addition, 47% of the respondents replied that the current government’s environmental policy has not improved at all compared to the Kim Young-sam administration, and 41% of respondents reported that they thought the current government’s environmental policy to be worse (Green Korea United 1999).

Constraints on Sustainable Development and Greening Government

As explained so far, since the first environment law was enacted in 1963, the Korean government has made substantial progress in related laws and governmental organizations. However, the development of laws and organization did not bring commensurate changes in environmental policy. How can we explain this gap between the development of environmental laws and organizations and the actual achievements of the environmental policy? What is the underlying structure that persistently generates such a large disparity between

stated goals and actual achievements? The answer can be found in the legacies of Korea’s economic development.

The Korean economy has been growing rapidly during the last four decades. Economic growth averaged over 8 percent per year for more than thirty years, and its GDP volume soared from 2.1 billion US\$ in 1961 to 484 billion US\$ by 1996, just before the economic crisis. Korea’s per capita GNP also leaped from 82 US\$ to 10,543 US\$ over the same period (Bank of Korea 1998; see also Song 1997).

But, the rapid and successful economic growth has produced structural constraints on sustainable development in Korea. Korean environmental policy has been operated under the “growth-first” context. Out of the three aspects of sustainable development—the economic, social and environmental—only economic development become a matter of concern, while the other two aspects remain largely neglected. Ironically, it was the very factors that contributed to Korea’s rapid economic growth—a governmental growth-first policy combined with close ties to large conglomerates—that triggered Korea’s financial crisis in 1997, critically weakening the economic prop of sustainable development too.

Thus, constraints on sustainable development in Korea can be found, first of all, in the growth first economic policy of the last four decades. Besides, the irresistible worldwide trend of globalization for which Korean society has been ill prepared, has posed another threat to sustainable development. Just for the sake of explanatory convenience, these constraints can be grouped into three types—those at the global, national, and local levels.

Global-Level Constraints

Since the late 1980s, globalization, led by the United States, has been strongly pursued by a few advanced capitalist countries. Armed with neo-liberalist arguments, these countries prescribe liberalization, deregulation, and privatization for economic prosperity and social stability.

Initiated by President Kim Young-sam’s concerns in the matter, Korea joined the globalization movement from late 1994. However,

the distorted economic structure characterized by heavy concentration on a few large businesses and weak financial institutions, which were unduly influenced by large businesses and the government, resulted in a disastrous economic crisis in 1997 (Ahn 1998a, 9).

To be sure, globalization has its positive aspects. Globalization removes unnecessary government regulations and trade barriers, thus fostering economic efficiency and encouraging economic prosperity. However, the Korean government was too optimistic and unprepared to see the dark side of globalization. One of the most common attitudes of globalization is the tendency to exaggerate the importance of economic efficiency and submitting all decisions to the rules of economic discipline, leading to the evaluation of policies and development strategies exclusively on the basis of economic reasoning. Under these conditions, social and environmental policies are almost always regarded as inefficient or externals, and are therefore ignored. Consequently, "economism" becomes a trap that is difficult to escape, especially in times of economic difficulties, processes of adjustment, and structural reform, all of which tend to give even greater weight to economic decision makers (Gligo 1995, 64).

Furthermore, cutthroat competition is inevitable and as a result, the gap between rich and poor, industrial and non-industrial, is widening rather than narrowing. Moreover, with the growing trend toward mergers and acquisitions, increasing wealth and power has been concentrated in the hands of the few, while the power of the working class has dissipated, causing widespread unemployment and job insecurity. Environmental abuse accelerated in the name of economic efficiency has caused the gains of social movements in politics, society, and culture to erode. In addition, globalization can be seen as a threat to democracy since economism overwhelms other non-economic values and state sovereignty is eroded through the bilateral agreement with the IMF and World Bank, multilateral pacts under the WTO regime, and regional and other arrangements. All of these dark sides of globalization pose great constraints on sustainable development. Of the three areas of development necessary for sustainable development—economic, social, and environmental—only economic development has

become a matter of concern, while the other two have been much neglected. The structure of constraints resulting from globalization can be presented in a causal loop diagram as shown in figure 1.⁵

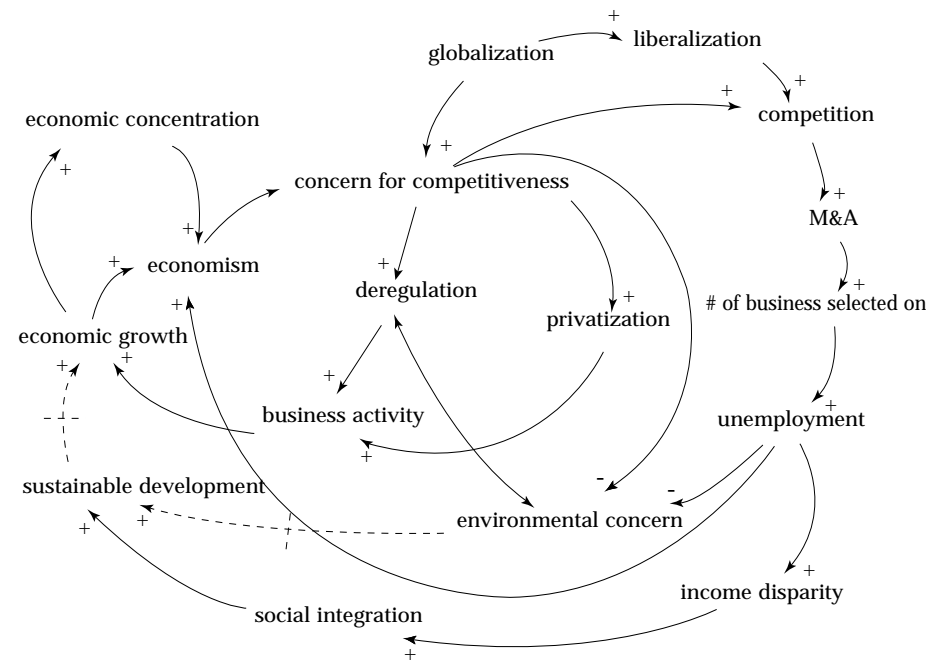


Figure 1. Constraints on Sustainable Development at the Global Level

5. In the diagram, the plus (+) sign on the arrowhead indicates the variables at the opposite ends of the arrow move in the same direction while the minus (-) sign indicates an inverse relationship. For example, an increased concern for competitiveness decreases environmental concern. The direction of variables in the relationship is opposite in this case and the minus sign on the arrowhead denotes this inverse relationship. But increased concern for competitiveness tends to increase amounts of privatization and deregulation. The direction of variables in this case is in the same direction and the plus sign denotes this relationship. The dotted lines indicate a long time delay of causal relationship between linked variables. For example, a higher level of concern for the environment can lead to a more sustainable development but only after a long delay. For more details, see Richardson and Pugh (1981); Richmond (1994).

In figure 1, globalization increases the importance of competitiveness while promoting liberalization. Increased concern for competitiveness accelerates deregulation and privatization. Deregulation increases business activity and thereby can contribute to economic growth, but deregulation can also lead to a decrease in environmental concern, as in the land use problem since the deregulation of land use in 1994. Prevailing economism in public as well as private sectors further accelerates a higher concern for competitiveness, which forms a vicious cycle.

National-Level Constraints

1) Growth-First Development Policy Orientation

In the history of Korea's developmental policy and specifically throughout the past four decades, government concern about economic development has been strikingly consistent across all policy areas. There was a certain amount of reflection and reaction to the growth-first developmental policy. 1980 was an important turning point for Korea's developmental policy because in that year the government announced a shift in its major policy thrust from "government initiative" to "private initiative." As part of this shift, it gradually began to withdraw intervention in the market place, promised to improve social justice through a stability-first economic policy, welfare policy, and environmental policy, all of which had been neglected during the 1960s and 1970s. However, the development of related laws and agencies did not necessarily produce a similar improvement of policies. One important reason was the government's concern for rapid economic growth that was deeply imbedded in all policy areas.

Even though strong governmental concern for economic development deserves credit for Korea's rapid economic development, this concern has now become a constraint on sustainable development and "greening" the government. It prevents an effective change to develop appropriate mechanisms to ensure the development of non-economic policies including social and environmental policies. This situation deteriorated further following the economic crisis of 1997.

2) Economic Concentration and Business Influences

In addition to the government's concern for economic growth, economic concentration and large businesses' growing influence over governmental policies seem to have affected the development of non-economic policies. During the last four decades, government in general saw large business conglomerates, *jaebeol*, as the key to economic growth. Businesses needed government support for growth, and the government needed business cooperation for economic growth for its political legitimacy. Thus, large businesses were major beneficiaries of government developmental policy, so economic concentration into a couple of large businesses was a natural consequence. For example, during the 1970s, when Heavy and Chemical Industries (HCI) were actively promoted, the average number of member companies within the ten largest business conglomerates grew from 7.5 per conglomerate in 1972 to 25.4 in 1979. During the same period, assets in manufacturing sectors among the ten largest conglomerates increased from 362 billion won to 5,263 billion won, marking a staggering 1400 percent increase (Moon 1992, 63).

The first comprehensive policy measures to curb large business economic concentration began in 1981 with the enactment of the Monopoly Regulation and Fair Trade Act. However, government policy against economic concentration was not effective. Government has since responded by strengthening regulations on economic concentration, but curbing economic concentration was easier said than done. As a key force in the Korean economy, businesses continued to expand their economic power despite government regulations. For example, the number of subsidiaries of the 30 largest businesses increased from 544 in 2000 to 624 in 2001 and the economic concentration of the four largest businesses is greater than before the financial crisis of 1997. The percentage of total production by the four largest businesses in the GDP increased from 6.8% in 1997 to 8.7% in 1998, 9.3% in 1999, and 10.9% in 2000. Total tax payment of the four largest conglomerates was 14.6% in 1997, 15.3% in 1998, 14.9% in 1999, and 18.5% in 2000. With regard to the total amount of

export, the proportion has increased from 41.6% in 1997, 44.1% in 1998, 47.4% in 1999, and 49.8% in 2000. On the other hand, total employment by these conglomerates decreased from 4.5% in 1997 to 3.8% in 2000 (*Hankook Ilbo*, 16 May 2001; *Kukmin Daily*, 2 April 2001).

The problem is that the economic power of the large businesses granted them stronger leverage in dealing with the government both politically and economically. Business opposition to government actions based on economic arguments was one of the major deterrent factors to environmental preservation. Large businesses effectively articulated their interest through business associations and through a client-patron relationship with government agencies. Rather than oppose the Ministry of Environment (MOE) directly, businesses often worked with the economic ministry to weaken environmental policy. This strategy worked effectively because the MOE's status was weak

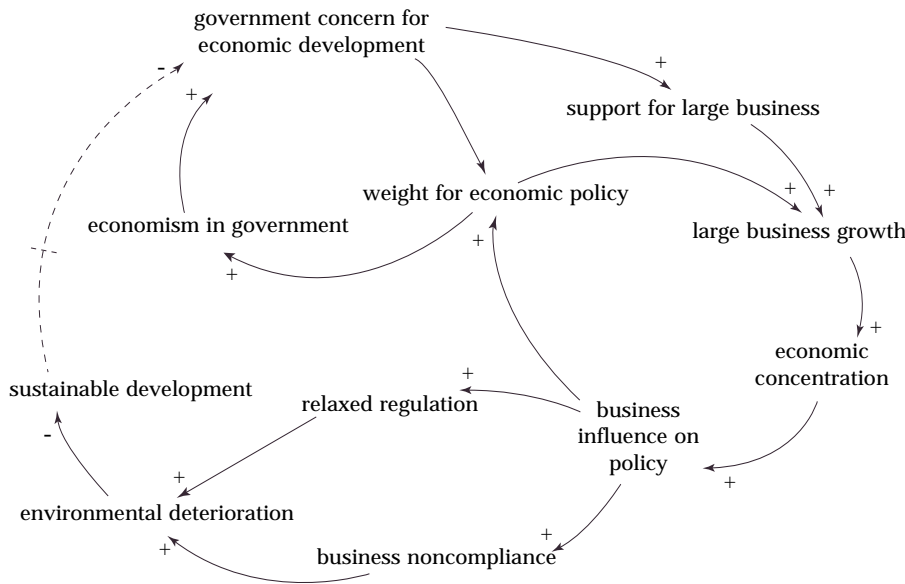


Figure 2. Constraints on Sustainable Development at the National Level

compared to that of the economic ministries. Businesses' compliance with even relatively loose policies was weak, and there were several incidents of non-compliance. The result was almost always relaxed regulations and, despite strong verbal commitment to environmental policy, governmental implementation remained weak in the 1990s and even in the early 2000s.

Figure 2 shows the structure of constraints at the national level. Government concern for economic development increases both support for large businesses and the importance of economic policy. The growth of large conglomerates in a high degree of economic concentration increases business influence on government policy, which in turn increases the significance of government's economic policy even more. The high priority placed on economic policy tends to weaken non-economic policies, including the environmental and social policies, and strengthens economism in the government. Relaxed environmental regulation and business noncompliance deteriorate the environment, and increased economism further accelerates government concern for economic development, which has a negative effect on sustainable development.

3) Local-Level Constraints

Awareness of the local government's importance in sustainable development had been increasing since the Earth Summit in 1992. The International Council for Local Environment Initiatives (ICLEI) identified a number of common constraints to the local implementation of sustainable development, based on a review of implementations of Local Agenda 21, in which more than 1,800 local governments from 64 countries participated between 1992–1996 (ICLEI 1997). First of all, sustainable development strategies and local government projects had generally been isolated from overall municipal budgeting, local development planning, land-use control, and economic development activities. As a result, sustainable development strategies resulted in a limited number of cases. Second, many national governments had "downloaded" environmental protection

and social development responsibilities to local governments. However, this trend was hardly accompanied by new revenue generating powers or by transfers of its revenues. The result was an increase in the financial burden on the local governments, undermining their ability to implement Local Agenda 21 strategies. Third, reduced or poor national-level regulations of economic activities were weakening the ability of local government to hold local businesses and other institutions accountable for the negative environmental and social impacts of their activities. Fourth, national and local governments continued to maintain policies, subsidies, and a fiscal framework that inhibited efficient resource use and developmental control on the local level. Fifth, minimal incentives existed for transnational corporation and multi-lateral development institutions to be accountable and committed to local developmental strategies (ICLEI 1997).

This situation is similar to the one in Korea. Encouragingly, as of 2004, about 90% of local governments are involved in formulating and implementing Local Agenda 21. However, municipal development plans and budget priorities often do not reflect Local Agenda 21 or sustainable objectives. Centralized control of local budget and resources and poor coordination between national investment plans and local priorities have undermined the ability of local government to implement Local Agenda 21 action plans. In addition, enforcement of regulation has been lax, revenue generation options of local government have been restricted by central government and it has been hard for local government to afford social development programs. Furthermore, since the beginning of local autonomy in 1995, many local governments gave first priority to developmental policies, resulting in substantial environmental deterioration. Figure 3 shows the structure of constraints at the local level on sustainable development with a feedback loop. Elected local governors' concern for regional economy lead to relaxed enforcement of environmental regulation and the increased significance of regional development policies. In addition, decentralization without financial support from the central government since the beginning of local autonomy increased the financial burden of local governments, which further increased

the significance of regional development policies and weakened local government's ability to implement Local Agenda 21. All of these trends had negative effect on environmental preservation.

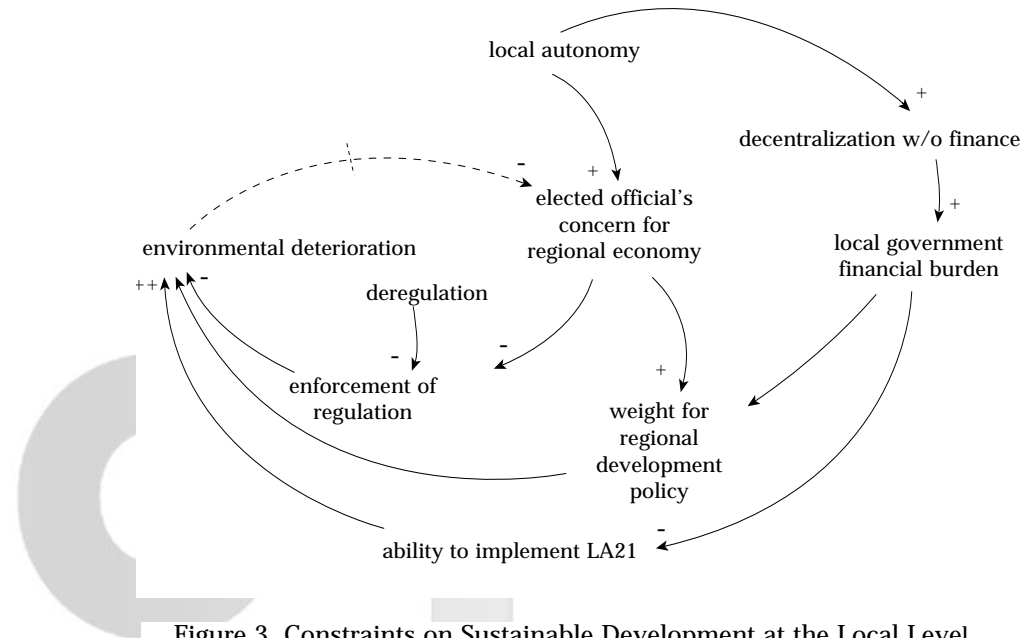


Figure 3. Constraints on Sustainable Development at the Local Level

Conclusion: Reflections on Environmental Policy and Sustainable Development

Korea was successful in overcoming poverty and its economy grew at an astonishing pace through a growth-first developmental policy. Korea adopted an unbalanced growth strategy because there was no money to invest in all sectors for balanced growth. Korea went for an industry-oriented growth strategy because industry yielded more profit than did the agricultural sector. It also adopted an export-oriented growth strategy because the domestic market was too small. During the early period of development, these choices were some-

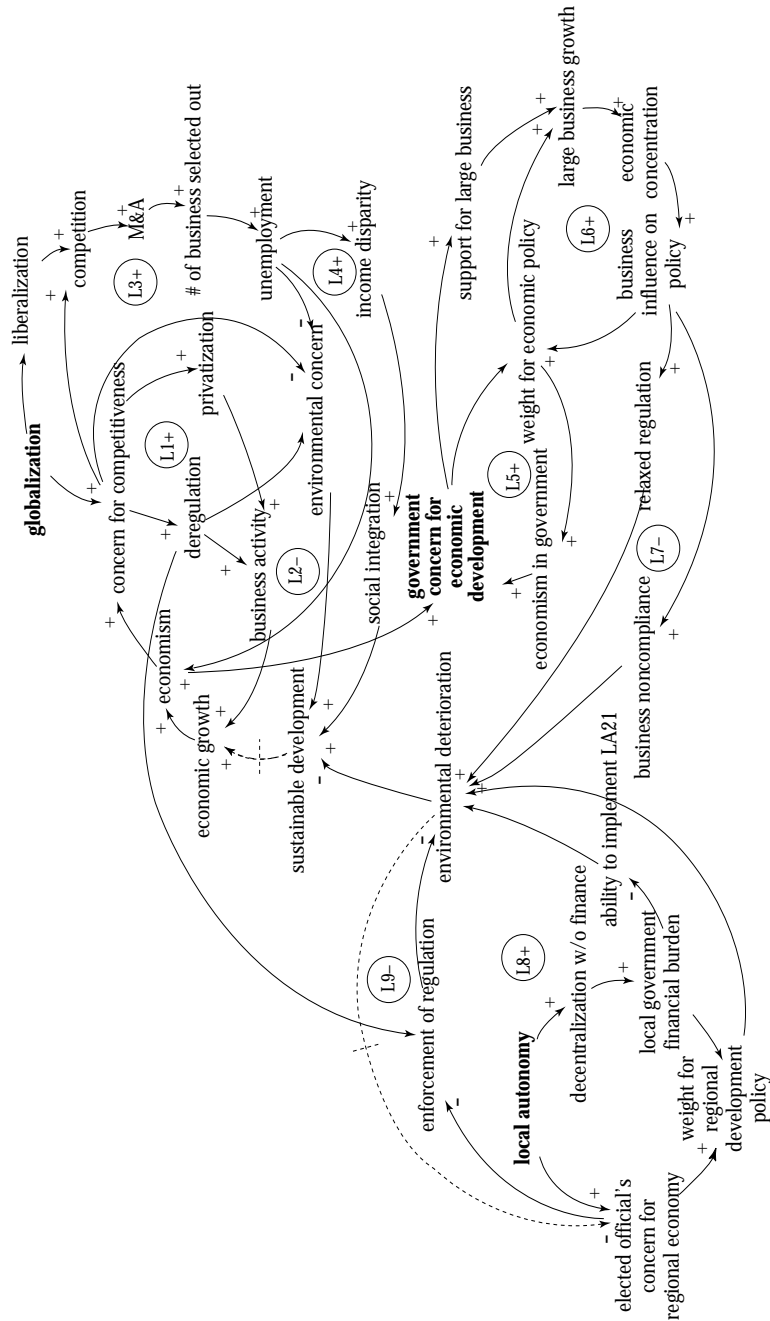


Figure 4. Constraints on Sustainable Development in Korea

what inevitable. The problem, however, was not the strategy pursued but the government's inertia and adherence to growth-first policy even after socioeconomic conditions had changed. The government was successful in making the pie bigger, but lagged in meeting the changing public demand for a better quality of life.

This lack of adaptability on the part of the government came from many sources. First, as illustrated in the causal loop diagram, the lack of adaptability came from institutionalized economism in the bureaucracy obsessed with economic growth; second, from increased business influence that gave businesses a greater bargaining power vis-à-vis government policy-making and implementation; and last, from short-sighted political leaders who heavily relied on economic performance for their political legitimacy and popularity. Figure 4 is a causal loop diagram that combines all the causal loop diagrams explained so far.

Achieving a "greening" of the government is not an easy task in Korea. As shown in the above causal loop diagrams and in the integrated causal loop diagram in figure 4, constraints on sustainable development and "greening" the government are structural ones. Unless Korea can overcome these structural problems, it will be very difficult to achieve sustainable development and to have a "green" government. As shown in figure 4, institutionalized economism in government increases growth-oriented policies, which in turn increase economic concentration. Economic concentration leads to more business influence on government policy. Globalization further accelerates economism because its concern largely focuses on economic efficiency.

There seems to be little room for sustainable development under these circumstances. The role of government, which has leaned too favorably toward economic supports, has to be strengthened in the area of social and environmental policy to keep a healthy balance between economy, society and environment to achieve sustainable development. However, it seems unlikely that government will take strong actions for sustainable development under current structural constraints. The only alternative strategy lies perhaps in civil society.

Civil organizations' movement and participation can make a strong balancing loop that can negate the trap of economism. Were the government agencies effective in formulating policies and delivering services to the public, and had the legislative bodies been effective in articulating and conveying public voice, Korea would not have witnessed such a mushrooming of civil organizations. Civil organizations are now regarded as alternatives to governmental bodies that can monitor, correct government misconduct, and deliver services in the interests of the community. Furthermore, civil organizations are now regarded as guardians of democracy that can protect against the negative effects of globalization (Ahn 1998b). It is encouraging that civil society organizations are growing rapidly since the democratization process of the late 1980s. However, their participation in the policy process is still limited and their financial resources are far from sufficient to fulfill their expected role. Government must ensure the full and equal participation of civil society in the process of economic policy and other developmental decision-making. However, in order for this to be attainable, the legal and institutional framework has to be changed to empower citizens and civil groups.

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