

Chapter 4

Environmental Movement and Policies During High Economic Growth in Korea

Do Wan Ku[†]

1. Introduction

Korea has sustained high economic growth rates since the 1960s, often at the expense of environmental degradation and authoritarianism. In spite of these problems, Korea could be a useful model for achieving high economic growth.

In the 1980s, Koreans began to recognize the importance of environment and nature. Environmental awareness developed rapidly. Accordingly, environmental movement organizations and policies proliferated. Environmental disasters such as tap water contamination accidents (i.e., the phenol accident in the Nakdong River in 1991¹) provoked severe social concern for environmental problems. The enormous explosion of mass communication on environmental problems in the early 1990s was an important resource for the expansion of environmental movement and policies.

Environmental movement organizations became one of the most important powers in civil society in the 1990s. Environmental policies and administration developed very quickly. Why was this change made? Did economic growth result in this change? Is the democratization process since 1987 the main reason for the development of the environmental movement and policies?

My theory focuses not on uni-dimensional but multi-dimensional causal linkage. We cannot reduce the causes of environmental problems to just one factor such as industrialization, capitalism, anthropocentrism, and so on. Cultural systems such as anthropocentric Christianity, dominant western value systems and socio-economic systems such as capitalism, industrialism, imperialism, and so on are integrated, and in combination result in impacts on the environment.

[†] Consultant to the Director General, Ministry of Environment, Korea

¹ The phenol leakage accident in the Nakdong River was happened in 1991. Contaminated tap water was supplied to houses and small factories in Taegu, the third largest city in Korea. This accident was the most important event in Korean environmental history. After this accident lots of environmental organizations were organized.

The mechanism for pollution abatement and nature conservation is also complex. We need to analyze the process involved in the social construction of environmental problems. In this process, mass media, public awareness, environmental disasters and so on are important mediation factors. Through these mediation factors, social responses to environmental problems can be organized. A multi-dimensional approach is needed to comprehensively research relations between these factors.

In chapter 2, I will suggest an analytical framework for environmental policies and movements. In chapter 3, I will review the discussions concerning the relation between economic growth and environmental degradation in Korea. After that I will suggest the trend of mass communication on environmental problems and environmental consciousness. I will study the short history of environmental movements and policies. Finally I will tackle the 5 research questions.

2. Analytic Framework

Does economic growth in a capitalist economy improve environmental quality in some stage? Marxists urge that capitalist economic growth occurs only for capitalists' interests and supported by the capitalist state. Eco-Marxists such as James O'Connor (1988) insist that capitalism have limits in reproducing the condition of production (land, resources and so on). According to eco-Marxists, it is essential to replace capitalism in order to solve environmental problems completely.

Technological optimist, however, urge the opposite thesis. This model considers economic success to be the key factor in a state's turn to protective environmental policy. According to Grossman and Krueger, development gives rise to structural transformation in what an economy produces. They insisted that the forces leading to change in the composition and techniques of production may be sufficiently strong to more than offset the adverse effects of increased economic activity on the environment (Grossman and Krueger, 1995: 353; Jang Heo: 17).

These two theories focus on economic systems as a main cause of environmental problems. However it is problematic to find direct linkage between economic and environmental factors. We can find many intermediate factors such as public awareness, mass communication on environment, environmental movements and policies. We can make a multi-dimensional diagram of the socio-economic mechanisms of environmental problems.

First, environmental problems are caused by various systems. Lynn White jr. (1967) insisted cultural system such as Christianity is the fundamental reason for

environmental problem because of its anthropocentrism. The other people think socio-economic systems such as capitalism, industrialism, and authoritarianism are the causes of environmental problems. I think environmental problems cannot be reduced to just one cause but rather to multiple causes.

Environmental degradation doesn't invoke environmental policies and movements, since most states need to generate economic growth to keep their legitimacy and therefore give low priority to environmental policies. We should identify what factors are the main causes of environmental policies and movements. When environmental problems become serious, generating crisis or disaster, mass communication on environmental problems explodes. Public awareness of environmental problems then develops quickly.

Three dimensions of social responses to environmental problems can be identified. The state responds to environmental problems with environmental policies, civil society with environmental movement, the private sector with environmental industries (green capital).

Environmental movement can be developed on the basis of resources such as mass media and public awareness, while environmental disasters can provoke public grievances and can also be a good resource for environmental movement.

The state must respond to environmental problems. In the early stages of economic growth, as pollution is not serious and is not recognized seriously by the public, the state will usually also not address environmental problems. However, as environmental crises emerge, public awareness and mass communication on the environment increase, and the state must tackle environmental problems not only to maintain its legitimacy but also to maintain economic growth.

The environmental movement, policies and industries can improve environmental quality to some extent. This article suggests the relations among these factors by analyzing historical trends. On the basis of this conceptual framework, I will tackle the following 5 research questions.

Did economic growth in Korea improve environmental quality?

What impacts have environmental policies had on environmental quality in Korea?

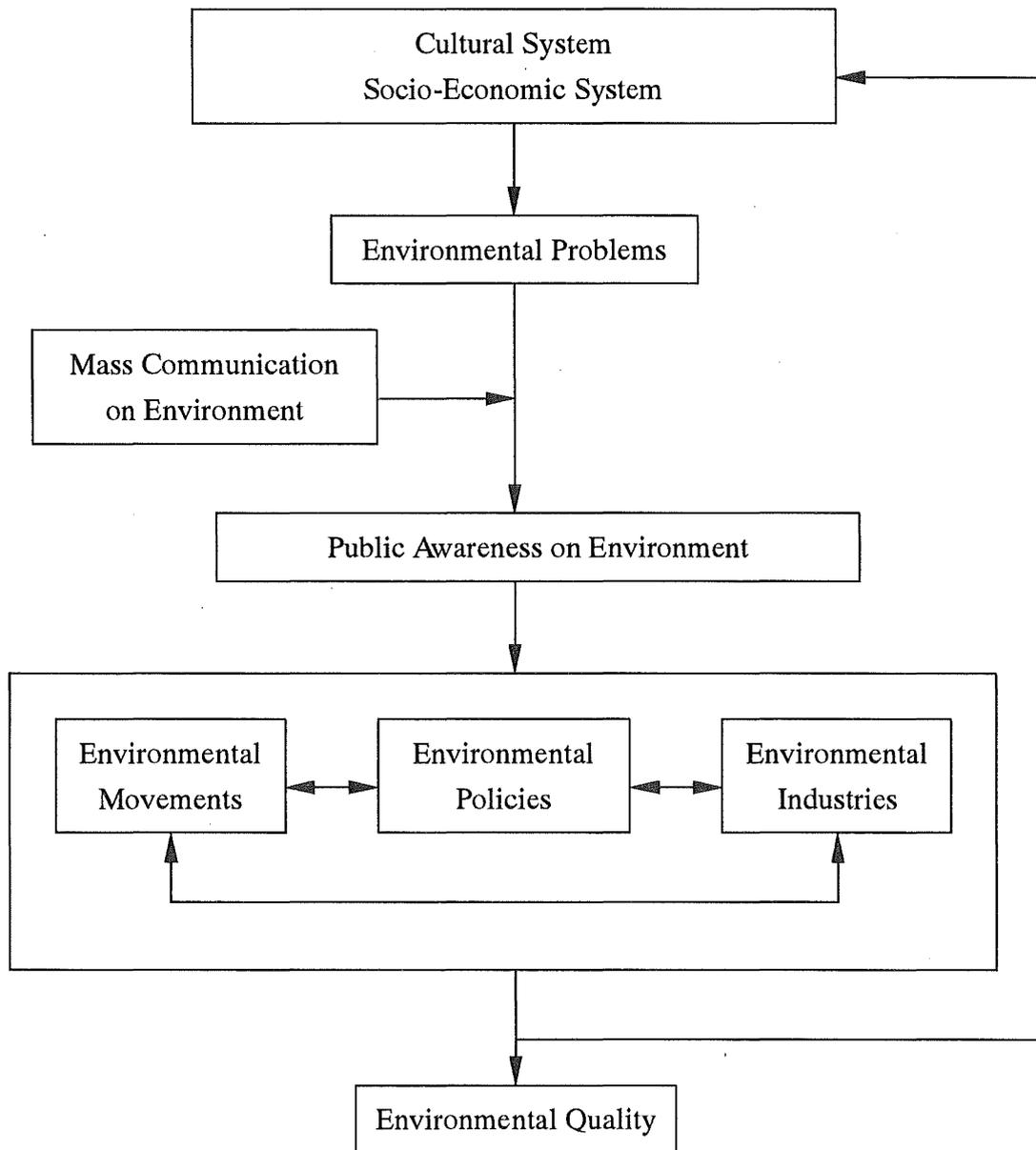
What are the crucial factors in the development of environmental policies in Korea?

Why did the Korean Environmental Movement grow in the 1990s?

What is the environmental movement's impact on Korean society?

<Figure 1>

The Structure of Environmental Problems and Social Response



3. Economic Growth and Environmental Degradation

Grossman and Krueger (1995) examined the reduced-form relationship between per capita income and various environmental indicators. They found that while increases in GDP may be associated with worsening environmental conditions in very poor countries,

air and water quality appear to benefit from economic growth once some critical level of income has been reached. The turning points in these inverted U-shaped relationships² vary for the different pollutants, but in almost every case they occur at an income of less than \$8000 (1985 dollars) (Grossman and Krueger, 1995: 370; Jang Heo: 17).

Ji-Hyun Kim (1999) studied whether Korea has developed the inverted U-shaped relationship between income growth and environmental pressure. To examine the relationship she undertook two approaches: (1) investigating the relationship between per capita GDP and four types of pollutant emissions (CO₂, SO₂, NO₂, and BOD) from 1980 to 1995 and (2) the relationship between per capita GDP and per capita material intensity.

She found that each emission had a different trajectory because of varying economic activities; furthermore, different government regulations influence each emission to different extents. For example, CO₂ emissions had a linear relationship with rising income while SO₂ emissions showed an environmental Kuznets curve.

Second, she applied Bruyn and Opschoor's index of environmental pressure (1997) and found that the inverted U-shaped story did not occur in Korea during the period 1980-95. She concluded that the Korean economic growth pattern might have been a burden on the environment.

Jeong-jeon Rhee (2000: 82-3) also studied the relationship between economic growth and environmental degradation during high economic growth. According to him, while total energy consumption increased by a factor of around 3, SO_x emission increased by a factor of 9 during the period 1965-79. Considering population growth, energy consumption per capita increased 2.5 times, but SO_x emission increased 7 times.

In the 1980s, the average annual economic growth rate was around 10%. During high economic growth environmental degradation was serious. While GNP increased 64% from 1980-86, the quantity of specific industrial waste increased 100%, general industrial waste increased 90%, and CO emission increased 75%. Rhee found that the increase in the rate of pollution emission was greater than the economic growth rate.

² Environmental Kuznets curve

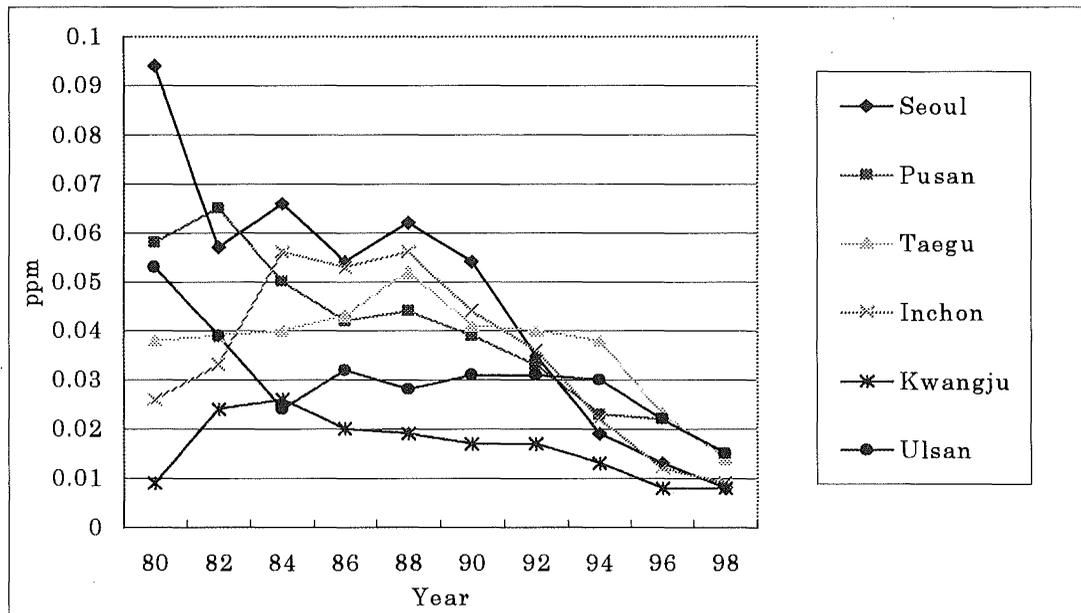
<Table 1> Energy Consumption and SOx Emission during 1965-1979

	1965	1979	1979/1965
Total Energy Consumption (TOE)	12,127,000	40,503,000	3.34
SOx (ton)	161,000	1,463,443	9.09
Population (thousand)	28,705	37,605	1.31
SOx/capita (kg/capita)	5.61	38.9	6.93
Energy Consumption /capita (kg/capita)	422	1077	2.55

Source: Economy Planning Bureau *Korea Statistics Yearbook* (1980)

According to Rhee's and Kim's work, while Korea succeeded in achieving high economic growth rates, the rate of environmental degradation is greater than the fruit of economic growth. Industrial structure, consumption patterns and the import/export structure of Korea can be the economic causes of this result.

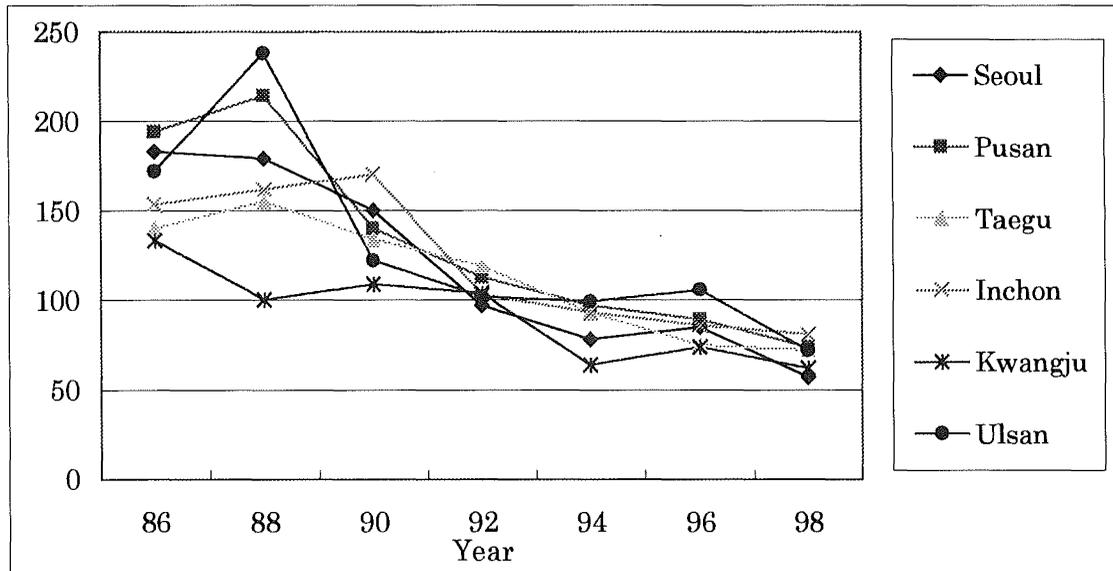
<Figure 2> Trends of Sulfur Dioxide (SO₂) Pollutant Level in Major Cities by Year (ppm)



Source: Ministry of Environment, *Environmental Protection in Korea* (1999: 303)

However, as Kim says, we can find some improvements in environmental qualities. For instance, SO₂ and Total Suspended Particulates (TSP) pollutant levels in major cities have decreased since the late 1980s (Figure 2, 3).

<Figure 3> Trends of Total Suspended Particulate (TSP) in Major Cities by Year (µg/m³)

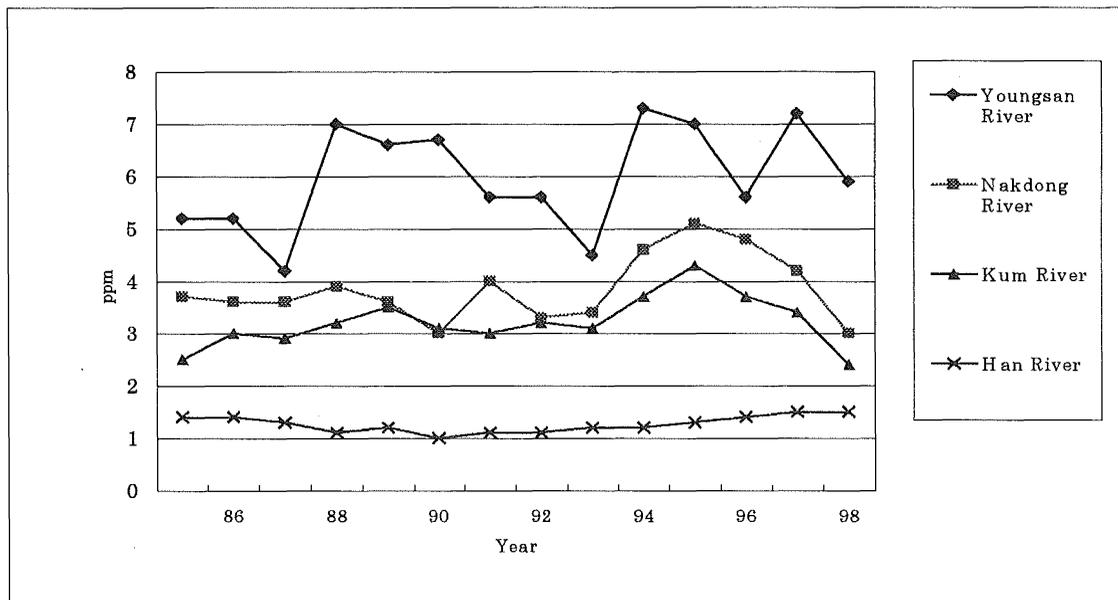


Source: Ministry of Environment, Environmental Protection in Korea (1999: 305)

On the contrary, it is hard to find explicit improvements in water quality in major rivers. Though the Korean government has made efforts to improve water qualities since the early 1980s, could not catch up with the rapid urbanization and development trend (Figure 4).

The total amount of the nation's waste generation had dropped during 1992-1993 period; it increased from 1994, again. Industrial waste generation increased consistently except 1998, the year of fiscal crisis. However, municipal waste generation decreased consistently since 1992. A volume based collection fee system for municipal wastes that was put into effect nationwide on 1995 was effective to reduce municipal wastes (Ministry of Environment, 1997: 265).

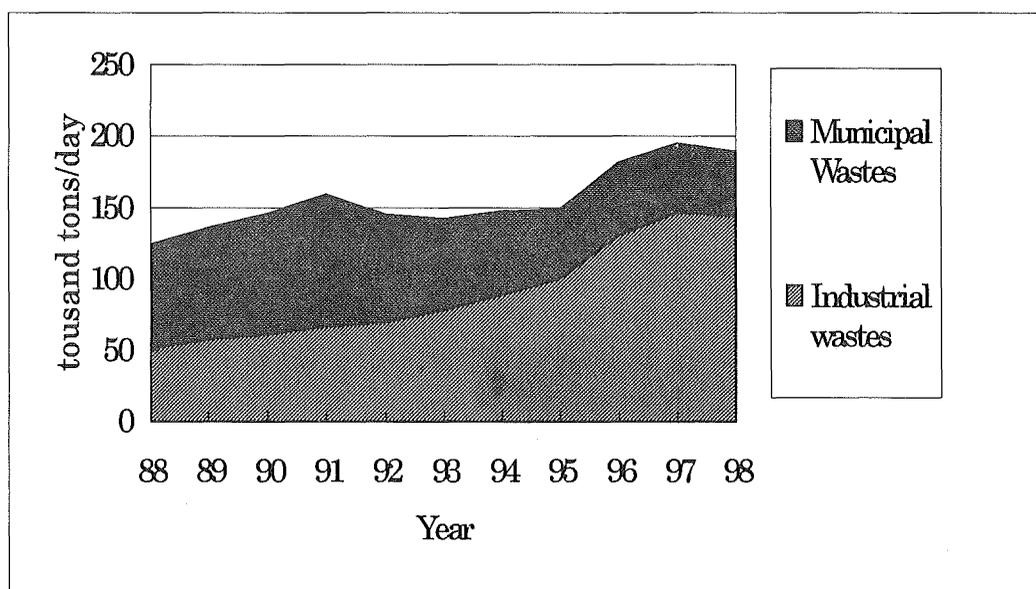
<Figure 4> Water Quality (Biochemical Oxygen Demand) by Year (ppm)



Source: Ministry of Environment, Environmental Protection in Korea (1999: 367)

Considering these data, we can find that though environmental qualities in some aspects have been improved, total amount of pollutant emissions do not decrease during high economic growth in Korea.

<Figure 5> Total Amount of Wastes by Year (thousand tons/day)

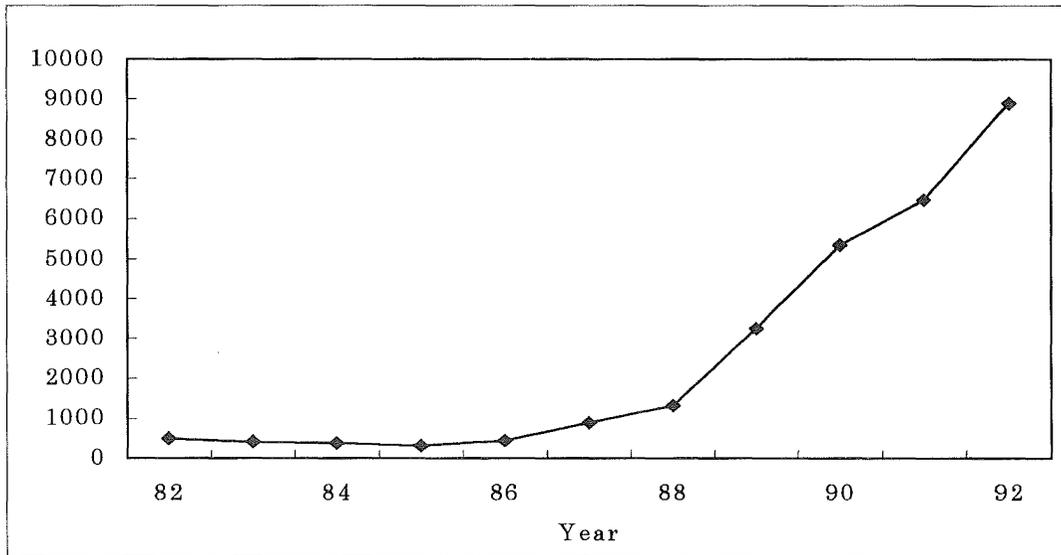


Source: Ministry of Environment, Environmental Protection in Korea (1994, 1999)

4. Mass Communication on Environmental Problems

In the 1970s and early 1980s, the major environmental issue was pollution around industrial facilities, specifically in Ulsan, Yeochon etc. In the 1990s, tap water contamination, air pollution, nature conservation and global environmental problems such as climate change were major issues. The number of reports concerning environmental problems increased rapidly since 1987.

<Figure 6> Number of Reports concerning the Environment in National Newspapers



Source: Ministry of Environment, Environmental Protection in Korea (White Paper) (1993: 350)

5. Environmental Consciousness

Most Koreans have become very concerned about environmental degradation, since the 1980s. According to national survey, about 90% of Koreans thought environmental problems seriously (Table 2).

<Table 2> Attitude on Environmental Degradation of Nation (%)

“What do think of environmental problems”?

	Very Serious	Serious	Not Serious
1986	51.6	42.4	5.9
1988	47.3	39.1	13.6
1996	37.5	53.1	9.0
1997	42.2	52.0	5.8

The dissatisfaction with environmental policy and implementation dramatically increased in the 1990s. While negative valuation of environmental policies was 24-32% in the 199s, it increased to around 50% in the 1990s (Table 3).

<Table 3> the valuation of environmental policies of the government (%)

“What do you think of environmental policies of the government?”

	Very Good	Good	Bad	Very Bad	Don't Know
1982	8.6	59.7	18.6	5.7	7.4
1987	15.5	41.7	21.8	10.3	10.6
1996	3.1	50.8	40.6	4.9	-
1997	2.7	46.5	42.4	8.4	-

Koreans gave top priority to environmental policy in national surveys of 1996 and 1997. While most people supported "the harmony of economic growth and environmental protection" in the 1980s, around 80% respondents preferred environmental protection to economic growth in the late 1990s (Table 4). Many people were supportive of environmental movement organizations in the 1990s.

We can find that public environmental consciousness in Korea is persistent. The issue-attention cycle dynamics thesis of Anthony Downs³ (1972) is not relevant to the Korean case (Ku, 1999).

Thanks to this tendency, environmental movement and policies could be developed rapidly in Korea. On the other hand, this tendency is a result of environmental movement and policies.

³ Anthony Downs insisted that most social problems including environmental problems have issue-attention cycle. He urged that public attention to environmental problems could be disappeared if mass media reports decreased.

<Table 4> Attitude on Environmental Protection and Economic Growth (%)

	Prefer Environmental Protection	Prefer Harmony of Environment and Economic Growth	Prefer Economic Growth	Don't Know
1982	6.6	69.9	14.3	9.1
1987	2.8	88.7	6.0	2.5
1992	51.5	29.0	19.5	-
1996	85.5	-	14.4	-
1997	77.7	-	22.3	-

6. Environmental Movement

The Korean environmental movement began with industrialization. While it is true that rapid economic growth provided economic affluence, at the same time it exacerbated pollution. Koreans enjoyed increased material affluence, but they also desired a cleaner environment, and this desire influenced the development of the environmental movement. In this chapter, I will review the history of the Korean environmental movement.

The 1960s-70s

In the 1960s and 1970s, there were little environmental organizations having environmental ideology and organizational structure. This period can be termed the stage of prehistory of the environmental movement (Ku, 1996a; 1996b).

The Korean environmental movement started from the collective action of victims. Though their action, because it lacked organization and continuity, it can hardly be defined as a social movement, it nevertheless forms the basis for the contemporary environmental movement. After the economic development plan was executed in the 1960s, pollution around industrial sites in such places as Ulsan, Onsan, and Yeochon became a serious problem, and the residents of the surrounding areas began campaigns for damage compensation. In addition, the Nature Conservation Association (founded in 1963) and the Association for the Protection of Wild Animals (founded in 1969) were established, though their social influence was trivial.

With the increase in pollution in the 1970s, campaigns for damage compensation became more active, and environmental movement organizations such as

the Association for the Preservation of the Nakdong River (founded in 1978) and the Pollution Research Society (*Gonghaeyonguhoe*: founded in 1979) were established.

There were not many professional environmental organizations during this period, and they did not have the resources to support the victims' movements. During this time, the press was the only force that could raise the environmental issue in public and represent the victims.

The 1980s

The second period, the 1980s are the era of the anti-pollution movement. After the democratization movement, 'the Spring of Seoul' in 1980 was suppressed by military power, it was temporarily withdrawn; soon, a new nationalist-democratic movement developed. The anti-pollution movement became active along with the nationalist-democratic movement, and it became a part of the nationalist-democratic movement. In 1982, progressive Protestant and Catholic clergymen established the Korean Pollution Research Institute (PRI). This institute made great efforts in supporting victims, researching the pollution problem, and educating the public.

Different from the grassroots environmental organizations, the Non Governmental Organizations (NGOs) led by college students and recent graduates strongly identified themselves as part of the nationalist-democratic movement. The anti-pollution movement organizations recruited their members from students and anti-government activists with a nationalist-democratic inclination, for example, Yul Choi, the core member of PRI. The declaration published during the evacuation campaign in the Ulsan and Onsan industrial sites, led by the PRI, shows such an inclination.

The pollution requiring such a voluntary migration is not limited to the Ulsan and Onsan residents but is a matter concerning the quality of life of the whole nation. It is important to realize that a few government-supported conglomerates and military dictatorship create the pollution problem. Thus, not only the residents in industrial sites such as Ulsan and Onsan but people all over the nation have to commit themselves to a more basic and broad anti-pollution movement in order to terminate the anti-nationalistic and anti-popular conglomerates and military dictatorial regime causing the problem. (*Kisayun*, 1986: 164-166).

Because of this inclination, the ruling power regarded the anti-pollution movement as an anti-government movement, and tried to prevent the local resident movement from allying with professional environmental organizations (Ku, 1996: Chap. 6). In 1988, the Korean Anti-Pollution Movement Association (KAPMA: *Kongchuryon*)

was established (Co-president: Yul Choi). KAPMA's ideology was oriented to leftist environmentalism that urges environmental justice and abolition of the monopoly capitalist system.

The 1990s

The third period, the 1990s is the era of the new environmental movement. During this period diverse social movement organizations formed, made progress, and sought new ideologies and strategies as Korea was in the process of democratization. As democratization progressed after the collapse of Chun regime through the June Protest of 1987, the environmental movement changed in character.

In this period, citizens' movement organizations such as the Citizens' Coalition for Economic Justice (CCEJ: *Kyongshilyon*), the YMCA and the YWCA actively joined the environmental movement. They criticized the radical strategy of the existing anti-pollution movement and insisted upon more professional and mass-oriented activities.

The United Nations Conference on Environment and Development (UNCED) in 1992 was a turning point; after this conference, the Korean environmental movement changed greatly. The new environmental movement replaced the anti-pollution movement. The anti-pollution movement organizations, represented by KAPMA, had regarded huge corporations and the government as the violators, and the people as the victims; therefore, they defined the environmental movement as a hostile struggle between the two. After the UNCED, however, they began to pay attention to global environmental issues and the modest mass movement.

The first important change in this period was that citizens became the major actors in the movement. In the 1980s, victims and the lower classes were the main constituents of anti-pollution movement. In the 1990s, diverse professional environmental organizations were established under the expanded political opportunity structure and citizens' organizations began to actively join the environmental movement.

Secondly, the victims' movement exercised greater social influence. It expanded not only in size, but also changed in quality in that the campaign for damage compensation expanded to include damage prevention.

Thirdly, the interests of the environmental movement moved beyond the interests of local residents to the general issue of life and health of all citizens.

Fourth, the ideology changed from leftist environmentalism to realist environmentalism that accepts institutional reform and environmental managerialism.

On the other hand, environmental movement organizations have experimented with various ideologies such as deep ecology, eco-anarchism, and communitarianism.

Fifth, in the 1990s, the big national environmental organizations, Korean Federation of Environmental Movement (KFEM)⁴ and Green Korea, were institutionalized and stabilized as National NGOs. They adopted modest resource mobilization methods.

⁴ KAPMA based on Seoul was transformed to National NGO, KFEM by making a federation of local environmental organizations.

<Table 5> The Characteristics of the Korean Environmental Movement by Stage

	Prehistory of the environmental Movement (the 1960-70s)	Era of the anti-pollution movement (the 1980s)	Era of the new environmental movement (the 1990s)
Accident Event	Mercury Contamination by pesticide (1978) Disease caused by Air pollution from Industrial Sites (late 1970s)	Onsan Disease (1985) Tap Water Contamination (1989)	Phenol Leakage Accident (1991) Tap Water Contamination (1990) <i>Anmyundo</i> Anti-Nuclear Waste Dumping Campaign (1990)
Environmental Movement Organizations	Not Applicable	PRI KAPMA	KFEM Green Korea CCEJ YMCA/YWCA
Types of Movement	Grassroots Victims' Movement for Damage Compensation	Grassroots Victims' Movement Radical NGO Movement	Grassroots Victims' Movement Modest NGO Movement
Ideology		Leftist Environmentalism	Realist Environmentalism Environmental Managerialism Ecologism
Issues	Pesticide Air and Water Pollution near industrial sites	Air and Water Pollution near industrial sites "Pollution Disease"	Air and Water Pollution in large cities Nuclear Power Plant and Waste Disposal Siting Conservation/Preservation (Dong River) Global Environmental Problems
Activists	Farmers and Fishermen near industrial sites	Farmers and Fishermen near industrial sites Intellectuals College Students	Farmers and Fishermen near industrial sites Intellectuals College Students Middle class Housewives

7. Environmental Policies

1) Environmental Administration System⁵

The 1960s and 1970s

In 1963, almost simultaneously with the beginning of the First Five-Year Economic Development Plan, the Korean government enacted the Pollution Prevention Act (PPA). It turned out, however, that the PPA was not effective in reducing or ameliorating the environmental impacts of industrialization (Heo, 1997). PPA and a small section with five persons in Ministry of Health and Social Affairs (MOHSA) were the only materialization of the state's involvement in environmental protection until the early 1970s.

To abate serious pollution, the Korean government took the form of new legislation — the Environmental Conservation Act (ECA) of 1977 — and then took part in shaping in the establishment of the Environmental Administration (EAD) in 1980.

In May 1979, two critical incidents that occurred almost simultaneously forced President Park to order his cabinet to create a separate environmental agency. In one of these incidents, hundreds of children aged between 2 and 15 years old who lived near the Ulsan industrial complex suffered from severe skin itching. The skin disease spread to more than 160 adults by the end of the month. The cause of this “strange” disease was unknown, but it was strongly suspected that it was related to the hazardous gas emitted from nearby chemical factories, because those living far from the factories had lower rates of suffering.

Within a week's span, a second incident erupted when hundreds of female workers in an Ulsan factory complex had to be treated after drinking water contaminated by hazardous six-valve chromium (Cr^{+6}).⁶ The water was later found to contain 94 times the concentration of the heavy metal element allowed by the ECA Implementation Rule as an environmental standard (50 ppb). It was also found that other factories in the Ulsan and Yeochun complexes had over-used the heavy metal. In the resultant uproar, in May 1979, the President commanded the Prime Minister Kyu-ha Choi to create the Environmental Administration as soon as possible. As a result, the EAD was established in 1980.

⁵ Most of this part is based on Jang Heo (1997).

⁶ The six-valve chromium is a heavy metal material used as an anti-corrosive.

The 1980s

Since the time of its creation, the EAD has introduced many programs and performed regulatory roles in diverse areas. In 1981 a non-compliance charge began to be levied upon discharged wastewater, which exceeded a certain level; the collected fines provided funds for the government's pollution removal projects. The EAD also set forth a Long-term Environmental Improvement Plan with the goal of cleaning up major rivers.

The EAD had important organizational change in 1986. Regional branches were created in Seoul, Pusan, Kwangju, Taegu, Taejon, and Wonju in order to more effectively implement regional environmental management. The establishment of regional branches implied an important progress. It enabled the EAD to perform the routine monitoring of the locally dispersed facilities directly and to widen its implementation authority.

The broad socio-political contexts offered opportunities for environmental bureaucrats to expand both their organizations and the state's environmental law structure. These two efforts — legislative and organizational expansion — were pursued simultaneously in the late 1980s (Heo).

The 1990s

The Rho Administration created the Environmental Agency (EAG) in 1990. The National Assembly passed six environmental laws, among them the monumental Basic Environmental Policy Act (BEPA) that replaced the Environmental Conservation Act (ECA).

Through the creation of the EAG, environmental policy came to have an independent public authority, and the EAG became exclusively responsible for environmental issues starting in 1990. With its launch, the Agency declared the year of 1990 to be the "Beginning of the Era of Environmental Protection".

Only four years after the EAG was created, the Kim Young Sam administration decided to establish the Ministry of Environment (MOE). The December 1994 governmental reorganization was one of the most major renovations in Korean history.

2) Evaluation of Environmental Policies

According to OECD report on Korean environmental policy, in the 1990s, environmental protection has been given greater emphasis and efforts have been made to render development sustainable (OECD, 1997: 17). Korea's regulatory system is characterized by a combination of generally applicable rules and a "place-based" approach; the main

instruments are emission/discharge permits, ambient environmental standards and the designation of zones where special conditions apply.

Korea has been creative in adding an array of economic instruments to its set of regulatory instruments: these include emission charges, environmental quality improvement charges, traffic congestion charges, energy taxes, a deposit-refund system and a waste management charge. However, OECD evaluated that the rates at which economic instruments have been applied were still low to significantly affect behavior.

The Korean government recognizes the contribution a well-informed citizenry can make to protect the environment. For example, environmental impact assessments include a period of public hearings and resident's participation.

Korea elaborated and implemented a very comprehensive waste management policy in the early 1990s. Generation of household waste has been decreased as a result of technological changes and the use of a new economic instrument (taxation of garbage collection bags). A smaller portion of waste is being sent to landfills and a larger share is being recycled (OECD: 23). The Korean government has also made improvements in water conservation, air management, and conservation.

However, as Korea experienced high economic growth, it is hard to say that there have been broad improvements in actual environmental quality. The OECD report advised that to make development sustainable and environmentally sound, it will be necessary to better integrate environmental concerns in economic and sectoral policies (OECD: 26).

8. Discussion

1) Did Economic Growth in Korea Improve Environmental Quality?

According to Ji-Hyun Kim and J. J. Rhee, economic growth in Korea did not improve environmental quality overall. However, strong environmental policy implementation on water, air and waste management has had some effects. SO₂ emission, Total Suspended Particulates, and the quantity of municipal wastes have all been decreased in the 1990s.

We can conclude that economic growth is the main reason for environmental degradation. On the other hand it can provoke public awareness of the environment and environmental policies. If environmental policies can be implemented firmly and effectively, they can improve environmental quality to some extent. In the Korean case, we can find the trend only in some aspects. To identify the mechanism of pollution

abatement and environmental improvement in detail, we need to research how environmental movements and policies work.

2) What Impacts have Environmental Policies Had on Environmental Quality in Korea?

Environmental policies in Korea resulted in some improvements in environmental quality. SO₂ pollutant levels in large cities have decreased since the early 1990s. However, the level of ozone has grown in large cities in the late 1990s. The water quality targets of large rivers have not been met yet.

However, environmental administration has been set up successfully, though it has been still fragmented and not very well integrated with economic policies. Environmental laws have been comprehensively legislated. Key principles such as polluter pays principle and prevention and integration principles were adopted and will be implemented. Though environmental policies were somewhat successful in ameliorating environmental degradation, they could not change the social paradigm to new environmental paradigm.

3) What are the Crucial Factors in the Development of Environmental Policies in Korea?

Environmental disasters and reports of mass media are crucial factors in the development of environmental policies. Onsan disease, Phenol Accident and so on were constructed as important social agenda items. Thanks to these accidents, environmental administration systems, laws, and policies were developed quickly.

The other important factor was public environmental awareness. Since the late 1980s, environmental consciousness was diffused to most people in Korea. The Korean government had no policy options except progressive environmental policies to avoid a legitimacy crisis.

Finally, environmental movement organizations were an important pressure group for the government. The environmental movement was very antagonistic to government in the 1980s. However, in the 1990s they changed their strategy to modest and realist resource mobilization. On the one hand, they criticized government; on the other hand they co-operated with government on some issues. Because environmental organizations have large memberships and public trust, the government has tried to cooperate with them.

4) Why did the Korean Environmental Movement Proliferate in the 1990s?

Environmental degradation is the material condition of environmental movements. Environmental disasters such as Onsan disease and the phenol leakage accident triggered public environmental concern. Mass communication of environmental problems constructs environmental problems as a social agenda. Continuous communications made public awareness of environment diffused to most Koreans.

In the Korean case, under a relatively open political opportunity structure, strong grievances and concern were mobilized by environmental organizations. In 1987, the authoritarian regime was defeated by people's power. In the democratization process, the environmental movement grew, and public environmental awareness increased rapidly.

In conclusion, mass media was very influential. Environmental degradation is only a background; the environmental movement can be mobilized only when environmental problem can be constructed as a social agenda. In this process mass communication of environmental problems, disasters and public awareness are very important resources for the environmental movement. Overall, political opportunity structure was the social background of this dynamics.

5) What is the Environmental Movement's Impact on the Korean Society?

First, thanks to the environmental movement, procedural legitimacy in Korea has been improved. The Kim Dae Jung administration encouraged NGOs to participate in the decision making process, specifically on environmental issues. Environmental movement organizations thus gained power to participate in important decision-making processes.

Second, environmental organizations are devoted to the development of environmental policies. For example, water demand side management policy in the late 1990s was initiated by environmental organizations working against several dam construction projects. Resource recycling policy is a similar case.

Third, though the environmental movement has not succeeded in realizing general improvements in environmental quality, they changed the social value system to include a greater understanding and acceptance of environmental and ecological values. However, the general support of environmental protection does not always include sacrificing concrete economic interests.

9. Conclusion

We overviewed the environmental policies and movement of Korea during high economic growth. Economic growth gave us prosperity and material affluence, though it resulted in environmental degradation. We could find that environmental degradation was still serious though pollution abatement has succeeded in some respects (i.e. SO₂ pollutant level). According to Ji-Hyun Kim and J.J. Rhee it's hard to find an environmental Kuznets curve in Korea.

Does this finding justify the eco-Marxist theory that denies the possibility of sustainable capitalism? It's not true as far as the unit of analysis is confined to a nation state. Environmentally sound industry, export/import, consumption structure and technology can improve environmental quality of some nation state. Theoretically and empirically, clean economic growth or environmentally sound economic development is possible. However, in many cases this may be attained at the cost of global inequity. Eco-Marxist theory, therefore, should be understood in terms of a long-term, world system.

Korea was/is successful in economic growth. However, environmental degradation is still serious. To improve this situation, powerful, consistent, and efficient environmental policies must be made and implemented. Korea has made progress in environmental administration systems, policies and laws. However, Korea must apply itself to make its socio-economic system more environmentally friendly.

Environmental movement organizations proliferated in the 1990s and contributed to the development of environmental policies and the administration system. We could find that environmental disasters, mass communication, public awareness, and political opportunity structure are the most important factors for the development of environmental policies and movements.

To attain sustainable society, government and civil society cooperate to change the dominant social paradigm to a new environmental paradigm supporting harmony between nature and human beings, and social justice.

Appendix: National Accounts of Korea

	GNP (Billion dollars)	GNP Growth Rate (%)	GNP per capita (Dollars)
1960	19	1.1	79
1961	21	5.6	82
1962	23	2.2	87
1963	27	9.1	100
1964	29	9.6	103
1965	30	5.8	105
1966	37	12.7	125
1967	43	6.6	142
1968	52	11.3	169
1969	66	13.8	210
1970	81	7.6	253
1971	95	8.0	289
1972	107	4.6	319
1973	135	12.6	396
1974	188	8.0	541
1975	209	6.1	594
1976	287	11.9	802
1977	368	10.1	1,011
1978	516	9.4	1,400
1979	616	6.8	1,647
1980	606	-3.9	1,597
1981	671	5.5	1,741
1982	717	7.5	1,834
1983	800	12.2	2,014
1984	881	8.5	2,187
1985	911	6.6	2,242
1986	1,054	11.9	2,568
1987	1,334	12.3	3,218
1988	1,798	12.0	4,295
1989	2,204	6.9	5,210
1990	2,518	9.6	5,883
1991	2,920	9.1	6,757
1992	3,057	5.0	6,988
1993	3,308	5.8	7,484
1994	3,780	8.4	8,467
1995	4,526	8.7	10,037
1996	4,802	6.9	10,543
1997	4,374	4.9	9,511

Source: National Statistical Office, 1998 *Republic of Korea 50 Years*

References

[Works in Korean]

- Kisayun, Please Save Our Children*, Minjungsa, 1986.
- Ku, Do-Wan. *The Sociology of the Korean Environmental Movement*, Munhak kwa Jiseongsa, 1996a.
- Ku, Do-Wan. "The Environmental Consciousness of the Korean People", *Journal of Environmental Policy and Administration*, Vol.7, No.2.(1999), pp. 17-33.
- Ministry of Environment, *Environmental Protection in Korea*, 1993. 1994. 1999.
- Rhee, Jeong-Jeon. *The Environmental Economics*, Parkyungsa, 2000.

[Works in English]

- Bruyn, S.M. de, and J.B. Opschoor. "Development in the Throughput-Income Relationship: Theoretical and Empirical Observation", *Ecological Economics*, Vol.20, (1997), pp.255-68.
- Downs, Anthony. 1972. "Up and down with ecology: the issue-attention cycle," *Public Interest*, Vol. 28, pp. 38-50.
- Grossman, Gene M. and Alan B. Krueger. "Economic Growth and the Environment," *The Quarterly Journal of Economics*, Vol. 110, (1995), pp. 325-87.
- Heo, Jang. "Politics of Policy-Making: Environmental Policy Change in Korea", Ph.D. Dissertation, University of Wisconsin-Madison, 1997.
- Kim, Ji-Hyun. "Does an Environmental Kuznets Curve Exist in Korea's case?" *Journal of Environmental Policy and Administration*. Vol. 7, No.1, (1999), pp. 169-91.
- Ku, Do-Wan. "The Structural Change of the Korean Environmental Movement," *Korea Journal of Population and Development*, Vol. 25, No.1, (1996b), pp. 155-80.
- Ministry of Environment, *Environmental Protection in Korea*, 1997.
- OECD. *Environmental Performance Reviews: KOREA*, 1997.
- White, Lynn Jr. "The Historical Roots of Our Ecological Crisis," *Science*, Vol. 155, (1967), pp. 6-16.
- O'Connor, James. "Capitalism, Nature, Socialism: A Theoretical Introduction." *Capitalism Nature Socialism*, Vol. 1, (Fall, 1988), pp. 11-38.

