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새만금: 역사와 갈등

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The Saemangeum: History and Controversy

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요 약

새만금 간척사업의 역사와 갈등을 소개하고 행정소송과정을 서술하였다. 세계 최대의 간척공사인 새만금 간척사업은 한국에서 가장 갈등이 심한 환경이슈로 여겨진다. 1996년에 발생한 시화호 오염사건을 계기로 새만금 사업의 인공 담수호수 수질문제가 사회적인 관심사와 이해당사자의 갈등을 불러일으켰다. 이를 해결하기 위해 사법재판부가 개입한 것이 시화호와 다른 새만금 사업의 특징이다. 1, 2차 재판부가 동일한 사실에 대해서 경제적 타당성, 생태계 가치, 토지이용, 수질에 대한 상이한 판결을 내린 것은 복잡한 환경문제를 다루는데 있어 법률적 제도의 한계점을 보여준다. 대법원의 최종판결 직후 지역주민과 국회의원의 강력한 지지에 힘입어 새만금 사업촉진을 위한 특별법이 제정되었다. 2009년에는 이 법에 근거한 새로운 토지이용 계획이 수립되었다. 새만금 사업은 시화호와는 전혀 다른 진행과정을 보여주고 있다. 새만금 지역은 개발과 보존이 조화를 이루며 지역주민과 미래세대의 번영을 위한 지속가능한 방법으로 관리되어야 한다.

Abstract – The paper describes the history and the evolution of the conflict of the Saemangeum reclamation project, focusing on the court trial processes. The Saemangeum project is the world largest coastal reclamation work, regarded as the most controversial environmental issue in the recent history of Korea. Due to the severe pollution found in Lake Sihwa in 1996, the Saemangeum project began to receive a large degree of public concern on the water quality of the proposed artificial freshwater lake. Unlike the Sihwa case, the Korean court system intervened to resolve the heated conflicts between stakeholders in the Saemangeum case. Based on the same set of facts, the Korean courts showed different perspectives on the economic feasibility, value of the ecosystem, land use, and water quality, which represents the limit of legal system to address complicated environmental problems. After the final judgment by the Supreme Court, 'the Special Act for the promotion of the Saemangeum reclamation project', was enacted with strong political support from local leaders and congressmen. A more developmental-oriented land use plan came out in 2009 based on this Act. The Saemangeum project walked along the different pathway from the Sihwa case. The area should be managed in sustainable manners to appropriately consider conservation and development for the prosperity of local residents and future generations.

Keywords: Stakeholder conflict(이해당사자 갈등), Legal process(법적 절차), Tidal flat reclamation(갯벌 간척), Saemangeum(새만금)

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1. INTRODUCTION

The Saemangeum project was created by a commitment the president of Korea made during his election campaign in the late 1980s and commenced in 1991. The project was originally to last 21 years and end in 2011 with a total budget of 2.1 billion USD. The hallmark of the project was going to be the world's largest dike at approximately 33 km long. This dike would have enclosed the entire estuary of the Mangyeong and Dongjin Rivers in order to create dry land and an artificial freshwater lake that were together 401 km^2 in size.

While the Sihwa project was referred to as one of the most severe environmental disasters in the history of Korean reclamation, the Saemangeum project was the most controversial environmental issue in the recent history of Korea. Due to the pollution of Lake Sihwa in the mid 1990s, the Saemangeum project attracted a large amount of public concern about the water quality of the proposed artificial freshwater lake. The heated debates that occurred in the following years over whether the project should continue or be abandoned highlighted the conflict between stakeholders, including central and local governments, local residents, and environmental NGOs.

In 1999, an ad hoc committee was formed to reevaluate the feasibility of the project, by considering the environmental impact and water quality concerns and by conducting a cost-benefit analysis. The committee performed a 14-month survey but failed to reach a consensus. As a result, the government decided to continue the project based on a revised plan. Unfortunately, it seemed as though the science could not provide reliable tools in resolving the social debate on the complicated environmental issues in the Saemangeum area.

Over a period of two months in the spring of 2003, a long procession of people composed of clergyman, civic group members, and environmentalists performed a 'three steps and one deep bow' pilgrimage of 300 km from Saemangeum to Seoul proclaiming the love and seriousness for the conservation of life in the Saemangeum area. This protest sparked fierce debates about wetlands reclamation (Korea Herald, May 30, 2003), and led to a fairly large shift of public view favoring the conservation rather than the development of tidal flats.

Unlike the Sihwa case, the Korean court system was in charge of resolving the Saemangeum conflicts. In brief, three trials in the courts found that there was no reason to stop the project. Shortly after the final court decision, dike construction was completed in the spring of 2006 and the reclamation project entered into the second stage of the landfill.

Although the Sihwa and Saemangeum projects were conducted at similar times, there are significant differences between the two projects in three areas: 1) the timing of when conflicts arose, 2) the extent of local governance, and 3) the way that conflict was addressed. Conflicts around the Saemangeum project occurred before the dike was completed, resulting from the precautionary approach adopted based on the lesson from the pollution of Lake Sihwa. Local governance around the Saemangeum area was in favor of wetland development and lacked the deliberative decision making, found in the Sihwa case. Additionally, the court intervened to resolve these highly debated conflicts. Keeping in mind the different context between the two cases, we intend to address history and the evolution of the conflict of the Saemangeum project, in particular focusing on the court trial processes. Finally, we will present the changes that happened in the development plan and ecosystem after the dike completion. This chapter will conclude with a brief outlook on the future of the Saemangeum project.

2. THE SAEMANGEUM PROJECT

2.1 Geographical settings

The Saemangeum tidal flat is well developed along the west coast of Jeollabuk-do (province), and is located between 35°36' to 58'N and 125°26' to 44'E. It is surrounded by Gunsan City to the north, Gimje City to the east and Buan-gun to the south. The area is one of the least developed regions isolated from the Korean economic development during the past half century.

The intertidal area is approximately 400 km^2, and the tidal flat extends about ~5 km in many places and the maximum extent perpendicular to the shoreline is approximately 15 km. The area has a macrotidal regime with a tidal range from 1.2 to 7.2 m. Two large rivers (the Mangyeong and Dongjin Rivers) flow into the tidal flat from the east and form two main channels, then flow out into the Yellow Sea (Fig. 1). Yearly this provides the tidal flat with 6.4 billion tons of freshwater, 60% of which occurs during the monsoon season (July-September) (Kim and Jeong [1988]). The Saemangeum basin covers approximately 332 km^2, and includes the largest rice-producing plain in Korea which is called 'Gimje Plain.' The center of the Gimje Plain is the only spot in Korea where the entire horizon is unbroken by a hill in any direction.

The mudflats were fed by silt from both rivers until two small dams were built, one along the Mangyeong River approximately 15 km upstream and the other on the Dongjin

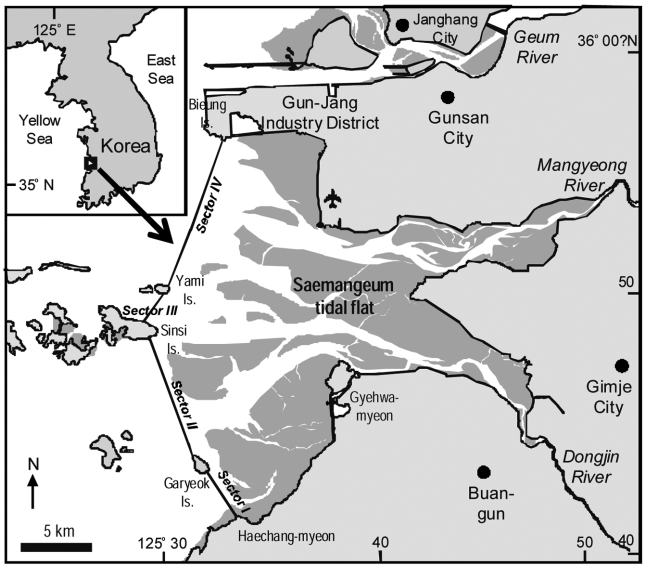

Fig. 1. The geographic setting of the Saemangeum tidal flat. The entire tidal flat was closed by four dikes (Sectors I-IV) on April 2006.

River approximately 5 km. The Mangyeong River is vulnerable to anthropogenic disturbance within the watershed. The River flows through two big cities, Jeonju City (the provincial capital of Jeollabuk-do) and Iksan City (an industrial city), and a vast quantity of animal manure from intensive livestock farming in Wanggung area washes into the Mangyeong River. The Dongjin River is less affected by intensive human activity and therefore has better water quality than the Mangyeong River.

Before the dikes closed the bay in 2006, this remained to be the only estuarine ecosystem except Han River which has been undeveloped due to the military contention, bordering to North Korea. Further, "Saemangeum" was not the original name for this estuary. The area was originally named after the cities surrounding the area (Gunsan, Gimje, and Buan) and the Mangyeong-Dongjin estuary. The Saemangeum project was named by adopting the first syllables of two geographic names, specifically 'MAN(萬)' from Mangyeong River and 'GEUM(金)' from the Gimje Plain (金濟). These two syllables follow "SAE(새)" which means 'new' in Korean. 'MAN' refers to fullness and 'GEUM' means gold or wealth. Therefore, the name of the project reflects the developers' intention to turn bleak wetlands into valuable dry land.

The Mangyeong-Dongjin estuary in the Saemangeum tidal flat was considered as one of the most important coastal wetlands in Korea in terms of fishery resources, biodiversity, seascape and as a stopover for migratory birds. International ornithologists have recently recognized that the Saemangeum tidal flat provides a critical staging area for migratory birds in the Asian-Australasian, flyway (Rogers *et al.* [2006]). The estuary has fed nearly three hundred thousand shorebirds on their way to breeding and wintering habitats during the corresponding migration periods in the spring and autumn. In addition, the tidal flat has been highlighted as an economically important ground for artisanal fisheries of indigenous communities in the Saemangeum area (Hahm [2004]).

2.2 Social context before 1991

Unlike the Sihwa project, the Saemangeum project was originally planned only to strengthen the agricultural infrastructure in preparation for food shortage in the future. The plan can be traced back to 'the Development Plan for Okseo District' in 1971 which aimed to develop irrigation and drainage facilities around the estuaries of the Geum, Mangyeong, and Dongjin Rivers. The plan included tidal flat reclamation around the Gimje area at a much smaller scale than the present plan. In January of 1986, the MAF[1] came out with 'the long-term reclamation plan' targeting the western and southern coasts of Korea, followed by a 21-month long feasibility study on the Saemangeum reclamation project conducted between March of 1986 to December of 1987. Soon after the Sihwa project began in April 1987, the Minister of MAF presented the original Saemangeum plan to build a 33 km long system of dikes to enclose the Mangyeong-Dongjin Rivers estuary and reclaim approximately 400 km^2. However, the feasibility study concluded that the project would have no economic benefit. Instead, in November of 1987, economy-related Ministers recommended a much smaller project to boost the local economy in the same area, which is so-called 'Gun-Jang Industrial District.[2]

In 1987, Korea transitioned from an authoritarian military government to a democratic government. A presidential election, held on the 16th of December in 1987, was finally achieved through over a decade of democratic movement. During the presidential campaign in the later part of 1987, the two candidates committed to develop different economic infrastructures in the Jeollabuk-do. In the final month of the campaign, one of them supported the Saemangeum project as a presidential commitment. Although the Saemangeum project had been

[1]The then-Korean Ministry of Agriculture, Forestry & Fisheries (cabinet level).

[2]'Gun-Jang' stands for Gunsan City and Janghang City. The project aimed to reclaim the western Gunsan tidal flat for industrial purposes. It started in 1990 and finished in 2006. A total of ~16 km^2 new drylands was created. According to a newspaper article, nearly 460 factories reserved ~98% of the entire district as of 2009 (*Hwangyeong Geon-seol Il-bo*, Feb 17. 2009).

discarded at the cabinet level one month before, when the candidate supporting the project was elected it gained strong political support.

Compared to the Sihwa project, there were no social and economic drivers in implementing the Saemangeum project. The area is located far from Seoul and is not densely populated. No urgent demands on the land either for agricultural or industrial purposes existed in the Saemangeum area. However, given the strong political commitment and the lack of environmental concern at the time, the project commenced in 1991 to build the first dike. The project began without an appropriate land use plan, and was funded by a temporary budget of 20 billion Won (approximately 16 million USD) for the first year.

Later that year, the government decided that the MAF had the authority to manage the Saemangeum project. MAF delegated several tasks to the Jeollabuk-do government, including management, compensation and local development. The Korea Agricultural and Rural Infrastructure Corporation (KARICO) took charge of the construction tasks, including the planning, implementation, and monitoring of the project. That the MAF became the leading governmental agency is a critical point in terms of the purpose of the project. As the MAF has jurisdiction only over agricultural sectors, a project led by MAF should be limited only to the same purpose of creating agricultural infrastructure. Further, nearly one third of the entire funding came from the national 'Agricultural Land Fund', meaning that the lands created by the Saemangeum project should be used only as farmland.

However, the original plan did not meet the hopes of local residents who were willing to participate in the project to achieve economic development in Jeollabuk-do, an area that had been isolated from the economic growth that had occurred during the 1970s and 80s.[3] During the launching ceremony for the Saemangeum project, the President declared that the reclaimed area should be developed as an industrial district. Unfortunately the president had no legal basis to declare this land use purpose due to the origins of the funding. The mismatch between the funding source and land use plan in the beginning stage of the project reflected how the government proceeded hastily without performing a comprehensive assessment of the plan. Down the road, this led to serious contention during the court's evaluation ten years later, which will be addressed presently in more detail.

2.3 The beginning of the project (1991-1997)

Construction work on the Saemangeum project began in November 1991. In accordance with the original plan, it aimed to build four dikes with a total length of 33 km by 2004 with a total budget of approximately 2.1 trillion Won (~1.7 billion USD).[4] The dike construction created a 401 km^2 closed estuary that was to be further developed into an 118 km^2 artificial lake and 283 km^2 of reclaimed land (Table 1), which would account for nearly 10% of the total rice production in Korea (Cho [2007]).

The original plan aimed to create agricultural lands, although there was room for adaptation in case there were future demands on the land to be used for more profitable purposes. Looking at the land use plan in detail, the northern area near Gunsan City would be slated to be used for urban purposes, including industry, harbor, airport, and research facilities. The central and southern area near Gimje City and Buan-gun along with the created freshwater lake would be developed for agricultural and recreational purposes including farmland, aquaculture, tourism, agricultural research, and logistics. The entire budget for the project was nearly 2.1 trillion Won (~1.7 billion USD), and included the dike construction (56%), compensation for local fishermen (21%), and the final landfill process (23%).

In addition to being the world's largest dike construction project ever, the fast tidal current (a maximum of ~1.0 m s^{-1}), a large tidal range (mean tidal range = ~4.5 m), and a deep bottom (over 50 m depth or 150 ft deep) made the Saemangeum dike construction one of the most difficult ocean engineering projects in Korea's history. However, these difficult conditions were seen as to overcome with the state-of-the-art construction technology that Korean companies had developed through

Table 1. The original land use plan of the Saemangeum reclamation project

Category	Size (km^2)	%	Remarks
Development	401	100.0	
Reclaimed land	283	70.6	
Freshwater lake	118	29.4	
Use of reclaimed land	283	70.6	
Crop agriculture	103	25.7	Agriculture
Horticulture	25	6.2	Agriculture
Fishery	20	5.0	Agriculture
Residence and industry	94	23.5	Urban and industry
Tourism	41	10.2	Urban

Source: KARICO (1998)

[3]When the project plan was open to local residents for the 30-day period for public comments in 1991, no one argued against the feasibility of the project.

[4]Later, the budget, construction period and land use plan were significantly modified, which will be addressed in the following section.

many large-scale projects in the Middle-East during the 1970s and 80s. In the early 1990s, many Koreans believed the Saemangeum project would be a world-class symbol of Korea's ability to conquer the nature.

From the south to the north, the four dikes begin in Daehang-ri in Buan-gun on the main land, and stretch to Garyeok Island, Sinsi Island, Yami Island, before finally connecting to Bieung Island in Gunsan City (main land) (Fig. 1). The two shorter dikes in Sector-I (4.7 km long between Daehang-ri and Garyeok Island) and Sector-III (2.7 km long between Sinsi Island and Yami Island) were completed in July 1994. The Sector-IV dike which is 11.4 km long, was finished in 2003 and connects Yami and Bieung Islands. Finally, in April of 2006, the 14.2 km long Sector-II dike was completed between Garyeok and Sinsi Islands and the estuary was completely enclosed. Two watergates, the Sinsi and Garyeok watergates, were built in each ends of the Sector-II dike.

The dike construction process was proceeding well without any major challenges or issues by the time of completion of Sector-I and -III dikes in 1994. However, when Lake Sihwa became severely polluted in 1996, all of Korea focused on the Saemangeum issue due to concern about the possibility of the project becoming a second Sihwa case. In 1997, the Korean presidential election was planned and all three major candidates used the continuation Saemangeum project an incentive to again gain the support of the constituency in Jeollabuk-do, by committing to fully develop the area into a high-tech industrial district. In the latter part of 1997, in addition to the default of dollar payment in foreign exchange in several Asian nations, the Korean government faced a lack of dollar reserves and received financial support from the International Monetary Fund (IMF) in order to stabilize exchange rates and implement financial reforms. This severely impacted Korea during the several years that followed, and led to the critical inspection of every national project for its feasibility by the new administration. These three dynamic external events - the pollution of Lake Sihwa, the presidential election, and the IMF intervention - were major factors that changed the direction of the Saemangeum project (Jeon [2003]) and led to increasingly contentious atmosphere among the various stakeholders.

2.4 Rising conflicts (1998-1999)

1998 was a tipping point for the conflict surrounding the Saemangeum. Although the President-Elect supported the development of Saemangeum and had a strong constituency (over ~90%) among the residents in the Jeolla region, the IMF situation forced the presidential transition team towards policies to strengthen the economy, including strict scrutiny of the feasibility of national projects conducted by the previous administration. In January 1998, the team decided to reexamine the planning and implementation process of the Saemangeum project. Encouraged by this official decision, environmental NGOs nationwide urged the government to stop all large-scale reclamation projects, including the Saemangeum project. In March 1998, KARICO and the Jeollabuk-do government revealed their disagreement on the land use plan.[5] In July 1998, MAF declared to cancel a national large-scale reclamation project (Yeongsan River IV District), further empowering the argument of pro-conservation groups that tidal flats ought to be conserved for present and future generations.

In August 1998, an alliance of thirty nine NGOs was created to stop the Saemangeum project. In the following month, the national audit office noted that the Saemangeum project was economically unfeasible and that it lacked plans to prevent pollution and to ensure safety. In October 1998, MOMAF delayed the plan to implement the new Saemangeum harbor plan by 2006. In the same month, ME pointed out the existing water quality modeling lacked credibility.

However, pro-development agencies defend the project and pushed for to continue. In December 1998, KARICO submitted revised water quality models and an alternative plan for the Saemangeum lake, arguing that the target of water quality for agricultural purposes could be reached by 2003. In the same month, MAF declared that the reclaimed land could only be used for agriculture, and not for an industrial district. In late 1998, the government finally gave up trying to retain freshwater in Lake Sihwa. In January 1999, the Jeollabuk-do governor agreed to reexamine the Saemangeum project and suggested a joint survey committee to address the Saemangeum issue. The minister of MAF also committed to cooperate in establishing a joint survey committee in the same month.

In April 1999, ME confirmed that the revised water quality plan submitted by KARICO was still deficient in its legitimacy and credibility. Finally, in May 1999, the joint survey committee was formed to scrutinize the Saemangeum project for one year and the Saemangeum project was temporarily suspended until a final decision was made by the committee.

[5]Jeollabuk-do continually expressed a desire to develop the Saemangeum area as a high-tech industrial district in order to maximize the local economic benefit.

3. JOINT SURVEY COMMITTEE (1999-2000)

The Saemangeum project faced a turning point in resolving conflicts in 1999. The Korean Prime Minister ordered a temporary stop to dike construction and called for a committee to reevaluate the feasibility of the project by considering the environmental impact, potential water quality issues and performing a cost-benefit analysis. The committee consisted of a total of 30 scientists and experts, and performed a 14-month survey funded by KARICO (approximately 160,000 USD). However, it failed to reach a consensus and the Prime Minister made a final decision to continue the project provided certain conditions were met.[6]

When the decision was made, some committee members representing the interests of NGOs expressed the strong disagreement with the final decision that was made by the Prime Minister because there were critical problems in decision making procedure within the committee. First, two thirds of the members of the committee were representatives of the pro-development group. Second, each working group within the committee lacked consensus-building processes among its members. Each member had independently performed his/her own task without any prior discussion about methodology. For example, the economic feasibility team had a great discrepancy in the methodology used by the pro-development group and the pro-conservation group. Third, the final recommendation from the committee was arbitrarily decided by the chair of the committee without discussion with the other members, and therefore this decision should not have become the objective basis of the Prime Minister's final decision.

Besides the committee members, many Korean scholars disagreed with the final decision and criticized the government for lacking transparency and appropriate scientific approach.

The final decision was made in May 2001, 10 month after the joint committee submitted its final recommendations in August 2000. Several dramatic developments occurred during this 10-month period. The government abandoned its attempts to retain freshwater in Lake Sihwa (February 2001). Additionally, most Korean NGO groups related to politics, religion, labor union, academics, among others, came out against the Saemangeum project. As a result, the final decision was expected to favor the conservation. However, because it favored development environmental NGOs and local residents filed a legal suit in August 2001, challenging the license for the public waters reclamation and the project implementation; this will be addressed at length in section 15.5. Further, the government abandoned the policy of promoting rice-production in Saemangeum in September 2001, which was inconsistent with the Saemangeum final decision to develop the area for agricultural purposes.

4. PARTICIPATION OF RELIGIOUS GROUPS (2001-2003)

Right after the government gave up the freshwater policy of Lake Sihwa, a group of several religious leaders and environmental NGOs was formed to encourage the pro-conservation policy in March 2001, called the 'Life and Peace Alliance of Saemangeum Tidal Flat.' This NGO expanded the discussion of the Saemangeum problem to include all of Korea.

In light of this effort, a group of scholars established the Korean Society of Saemangeum Life in October 2001, providing academic supports from a diverse set of scientific fields, including ecology, geology, economics, sociology, philosophy and law.[7] Along with these NGOs that arose in opposition to the governmental pro-development decision, four major religious leaders started a protest march from the Saemangeum to Seoul (approximately 300 km) that lasted for three months. The protesters marched by taking one-deep bow (or prayer) every three steps, a symbolic practice that represents perseverance and discipline in order to pray for good in Buddhism.[8] It successfully attracted a great deal of public concern in Korea during the spring of 2003.

This event brought an opportunity for the people of Korea to sincerely recognize the value of individual life in nature. When it began on March 28, 2003, there were only a few people marching. As it slowly proceeded towards Seoul over the next two months, both the mass media and the public began to pay a great deal of attention on this event, and felt empathetic towards these four environmental disciples. When the team finally entered into Seoul in the middle of May 2003, lots of people participated in the physical discipline of the march and formed a long parade of people performing the three steps and

[6]In May 2001, the final decision was made with the condition of plan modification as the following: 1) The 33 km-long dike should be completed as planned; 2) The southern part near Dongjin River is firstly developed and then Mangyeong River is monitored; 3) Based on the monitoring, it would be decided whether the northern part near Mangyeong River is developed or conserved.

[7]This is the first issue-based epistemic community (Haas, 1992) in Korean environmental history. A total of about 100 scholars joined the Society.

[8]The four leaders represented Catholicism, Buddhism, Protestantism and Won-Buddhism.

one deep bow march. Near the end, the length of parade reached several kilometers.[9] On May 28, three days before the parade ended, a total of 157 Congressmen officially proclaimed themselves to be against the reclamation project.

Surprised by the increasing public and political support for conservation, the pro-development group tried desperately to continue the Saemangeum project. Unexpectedly, the governmental Labor Union declared its support for the reclamation project on June 3. Two days later, the President of Korea gave a speech stating the project would continue with significant change to the land use plan. Furthermore, KARICO accelerated dike construction and completed the Sector-IV dike connecting between Bieung Island and Yami Island on June 9, 2003 (see Fig. 1 for the exact location).

5. COURT TRIALS (2002-2006)

The sudden news of the completion of the Sector-IV dike alarmed the Korean populace, most of whom believed the Saemangeum project would be stopped. The discussion of the Saemangeum project then began to move from a social debate towards a legal debate. The environmental NGOs submitted an urgent application to the court to suspend further construction (June 12, 2003) and conducted aggressive demonstrations against the project near the Sector-IV construction site. One month later, the Korean Administrative Court accepted the application and ordered a temporary suspension of the construction work (July 15, 2003). At the time, only 2.7 km remained to complete the entire dike. The pro-development group appealed to the High Court and once again used political pressure and succeeded in obtaining an order from the Korean High Court to resume the construction work (January 29, 2004).

Separate from the urgent application to the court, the pro-conservation group filed a lawsuit in the Korean Administrative Court in 2000. The court refused the lawsuit because the plaintiff did not have the legal standing to file the lawsuit.[10] In August 2001, a total of 3,640 local residents, who met the requirements to file the lawsuit, proceeded with legal action against the Prime Minister and MAF regarding three major issues.[11] Four years later, the administrative court ruled partially in favored of the plaintiff.[12] However, the Korean High Court ruled against the previous judgment in December 2005. The final decision by the Korean Supreme Court confirmed the judgment of the High Court, which ruled for the pro-development party in March 2006.[13] The dike construction closed the final opening and finished the 33-km dike system in April 2006.

Table 2. Comparison of the judgments between the Korean Administrative Court and the Korean High Court for the Saemangeum trial

Issue	Administrative Court	High Court
Economic feasibility	Poor feasibility to make cropland	Feasibility existing
Ecosystem value	Lack of accurate value judgment for the ecosystem	Different opinions among experts
Land use	Ambiguous land use plan	Adaptive land use plan
Water quality	Impossible to reach water quality targets	Possible to reach water quality targets

Based on the same set of facts, two courts showed different perspectives on the economic feasibility, value of the ecosystem, land use, and water quality (see Table 2). The discrepancy between the two courts' decisions represents the limit of legal system to address complex environmental problems (Kang, 2006).

6. AFTERWARDS (2006-present)

After the final judgment was handed down by the Supreme Court, the government confirmed the land use plan with 71.6 % of the entire land for agricultural purposes in April 2007.[14] The land use plan was later changed to reduce the portion devoted to agriculture (from 71.6% to 30.3%), reallocating it to mainly develop tourism and a science and industry belt for the future. This new plan was proposed by the new President of Korea during his presidential campaign in December 2007. In the same month, 'the Special Act for the promotion of the Saemangeum project' was enacted with strong political support from local leaders and congressmen.[15] This special law was amended in June 2009 to satisfy the current demands of industrial and economic free zones for international trades. Based on these acts, a new land use plan came out in July 2009 that focuses more on industrial uses.

In order to achieve sound environmental management, the new special act needs to give more attention to conservation.

[9]The 'three steps and one deep bow (prayer)' can be viewed as a culmination of the environmental discourse at the time.
[10]The Korean Administrative Court made this ruling on July 25 2001.
[11]The three major issues that were reviewed by the court were: 1) the governmental measures for the reclamation project confirmed in 2001; 2) license for the reclamation of public waters issued in 1991; and 3) cancellation of the original license due to the context change.
[12]The Korean Administrative Court made this ruling on February 4 2005.
[13]The task of Supreme Court in administrative lawsuit is construed in checking administrative legitimacy of the High Court's decision.
[14]The plan is similar to the Prime Minister's plan after the joint survey. See the *supra note* 6.
[15]The main purpose of this act is to develop the Saemangeum area in sustainable manners based on the agriculture.

Currently, the pan still lacks consideration for the environmental impact assessment and pollution mitigation measures (Choi [2008]).

7. OUTLOOKS

The Saemangeum project is the world largest reclamation work, and over 2 billion USD is expected to be invested by 2020. The project could become either a stimulus or a burden to the Korean economy depending on the degree to which further development considers the environment in the coming years. During the last two decades, the Korean people have learned a valuable lesson from the highly contentious debates and the huge social costs arising from the Sihwa and Saemangeum reclamation projects. Such a large-scale development that destroys coastal wetlands will not happen again in the future under the Wetland Conservation Act of 1999, which prevents loss of wetlands and empower wetland restoration efforts.

The problems surrounding the Saemangeum project primarily resulted from the lack of a reliable environmental impact assessment before the project began. We once chose to sacrifice wetlands for our economy, and we should not do the same mistake again. Under the Special Act of Saemangeum, we are facing the second stage of the project which will develop the reclaimed area by filling in the wetlands. This is the second chance to sustainably manage the reclaimed area. Unfortunately, the Special Act and government plan are both too ambiguous to prevent adverse effects caused by humans and protect natural ecosystems. If the second phase of the Saemangeum project fails to take the appropriate environmental measures, Korea would again face great social conflict. The Saemangeum area should be managed in a balanced and sustainable manner that considers both conservation and development for the prosperity of local residents and future generations.

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