



I'm happy with  
Water, Nature & People



Korea Water Resources Corporation



© K-water presents its 2006 Sustainable Management performance through this report. The report complies with the Sustainability Reporting Guidelines (G3) of the Global Reporting Initiative (GRI). Guideline observation and samples of data and sentences selected in the report were verified by the Korean Foundation for Quality. This report was written to meet all the A+ level requirements of the G3 of the GRI.



#### Purpose of Publication

K-water aims to improve people's standard of living and promote public welfare through comprehensive development and control of water resources. In every business process, K-water takes a social responsibility in a fair and environment-friendly way.

#### Publication of Report

"Sustainability Report 2007" is the third issue of K-water's annual report. K-water publishes a report every year which contains its sustainable strategies, activities, performance, and future plans on the basis of economic achievement, environment-friendly approach, and social responsibility. The latest report was published in October 2006.

#### Principles of Reporting

The report was written based on Sustainability Reporting Guidelines (G3) of GRI. More details can be found on page 122-125 of "GRI Index."

#### Target Readers

The report was prepared for all stakeholders who are directly or indirectly influenced by the K-water management, including its executives and staff members, the government, local organizations, clients, subcontractors, and non-government organizations.

#### Period of Reporting

The period of reporting is from January 1st 2006 to December 31st 2006. The qualitative achievement analysis includes a part of the achievements recorded until June 2007. The quantitative achievement analysis shows the four-year data from 2003 to 2006. The fiscal year of K-water commences January 1st and ends December 31st.

#### Scope of Report

The scope of the report includes the present conditions and performance of the sustainable management of the 54 domestic workplaces, including the head office, in Korea and nine overseas projects in eight countries.

As the overseas projects have not operated as a form of workplace but as project units, only their performance was taken into account.

Three domestic workplaces were combined into the regional headquarters due to the reorganization of substructure.

Overseas projects are being carried out in eight countries, not counting the previous projects completed in ten countries last year.

#### Changes

During the reporting period, there has not been any significant change in size, structure, standard year, and ownership structure.

#### Report Verification

In order to enhance credibility, samples of data and sentences selected in the report were verified by the Korean Foundation for Quality. The verification report can be found on page 116-117.

#### More information

The report can also be found on the website of K-water (<http://www.kwater.or.kr>). For more information about this report or K-water's Sustainable Management, please contact the Corporate Social Responsibility (CSR) Team in Management Innovation Office (telephone: 042-629-2367-68, fax: 042-629-2399).

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K-water dedicates itself to become  
a trustworthy and respected corporation  
for all Korean people and customers.



To our valued customers and stakeholders who care for K-water:

First of all, I'd like to offer my wholehearted gratitude to you for your affection and support toward our company. The year 2007 is a meaningful year, as it marks our 40th anniversary. K-water is doing its utmost to bring its vision to reality. In order to meet the needs of a rapidly changing society, since 2006 we have established and pushed forward a new mission ; 'We will make a happier world through water' and a vision ; 'STEP to Global Best' as well as four strategies including 'Service, Technology, Ethics, and a Pride' and Sustainable Management Plan with 10 strategy tasks.

Last year, K-water took part in the Efficient Operations of Local Waterworks Project and River Maintenance Project, expanded its overseas projects to 6 nations in South East Asia and Africa, and registered as a Clean Development Mechanism (CDM) which can bring about 10 billion won of greenhouse gas emission trade profit by developing new and renewable energy. In addition, we established an expanded R&D investment plan according to our technology roadmap to secure core technologies, minimized damages from flood through integrated water management based on IT, and built an integrated waterworks operation system in Seoul metropolitan region, which is of the largest scale in the world. To enhance stakeholders' value, we continue to develop our customer-oriented management, ethical management, environmental management, and sustainable management including social contribution.

Furthermore, K-water focuses on management innovation for transformation and growth. At a time when technologies are being developed at an alarming pace, those who are unable to keep the pace with changes will remain far behind. Without continuous management innovation, any public enterprise will not be able to survive. The followings are our management policies on which we strive to focus :

**As a global water service company, we will put the new growth engine programs first as a core strategy task and push ahead with it.**

We will concentrate our efforts on 'the Efficient Operations of Local Waterworks' with our employees' enthusiasm and abilities, and expand overseas projects from an aiding program to a technology exporting business. We will also expand in phases our river development, new and renewable energy development, desalination, and deep seawater development project.

**We will successfully develop our regional headquarters system.**

Centering on regional headquarters, water resources will be developed and managed by river systems, while drinking water will be supplied by regional divides. Basin research, water resources development, and river management by water systems will be implemented. In addition, water supply systems by region are being constructed in multi-regional waterworks, and distinctive customer satisfaction management will be carried out by an administration of a large regional basis. Regional headquarters will play an important role to meet new needs of the people.

**We will strive to develop human resources in addition to financial support to enhance our global best technology.**

Without advanced technology, tomorrow will not come to us. K-water has the best competence in every sector. In order to secure international competitiveness, we will implement a technology roadmap, and by 2015, will become a leading company in water resources, waterworks and research sectors in the world.

**We will practice transparent management, bearing in mind that the Korean people are the owners of this public enterprise.**

Corporate institution, practice, and culture should become more transparent and ethical. As our society is rapidly advancing into an open society, we will do our best to be a transparent and fair company.

K-water will strive to grow into a company respected and trusted by customers and society. Open and responsible management can be realized when there is trust, respect, and mutual cooperation. We will listen to what customers say at all times and will not waste a moment in pursuing our vision to make a happier world through water. In addition, I hope this sustainability report can be a channel for presenting our sustainable management performances and to promote further discussion.

Thank you.

August, 2007  
CEO & President, Kyul-Ho Kwak

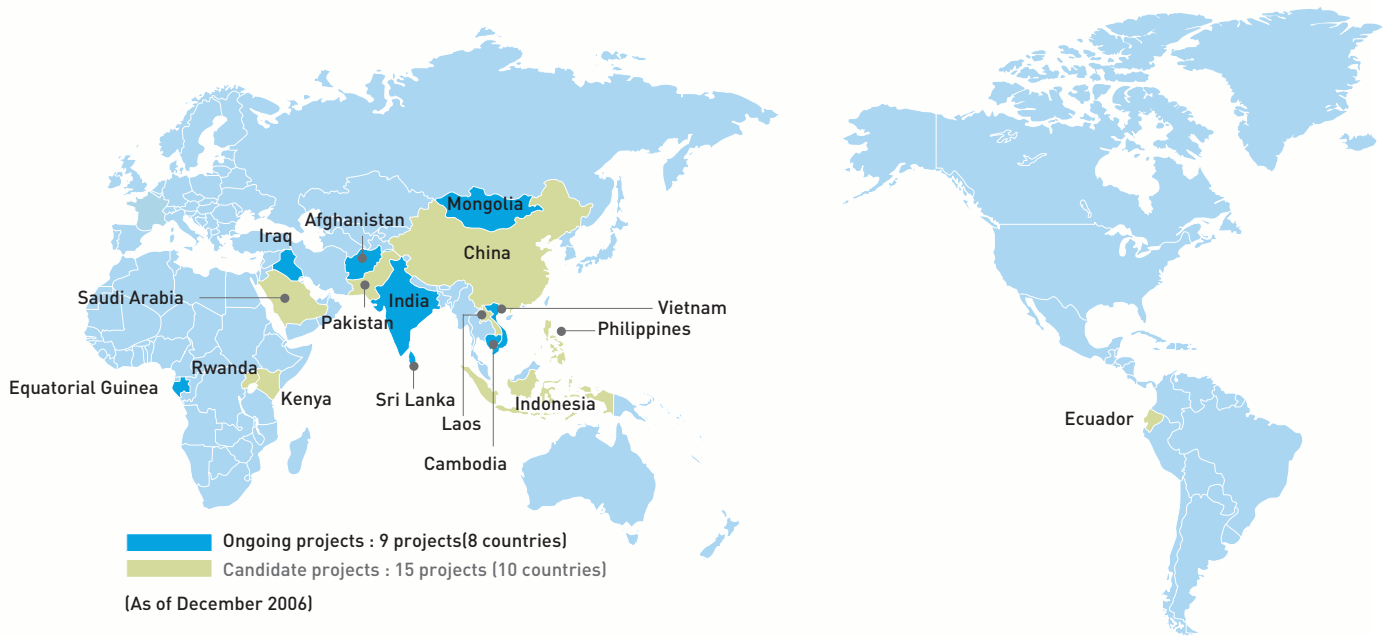




K - water Profile

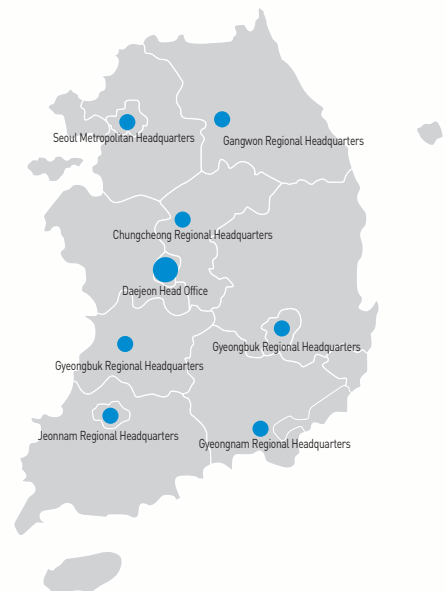
# STEP to Global Best

K-water is a comprehensive water services company which creates happiness through water. We are committed to building a bright world where water, nature and people work together in harmony. To deliver happy smiles and healthy environment to all, K-water is doing its utmost.



### Corporate Overview (2006. 12. 31)

- **Corporate Name:** K-water, Korea Water Resource Corporation
- **Established:** November 16, 1967
- **Net Capital:** 9,653.8 billion won
- **Gross Liabilities:** 1,743.6 billion won
- **Gross Assets:** 11,397.4 billion won
- **Sales:** 1,721.1 billion won
- **Business Segment:** Construction and Management of Multi-purpose Dams  
 Construction and Management of Multi-regional Waterworks  
 Operation and Management of Local Waterworks  
 Development of Industrial Complex
- **Workplaces:** Head Office, 7 Regional Headquarters, 46 Departments (54 workplaces), 9 Overseas Projects in 8 Countries
- **Employees & Executives:** 4,064
- **Investor:** South Korean Government 90.2%  
 Korea Development Bank 9.7%  
 Local Governments 0.1%
- **Investment Companies:** Chilgok En-biro Ltd. (49% of share)  
 Kyungin Canal Ltd. (20.1% of share)  
 Korea Construction Management Corporation Ltd. (18.9% of share)
- **Corporate Headquarters:** San 6-2 Yeonchuk-dong, Daedeok-gu, Daejeon Metropolitan City



| Head Office and 7 Regional Headquarters |

# Sustainable Management Vision and Strategy

Our new vision is to raise our services level, to secure global best technology. It also includes our will to become a workplace where ethics is making all K-water employees proud the most important virtue.

## :: Sustainable Management Mission and Vision for Grand Growth

Due to growing opposition to dam construction, dramatic changes in business environment and water environment due to rapid climate change, and the increasing importance of stakeholders in the business process, K-water had to develop its environmental management further into sustainable management. We acknowledged these changes and examined the previous mission and strategies to implement more intensive innovation. The previous mission failed to raise the awareness and understanding both inside and outside of the corporation, and its vision (Global Top 3) was also criticized for insufficient implementing force due to the gap between its goals and reality, even though it helped to overcome a stagnant corporate atmosphere. In this regard, the new mission and vision were declared in November 2006, marking our 39th anniversary, to reflect environmental changes both inside and outside the company and to develop public and corporate interests in harmoniously sustainable growth through the participation and concerns of all staff members and the strong leadership of the CEO.

## :: New Mission

We reflected our purpose of corporate establishment in the new mission to enable all employees, executives and outside stakeholders to clearly understand.

**With Water:** It is an abbreviation of "With water, we make" and refers to all water resources which we produce and manage on our own.

**Happier:** This implies our will to make the lives of our customers and people happier, by providing clean water at all times and preventing them from the damage of flood and drought.

**World:** We expanded our focus from human-oriented tasks to environment-oriented tasks as well as expanding our projects from Korea to overseas.

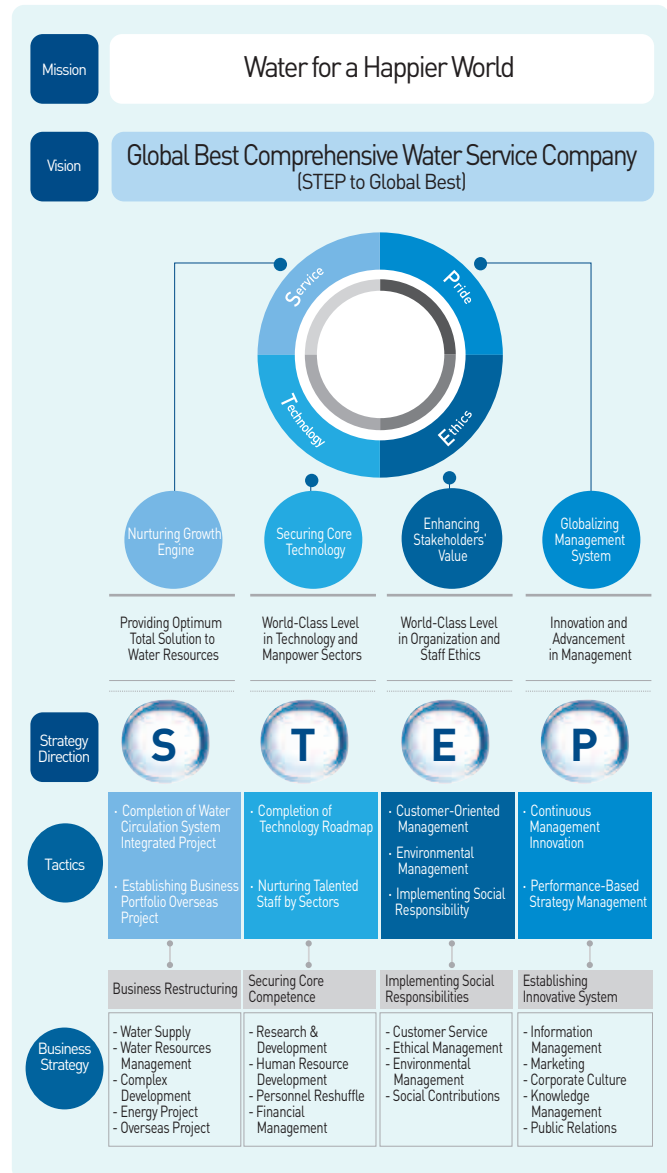
## :: New Vision

We have established a new vision, (STEP to Global Best) to become a leading global comprehensive water service company based on our water management competence and faithful fulfillment of the corporate demands. As "STEP" is an acronym for Service, Technology, Ethics, and Pride, our new vision includes the values of the four elements to accomplish the vision in a phrase.

**Global Best:** With our unique water management and technology, we will bring up our organization as the ideal comprehensive water company in the world.

**Comprehensive Water Resources:** We will grow as a comprehensive water management organization which will provide the total solutions not only for nationwide dams and multi-regional waterworks, but also for rivers and local waterworks.

**Service:** The management focus will move from suppliers to customers, and customer satisfaction and service quality will be the core value.



## :: Global Best Comprehensive Water Service Company

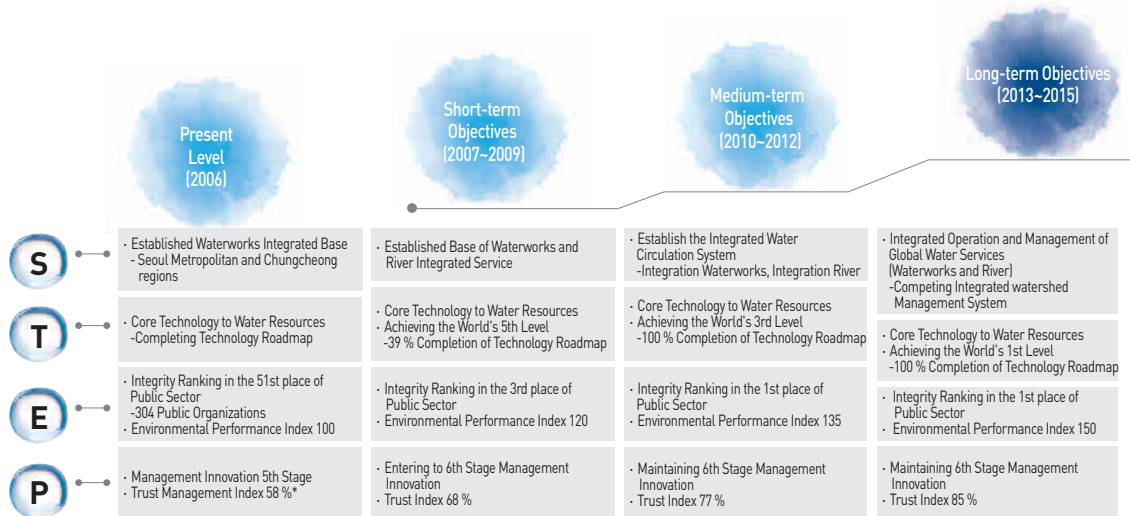
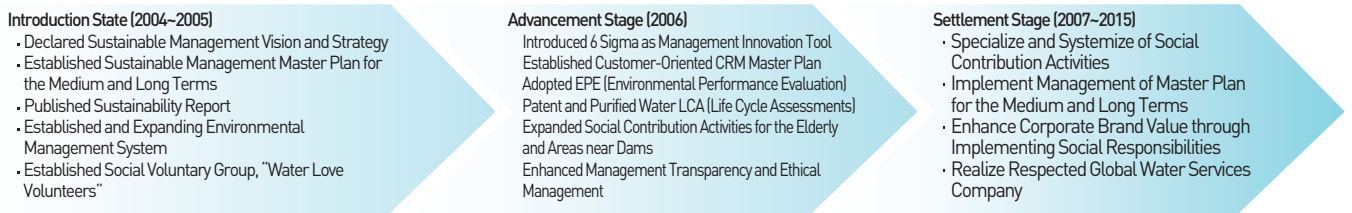
Our new mission and vision represent our firm determination to accelerate changes and innovation. They also show our efforts to secure a core technology and to provide the optimum total water service as well as to enhance our stakeholders' value, implementing its social responsibility through customer-oriented management, environmental management, ethical management, and social contributions. K-water will exert the maximum efforts to fulfill its vision, "Global Best Comprehensive Water Service Company" with its mission, "Water for the Happier World."



### ❖ Promotion System for Sustainable Management

The sustainable management of K-water aims to enhance economic performance and environmental reliability as well as to supply clean water to every region by implementing its social responsibilities. The sustainable management will be integrated with various former management activities

to blend the best for optimal effects. With economic efficiency as a basic principle, K-water will push ahead in balance with its environmental management and social contribution activities, so as to create new corporate values and to fulfill its aim of becoming a more respected corporation.

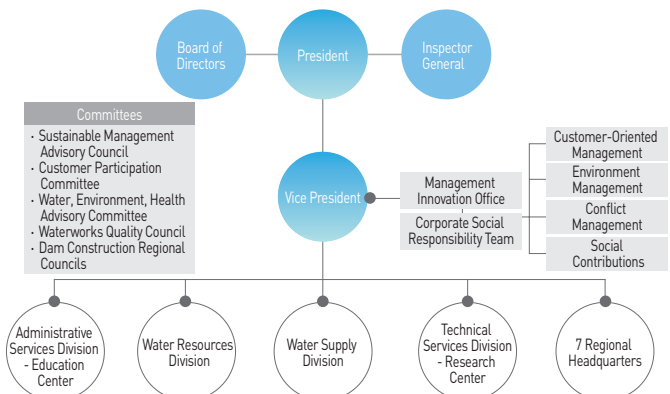


※An average of domestic solid companies is 67.8%  
 ※An average of Fortune 100 companies is 83.4%

### ❖ Sustainable Management Development Organization

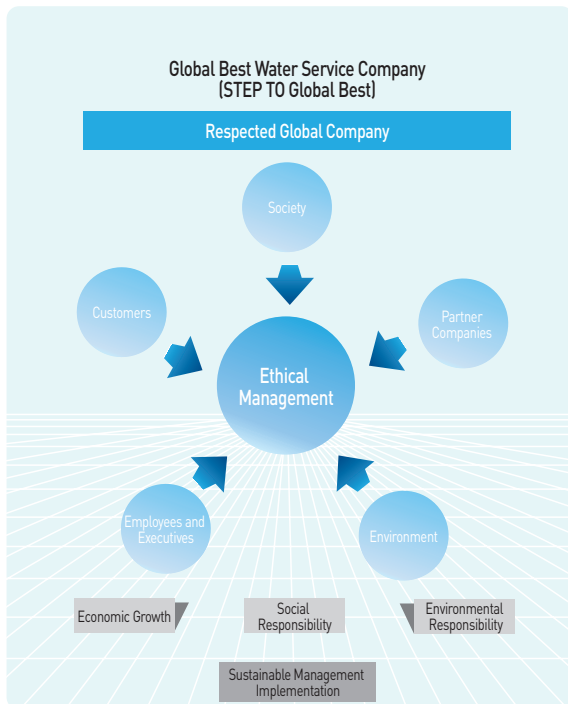
For promotion of continual sustainable management, K-water operates 4 Divisions in its Head Office and 7 Regional Headquarters as well as 49 Regional Offices including Construction Site Office.

Sustainable Management is promoted by our Corporate Social Responsibility Team comprised of 12 members within the Management Innovation Office which coordinates environmental management, customer-oriented management, conflict management and social contributions. It prepares the sustainability report every year to provide information to stakeholders. This report serves as a channel for facilitating communication with the stakeholders. In addition, advisory committees and councils are organized to reflect various opinions in economic, environmental, and social sectors.

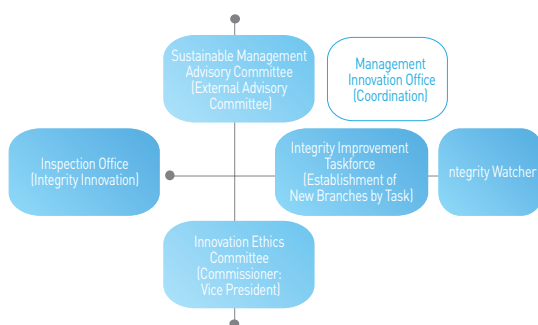


# Ethical Management

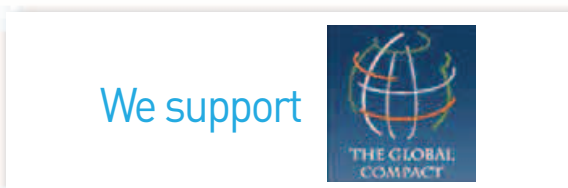
With company-wide efforts to implement an ethical management system, we are positioning ourselves as a global best water service company and a clean and transparent company.



| Implementation Structure of Ethical Management |



| Implementation Organization of Ethical Management |



## External Efforts to Realize Company-Wide Ethical Management

To satisfy external efforts to implement ethical management, K-water joined the UN Global Compact in February 2007. Recently, major international organizations have set rigorous ethics standards which prevent products and services of unethical companies from entering into international markets and established global standards to systemize ethical management. K-water makes a great effort to secure the transparency of public enterprise by joining the Public Corporate Transparent Society Agreement and Practice Council comprised of the CEOs of 19 public companies. It also operates Transparent Society Agreement Practice Council, in Water Resources and is an active member of the Ethical Management Forum.

## Operating Ethical Management Organization and System

K-water has ethical regulations such as a Code of Ethics and Code of Conduct and operating systems.

**Operating Ethical Management Organization:** Innovation Ethics Committee is led by our Vice President, and its role is to make decisions on various practice issues to enhance our integrity level. In addition, there is Integrity Enhancement Taskforce jointly operated by head office and regional headquarters, Integrity Innovation Research Group in charge of developing integrity policies and conducting research, and Integrity Watcher, a watch dog observing Code of Conduct in head office and regional headquarters.

**Interactive Evaluation System:** Ethics and behavior of all staff from the CEO to new employees are evaluated. To put integrity first as the most important value, this system enables all employees and executives to interactively evaluate each other, and evaluation results are reflected in their wages and personnel records.

**Monitoring Ethical Management System:** External Corruption Reporting Center where external observers can report any corrupt behavior or wrongdoings of employees, Internal Corruption Reporting Center where internal observers can report other employee's wrongdoings, and Clean Reporting Center where employees voluntarily return any received money or valuables are now in operation.

## Internal Integrity Assessment and Measurement

K-water assessed internal integrity level in October 2006 to find out the actual condition of ethical management and the level of corruption risk. Assessment results have been reflected on internal management evaluations (weight: 5 points for management divisions and 10 points for construction divisions). Top 3 departments gain prizes and incentives while 5 departments which receive bribes are put under special supervision in 2007 inspection. In addition, corruption disclosure and penalties system such as regional inspection system and inspection notice system for individuals have been tightened.

## UN Global Compact Observation Declaration

K-water joined the UN Global Compact to push ahead with the belief that ethical management is the most fundamental and powerful force for competitiveness. We will diligently implement the 10 principles of the UN Global Compact and take the lead in forming a dignified corporate culture with strict standards in order to be reborn as a global company worthy of trust and respect.

# Risk Management and Sustainability

K-water has set an Early Warning System to prevent financial and non-financial emergency situations and established an Enterprise Risk Management system base by devising implementing plans including counter plans and a management manual by risk type.

## Establishment of Enterprise Risk Management System Base

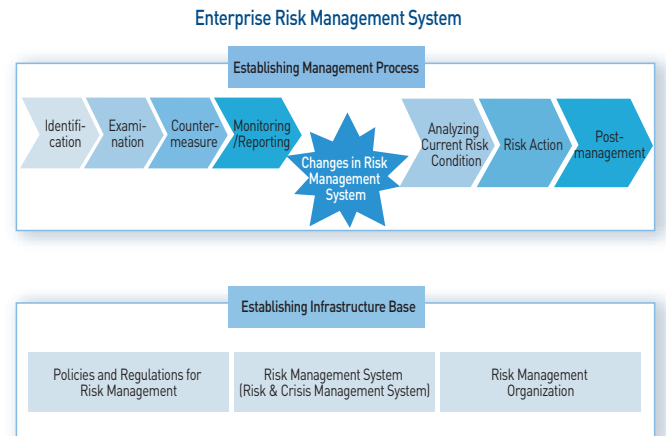
Enterprise Risk Management (ERM) has made the Emergency Action Plans and Risk Management Standard Manual to prevent financial risks and to safely operate multi-purpose dams and waterworks facilities. In 2006, we established risk management processes and management systems for various emergencies in management and built ERM system for uniform emergency information sharing system which aims to be in operation in 2007. In June, 2007 we completed the Risk Management Manual.

## Reflection on Standard Model of Public Enterprise Risk Management

For financial risks, we have adopted and controlled a Financial Risk Management system. As non-financial risks including terror attacks or accidents have more increasingly influenced us, we established the Enterprise Risk Management System reflecting the Standard Model of Public Enterprise Risk Management to prevent non-financial risks such as water quality problems and natural disaster and to maintain the safety level of dams needed in the event of national crisis.

## Establishing Early Warning System for Emergency

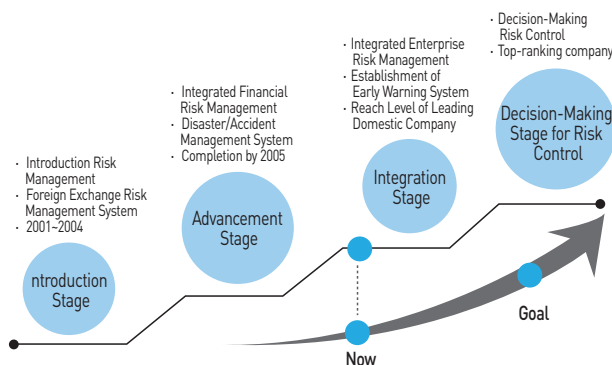
We have set up an Early Warning System consistent with the nature of public enterprise by analyzing the profile of controllable risks which may affect our fulfillment of management goals. Similar systems from other organizations were used as a benchmark, and we analyzed the characteristics of each system. By doing so, we have established an Early Warning System consistent with the nature of our company, which not only predicts insolvent



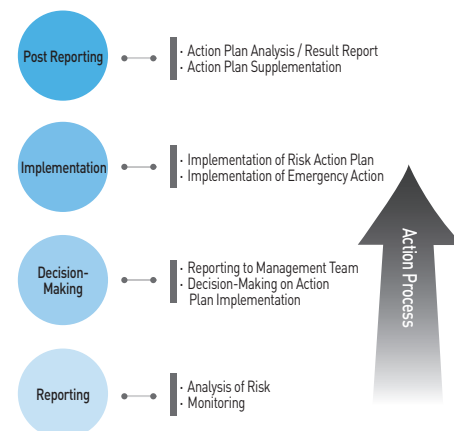
management but also analyzes management conditions, and reflects it on the ERM system.

## Establishing Financial Risk Management Action Plan

We divided all financial risks into 4 categories; market crisis, liquidity crisis, credit crisis, and management crisis. In addition, with establishment of Risk Countermeasure Process with 4 Stages and its following Action Plan, the systematic countermeasures were set up to prevent crisis situations.



| Implementation Direction of Enterprise Risk Management |



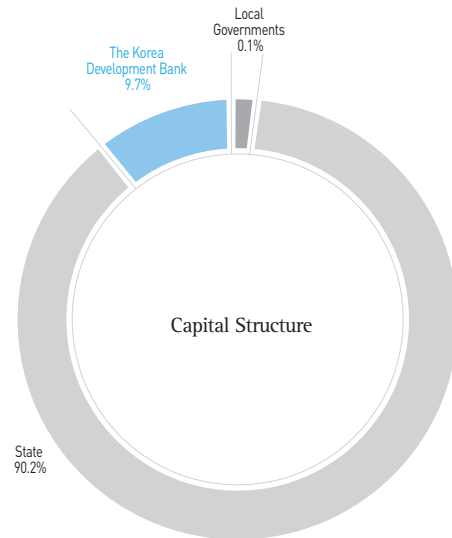
| Risk Action Plan Process |

# Corporate Governance

K-water is strengthening the role of Board of the Directors and practicing open management through various participatory systems

## :: Capital Structure

Major businesses of K-water have a significant impact on people’s lives through the construction and management of dams and waterworks facilities for the comprehensive utilization and development of water resources. Therefore, the “Korea Water Resources Corporation Act” restricts the investors to state and local governments as well as the Korea Development Bank, and it stipulates that “the state shall invest at least 50 % of its capital.” The investors as of 2006 are the state (90.2%), the Korea Development Bank (9.7%), and local governments (0.1%)



## :: Structure and Operation of Board of Directors

The Board of Directors is the highest decision-making body that deliberates on important issues, management objectives, budgeting and financing plans related to management as well as monitor and supporting the executive work. The Board (chairman is CEO) is composed of 13 directors including 7 independent directors as of June 2007. K-water considers independence and expertise as the highest values. Therefore, the appointment process is very rigorous. The standing directors are appointed by the Minister of Construction and Transportation upon recommendation by the President of K-water after interviews with internal and external experts, while independent directors are appointed by the Minister of Planning and Budget through the election process of Recommendation Directors Committee and a resolution of the Government-Invested Organizations Management Committee of the Ministry. We have made electronic approval of meetings and meeting proceedings available on the excusive webpage for the Board of Directors. In addition, by stipulating independent directors’ right to information, we have ensured the rapid and adequate preview of management information and strengthened the implementation force of management proposals.

## :: Evaluation on Board of Directors Performance

The performance of the Board of Directors is reviewed every year by internal

evaluation itself and management evaluation of the government. The standing directors receive different wages and incentives according to the government evaluation results. In addition, immeasurable efforts and performances are also reflected in the compensation system.

## :: Inspection Office and External Supervising Organization

In order to supervise the fairness and appropriateness of the management, an internal audit agency is set up as an independent organization and enhances the transparency in management through general inspection and examination of principles of the public enterprise. In addition, there are frequent external inspections by Board of Audit and Inspection, Parliamentary Inspection of the Administration, Ministry of Construction and Transportation, and Prime Minister’s Office.

### :: Strengthening Independent Directors’ Management Participation and Expertise

- Expanding Independent Directors’ Management Participation
- Specifying decision-making agendas and expanding report areas
  - Setting up internet-base system through exclusive board website for meeting notification, approvals, and management information
- Reflecting Independent Directors’ Expertise on Management
- Reflecting opinions of independent directors from a project planning stage by strengthening its preview function of Board of Directors Subcommittee (Management § Investment Committee)
  - Expanding opportunities to learn management expertise from management consultants and external instructors
  - Providing workshops, field trips, and management information at all times to improve job and water resources expertise

| Board of Directors |

| Category                             | Name            | Title  |
|--------------------------------------|-----------------|--|
| Standing Directors                   | Kyul-Ho Kwak    | President  |
|                                      | Woo-Ku Kim      | Vice-President   |
|                                      | Seung-Soo Jung  | Executive Director of Administrative Service Division      |
|                                      | Kwang-Jin Oh    | Executive Director of Water Resource Division              |
|                                      | Hyung-Tae Jung  | Executive Director of Water Supply Division                |
|                                      | Gil-Jae Lee     | Executive Director of Technical Services Division          |
|                                      | Jin-Won Lee     | Chairman, Kiupsarang Campaign Center                       |
| Independent Directors (Non-standing) | Chang-Rae Park  | Researcher, Samsung Press Foundation (former)              |
|                                      | Young-Sang Kwon | Representative, Kwon Young-sang Law Office                 |
|                                      | Tae-Il Kim      | Professor, Dept. of Political Science, Youngnam University |
|                                      | Sang-Hyun Oh    | President, Korea Fire Protection Association (former)      |
|                                      | Byung-Sir Min   | Inspector General at K-water (former)                      |
|                                      | Jin-Sang Shon   | Professor, Dept. of Law, Andong University                 |

# K-water Transparency in Management

K-water's Management transparency level is high, but we won't let our guard down.

## INTERVIEW

Tae-Il Kim  
Independent Director Professor,  
Dept. of Political Science,  
YOUNG NAM UNIVERSITY

### What do you think of K-water's corporate image as an independent director?

I've seen many people who had to leave their hometown behind because of dams constructed by K-water. That was the reason I didn't like K-water at first. However, my perception has changed. I realized K-water is a praiseworthy company which provides clean water to citizens and industrial water to our agriculture and industrial complex. In addition, it implements very important public duties to protect people's lives and properties from natural disasters. K-water has transformed itself dramatically and I am able to understand K-water very well.

### I've heard that you give specialized and objective advice on management as an independent director. What kind of advice do you provide to K-water?

I suggest the K-water should participate in various social contribution activities, since these activities will create a positive corporate image and bring a good effect inside the corporation as well. By participating in social contribution activities, staff will feel a sense of accomplishment and pride, and this will in turn form a positive identification as K-water's important staff, improving satisfaction, loyalty, and job performance. In this regard, last year I proposed the overall evaluation of the 'Dam Surrounding Area Support Project' and the establishment of its systematic project plans.

### How ethical and transparent do you think K-water's decision-making and its projects are?

As all know, K-water has had painful experiences. Anyone can make mistakes but they shouldn't repeat the same mistake. After going through several difficulties, I'm sure that the transparency in management and ethical management of K-water has reached a very solid level. All employees and executives set out with one voice ethical management as a major principle, and established and implemented several other measures. These measures are not superficial but reflect the management agreement so that the relevant penalties can be applied when corrupt behaviors are discovered. I believe the ethical management should be controlled by regulations although it stems from a conscious revolution.

### To enhance K-water's transparency, what is the role of independent directors and what should K-water do?

Not long ago, I suggested adopting 'Internal Control System', but K-water had been already examining the system. I felt very good and confident being an independent director. However, to raise the corporate transparency further, inspection ability by independent directors needs to be strengthened. Right now, this is not so feasible. At the moment, we have limited information on management and their agenda. I'd also like to have more conversations with K-water staff on transparency enhancement issues to examine the current situation and find viable solutions. In addition, the role of the labor union is essential in realizing corporate transparency. The labor union shouldn't limit itself as supporter of member's interests only. It should be also able to serve as a supervisor. I believe that ethical management should be emphasized more than environmental management or family-friendly management. Vast organization structure and various tasks and processes can not be an excuse to delay implementing ethical management.



# Sustainable Management Innovation

As a public enterprise, K-water is making the utmost effort to create a bright future for people and raise its competitiveness with continuous changes and innovation.

## :: CEO's Strong Innovation Determination

With creating customer value and setting creative innovation culture as first priority, K-water's CEO puts an emphasis on finding out what people feel unsatisfied with and what people expect, and takes the lead in this innovation movement by active discussions with all staff members and personal implementation of 6 Sigma GB tasks. Furthermore, the CEO leads the public corporation innovation movement as the first chairman of Head Innovation Forum composed of 58 public heads.

## :: Management Innovation Plans for Medium and Long Term

**Establishing Management Improvement Plan:** K-water has set up the Management Improvement Plan to overcome crises and to prepare new changes & redevelopment. It has also built social consensus through various discussions including Focus Group Interview, Discussion with Division Executives, Discussion with All Staff, and the Management Innovation Advisory Committee with External Experts. In addition, to secure the implementation force of this plan, agreements between the CEO and division executives were signed and evaluated for the first time in a public corporation.

**Innovation Master Plan, a Foundation for Sustainable Innovation:** K-water has established an Innovation Master Plan to solidify and implement the culture of innovation. Based on 4 Implementation Strategies, 16 Innovation Sectors are set up to examine current and future situations according to each sector. Additionally, Key Performance Indicator (KPI) is set up to create innovative objectives and tasks in each year and to implement sustainable and practical innovation activities.

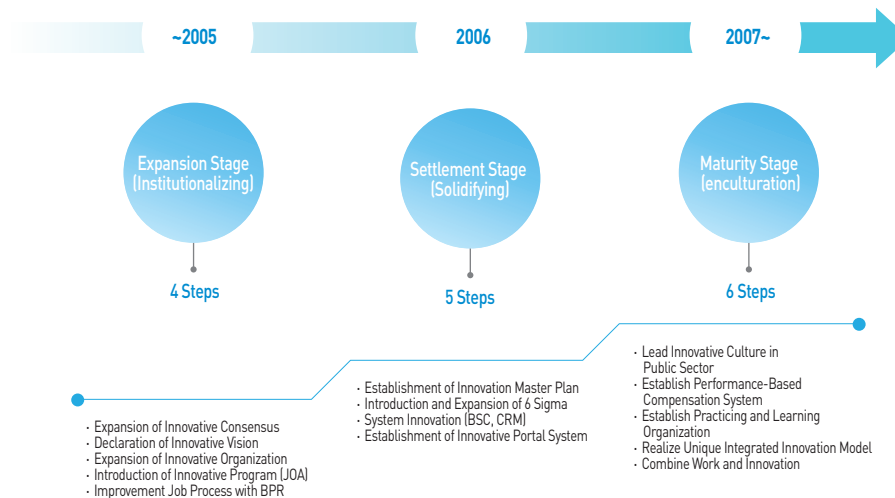


| Open Forum with CEO and All Staff |

## CEO Message

*"Innovation is needed for ourselves, not for others. I will take the lead in solidifying this innovation movement in our company."*

- from inno-mail to Innovation Frontiers



| Innovation Implementation Roadmap |

**:: Various Programs for Building Innovative Consensus**

We make an effort to create a workplace where our staff members can work with pleasure, free of stress, while we are operating various programs of building innovative consensus for all our staff members to realize solid and sustainable management innovation.

**Learning Innovation Capability**

We are operating customized Innovation Learning Program consistent with levels and titles of our staff, and implementation of the unique innovation strategy for public corporate, JOA (Join, Open, Advance; Workout Method of GE group) is learned and used by all our staff members.

**Securing Innovation Implementation Engine**

The 2nd Innovation Frontiers comprised of 123 members is taking the lead in enterprise innovation activities and in division innovation, while the Junior Board with 21 members is actively reflecting young employee' opinions on management, and the new Management Innovation Committee is serving as an innovation advisory committee. In addition, we have expanded this innovation base by building a network with organizations under the Ministry of Construction and Transportation and public organizations in Daejeon City.

**Sharing and Expanding Innovation Performances**

We've sought excellent cases through the Innovation Contest, and shared and spread public corporate innovation cases through the website (inno.kwater.or.kr) and Innovation Essay Publications. In addition, we've promoted our innovative achievement internally and externally by brandishing a successful innovation case, Integrated Operations Dam System.

**Developing Innovative Brand: DAMOA**

DAM Operating Automation (DAMOA) is an automatic system for dam operation and management. This system enables us to control every dam in an integrated manner, and we can control 9 dams nation-wide in the Water Management Centre at our head office.



| Innovative Brand |



| Innovative Essay Publication |

**INTERVIEW**



**Bo-Hoon Yoon**  
Head of the Management  
Innovation Office

**Realization of Healthy and Sustainable Management Innovation**

It is true that public corporations tended to provide public services with a non-competitive environment with the government's support and protection. Public corporations took the passive implementation of management innovation only when they forced by external factors. However, the environment surrounding public companies has changed. With the market opening in public sectors, the public corporation is no longer free of limitless competition, and it realizes it can't survive with the previous management mentality.

Recently, innovation levels of public companies have improved but they are not enough to impress many people. In this regard, our innovation focus is put on finding out what our customers feel unsatisfied with and what they expect from us, and addressing the problems. For example, we've been making an effort to raise the quality and content of our service as well as to transform the organization structure to field-oriented organization which puts contact with our customers first. K-water set its 2006 vision as 'Global best water services company to create a happier world with water' and all executives and staff members are striving to implement the enterprise innovation with one voice. K-water is committed to make a workplace where all staff members work with pleasure, and all K-water members will work together to realize healthy and sustainable management innovation.

# Cooperation with Stakeholders

We respect every opinion from our wide range of stakeholders and encourage them to actively participate in our decision-making and project development stages.

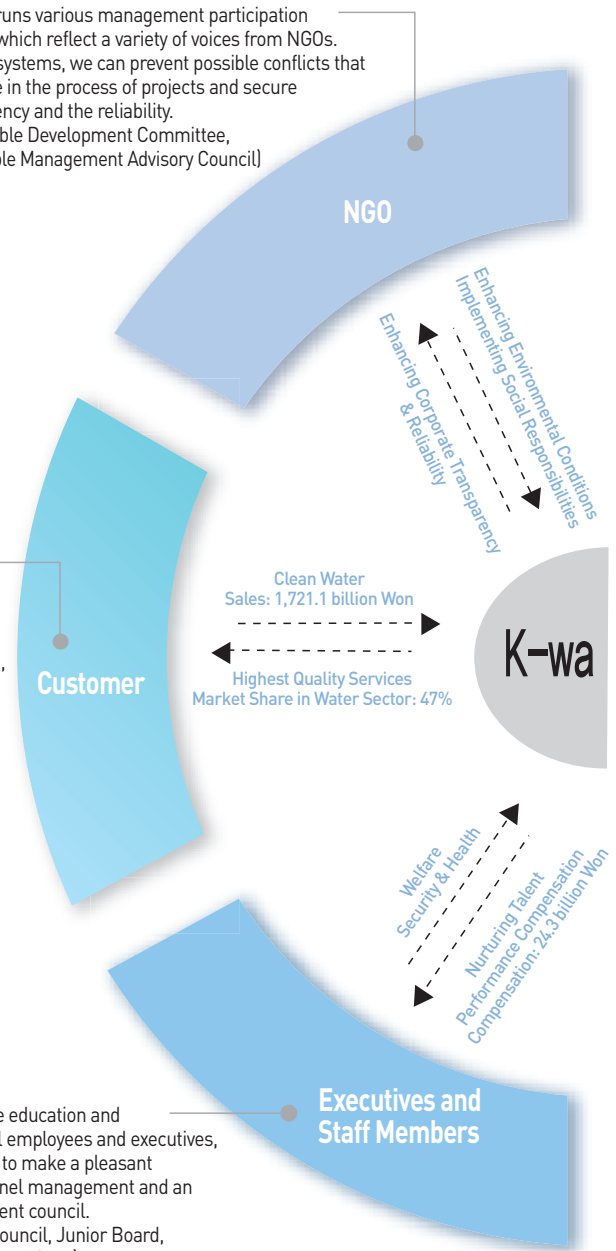
## :: Stakeholders' Participation in Management

K-water is implementing various systems for external stakeholders to participate in its management. Outside stakeholders can participate at the stage of decision making and in the process of its business, thus conflicts that might arise can be prevented in advance, and corporate transparency and reliability can be secured. Moreover, we have set up and run councils and committees to receive suggestions on management from stakeholders, and also run local councils to resolve conflicts that may arise in the process of projects. Advisory councils and committees are organized with representatives from non-governmental organizations, academia, research institutes and the press, while local councils in which experts, government officials and local residents participate for deliberation on local issues, have been expanding the opportunities for participation. We also cooperate closely with appropriate Ministries including the Ministry of Construction and Transportation and the Ministry of Environment in establishing and implementing policies related to water resources.

K-water runs various management participation systems which reflect a variety of voices from NGOs. With the systems, we can prevent possible conflicts that may arise in the process of projects and secure transparency and the reliability. (Sustainable Development Committee, Sustainable Management Advisory Council)

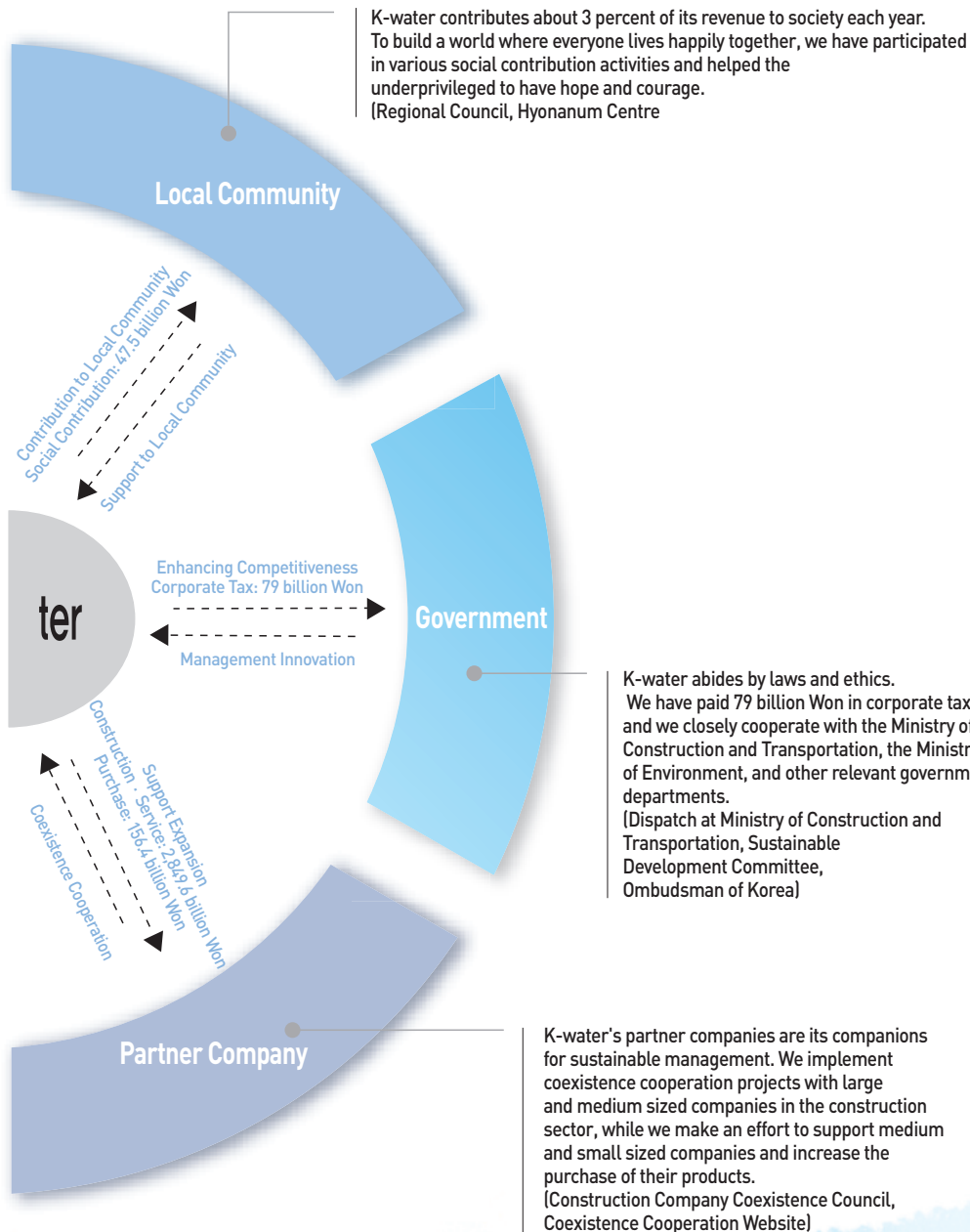
In order to fulfill our CEO's commitment to customer satisfaction, we are also doing our best to put our customers first and to enhance customer values in our management. We are also committed to management innovation, environmentally friendly water resources development, protection of people's rights, and social responsibility. (Customer Participation Committee, Customer Proposal)

While providing sustainable education and training opportunities to all employees and executives, we are making great effort to make a pleasant workplace with fair personnel management and an active labor and management council. (Labor and Management Council, Junior Board, Management Innovation Committee)



# To Improve Stakeholders' Values





**:: Sustainable Development Organization and Cooperation**

K-water joined KBCSD (Korea Business Council for Sustainable Development) in 2005 and has been actively involved. Since 2006, the CEO Kyul-Ho Kwak has served as an independent director. Since we signed an agreement with the Korea Eco-Products Institute to purchase environmentally friendly products, we have taken the lead in buying environmentally friendly products.



B u s i n e s s I n t r o

# The Best Water Partner

K-water dedicates itself to building a happier world for people, nature and the future. We promise to become a global leader so everyone can enjoy the benefits of water resources. We will enhance the quality of people's lives by developing sustainable water resources, and make environmentally friendly high-tech complex cities where everyone can enjoy a happy life.



**Water Resources Management**

- Multi-Purpose Dams
- River Management
- Development of Medium and Small Sized Dams
- Research on Watershed and Water Data
- Research on Underground Water
- Environmental Water
- Canal

**Water Supply**

- Multi-Regional Waterworks
- Local Waterworks
- Sewerage
- Sea Water Desalination
- Deep Sea Water
- Industrial Water

**Industrial Complex Development**

- Existing Complex
- MTV (Multi-Techno Valley in Sihwa)
- Kumi Expansion Complex
- Songsan Green City

**Energy Projects**

- Hydropower
- Tidal Power
- Solar Energy
- Wind Power

**Overseas Projects**

- ODA (Official Development Assistance)
- Technology Export
- Direct Investment
- Inter-Korean Project

# Business for Water Resources

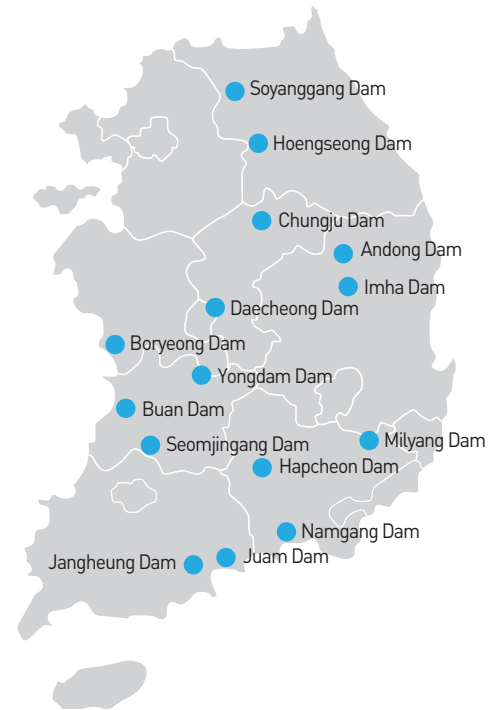
We contribute to elevate the national standard of living with sustainable water resources development.

## :: Water Resources Development

With the peculiarity of Korean rainfall, droughts and floods occur due to the unevenly local and seasonal precipitation. Moreover, even though the number of rainy days has decreased after 1980s, precipitation has sharply increased and localized rainfall tends to increase. In order to solve this water problem, we prevent flood and supply water by constructing dams. Recently, however, it has become difficult to construct dams due to the lack of dam construction sites and increased compensation. Therefore, we constructed the water supply dam of Daegok Dam and Peace Dam (2nd stage expansion) in 2005, and Jangheung Multipurpose Dam and Gampo Water Supply Dam in 2006. Also, we have already set 4 new projects (renewal of Sung-duk Dam, Bu-hang Dam, Gun-nam Flood Control Reservoir, Hantang-gang Flood Control Dam) for water shortage, hydropower generation, and prevention of flood damage in inland of northern Gyeongsang-do and northern Gyeonggi-do.

## :: Multipurpose Dam Operation

We have continuously enhanced the ability of flood control to protect human life and property. In 2005, we completed Peace Dam to prepare for unexpected floods on the upper stream of the Bukhan River, and improved flood-control ability up to about 2.6 billion ton. This equals the amount of water to fill the area with the height of 1 meter and the area of 4 times of City of Seoul (605.58㎢). In order to prevent flood damage in the area of northern Gyeonggi-do, Gun-nam Flood Control Reservoir (70 million ton) is under construction on the main stream of the Imjin River in 2006, and we started construction of flood control dam (270 million ton) on the Hantan River which is the largest tributary of the Imjin River.

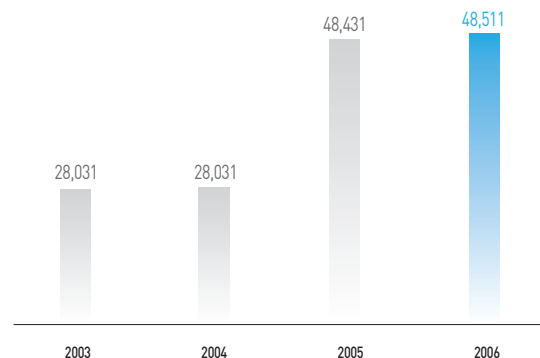


| Location of multipurpose dams |

| Dam facilities in operation |

| Category | Multipurpose dam | Water supply dam | Estuary bank |
|----------|------------------|------------------|--------------|
| Numbers  | 15               | 13               | 1            |

Present status of flood control ability

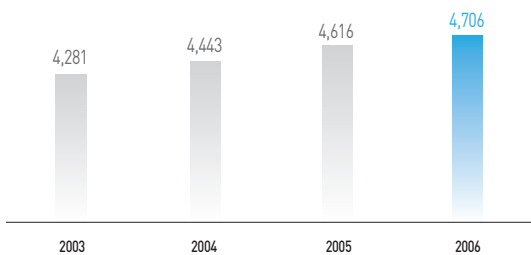


\* Flood control ability: applicable amount of water held in dam when flooded

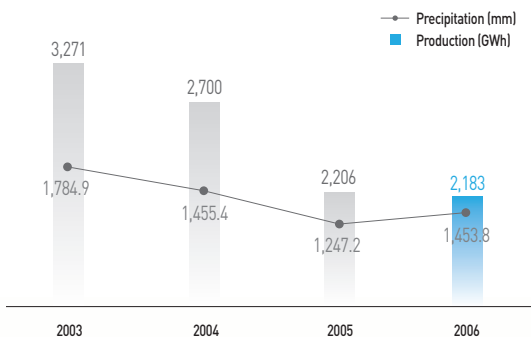


| Eco-friendly designed Jangheung Dam |

Present status of water supply (hundred million ton)



Present status of hydropower



**Preparation for climate change with improvement of dam safety**

It is an ongoing project of the enhancement of flood control ability until 2010 for the 23 of existing dams, and KRW 1.9 trillion will be required. The enhancement of flood control ability of Dalbang Dam was completed in 2006, and 10 dams are under construction including Soyonggang Dam.

**Solution to local water shortage with water supply**

Based on "Water Vision 2020" (July 2006), national water shortage will be relieved by 2011, but water shortage is expected in the West Coast of the Yeongsan River, Dongjin River, some portion of the East Coast in the Nakdong River, Midwestern area of northern Gyeongsang-do. In order to alleviate water shortage in those areas, we constructed Daegok Dam (32 million ton) in 2005, Jangheung Dam (128 million ton) and Gampo Dam (2 million ton) in 2006, and provided water to southwestern of southern Jeollado and southeastern of northern Gyeongsangdo. Also, there is a plan to complete Seongdeok, Hwabuk, Pyeongnim, Buhang Dam by 2011. This plan will lead to the solution of the local water shortage problem.

**Supply clean energy from hydropower generation**

Total facility capability of hydropower stations of multipurpose dams that K-water possesses is 1014.9MW. This represents 1.5% of Korean national electric power facilities and 18.5% of hydropower generation. It produced 2183GWh of hydropower which equals 41.8% of national hydropower production in 2006. The amount of hydropower generation, however, has decreased since 2003. The cause of this decrease might be an effect of localized torrential downpour due to recent abnormal climate. The amount of inflow to dams was 110% more compared with other years, but the electricity generation decreased with the increase of outflow by floodgate as the precipitation in July 2006 was 50% of the total amount and 69% of the total inflow to dams.



| View of Chung-ju Dam |

# Water Supply

Water supply is K-water's core business. We are promoting construction and operation of multi-regional waterworks, consignment management on local waterworks, and related sewage business to solve the water shortage and supply imbalance between regions.

## :: Operation and construction management of multi-regional waterworks

Multi-regional water supply business provides water to local governments and general customers through 19 multi-regional waterworks and 8 industrial water facilities. And 8 multi-regional waterworks and 5 industrial water (from 1995 to 2009) are under construction. A project for water supply system improvement is being promoted in 7 areas, including Seoul metropolitan region, to prevent future water shortage and imbalance of water demand and supply between regions. When the project is completed, it will represent 50.3% of national water supply capability. As of the end of 2006, the supply capability for multi-regional water was 16,482 thousand m<sup>3</sup>/day and represents 47% of national water facilities.

Management of water quality of global standard by application of reinforced standard K-water conducts a water quality test (250 items) which is more rigorous than the regulation so as to provide safe and dependable water, and we do our best to produce safe water through application of water quality rating system of purification plant. Furthermore, we changed to the system for eco-friendly clean water production by Life Cycle Assessment (LCA) through the entire process.

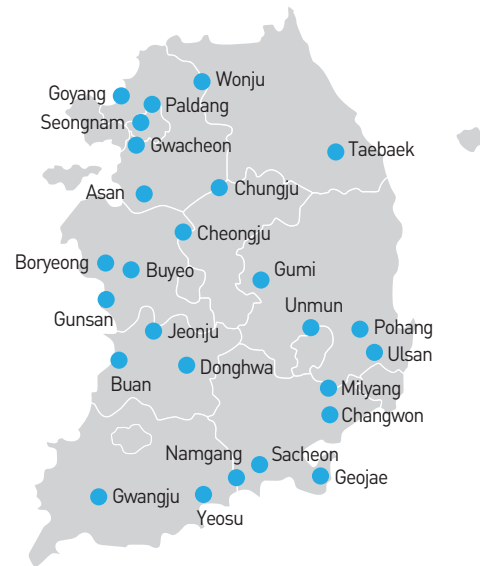
### Promotion to solve the imbalance of water service demand and supply

As of 2005, the diffusion rate of national water service was 90.7%, but the rate in agriculture and fishery communities is only 56.9% (myeon area 37.7%). This shows the supply imbalance between big cities and agriculture and fishery communities. Therefore, K-water is conducting an adjustment project of water supply system establishing 12 water supply regions nationwide. With construction of 19 new multi-regional waterworks and industrial water by 2016, we have a plan to solve the supply imbalance between regions and water shortage.

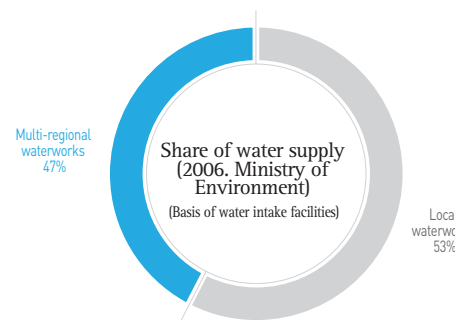
Innovation of operation and management through integrated operating system by regional area We divide facilities that are locally neighboring or overlapping with water supply boundary into one area in range, and are building an integrated operating system to operate and manage with integration of water facilities (water intake plant, pumping plant, water plant, distributing reservoir, etc.) that are straggled and individually operating in the area within region. We are also building integrated operating system in 7 regions, and currently, it is in use in 3 regions including northern Jeolla-do, Chungcheong-do, and Seoul Metropolitan region. The system will be completed by 2011 for the remaining 4 regions. By building the integrated operating system, we plan for scientific and futuristic technology, adjusting organization and manpower management system and contributing improvement of business management system.

### | Present status of multi-regional waterworks (as of 2006) |

| Project              | Capacity (1,000 m <sup>3</sup> /day) | Source of water (1,000 m <sup>3</sup> /day) |       | Water supply facilities (place) |     |                    |             |               | Pipeline (km) |
|----------------------|--------------------------------------|---|-------|---------------------------------|-----|--------------------|-------------|---------------|---------------|
|                      |                                      | Dam   | River | Total                           | Dam | Water intake plant | Water plant | Pumping plant |               |
| Total                | 16,482                               | 12,499                                      | 3,983 | 135                             | 13  | 27                 | 35          | 60            | 3,845         |
| Multi-regional water | 3,047                                | 11,532                                      | 1,515 | 96                              | 6   | 15                 | 27          | 48            | 2,909         |
| Industrial water     | 3,435                                | 967   | 2,468 | 37                              | 7   | 12                 | 8           | 12            | 936           |



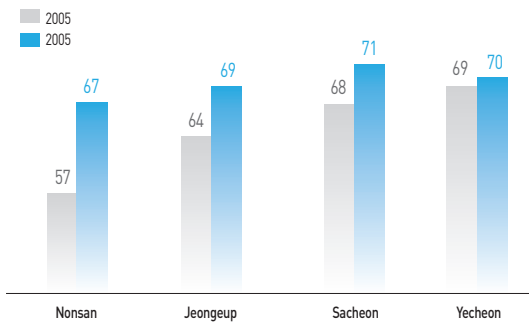
| Location of Water Plants |



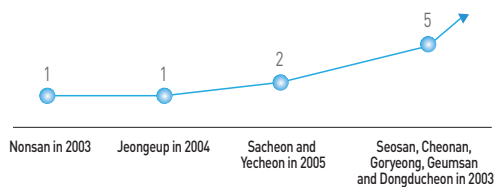
| Seoul metropolitan integrated waterworks operation center |

Local waterworks operation management has been cosigned to local waterworks operated by local governments. We will reduce the production cost and provide high quality of water. Also, we try to raise the customer's satisfaction as well as enhance the competitiveness of the domestic waterworks industry.

Present status of customer satisfaction by region



Consignment operation of 9 local waterworks



**:: Operation and management for sewerage**

For the purpose of integrated management of national water resources, we are involved in sewerage business. Starting with construction of Sihwa sewage termination treatment facility in 1988, 8 sewage treatment facilities have been completed, 5 facilities (8500 m<sup>3</sup>/day) are under construction, and 86 facilities (243 thousand m<sup>3</sup>/day) are in operation.

**Settlement of sewerage integrated management system**

Quality of water in process has improved remarkably as the integrated management system was established for the 64 facilities on the upper stream of Yong-dam Dam (3 groups), and excellence of integrated operation has been proven, showing cost reduction with reduction of operating manpower and management expenses.

**Development of waterworks and sewerage integrated project**

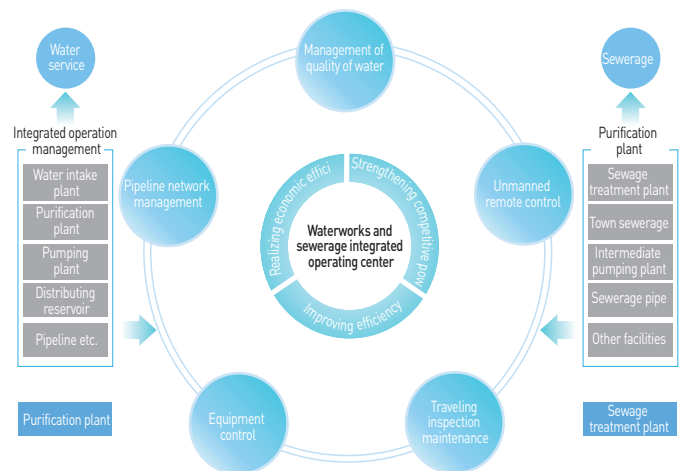
Since waterworks and sewerage have functional similarity and overlapped management, integrated management will increase efficiency. Accordingly, development of waterworks and sewerage integrated project is the ultimate goal of water service project, and we promote the project actively through proposals.

**:: Operation for Local waterworks**

As of June 2007, starting with Nonsan Waterworks Service Center, 9 waterworks service centers in local government have been opened. They operate local waterworks and supply water. For the next 20 to 30 years, the total of KRW 365.6 billion of facility improvement cost will be invested in the currently operating local waterworks. Consequently, the management efficiency will be maximized by increasing the revenue water rate and reducing the production cost.

**Cost reduction effect of KRW 1.9 billion due to increase of revenue water rate**  
 In order to increase revenue water rate of local water service, with observation pressure control, investigation and repair for the systematic water leakage management, building block system for scientific water supply rate management and replacement of old pipeline, KRW 1.9 billion will be dramatically reduced by the increase of revenue water rate.

**Increase of resident satisfaction by providing specialized service**  
 24-hour call center operation, Happy Call System which checks satisfaction after dealing with civil petition, Xroshot System to minimize residents' inconvenience related to water supply such as suspension of water supply, and operating water supply vehicle for water supply backup without delay in case of drought and suspension of water supply. ( Xroshot: mass transmission system which transmits at once after conversion of information to text or voice)



| Development of waterworks and sewerage integrated project model |

# Complex Project

We will take the lead in construction of eco-friendly high-tech complex town.

## :: Ansan · Sihwa new town

To guarantee the industrial lot and residential area, a project for Ansan and Sihwa new town development started from 1977. The 1st stage of Ansan was completed in 1993, and the 2nd stage Ansan and the 1st stage of Sihwa will be completed in 2008. A project for large scale land conducting on 59.33β¥ of Ansan and 57.11β¥ of Sihwa, we led to the employment increase and business improvement in this area. Also, we created a development model by way of showing an example for the mixed use of land development that is economically appropriate.

## :: Sihwa Multi-Techno Valley (MTV)

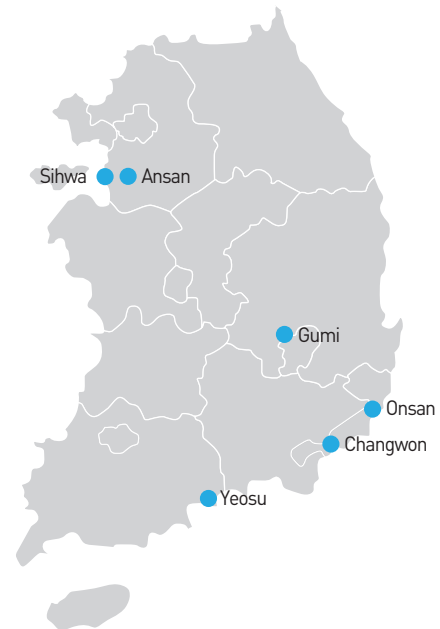
Sihwa Multi-Techno Valley is planned to prevent thoughtless development for the environment providing the planned location for the small and medium enterprises in the National Capital region and is designed to improve business competitiveness and revitalize the economy. It will be prepared in 2016 that 9.26β¥ of high-tech complex town which is centralized on knowledge-based industry including high-tech and venture business and harmonized with leisure function. With this project, it will take transit to Seoul and Incheon International Airport 1 hour by constructing a metropolitan expressway, and it will be led to local image improvement with environmental improvement in Sihwa and Banwol area and quality of water improvement of Sihwaho.

## :: Songsan Green City

Songsan Green City is planning a tour and leisure complex town considering ecological environment in 56.89β¥ of tideland that is created from Sihwa tide embankment in 1994. And the City will provide a new urban area which combines residence and leisure in Sihwa and Hwaseong area, to induce higher value-added business area, and take a role of key position for development halfway along the west cost belt (from Incheon to Pyeongtaek). Songsan Green City, especially, will be an example for the benchmarking of solving a social conflict resulted from complex development projects at the beginning stage.



| Lake park in Ansan new town |



| Location of complex project |

| New town           | Sihwa expansion        | Industrial complex |
|--------------------|------------------------|--------------------|
| Ansan new town     | Sihwa MTM              | Gumi('77-'09)      |
| 1st stage of Sihwa | Songsan Green City     | Changwon('74-'02)  |
|                    | under construction     | Yeosu('74-'10)     |
|                    | Tidal power generation | Onsan('74-'99)     |







| Sihwa reedy marsh panoramic view in autumn |



| Chinese water deer in Sihwa reedy marsh |

**:: Gumi National Industrial Complex**

Gumi National Industrial Complex has been completed in the area of 5.7km<sup>2</sup> by 1995 for the purpose of higher value-added business complex preparation in order to play a role for northern Gyeongsang-do area development and to secure the nation's competitiveness, and it will be completed 6.8km<sup>2</sup> of the 4th complex by 2009.

Gumi National Industrial Complex has the aim to develop eco-friendly complex harmonized with nature. It is a source of supply of service water for Gumi Industrial service water facility, taking the Nakdong River as a water source, and service water will be supplied by indirect water supply system from the distributing reservoir in the complex.

**:: Yeosu National Industrial Complex**

It is a large scale industry complex developed from 1973 to 2010, completed 12km<sup>2</sup> by 2006, and will be completed additional 7.1km<sup>2</sup> by 2010. Yeosu National Industrial Complex plans to build a comprehensive petrochemistry complex and prepare connected development in the broad area of Gwangyangman region as a keynote for development. Yeosu National Industrial Complex contributes remarkably to promote balanced

development for the area. It is a source of supply of service water for the 3rd stage of Gwangyang industrial service water, taking the Seomjin River as a water source. Currently, for residents' convenience, service water is supplied from the 2nd stage of Gwangyang until the completion of the 3rd stage of Gwangyang industrial service.

**:: Sihwaho tidal power plant**

Sihwaho tidal power plant is planned to improve quality of water according to Sihwaho comprehensive management plan in 2002, and aims to meet a policy on recycled energy expansion and UN's Climatic Change Convention. For the first time in Korea and on the largest scale in the world, Sihwaho tidal power plant has 254 thousand kw of generation capacity and 553 million kWh of annual generation, and can supply a city of 0.5 million population. Once Sihwaho tidal power plant is completed, quality of water in Sihwaho will be improved, cost of energy importation will be reduced, and 315 thousand tons of carbon dioxide will be decreased annually. Furthermore, there will be a synergy effect related with Sihwaho area due to tourist development.



| Construction site for Sihwa tidal power plant |

# Subsidiary Water Resources

With integrated operation of desalination facility and development of deep ocean water, we develop subsidiary water resources for the preparation of future water shortage and contribute to the balanced benefit of the nation's water welfare.

## Desalination project

### :: Background and status for desalination project operation

A desalination facility equipped by the local government to regularly supply service water for islands was not operated properly because of lack of skills due to residents' own operation and high water cost. Therefore, K-water concluded an agreement of additional commission and consignment with local government to solve the problem of water in costal island areas. Also, K-water started operation and management of desalination facilities in Udo and Gopado in Seosan-si in June 2004, and as of the end of 2006, has been operating 40 facilities in 8 cities and counties out of 68 desalination facilities in 16 cities and counties nationwide.

### :: Accomplishment of desalination operation

**Increase of working ratio by improvement of undertaken facilities:** At the beginning of undertaking, the working ratio was only 48%, but now all facilities are operated with stability by equipment improvement and supplementation.

**Reduction of water cost for the residents in islands:** High water cost due to operation expenses such as electric charge from facility operation was reduced by 1/3 to 1/5 applying local water service rate.

**Increase of operation efficiency with integrated management by area in region:** As expert manpower is posted by area in region (Chungcheong area, northern Jeolla area, southern Jeolla area, and southern Gyeongsang area), the level of operation skill was improved. And we make efforts to improve efficiency and facility operation with stabile entrusting local manager and operating by islands.

**Providing customer-oriented service:** Customer-related works including taking care of customers' claim, keeping record of gauge, adjusting water rate and managing receipt are computerized and prompt and accurate work is processed.

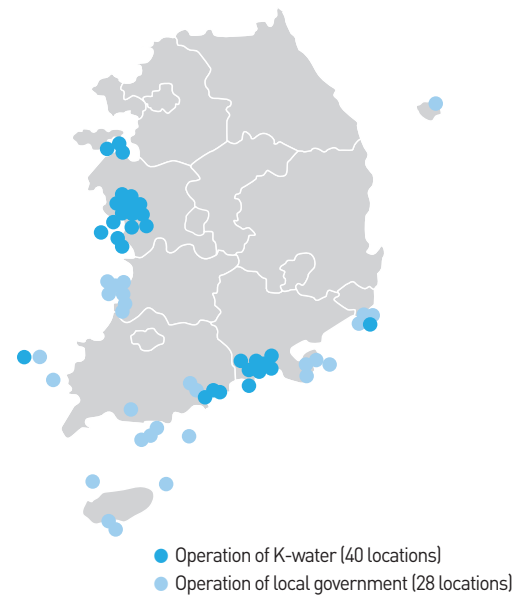
**Securing water safety:** During the operation by community own, there were risks to residents' health because waterborne epidemics could break out due to lack of disinfection, but now water safety is secured by reinforcement of disinfection facility and thorough management, and evaluation of water quality regularly.

**Building remote monitoring control system:** In order to monitor desalination facilities in islands from land remotely, the system was built by way of showing an example in 4 places in Janggodo, Seodaedo, Seonyudo, and Yamido, and it is available to promptly deal with problems such as malfunction by real-time monitoring of equipment and checking the operation condition.

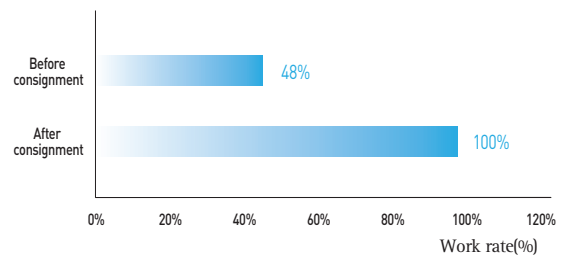
**Improvement of desalination technology:** Desalination technology is secured by both construction and operation through the desalination project which is under construction of local government.

- Gunsansi (completed in Oct. 2006): Seonyudo(100 ton/day), Yamido(50 ton/day)

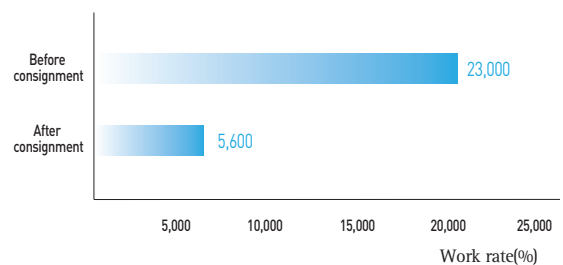
- Ongjingun(schedule to be completed in Oct. 2007) : Daeyeonpyeongdo(200 ton/day)



Change of work rate



Change of water rate



## Development of deep ocean water

### Deep ocean water

Deep ocean water is water placed in depth of more than 200m where sunlight can not reach, originating in Greenland, and is seawater circulating Atlantic Ocean, Indian Ocean, and Pacific Ocean with a period of 2000 years. Deep ocean water is useful seawater having characteristics of low temperature, purity, eutrophy, and maturity, and is an unlimited clean resource that is restored and circulated.

### Development trend of advanced country

Deep ocean water is utilized in various fields of agriculture and fisheries, industrialization, and medicine. In the case of Japan, around 400 products including liquor, spring water, food, salt, and cosmetics are developed and over KRW 2 trillion of market has been formed. Also, the United States is promoting research and development and practicality in the field of agriculture, fisheries and energy at NELHA (Natural Energy Laboratory of Hawaii Authority).

With development of deep ocean water which is the clean unlimited resource in 21 century, we want to contribute to developing subsidiary water resources for water shortage and creating the new higher value-added business.

### R&D of K-water

K-water is conducting joint research for making water resources of deep ocean water with Korea Ocean Research & Development Institute investing KRW 2 billion, and the result will be transferred to private enterprise and can contribute to deep ocean water industrialization.

### Deep ocean water project in Gangneung

K-water concluded a basic agreement for the development of deep ocean water with Gangneung-si and is conducting a feasibility study and master plan. Gangneung has an excellent development condition of deep ocean water, and is a superior area to build necessary infrastructure to industrialization as a center for tourism and transport. Once the feasibility is proved for this project, in 2009, we will take 4000β of deep ocean water a day and supply for industrial service water. Also, revitalization of higher value-added business seems to contribute to local economy growth.

| Category                           | Low temperature | Purity | Eutrophication | Applicable area                                       |
|------------------------------------|-----------------|--------|----------------|---|
| Use of desalination water          | ●               | ●      |                | Production of desalination water(functional beverage) |
| Extraction of dissolved material   |                 | ●      |                | Salt manufacture, food, medicine                      |
| Conservation of global environment | ●               | ●      | ●              | Improvement of oceanic environment                    |
| Use of low temperature             | ●               | ●      |                | Marine farming, generation with temperature variation |



| Conclusion of an agreement on deep ocean water with Gangneung-si |

# Overseas Projects

We are heading toward becoming a global leader with advanced technology and experience.

## :: Preparation of base for overseas projects

Recently, the scale of water market in the world has been expanding rapidly, and multinational enterprises in Korea are increasing. Consequently, K-water is securing the domestic water market and seeking to extend its business abroad with priority given to management and maintenance, and trying to contribute to national resources creating value-added overseas projects. In order to have a position as a global leader in the water service market with technology and experience for 40 years, we are making inroads into foreign markets including Southeast Asia, Middle East, and Africa where water demand is increasing rapidly. K-water extended its business in the African Continent and received an order of water service operation management project in Equatorial Guinea, which laid the groundwork for expanding business in 2006. Also, we are conducting the modernization project of waterworks and sewers in Arbil, Iraq, and flood prevention project in Sri Lanka successfully. Furthermore, we reinforce marketing activities for the new project through local office operation in Vietnam, and find a chance for new business diversifying portfolio of overseas projects with a revitalization of investment business.

## :: Diversifying portfolio of overseas projects

Starting with a survey of the Bunha River area of Sanseosung, China in 1994, we mainly conducted Official Development Assistance (ODA) and laid the groundwork for overseas expansion in developing countries at the beginning of the project. We received orders of O&M technical support project of Likimro hydroelectric power station in India and water service operation management project in Equatorial Guinea consecutively in 2006. K-water made inroads into African market and raised its reputation conducting Mongomo project for waterworks operation and management ordered by Equatorial Guinea Government successfully, as well as creating an



| Water service modernization in Arbil, Iraq |

opportunity to expand business afterwards. In the mean time, we organized the whole responsibility system for regularized promotion of investment business including "investment business on Bandung water service facility in Indonesia" and "investment business on Bila city hydroelectric power generation," and are working to attract investment. We will promote ODA, technology exportation and investment with the best portfolio, build global intelligence network to find potential investment, and conduct cooperative work such as strong relationship with applicable countries and strategic alliance with domestic and foreign enterprises.



| Project for waterworks operation and management in Equatorial Guinea |



| AIT(Thailand) student internship |



| Visit of Cambodia Prime Minister Hun Sen |



| Likimro, India field technical education |

**:: Making mid- and long-term roadmap for overseas projects**

With technology, experience, and professional training, we have comprehensive ability on a par with multinational enterprises in the field of water resources, waterworks and sewerage, and hydroelectric power generation. Based on these abilities, we developed a mid- and long-term roadmap for overseas projects for regularized overseas expansion. Through rapid growth of world water market and the need to introduce global standards we devised a plan to manage overseas projects with global standards. Focused on operation management with comparative advantage, we will gradually expand investment business and prepare to become a global corporation.

**:: Global network for securing new growth motive force**

We reinforce strategic alliances and cooperation with domestic and foreign organizations to ensure global network for overseas projects. We concluded

MOU with Water Resources Authority in Mongolia, Committee of Water Resources in Sri Lanka, and Committee of Water Resources in Kazakhstan in 2006. Also, K-water reinforces strategic alliances with foreign governments and organizations, for example, Hun Sen, Cambodia's Prime Minister, visited, and promised cooperation in water resources development. Moreover, we dispatched professionals to Iraq and Afghanistan and served as a technical advisor, as well as giving technical training to over 500 experts from more than 40 countries of Asia and South America, as of 2006. K-water has a plan to expand into China and Southeast Asia where water demand is increasing rapidly, focused on the field of dam and water service and sewerage in which we have already accumulated know-how and technology as a water specialist organization. However, since overseas projects are risky, we will check legal, financial and technical feasibilities thoroughly and promote overseas projects without mistakes based on the global network we already have.

**Opening overseas markets to be a global enterprise**

- Making business portfolio through business diversification (ODA, exportation of technology, loan business)
- Understanding probable list by business, region and process, and devising management plan

**Completed**

8 projects in 7 countries  
(KRW 10 billion)  
China, Nepal, Cambodia  
Afghanistan, Peru,  
Indonesia.



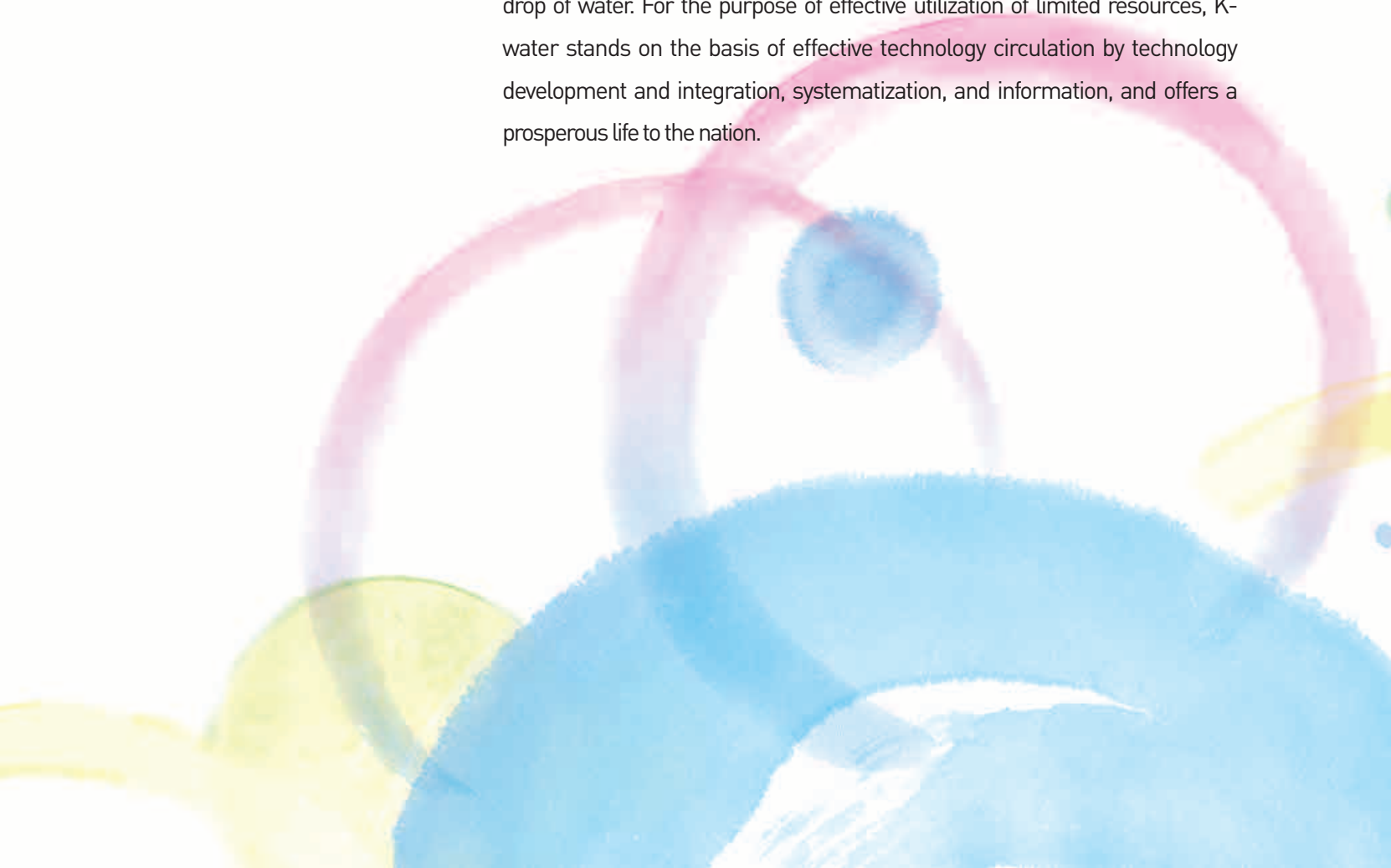
**In progress**

9 projects in 8 countries  
(KRW 19.9 billion)  
Cambodia, Mongolia, Sri Lanka  
Iraq, Vietnam, Afghanistan,  
Equatorial Guinea, India.

T e c h n o l o g y & B r a n d

# Technology Creating Brand

We have a future because we have water. We believe water brings happiness, that we must consider environment first, and we believe in the great power of a drop of water. For the purpose of effective utilization of limited resources, K-water stands on the basis of effective technology circulation by technology development and integration, systematization, and information, and offers a prosperous life to the nation.





# Integrated Operation of Water Resources Facilities

K-water uses existing water resources facilities efficiently by building integrated watershed management system considering irrigation, flood control, and river environment, and makes efforts to minimize the damage from flood and drought for the nation.

## Integrated watershed management

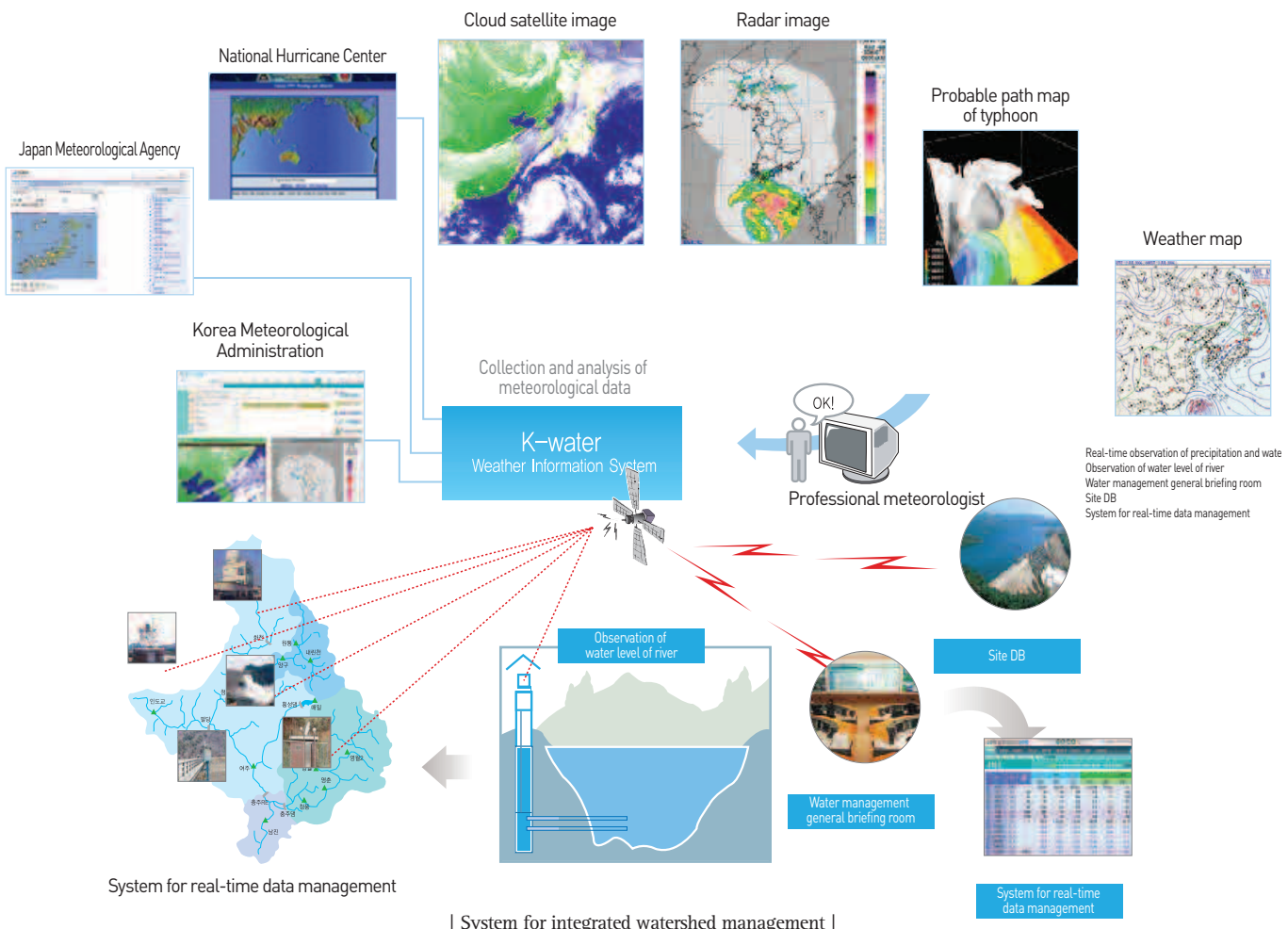
### Technology for Integrated watershed management

Because of recent abnormal climate, drought and localized torrential downpour occur frequently. K-water is developing the technology for integrated watershed management to operate 15 multipurpose dams efficiently and manage water resources that are operated currently.

- Maximizing the efficiency of water management by weather forecast and building Hydrological Data Acquisition and Processing System
- Building a system for integrated watershed management connected with amount and quality of water
- Building an operating system linked with flood control to minimize flood damage in basin

### Maximizing efficiency of water management by weather forecast and building Hydrological Data Acquisition and Processing System (HDAPS)

We need to forecast the climate in basin and to build real-time HDAPS in order to increase reliability of drought and flood analysis. Consequently, K-water provides weather forecast for dam basins 1 time normally and 4 times when flooded by a professional meteorologist for weather analysis and forecast in dam basins. Also, K-water uses real-time HDAPS for operation and management of multipurpose dams, and with this system, precipitation and water level observation data of dams and river basins are sent and received minutely in real-time by Korea's own satellite.





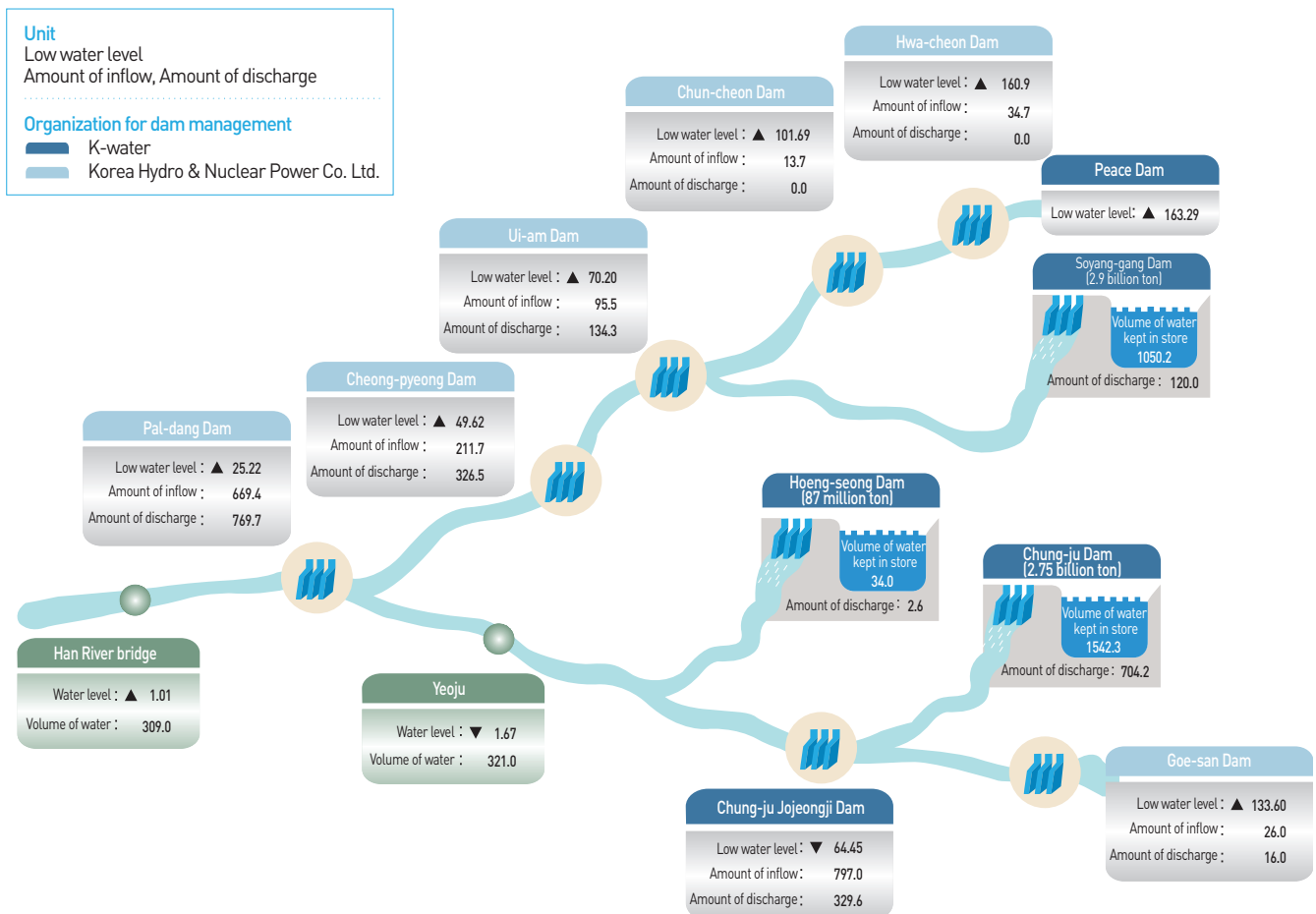
**:: Building a system for integrated watershed management connected with amount and quality of water**

The goal of operation of irrigation facility reservoir which uses large amount of water is to satisfy both flood control and guarantee of service water making dam operation manual. For the operation of reservoir during normal and dry season, we provide service water with stability, by setting the level of dam operation monthly which is available for water supply, even if drought occurs with frequency of 20 years until the next year of rainy season (end of June). Dam for irrigation management is operated with the method that the best volume of discharge is distributed by dam linked to several dams considering the condition of sluice gate and demands for water service on the upper stream dam at the point of main control within the water system. This method, however, has changed from the method that volume of discharge is decided individually based on the purpose of each dam construction in water system. Therefore, a "system for real-time water management" is in the stage of trial operation after completion of water system of the Geum River and the Nakdong River from 2003 to 2007, and has a plan for the water system of the Han River in 2007.

**:: Building an operating system linked with flood control to minimize flood damage in basin**

Lately, by the effect of abnormal climate, risk of flood has increased in Korea, but construction of new dams to secure flood control capacity is becoming difficult. Consequently, in order to raise the efficiency of flood control operating with connection of existing dams, an operating system linked with flood control is being built by dam group by water system such as the water system of the Han River in 2004, the water system of Nakdong River in 2006, the water system of the Geum River and Seomjin River in 2007, and stands on the basis of water management system by basin. Now, the operating system linked with flood control in dam group of water system of the Han River was completed in 2006 and is ready for trial operation in 2007, water system of Nakdong River and the water system of the Geum River and Seomjin River will be completed and run by trial by 2008 and 2009 respectively.

\*Organizations related to flood control: MOCT Flood Control Center, Korea Water Resources Corporation, Korea Hydro & Nuclear Power Co. Ltd., Korea Rural Community and Agriculture Corporation



| Operating system linked with flood control (as of July 7, 2007) |

## Generation Integrated Operation

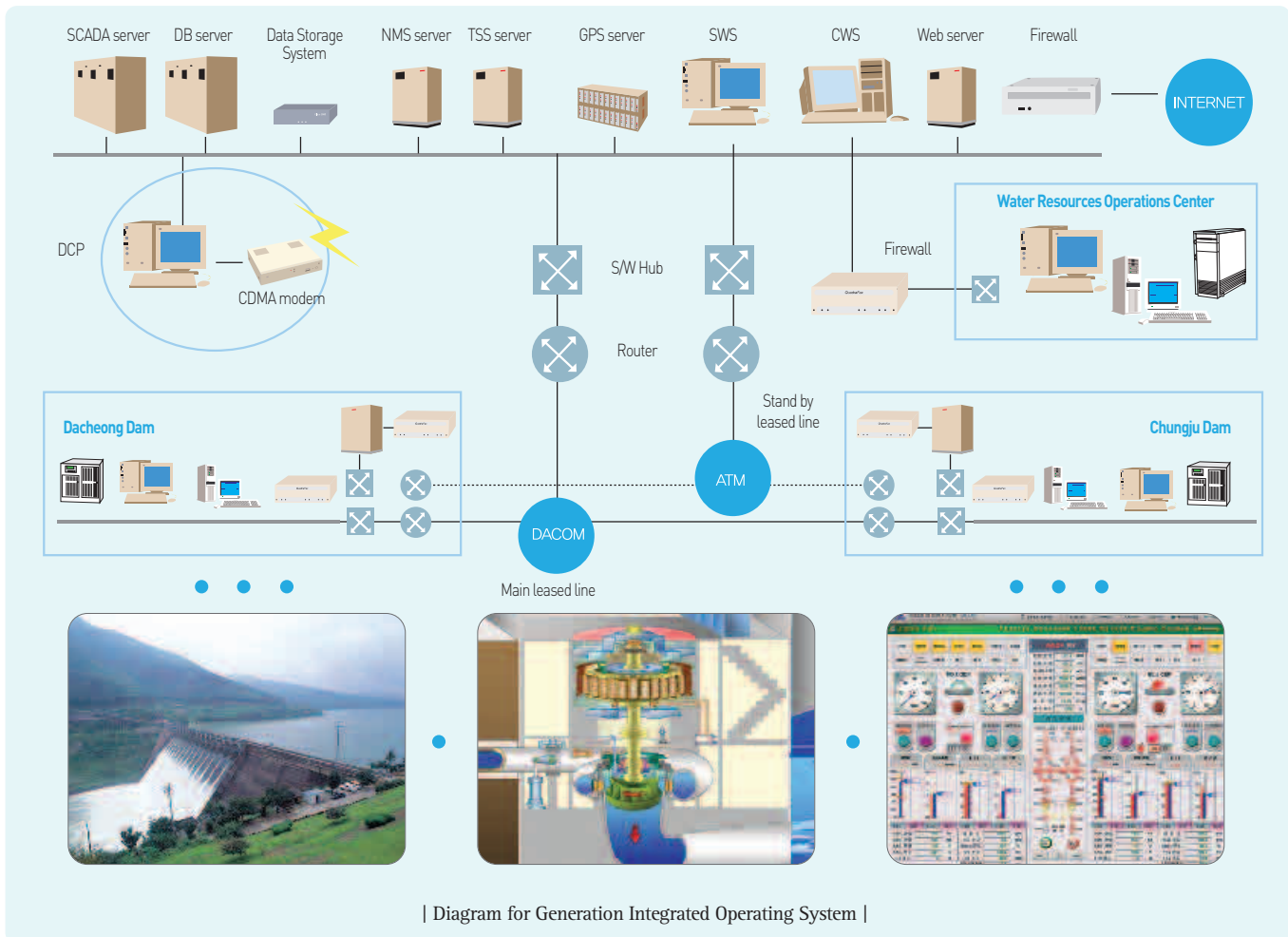
### Generation integrated operation

Generation Integrated Operating System was built for the first time in Korea, and K-water headquarters remotely operates generation, transformation and sluice gate equipment of 9 multipurpose dams nationwide. Integrated operating system operated by K-water includes 33 generators, 1 million kW of generation capacity, and 2.2 billion kWh of generation output.

### Generation Integrated Operating System

As we built Generation Integrated Operating System and run unmanned remote integrated operation substantially, we raised utility of water

resources with efficient irrigation and flood control, and increased competitiveness due to modernization of generation operating technology and guarantee of core technology based on IT. Also, we improved management efficiency with switch labor intensive operation and management for technology intensive system by transforming the shift work of operation and watch to ordinary work system. Furthermore, we brought about cost reduction by minimizing shift workers and disposing of other department work, and brought an effect of employment creation in the new field. We are planning to make inroads into the foreign market with this system after branding.



## Remote automatic measurement for volume of water

### Development of measurement system for volume of water

K-water developed unmanned automatic measurement system for volume of water using state-of-the-art supersonic Doppler hydrometer remotely to solve current problems such as lack of accuracy for measurement of volume of water by people. Volume of water measurement is the basic data for water resources management. Accurate information of volume of water is fundamentals for the analysis of all water resources, and is utilized as a basic data for dam operation, repair, development of sluice gate model, record for lawsuit against water concession and water dispute, design of river and repair structure, rate of sediment transport in basin, and performance of system for the total amount of pollution.

### Remote automatic measurement facility for volume of water

It controls supersonic Doppler hydrometer and mechanical equipment remotely, and measures real-time flowing volume of water in river. This system measures distribution of flow velocity as a speed detector on the highway and converts to volume of water.

### Principle of remote automatic measurement facility for volume of water

Remote automatic measurement facility for volume of water is the system that measures flow velocity of river using Doppler shift. It measures flow velocity with reaction of Doppler shift which supersonic pulse from a sensor, which is diffused on particle and returned.

| Installation case of remote automatic measurement facility for volume of water |



Vibrating water level facility in Nakdong River



Water level facility in Goryeong Bridge of Nakdong River



Remote automatic measurement facility for volume of water in Seongsan Bridge of Nakdong River

# Production of Clean Water

We improve quality of waterworks by introducing high level purification treatment process continuously, hold core technology of future water industry such as desalination.

## High level purification treatment method

### High level purification treatment process

High level purification facilities are activated carbon, ozonization, and screen filtration facilities introduced for the treatment of extremely small quantities of hazardous substance, taste and smell, disinfection residual product, agrochemical, and anion that are not removed by general purification treatment. It is difficult to remove the pollution substance with general purification treatment since quality of water in river stream area also lowered less than level 3 water as quality of main sources of water service including the Nakdong River and the Geum River lowered.

### High level purification treatment method

For the high level purification treatment, there is oxidization removal which uses strong oxygenation to remove taste, smell, iron and manganese, a method using ozone facility which is effective to disinfect germs, and activated carbon treatment method which removes the hazardous substance for people including fusible organic substance by absorption and agrochemical ingredient. Also, in the United States, screen separation method has been developed and applied centered with reverse osmosis for demineralization of industrial water from 1960s. This method is uses of anti-transmission and removes the pollution substance by filtration and diffusion.

### Present status of introduction of high level purification treatment

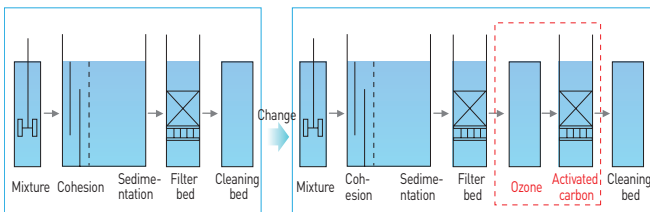
Starting with introduction of high level purification treatment process using granular activated carbon filter/absorber in Seokseong purification plant of Buyeo in Nov. 2003, Bansong purification plant of Changwon was completed in Dec. 2006. Also, Banwol purification plant started construction to introduce ozone facility and granular activated carbon absorption process. We have a plan to introduce the ozone facility and granular activated carbon absorption process of high level purification treatment process continuously in the National Capital region purification plant including Ilsan and Seongnam. In Siheung purification plant, sedimentation water has been supplying by introducing the purification treatment process using ultrafiltrazation (UF), and is undertaking verification and evaluation for appropriateness of introduction process and operation and maintenance factor. Gongju purification plant will introduce the precision filtration process and be completed by the end of 2008.



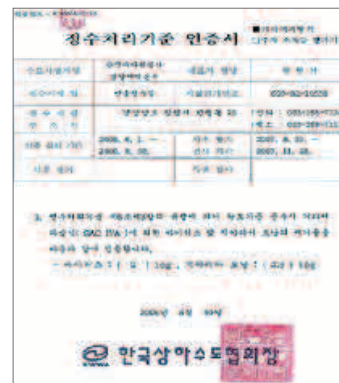
| Screen filtration purification facility in Siheung purification plant |



| Wining 1st prize in technology at Korea Screen Seminar (Nov. 2006) |



| High level purification treatment process in Seongnam purification plant (After Ozone+GAC Contact bed) |



| Certificate of filtration method in Bansong purification plant (Aug.2006) |

## Desalination technology

### Accumulation of desalination operation technology

K-water carries out strict quality and process management, establishing its own technical manual to maintain the best operating technology including effective operation, management and cost reduction of desalination facilities in islands.

- Formulation of desalination facility operation management standard (2005)
- Establishment of desalination facility operation management manual (2005)
- Publishing desalination facility operation white paper (2006)
- Study of the best operation program of desalination equipment (2006)

### Guarantee of desalination construction technology

K-water makes efforts to secure construction technical expertise with desalination construction project. Also, K-water tries to secure construction technology such as standardization of desalination equipment component through advanced technology and experience of water service.

- Reinforcement of technical ability by self-conduct of basic and execution drawing and construction
  - Trial construction in Gunsan-si (Seonyu-do, Yami-do) [Completion in 2006]
  - Trial construction in Ongjin-gun (Daeyeonpyeong-do) [Schedule to be completed in 2007]
- Establishment of desalination facility design and technical standard (2005)
- Study of standardization program of equipment control system component (2006)

### Patent and new device application for desalination quality of water adjustment

We have global competitiveness with continuous R&D for desalination.

- Development of quality of water adjustment technology for producing water from desalination (Patent No.10-2005-0041539)
- Mineral concentration method in seawater (Patent No.10-2004-0040049)
- High hardness mineral concentration from seawater production equipment (New device No.20-2005-0023158)

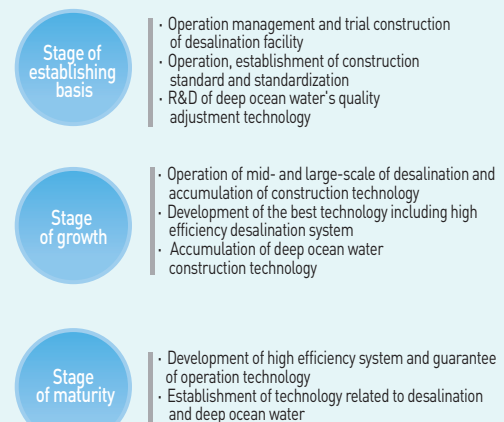
### Development of deep ocean water technology

A joint research between deep ocean water laboratory (Goseong in Gangwon) and Korea Ocean Research and Development Institute is undertaking for making deep ocean water to water resource, and we make efforts to secure core technology for future industry with technology development related to deep ocean water.

**Desalination** The process to change seawater to drinkable water. Method of desalination is evaporation and reverse osmosis, and reverse osmosis method is mainly used in Korea.

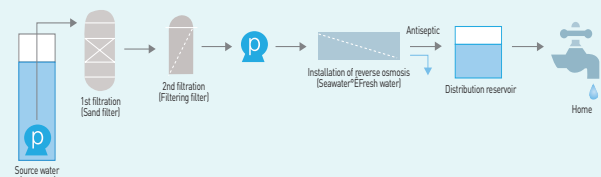
## Core technology in the future development and management of subsidiary water resources

As one of the 14 core technology development fields on the technology road map, we promote it as a priority to hold global competitiveness and create and support customer value.



### Process of desalination treatment

When large impurities in seawater used as source water are removed comparatively through the 1st and 2nd filter and pressurized larger than osmosis on reverse osmosis screen by using high-pressure pump on the source of water removed impurities, fresh water is produced by filtering the salt ingredient in the water, safe waterworks are supplied to user by pouring antiseptic, and the rest of concentrated water is discharged into the ocean after appropriate treatment.



# Operation and Management of Waterworks Facilities

## Building waterworks integrated operation center by region

### Integrated waterworks for adjustment of water supply system

Adjustment of water supply system is to use limited water resources efficiently, raise facility utilization for multi-regional waterworks, and divert surplus volume of service water in the sufficient area of water supply with forecast of future service water demand and service water shortage divided by 12 regions nationwide to the area of shortage.

- Guarantee of 370 million β© of sufficient water yearly after system adjustment project on 6 regions until 2006
- Available to use 600 million β© (2.06 million β©/day) yearly when completion of adjustment project for water supply system in 2011
- Increase of working rate for multi-regional waterworks (60% of 2006 → 79%), substitution effect of KRW 2.5 trillion yearly

### Building integrated operation system based on IT

Besides the adjustment project for water supply system, we reorganize 12 regions to 7 management regions in the center of local headquarters for the purpose of the best operation management, and build the water integrated operation system based on IT and automatization technology including waterworks managed by K-water as well as waterworks of local government in the region.

- In 2004: building in northern Jeolla region, In 2006: building in Chungcheong region and National Capital region
- In 2007: building in southern Jeolla region, In 2011: integrated operation in Gangwon, northern and southern Gyeongsang region

### Effects from integration

In building the integrated operation system, it will be automatized by unit process of water derivation plant, pressurized water supply facility and purification plant, available real-time remote monitoring control and effective to operate and manage facilities. Since the integrated operation center by region remotely manages all the process of operation 24 hours, production of water and supply in the all water facilities within region, with the exception of core facilities such as purification plant, large water derivation plant and pressurized water supply facility become unmanned, and the remainder of employees are used to process management and traveling inspection.

### Plan of waterworks integration promotion

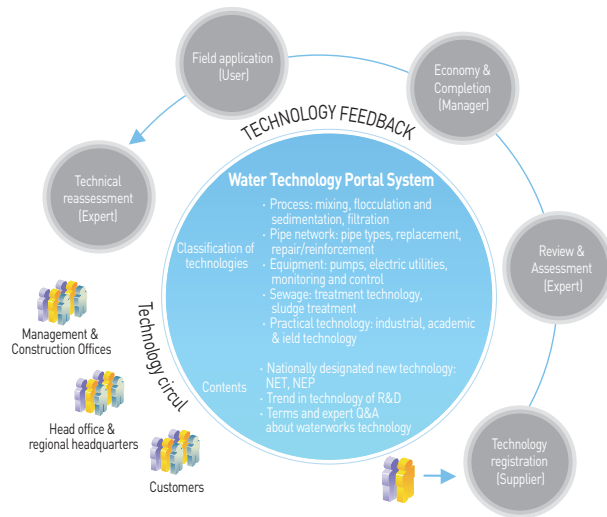
- Adjustment plan for water supply system: linking with 12 regions Supply (600 million ton) for water shortage area using sufficient amount from existing facilities
- Development of multi-regional and industrial service water Facility expansion for clean water safe supply
- Building emergency water supply system Operation linked to emergency water supply between water facilities (19 of broad to broad regions, 24 of broad to local regions)
- Building integrated operation system Advanced operation system of waterworks facilities and increase of production



| Completion of waterworks integrated operation center in the National Capital region (Feb. 2007) |

### | Plan of integrated system for waterworks facilities |

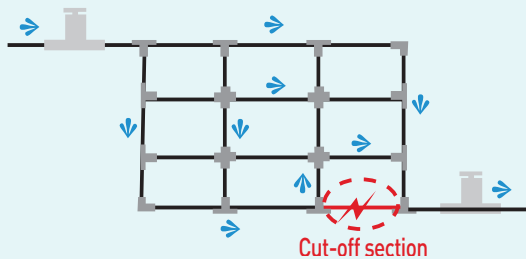
| Classification             | Status for progress  | 2005                                 | 2006                                 | 2007            | 2008                                 | 2009                 | 2010          | 2011                 |
|----------------------------|----------------------|--------------------------------------|--------------------------------------|-----------------|--------------------------------------|----------------------|---------------|----------------------|
| Northern Jeolla region     | Completed            | Integrated operation                 |                                      |                 |                                      |                      |               |                      |
| Chungcheong region         | Integrated operation | Building integrated operation system |                                      | Stabilization   | Integrated operation                 |                      |               |                      |
| Metropolitan region        | Integrated operation | Building integrated operation system |                                      | Stabilization   |                                      | Integrated operation |               |                      |
| Southern Jeolla region     | Building in progress | execution design                     | Building integrated operation system |                 | Stabilization                        | Integrated operation |               |                      |
| Gangwon region             | Planning in progress | execution design                     |                                      | investment idea | Building integrated operation system |                      | Stabilization | Integrated operation |
| Northern Gyeongsang region | Planning in progress |                                      | execution design                     | investment idea | Building integrated operation system |                      | Stabilization | Integrated operation |
| Southern Gyeongsang region |                      |                                      | execution design                     | investment idea | Building integrated operation system |                      | Stabilization | Integrated operation |



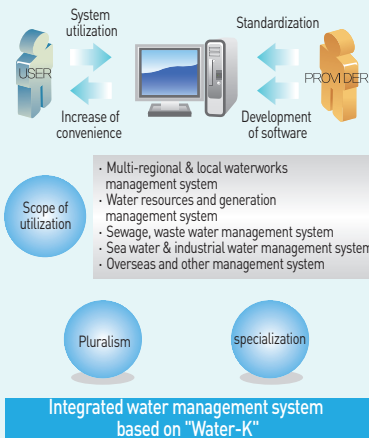
| Portal system for waterworks technology |

**Fluid-crossing gate for pipelines**

This method enables repairing and maintaining a pipeline such as pipeline reinstallation, change of valves, etc. without any interruption of water supply by shutting off a necessary block to work on (the least block), minimizing the inconvenience of consumers regarding water supply.



**Branding its own operation system (Water-K)**



| Water-K management system |

**Portal system for waterworks technology, Fluid-crossing gate for pipelines Water-K, TSS(Total Support Service)**

**:: Setting up portal system for water technology**

K-water has carried out a project called "Setting up the portal system for water technology and becoming a hub" to establish an efficient base of technology circulation by integrating, systematizing, and creating a database for a variety of water technologies (process, pipeline network, equipment, IT, and sewage) held by the industry, academia, and water supply service companies.

The system is composed of the portal system covering the whole area of water technology. All water technologies actually being applied and used in the field are included through the process of refinement and assessment. This system can be used to for resolving any technical problems that might arise in work-site operations. It serves as a water technology hub through the operation of a networking system created for the circulation of technological information between academia and the industrial world.

**:: Development of fluid-crossing gate for pipelines**

K-water developed the fluid-crossing gate for pipelines to minimize users' inconvenience and the time & section required for water cut-off. As of 2007, we completed the first development of the cutoff devices for pipes of 400mm, 350mm, 300mm and 250mm in diameter using the 6 Sigma management techniques. Practical utilization of the fluid-crossing gate for pipelines: K-water corrected its mechanical problems through equipment tests and the simulation conducted by the Korea Institute of Water and Environment. The technology was applied to the replacement work of regulating valves of 300mm in diameter in Sacheon city's local waterworks system commissioned to K-water, and that work was successfully completed without cut-off of water supply. Acquisition of patent on the fluid-crossing gate for pipelines: Method for pipe diameters of 500-600mm is now under development, and it plans to be extended to the pipes of large diameters. The fluid-crossing gate for pipelines will continue to be applied to multi-regional and local waterworks systems throughout the country.

**:: Water-K(K-water General Operating System)**

Water-K is an independently developed water-related management system, a standardized software (based on HMI & Web) which provides an integrated water supply service for all treatment and facilities regarding water purification, dams, sewage, local water supply system, sea water desalinization, industrial water, etc. K-water has been promoting the project for spreading the value of Water-K brand to secure global competitiveness through the creation of an integrated water supply management system encompassing multi-regional waterworks, local waterworks, water resources, industrial water, and overseas business. As a result, we expect to enhance the convenience based on improved user-oriented functions and strengthened application functions facilitated by the development of IT technology.

**:: Total Support Service (TSS) for Local Waterworks by Stage**

Breaking away from a mere technology provider, K-water has set up the TSS system by conducting an analysis of water purification process aimed at improving worn out facilities in respect of a specialist and introducing a service technique searching the part of which customers are not even aware. The water quality of most water purification plants was improved (turbidity was reduced by 89%) and the survey results of the operating personnel of the local governments (World Research) on consumer satisfaction indicated 88.9 points, raised by 6.5 percent since 2006.

2006 Highlights

# Challenge & Innovation

The wisdom of looking far into the future and a passion for progress are characteristics of K-water, preparing for the future of Korea. K-water will move forward by maintaining management innovation and setting up an ethical management system of global standards in order to be reborn as a top global company for comprehensive water services through continuous innovations and challenges.







# Being reborn Through Change and Innovation

K-water is marching towards its goal of becoming a top global company for water services and the number one innovative company through continuous innovations and challenges.

## :: Objectives for management innovations

As an integrated water management institution, K-water is advancing to the goal of being a top global company for integrated water services on the foundations of managerial efficiency through the use of advanced management techniques, top-notch technical power, and strict and clean ethical management.

## :: Global standardization of management system

K-water has innovated on the infrastructure to support innovation activities to strategically adapt ourselves to the complex and new business environment.

### HR-Bank, innovation on talent education

K-water has achieved an epoch-making efficiency of human resources management by integrating into one system the existing sectors of organization, personnel, appraisal, education, and welfare that had been separately managed.

### BSC, powerful engine of strategic implementation

K-water has built up the base for strategic implementation by establishing employees' performance indicators and objectives and by introducing the unique BSC system of K-water.

### Innovation converting internal process into customer-oriented process

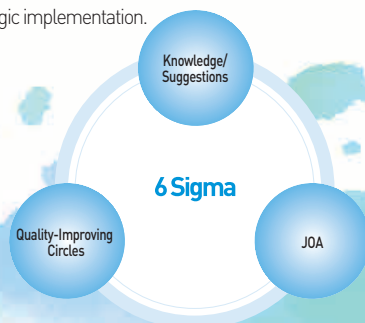
K-water has built an infrastructure for providing customized service suited to individual customer's needs and wants and for achieving our innovation objectives for creating the customer value.

### Separate management of position and class

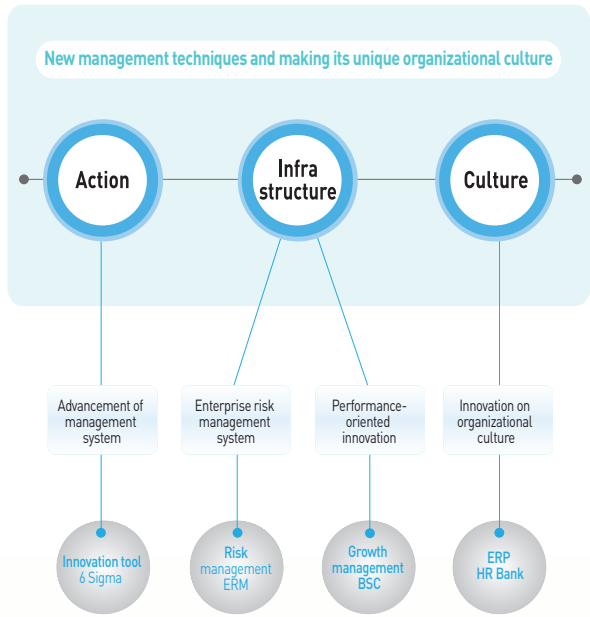
K-water has radically reformed the organization on the basis of competence and performance: cut 20% of upper-level of the 1st class, introduced a system of separate position and class for the 1st-3rd class, implemented cross assignments to upper and lower level positions, and greatly improved the system based on the capability and achievement through differential compensations commensurate with positions.

## :: Introduction of 6 Sigma as a tool of management innovation

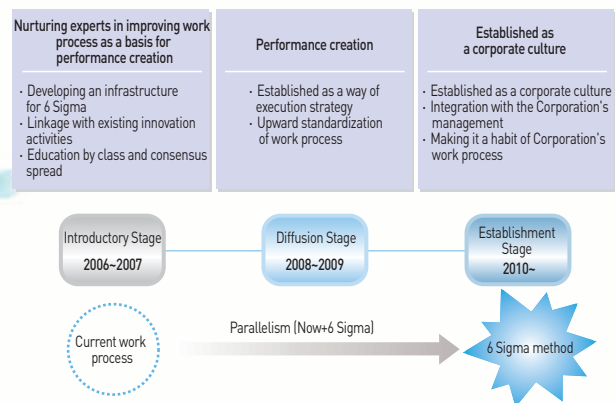
K-water introduced 6 Sigma as the most effective management innovation technique to bring about change and takeoff. K-water is promoting 6 Sigma not just a tool of improving work but as an activity to change corporate culture through "nurturing experts in improving the work" and "innovating the working procedure." We hope to establish 6 Sigma as our corporate culture which leads innovations, linked to a method of strategic implementation.



## Internalization of Excellent Companies's DNA through Continuous Management Innovation



| Implementation system of management innovation |



| Promotion Road Map for 6 Sigma |



| The Seoul Metropolitan Integrated Water Supply Management Center |

**:: Innovation for core technology**

Implementing a technology road map aimed at securing core technology that is up to global company standards, K-water is on our way to promoting our project of developing 14 core technologies of world's highest standards and 137 sub-technologies for these within a decade, based on our technology road map for achieving the world's best technological prowess.

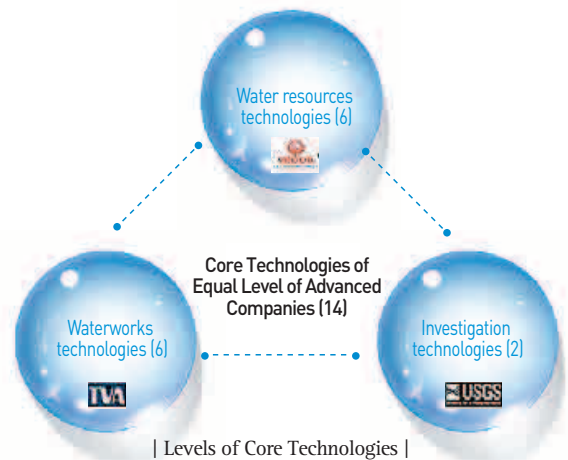
**:: Building the Seoul Metropolitan Integrated Water Supply Management System based on IT**

K-water completed building the world's largest integrated water supply management system encompassing the Seoul metropolitan area (integrated 23 water supply facilities) and Chungcheong region, opening a new era of full-scale integrated water supply management system. All water supply facilities and the whole process of tap water production in the region can be remotely monitored and controlled at one integrated management center.

| Category   | Metropolitan Area Center | Japan (Tokyo) | France (Paris) |
|--|--------------------------|---------------|----------------|
| Facility capacity (thousand m <sup>3</sup> /day) | 9,305                    | 6,860         | 1,940          |
| Population supplied with water (10 thousand)     | 1,700                    | 1,225         | 400            |

**:: Achieving 70% of rate of revenue water at the Nonsan Local Waterworks**

Through the innovation of building block system, applying scientific techniques of detecting leakage, setting management system of the pipeline, etc., K-water has produced the epoch-making result of achieving 70% of rate of revenue water at the Nonsan Local Waterworks which was considered for K-water to manage for the first time in K-water's history.



| Levels of Core Technologies |

**:: Freezing water rate for 3 consecutive years by improving cost management system**

K-water has frozen the dam and service water rate for 3 years straight and actually reduced the rate of industrial water (precipitation) by 5%. This was made possible by our companywide efforts to cut costs through introducing a target cost system and freezing the budget brought about by our policy of "First, management innovation, then, the least rate increase." As a result of such innovation efforts, K-water is leading the innovative efforts for other public institutions. K-water's efforts at change and innovation will continue in order to secure competitiveness befitting the world's best comprehensive water services company and establish itself as a number one innovative model.

# Ranking Number One in Consumer Satisfaction

Scoring 87 points as a result from survey consumer satisfaction among public corporations in 2006 by Ministry of Planning and Budget Rated as the first among 9 “public enterprises for institutions or companies”

## :: Customer-oriented management

Since corporate management value had been extended to the MOT overcoming customer satisfaction in 1990s, our corporation has shifted the focus of our overall management activities toward customers, undertaking a variety of activities beyond achieving customer satisfaction. In 2005, we established a medium-term strategy aimed at achieving a global company for water services respected by customers and created corporate culture for customer satisfaction, expanded infrastructure, and reformed customer service process by operating a special task force team solely devoted to promoting customer satisfaction.

## :: CEO's strong leadership regarding customer satisfaction

Suggesting ‘customer-oriented management’ as 3 core management principles, our CEO expressed his strong determination towards customer satisfaction such as his first-hand check and confirmation of the promotion results as to customer satisfaction through extended executive meetings. He also built a service system centered on MOT to the customer by transferring 295 head office’s workforce to the field offices such as regional headquarters and management groups.

## :: Establishment of targets and motivation for customer satisfaction

We have launched a variety of activities aimed at motivating personnel, establishing the highest goal of becoming the best institution in customer satisfaction area. For this purpose, we have strived to raise our employees’ will to achieve by assigning each department higher goals than those set by the government and preparing incentives for promotion and various other reward systems for the department with exceptional performance.

## :: Concentrating staff abilities on achieving the goal of customer satisfaction

We held employee workshops to strengthen their capabilities to achieve customer satisfaction and various opinions from the workshops were reflected in the 2006 promotional orientation for customer satisfaction management. The team leader at the head office, who is responsible for essential quality factors such as water quality and water rate, held a meeting for achieving the goal by forming a task force for customer satisfaction, and arranged and promoted epoch-making solutions such as improving water quality and freezing the water rate.

## :: In-house survey of customer satisfaction and conduct of employee education

We forecast public company’s customer satisfaction through in-house survey of dams, water supply, and corporate image, and we examined the underachieving departments and provided them with visiting education. We monitored all personnel in their phone responses 6 times per year and endeavored to reflect the results in internal appraisals so that kind responses could be embedded as organizational culture.

## :: Improvement for system of customer participation committee

We transferred the customer participation committee held at the head office to regional headquarters in order to listen to customers’ real opinions at MOT. In this way, we are able to promptly process customers’ complaints and demands.

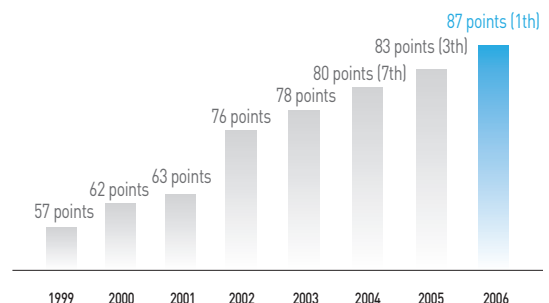


| Committee for customer satisfaction under the presidency of CEO |



| Customer Participation Committee |

Assessment results on customer satisfaction for public enterprises in 2006



# Acquired 9.08 Points for Integrity

Promotion of strong clean campaign by top down → Reflected in 4 strategic orientations of a new vision  
 Establishment of ethical management system with global standards → Achieved 9.08 points in integrity (ranked number 2 among state-sponsored corporations)

## CEO's strong will to promote ethical management

We had to practice stringent ethical management in order to regain corporate credibility tarnished by unethical behavior by former CEO and labor union leader in the past. With appointment of Kyeol-Ho Kwak as CEO in September 2005, he led a strong ethical innovation campaign to sever us from the shameful past and recover the company's reliability, and stressed the importance and practice of ethical management through various channels by reflecting "ethical management" in management orientations in 2006.

|  |  |
|--|--|
| New Vision                             | Selection of ethics as one of the 4 strategic orientations in achieving the vision   |
| Management orientations in 2006        | -Pointing 4 new management orientations centering on ethical management<br>-Establishing challenging goals: Achieving 9.0 points in national assessment of clean index   |
| CEO's New Year address (January, 2006) | 'When it comes to ethical management, let's make it a history to have our company's case quoted. Let's not blame on social environment. Let's not blame it on others. From now on, we should have to share the responsibility for anything that goes wrong.' |

## Various endeavors for practice of ethics

Keeping step with CEO's will, we have provided companywide innovative integrity education to all executives and employees in order to bring reform. And we have given extended and diversified education in innovative integrity. As a result, an annual cumulative number of all participants in 237th education including executives and employees reached 7,529 in 2006.

Joint endeavors between management and union to achieve Clean K-water

-All employees' oath of integrity, declaration of new management and labor relations and practice of promise for mutual prosperity

Efforts for expansion of ethical education and diffusion of voluntary awareness

-Efforts at diffusion of ethical awareness resulted in greater recognition of ethical management among executives and employees (90% → 97.6%)

Creation of a cross ethical assessment system for all employees

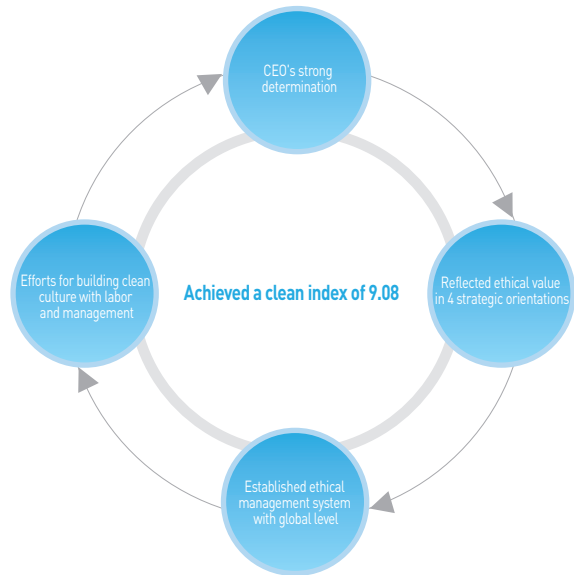
-The results from this cross ethical assessment system are reflected in personnel management and rewarding system.

-Integrity (20%) is reflected in 'Model K-water Worker,' the highest honor of the corporation.

Operation of ethical programs for co-prosperity with partner companies

-Model projects for mutual prosperity and cooperation: Operation of a co-prosperity council between principals, contractors, and subcontractors

-Informal gathering for specialized outfits: Hosted the informal discussion inviting representatives of 34 organizations and ethics workshops for partner companies

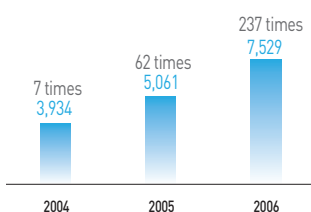


| All employees' oath of integrity (Sept. 2006) |

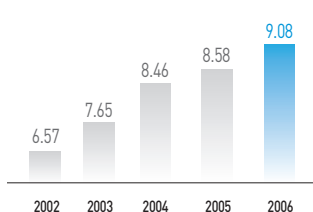
## | Supervisory for ethical management and operation of monitoring organizations |

| Organization                              | Activities   |
|---|--|
| -Innovation and ethics committee          | -Resolution of important matters about clean innovation  |
| -Task force on increasing the clean index | -Establishing measures to increase clean index   |
| -Research team on clean innovation        | -Devising clean measures, R&D  |
| -Clean watchdogs                          | -Monitoring field departments' compliance with codes of conduct<br>-Introduction of clean mileage system |

### Records of ethical education



### Clean index



# Success in Registering Clean Development Mechanism (CDM)

As an environment-friendly company that manages water, we are actively promoting the development of renewable energy such as hydro, tide, wind, and solar and linking reduction results of greenhouse gases with CDM business, proactively providing for UNFCCC.

## :: Registration of CDM in UNFCCC

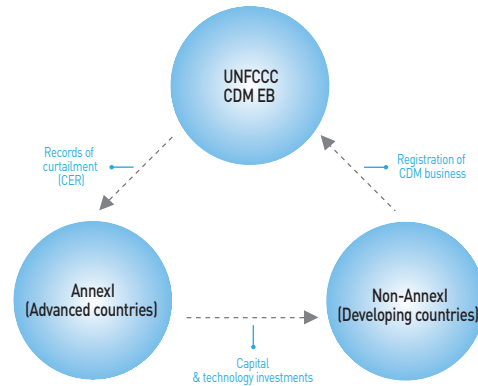
We started to utilize Sihwa tidal power, hydraulic power, Sihwa wind power as the CDM business for the first time in the public sector in May, 2005 and registered the CDM project of Sihwa tidal power with UNFCCC in June, 2006 after an objective verification of reduction effect of greenhouse gases and government approval. With the registration of 3 CDM projects in the sectors of tidal and hydraulic power and the start of emission trading, K-water established itself as an environment-friendly company with the greatest achievements in CDM business sector in Korea.

## :: CDM project of Sihwa tidal power

Sihwa tidal power, a project installing the total of 10 power generators (capacity: 25.4MW each), is expected to annually produce 552 thousand MWh of electricity and reduce 315 thousand tons of greenhouse gases, and hydraulic and wind power are recognized to produce 35 thousand MWh of electricity and curtail 22 thousand tons of carbon dioxide annually, which makes it possible to expect revenues arising from emission trade. We established the 'Solution for Emission Trade for CDM Business', preparing for participation in carbon market and the possible designation of our country as one of the 2nd nations obligated to reduce greenhouse gases in March, 2007. As a comprehensive national company for water services management, K-water will pursue emission rights in terms of both public good and profitability to fulfill its social responsibility considering the light of national carbon security under future international carbon market system, not just as a mere product.

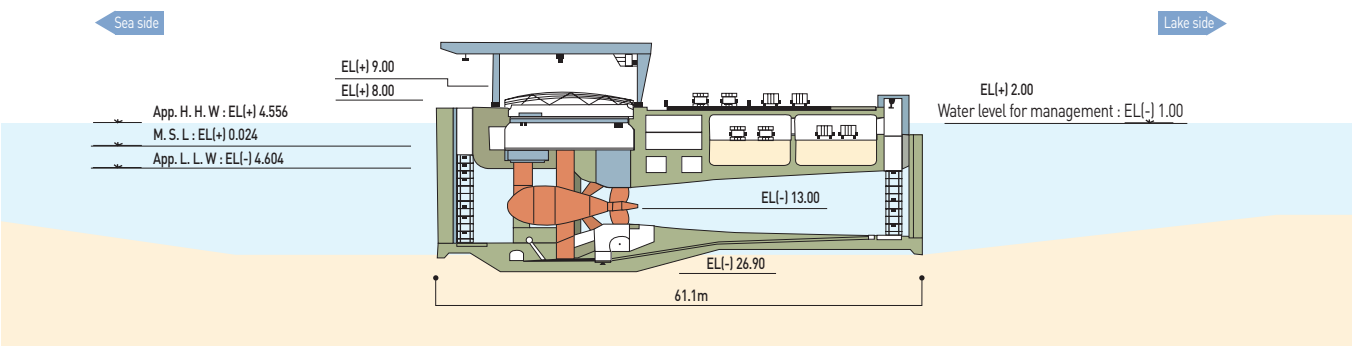
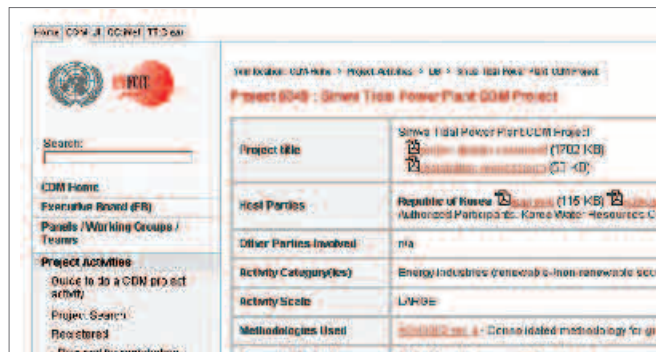
## :: Future promotion plan

We will continue to develop the new renewable energy and create the new CDM business in order to revitalize it against UNFCCC. As a countermeasure against global warming and as an active means to meet the UNFCCC, we will take the lead in propagating our ideal of sustainable growth by linking the CDM business with the new renewable energy business to create economic feasibility.



| Registration Status for CDM Projects |

| Project title     | Government approval | UN registration   | Annual amount of electric power generation (MWh/y) | CO <sub>2</sub> curtailment (CO <sub>2</sub> ton/y) |
|-------------------|---------------------|-------------------|--|---|
| Sihwa tidal power | '06. 01. 25         | '06. 06. 18       | 552,700  | 315,440   |
| Hydraulic 1       | '06. 07. 13         | '06. 10. 06       | 15,473   | 9,689   |
| Hydraulic 2       | '06. 09. 14         | '07. 02. 09       | 13,996   | 8,697   |
| Sihwa wind power  | '07. 02. 28         | Under examination | 5,676  | 3,616   |

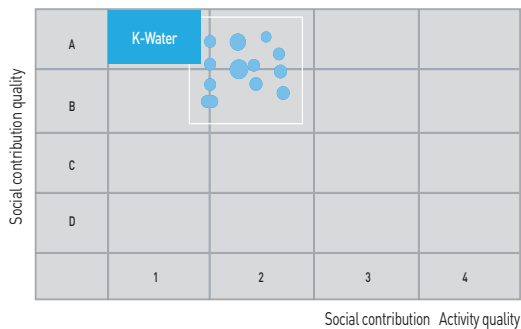


| Operational Plan for Sihwa Tidal Power Generation |

# Attained A1 Grade for Social Contribution Activities

K-water's social contribution activities are carried out to ensure that all citizens equally enjoy the benefits of water, and the local economy of areas close to dams and water service sites is revitalized.

Matrix analysis of social contribution



Source: Diagnostic report from Lime Globe, Inc. (2006)

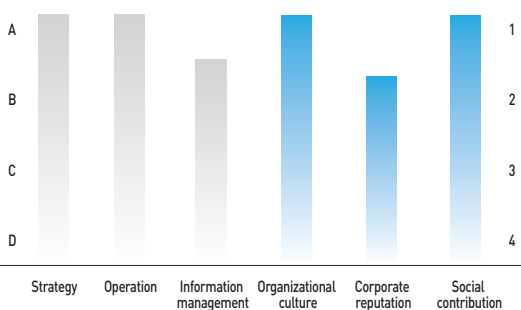
## Diagnosis of corporate social contribution

We received the highest 'A1' grade from the assessment of our level for social contribution activities, which was made by 'Lime Globe', an authoritative strategic institution of social contribution to accurately assess our current level for social contribution activities and build a new activity system.

A1 grade with requirement of both system and activity results: Assessed by Lime Globe, Inc.

Advanced companies carrying out strategic social contributions have A2 or B2 grade, which means that K-water's social contribution activities are carried out keeping a proper balance between 'water-related strategic business' and 'local business', and they contribute to innovation of the organizational culture through the best voluntary work and motivation systems in town.

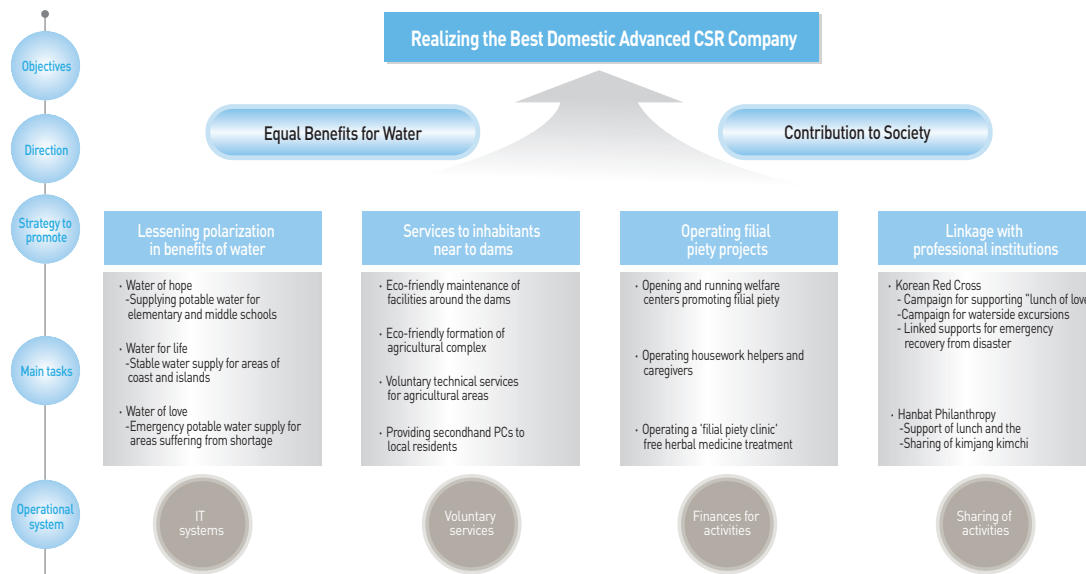
Graphic analysis of social contribution



Source: Diagnostic report from Lime Globe, Inc. (2006)

## Make more organized system in social contribution activities

Since the foundation of our social services group in 2004 and full-scale activities thereafter, a total of 87 social contribution volunteers were made up, in which 95% of executives and employees are participating now. Now, we are at a time when a new strategy of social contribution is required due to changes in the corporate environment and demands for social responsibility. From now on, we will strategically carry on our selective and more focused social contribution activities befitting our corporate characteristics, which will center on the water-related social activities and the welfare for old people living near dams.



With Water :: Economy

# Water for life

A stable water supply is the driving force of our economy. K-water is committed to our prosperous future with water and to keeping our beautiful environment everlasting with water. K-water is developing the agenda for making a more prosperous world with water based on the establishment of systematic sustainable management strategies and the expansion of stable investment in R&D.







# Economically Sustainable Management Strategies

We reestablished economically sustainable management strategies in order to reflect a changing management environment and achieve our new vision as one of the world's best comprehensive water services companies.

## :: Reflection of new managerial condition

We are promoting sustainable management strategies in order to reflect the changing environment due to the amendment of Water Supply and Waterworks Installation Act, changing markets for the water supply industry, and the reduction of government subsidy, and to achieve our newly established missions and visions, the economic benefits from which we will share with our stakeholders.

## :: Diversification of water-related business

We will lay the foundation for solid base for growth selecting efficient operations of local waterworks, sewage, overseas business, and river management as growth engines which are consistent with our vision and have a high degree of linkage with the existing business, alleviating national financial burden and contributing to economic growth.

Also, we will promote a water supply circulation system that will involve integrating local water supply system, sewage, and sea water desalination around multi-regional water supply business, and that will require integrating river management and survey and environmental water around dam management.

## :: Securing core technologies

We will secure core technologies by expanding R&D investments per project in order to raise the efficiency of the existing business and to systematically promote business with growth engine.

First: Our own business for development of water resources, multi-regional water supply system.

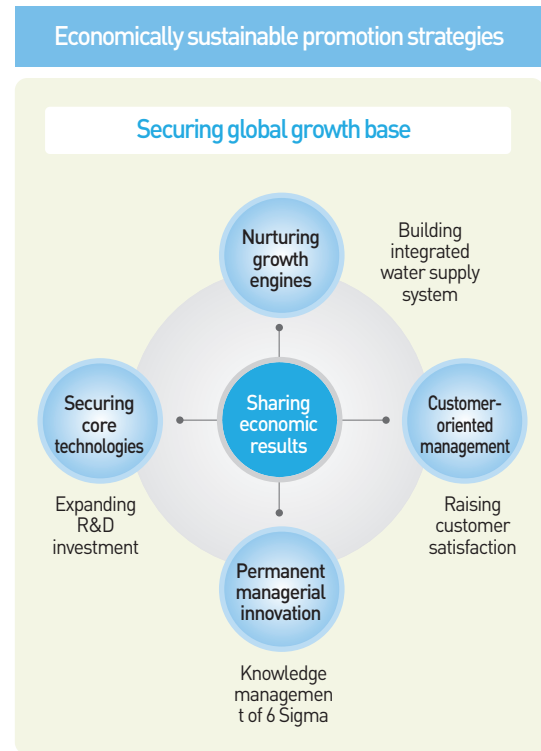
Second: Diversification related to local water and sewage and river projects

Third: Integrated management by region, readjustment of water supply system, advanced water purification and development of core technologies

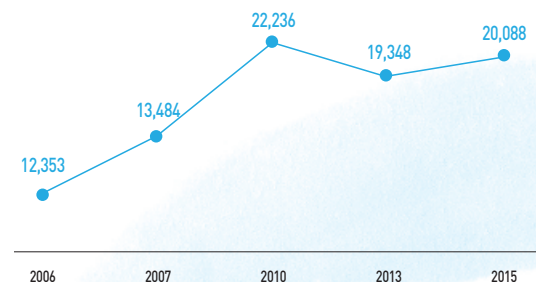
Fourth: Business on environment-friendly and new renewable energy

## :: Focus on customers and innovation

We will lead management innovation by raising customers' happiness index resulting from their satisfaction through customer-oriented management and applying knowledge management and 6 Sigma as management tools for innovation at all times.



Medium- and long-term investment plan (100 million won)

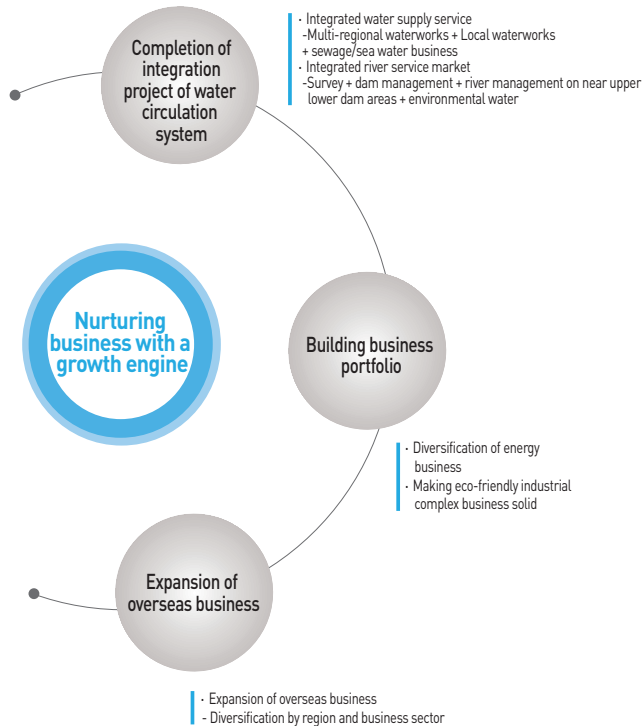


| Medium- and long-term financial plan |

| Division (100 million won)      | 2007      | 2010      | 2013      | 2015      |
|---------------------------------|-----------|-----------|-----------|-----------|
| Sales                           | 18,171    | 28,479    | 31,958    | 37,928    |
| Net income                      | 1,144     | 1,575     | 1,592     | 2,100     |
| Assets                          | 121,518   | 153,946   | 175,628   | 178,237   |
| Liabilities                     | 23,028    | 47,671    | 60,657    | 56,829    |
| Capital                         | 98,490    | 106,275   | 114,971   | 121,408   |
| Turnover ratio of total capital | 0.15times | 0.18times | 0.18times | 0.21times |

# Business Structure

Building an integrated water management system in terms of nurturing business with a growth engine, we will manage water resources efficiently and provide high-quality water service.



## :: Nurturing business with a growth engine

K-water's nurturing of business with a growth engine is intended to raise the value of stakeholders by innovating the nation's inefficiently managed water supply system. For this purpose, we are integrating the existing core business to increase customer value, and focusing on new businesses that can create synergy when linked with the existing businesses and provide more value to customers.

## :: Completion of integration project of water circulation system

The purpose of integrating water circulation system is to increase the efficiency of water management and to raise the customer value by providing integrated service of water supply and rivers through integrated management of water supply business by region and integrated operation of water resources-related business by basin.

The river business will be promoted comprehensively considering quantity and quality of water, ecology environment and culture through providing integrated services by region such as the upper and lower of dams, construction and operation of dams by size, environment water, flood information, construction and operation of canals, and various survey businesses.

## :: Building business portfolio

Our business will be promoted in the direction of diversifying, stabilizing business structure, and varying revenue sources. The industrial complex already developed will be made to create synergies with other businesses, or some specialized complexes regarding water will be developed.

In short, we are promoting various fields of business such as expansion of water-related indirect business, diversification of clean energy production, and a continuation of the business of industrial complex.

We will become a specialized institution devoted to producing the new renewable energy and securing the trading revenue from emission rights by building stable business portfolios such as Sihwa MTV, development of Songsan Green City, and energy business, by 2015.

## :: Expansion of overseas business

Based on our accumulated capabilities of managing water, we will secure competitiveness of global standards by promoting overseas business by stages and systematically. The countries targeted for our entry are Southeast Asian countries such as China, India, the Philippines, and the developing countries in Latin America, the Mid-east and African countries that are suffering from water shortage. Using our ODA business as a stepping stone, we will continue to expand our investments seeking to revitalize our business through engineering. Through these preliminary stages, we will achieve the status of a global company by 2015, which will provide the world with comprehensive services of design, construction, and management in the field of water.

# R & D

We are investing in comprehensive R & D, including increasing R & D investments and investigation and expanding infrastructure in order to create sustainable growth engines.

## :: Expanding R & D investment aimed at creating sustainable growth engines

We are promoting the development of core and leading technologies of the next generation that can strengthen technological competitiveness and support the creation of future seeds by expanding investments in the area of core technology development in response to market changes. Also, in order to continuously promote Ministry of Construction and Transportation's innovation roadmap and that of K-water technology, we made an investment exceeding the Ministry of Science and Technology's recommended rate of 6.6%, and currently are focusing our efforts on expanding the development of technology to improve the credibility of research results and to create research conditions of a global standard.

### | Status on R & D Investment |

| Division                | 2004  | 2005   | 2006   | 2007Plan |
|-------------------------|-------|--------|--------|----------|
| Sales (100 million won) | 9,797 | 10,907 | 11,113 | 15,325   |
| Sales (100 million won) | 625   | 729    | 761    | 1,272    |
| Investment (%)          | 6.4   | 6.6    | 6.8    | 8.3      |
| Investment Ratio (%)    | 5.6   | 6.0    | 6.6    | 6.6      |

## :: Building R & D infrastructure to secure future core technologies

We are promoting the creation of sustainable R & D infrastructure to secure core technologies related to water. As regards the field of water resources, we are currently promoting the construction of an Environmental hydraulic Test Center to acquire river-related technical power. In order to lead the world water supply and drainage technology, we completed the International Water Supply and Drainage Education Center containing actual plant, pilot plant, and filtration facilities, and opened a large centrifugal model test center to create technologies as befits the company that is specialized in dams. K-water is a comprehensive leader in producing technologies aimed at securing core technologies by specialized field and growth engines.



| International Water Supply and Drainage Education Center |

### | Direction of Promoting R&D |

#### Nurturing business with growth engine

- Promoting core research for securing business with growth engine and future core technologies
- Developing technologies linked to improving the Corporation's management

#### Sustained securing of core technologies

- Developing technologies linked to nurturing future business with growth engine, including the fields of water resources, water supply, and dams
- R&D for securing medium-to long-term core technologies

#### Maximization of the value of technology

- Sustained securing of intellectual property rights for creating growth engine
- Profit-making business and technical support using research results

#### Strengthening R&D networks

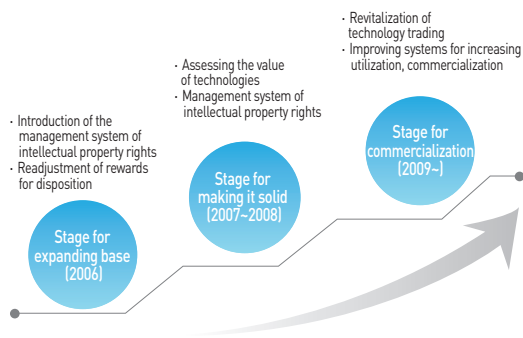
- Signing MOUs with professional institutions and conducting joint research with them
- Revitalizing small and medium-sized companies and linkage with local experts

### | Status on Research Infrastructure |

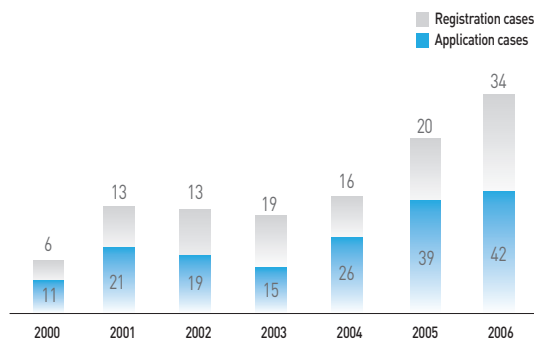
Building/Site Scale: 12522 pyeong

Testing equipment including tools: Total 560 items/17.6 billion won

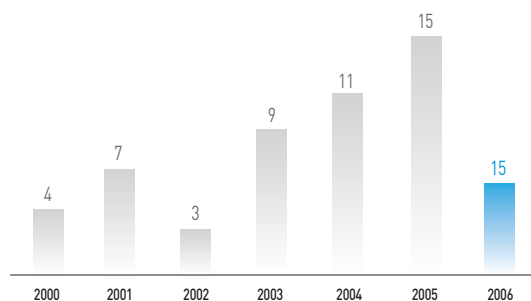
Securing competitiveness of core technologies



Status on Yearly Application and Registration



Application Result for Intellectual Property Rights (Cases)



⚡ Sustained efforts for securing intellectual property rights

In order to continuously secure intellectual property rights and improve competitiveness, we established short-and long-term management plans for intellectual property rights and are systematically promoting them according to our yearly implementation plans. We are promoting not only the securing of property rights to cutting-edge technologies we are holding, but also utilization and commercialization of research results through revenue generation by technology transfers, promotion of joint development and exchange of technologies with outside companies.

⚡ Status on yearly application and registration

Since 1994, records of application for and registration of intellectual property rights (patents, utility model rights) have been on the increase. After 2004, there have been over 24 cases of application, and as of the end of 2006, we hold 111 patents and 24 utility model rights.

⚡ Status on creation and utilization of infrastructure of intellectual property rights

Regarding the registered intellectual property rights, we are putting 47% (65 cases) of the total technologies we are holding to actual use through field applications and technology transfers.

|                 |                     | Division | Total   | Patent | Utility model |
|-----------------|---------------------|----------|---------|--------|---------------|
|                 |                     | Total    | 135     | 111    | 24            |
| Utilization     | Subtotal            |          | 63(47%) | 57     | 6             |
|                 | Field application   |          | 41      | 35     | 6             |
|                 | Technology transfer |          | 22      | 22     | 0             |
| Not implemented |                     |          | 72(53%) | 54     | 18            |

⚡ Promotion of joint development of technologies with outside institutions and technical support

As a public institution, K-water is promoting joint development of technologies to nurture small and medium-sized companies and to support their development of technologies. As a byproduct of this activity, K-water acquires intellectual property rights and applies the developed technologies in the field, making for commercialization, during which process the Corporation contributes to the development of new technologies by small and medium-sized companies through technical consulting and support.



| Information System for Research |

# Customer-oriented Management

As customers are now seen as are our closest business partners, we are focusing all our management activities on improving the value of customers and raising customers' happiness index.

| Stage-by-Stage Promotion Strategies for Customer-oriented Management |

| Step 1 (1999-2004)   | Step 2 (2005-2006)   | Step 3 (2007-)  |
|--|--|---|
| <b>Building customer-oriented management base</b> <ul style="list-style-type: none"> <li>· Measuring customer satisfaction/feedback</li> <li>· Reforming employees' mindsets</li> <li>· Operating customer participation committee</li> <li>· Establishing CS medium-term implementation plan</li> </ul> | <b>Establishing institutions and systems</b> <ul style="list-style-type: none"> <li>· Setting up CRM master plan</li> <li>· Freezing water rate for 3 years straight</li> <li>· Introducing advanced water treatment processes</li> <li>· Providing real-time water quality information</li> </ul> | <b>Creating advanced processes</b> <ul style="list-style-type: none"> <li>· Building CRM system</li> <li>· Improving customer satisfaction process</li> <li>· Integrating management of customer information</li> <li>· Providing customized customer services</li> </ul> |

## :: Customer-oriented Management

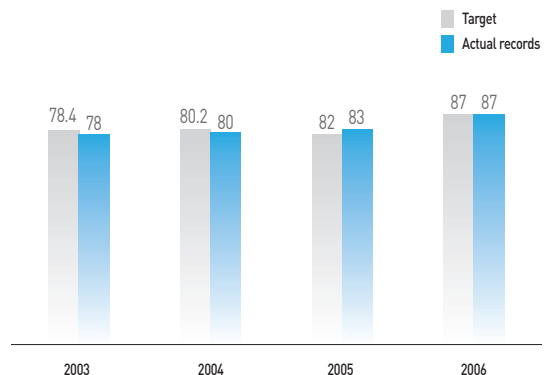
Based on our CEO's strong commitment to management by customer satisfaction, we are doing our utmost to improve the value of our customers, giving them top priority in all our management activities. To this end, we established a new vision and management strategies in 2006 and chose "customer-oriented management" as one of the 10 strategies of K-water, so that all rules associated with management and the behavioral standards of the executive and employees are geared up to improve customer value.

\*CEO's 2006 New Year address (Jan. 1, 2006) "Let's put ourselves in our customers' shoes and handle our work in a fair and transparent manner, and discard unreasonable and improper practices."

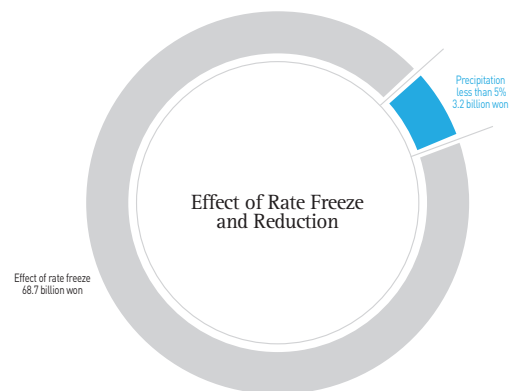
## :: Improvement for customer-oriented water rate system

We are making various cost-cutting efforts including the target cost system to lessen the burden of water rate for customers. We froze the rate for natural water and tap water for 3 years (2005-2007) in 2006, and for the first time reduced the rate for industrial water (precipitation) by 5% (implemented on Jan. 1, 2007), thereby contributing to our price competitiveness worth 71.9 billion won.

Customer satisfaction (NCSI): Ministry of Planning and Budget



|                              | Target   | Number of customers                                 | Core strategy  |
|------------------------------|--|---|--|
| <b>First customers</b>       | The customers using our Multi-regional waterworks and dam water (local governments and private companies)  | · About 1500 autonomous organizations and companies | · Integrated View<br>· Cross-Sell/Up-Sell  |
| <b>Second customer</b>       | The customers using Commissioned local water works by K-water (relevant residents)   | · About 76,000 users                                | · Improving management efficiency<br>· Customer Profiling<br>· Customer Service                    |
| <b>Third customer</b>        | Stakeholder organizations such as NGOs cooperating with K-water for Consulting, deliberation, business promotion, research activities, support for dam's adjoining areas, etc. | · 75 organizations<br><br>· About 63,000 people     | · Positive information sharing<br>· Management of differentiated relationship<br>· Managing claims |
| <b>Lotting-out customers</b> | Certain majority of corporate, individual customers  | · About 26,000 people                               | · Serving customers<br>· Managing potential customers<br>· Managing claims                         |

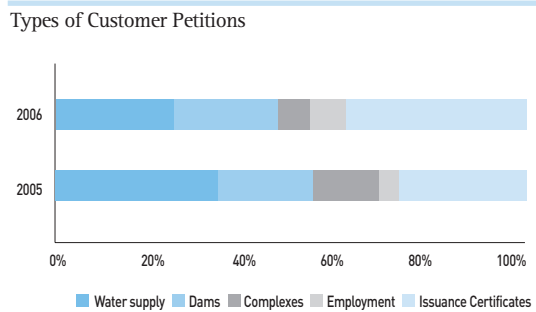
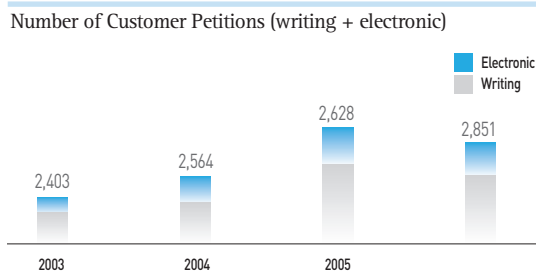


**:: Safety and health for customers**

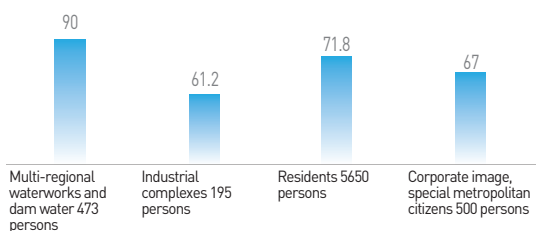
We endeavored to improve the safety of tap water by introducing Lifecycle Assessment (LCA) about tap water and environmental performance report. We also built advanced purification facilities in Bansong water purification plant of Changwon and Seokseong water purification plant of Buyeo in order to enhance the reliability of tap water. By introducing carbon dioxide projection facilities for adjustment of pH aimed at improving the quality of natural water, we improved natural water quality by 1/20 of the statutory standard about concentration of aluminum residue, which is up to the standard of advanced countries. As a part of further strengthening water quality grade evaluation system applicable to water purification plants, we expanded water quality inspection items from 4 to 11, and strived to produce tap water to customers' satisfaction by running inspection programs aimed at discerning taste and odor. We are managing water quality based on our own 'Service Standards to Fulfill.'

**:: Providing information on tap water quality**

Each year we conduct our own survey on our customers' opinions about tap water and their degree of satisfaction, and we implement measures to improve customers'



K-water survey on customer satisfaction in 2006 (Matrix, Inc.)



confidence in tap water and to prevent contamination based on the findings of this survey. For transparent disclosure of information about water quality, we are providing it on a real-time basis on our web page, and for the first time we are providing customers with this information through an electric bulletin board installed on the roadside in downtown Jeongeup. In the meantime, according to our own Customer Charter and 'Service Standards to Fulfill,' we cut the water rate by 3712 won in one case which exceeded the guaranteed 32-hour limit for cutoff time.

**:: Compliance with laws governing marketing communication**

Since customers are liable to be affected by marketing communication in their decisions, it is necessary to provide them with exact information so as not to prejudice their sound judgments. All advertisements including public announcements about land lotting-out are fairly executed according to our own criteria for the selection of media. There has been no case of violation to date in connection with marketing or advertisements.

**:: Protecting customers' information and processing customer petitions**

We are protecting customer's personal information through our security policies on customer database including access controls, control of authority, and post audit, and there has been no case of customer complaints in connection with protection of customer's personal information. However, we pay a 10 thousand won gift certificate per case of customer complaint which caused inconvenience to a particular customer in the process of our promptly processing his/her complaints. In 2006, we paid a total of 80 thousand won for 8 cases. We haven't had to any fines for violating laws and restrictions on supply of products and services.

**:: Compliance with fair trade laws**

Under the Monopoly Regulation and Fair Trade Act, we abide by fair trade and are subject to periodic audits by the Fair Trade Commission for any unfair competition or monopolistic acts. For the last 3 years, there has been no official warning from FTC and no other fine or non-monetary sanction has been imposed upon us due to violation of laws or regulations.

**:: Processing customer complaints**

We are endeavoring to minimize customer complaints by establishing and operating the Customer Charter and complying with service objectives to fulfill that detail requirements for the staff, and are also striving to provide customers with the right answer at the right time by operating open windows for receiving complaints at all times on the Corporation's web page (bulletin board for "Voice of Customer"). The complaints received are shared by all employees and are utilized as valuable resources for devising ways to improve management.



| Outdoor electric bulletin board informing water quality (Jeongeup) |

# Knowledge-based Management and 6 Sigma

K-water is operating a variety of integrated innovation activities in such a way as to promote 6 Sigma as a methodology for consumer satisfaction, our top priority in management, and circulate its results through knowledge-based management.

## Introduction revitalization of knowledge-based management

As far as knowledge-based management is concerned, K-water has effected overall changes that have restructured business strategies as well as organization, culture, and work process around knowledge. Since the knowledge management team was set up in 1999, formation of infrastructure, creation of core knowledge, appraisals and compensation schemes have been completed by stages. Currently, the knowledge-based management system OASIS has about 7 hundred active learning groups. About 6 thousand cases of knowledge and suggestions created by employees along with about 5 million documents produced in the work process are registered so that employees can access needed information and utilize it on the job at any time.

## Results of knowledge-based management

The Corporation won the 'Grand Prize for Knowledge-based Management' (Maeil Business Daily - Booz Allen & Hamilton) and established itself as the nation's best company practicing knowledge-based management. Also, its excellence was recognized by the government, and K-water was selected as an excellent case of management innovation. As it is continuously promoted by the management's strong commitment and interest, knowledge-based management, which keeps innovation, is becoming a benchmarking target for a myriad of companies.

## Convergence of knowledge-based management and 6 Sigma

The most valuable result employees acquired through knowledge-based management is that they now have different mindsets. The fact that employees don't regard innovation activities as extracurricular activities, but accept them as their own work to do provided K-water with a firm foundation in promoting 6 Sigma, a new innovation tool.

## Background for promotion of management innovation by 6 Sigma

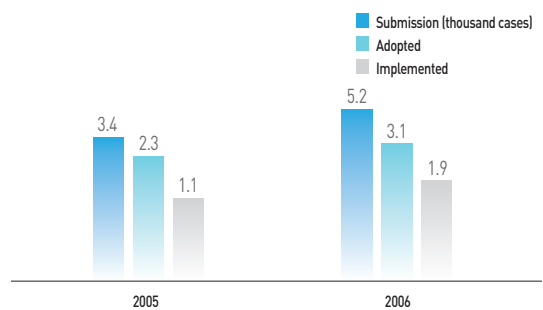
There have been various activities for management innovation such as QC and JOA, but there was a limit to these methods mainly because they were characterized by a bottom-up, sporadic approach to task selection and an improvised method dependent on individual feeling and experience. To overcome these weaknesses, K-water started to research 6 Sigma as the most effective technique for management innovation, and after getting experts' advice on its success potential, 6 Sigma based on knowledge-based management was adopted in October, 2006.

\*JOA (Join, Open, and Advance): An innovation technique that K-water made out of GE's work-out method

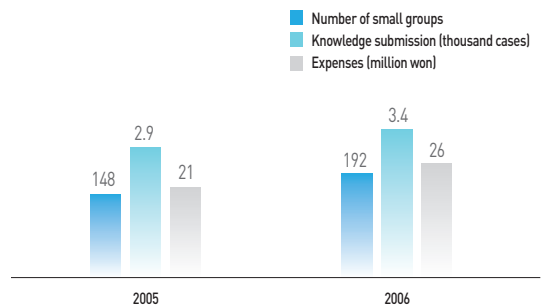
## Promotion results of 6 Sigma

In order to reduce trial and error in the initial introduction stage, 21 model tasks linked to BSC were chosen and promoted in 2006. It resulted in producing 19 GBs (Green Belts) and tangible effect of 660 million won. In 2007, we will select and promote 120 tasks for 6 Sigma based on our experience in model tasks.

Status on suggestions



Status on small knowledge-based groups



| Declaration Ceremony for 6 Sigma |



| Belt Education for 6 Sigma |



# Economic Achievements

Stable water supply is the mover activating our economy.  
K-water shares its management performances with all people.

## Direct Economic Effects

### :: Creation and Distribution of Economic Value

The business of water resources, a core business directly connected with national economy, creates economic value by efficiently utilizing limited resources and returns it to society. Recently, we saw our sales increase for 3 consecutive years, with the result that the economic value of K-water is also increasing. More than 70% of the total annual sales are invested as operating expenses and capital cost to continue production.

### :: Payment of contributions

We provide water supply facilities to elementary schools, sponsor the events hosted by nonprofit organizations, and deliver donations to the areas hit by disasters. As corporations are prohibited from paying political contributions, we are banned from paying political donations or payment in kind as the name of K-water.

### :: Investments in SOC facilities

K-water is contributing to the economic development of the nation through investments of 448.5 billion won in the expansion of water resources such as the construction of dams, projects of increasing flood control capabilities, and exploration of water resources in 2006, and 457.5 billion won in the construction of water supply facilities such as multi-regional water supply and drainage and the readjustment of water supply systems.

## Indirect Economic Effects

### :: Improvement on environment facility for existing dams

The existing dams are not accessible for military and security reasons, and they gave no benefit to the local economy because of their obsolete facilities. For these reasons, K-water opened the top of the dams and completely renovated the existing facilities, providing the local residents with observatory decks, elevators, promenades and water culture centers that serve as resting or cultural space for them.

### :: Support for areas around dams

K-water not only provided financial assistance to revitalize the economy of area around dams, but also supported farmers in the upper areas of the dams in spreading environment-friendly agricultural complexes. It is also contributing to raising farm households' income substantially by assisting them in expanding markets for their harvested agricultural products. And our provision of second-hand PCs to agricultural areas and places around the field office is enormously helpful for them.

### :: Policy of local purchase and hiring local residents

K-water ensures that construction contracts or merchandise in less than certain amounts are procured locally to facilitate local purchase in the area where the field office is located. In general, limitations such as academic background, regionalism, and age are not considered when it comes to hiring people, but metermen and operating staff (operators) at the business office are being locally hired.

| Creation and Distribution of Economic Value (Unit: million won) |

| Division  | 2004             | 2005             | 2006             |
|---|------------------|------------------|------------------|
| <b>Created economic value [1]</b>   | <b>1,522,358</b> | <b>1,618,263</b> | <b>1,751,463</b> |
| a) Net sales  | 1,493,084        | 1,590,951        | 1,721,105        |
| b) Interest income, rent, and profits from sale of assets                 | 29,274           | 27,312           | 30,358           |
| <b>Distributed economic value [2]</b>                                     | <b>1,330,434</b> | <b>1,536,185</b> | <b>1,659,048</b> |
| a) Operating expenses: production costs, and asset purchasing expenses    | 950,158          | 1,092,300        | 1,210,016        |
| b) Wage and welfare: wage, benefits                                       | 208,354          | 220,019          | 231,888          |
| c) Capital cost: interest paid, dividends                                 | 66,814           | 64,211           | 62,925           |
| d) Taxes: corporate tax, local tax paid                                   | 71,355           | 96,177           | 91,431           |
| e) Investment in local community: contributions, various allotted charges | 33,753           | 63,478           | 62,788           |
| <b>Surplus economic value [1-2]</b>                                       | <b>191,924</b>   | <b>82,078</b>    | <b>92,415</b>    |

\* For computation method regarding each item, the rules about economic index of GRI G3 guidelines were referred to.

# Financial Structure and Sharing of Results

Financial strength was further improved by reducing borrowing and continued improvement of debt structure.

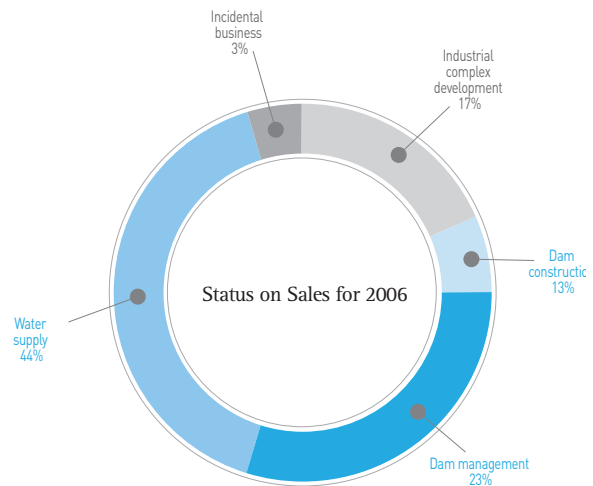
## :: Management performance

Gross sales for status on sales and management performance in 2006 are 1.7211 trillion won. The share of the core business of water supply and dam management accounts for 67% of gross sales.

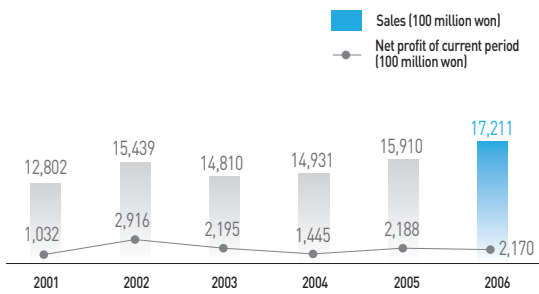
As for the business of water supply, it generated sales of 740.4 billion won by supplying 2.97 billion tons of water to the total of 1538 establishments through Multi-regional waterworks systems, and sales from 5 Local waterworks systems under operation commissioned by local governments recorded 15.7 billion won. The dam business supplied 4.7 billion tons of water and 2183 GWh of electricity, bringing in sales of 404.6 billion won.

## :: Stable financial structure

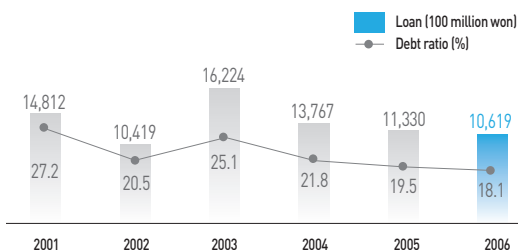
K-water has a sound financial structure. Financial strength was further improved thanks to the reduction of loan and the continued improvement of debt structure. The debt ratio showing short-term debt repayment capability is 18.1% on the basis of 2006 figures, which points to the fact that K-water's financial structure is more stable compared with other state-sponsored companies (88%), and competitors such as Veolia (538%) and Suez (321%). K-water minimized surplus funds through flexible fund management and efficient liquidity management. It also expanded equity capital by internally reserving more than 80% of its net income and increased its capacity of early repayment of loan by improving cash flow (EBITDA) supported by sales activities.



Changing Trend in Sales and Net Profit of Current Period



Changing Trend in Loan and Debt Ratio



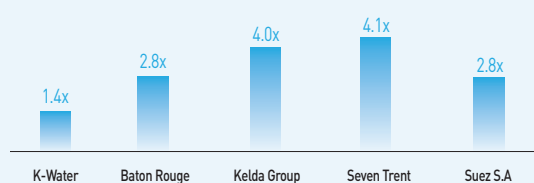
## Level of financial competitiveness

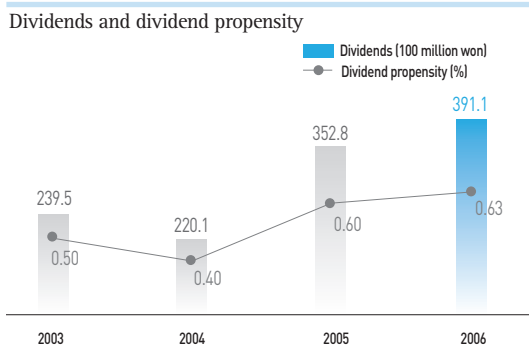
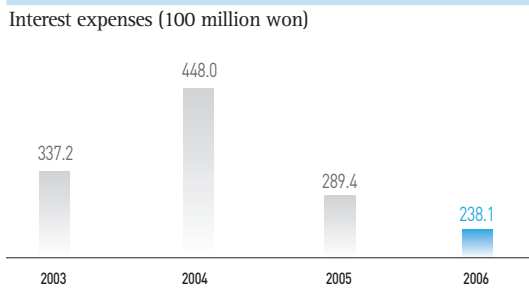
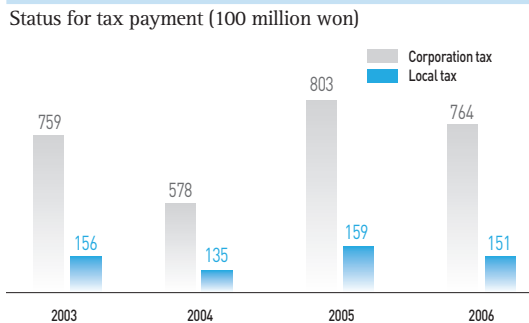
### | Key financial ratios |

| Division                | 2004                    | 2005  | 2006      |
|-------------------------|-------------------------|---|-----------|
| Debt ratio              | 21.8%                   | 19.5%   | 18.1%     |
| Dependency on loan      | 12.1%                   | 10.2%   | 9.1%      |
| Debt/ EBITDA            | 2.2times                | 1.6times  | 1.4times  |
| EBIT/ Interest expenses | 5.5times                | 11.2times   | 13.4times |
| Credit rating           | S&P : A<br>Moody's : A2 | -Same level as the government<br>-One level higher than the government (A3) |           |

Source: S&P 2005

### Debt/ EBITDA comparison of ratio (multinational water services companies)





| Recipients of government subsidy |

| Details  | 2004   | 2005   | 2006   |
|--|--------|--------|--------|
| Total (million won)  | 18,047 | 24,001 | 18,500 |
| Kumi Sewage Treatment Plant                                    | 8,968  | -      | -      |
| Kumi Research of Cultural Properties                           | 20     | 80     | 350    |
| Kumi rental complex  | 3,614  | 11,604 | 5,600  |
| Yeosu rental complex   | 3,000  | 4,000  | 3,000  |
| Changwon advanced purification plant                           | 1,342  | 3,742  | 5,588  |
| Construction of International Water Supply and Drainage Center | 1,103  | -      | -      |
| Increasing the rate of running water (Jeongeup)                | -      | 4,575  | 3,962  |

**:: Compensation for executives and employees**

Breaking away from the system based on seniority and job class, K-water has reorganized its compensation system around competence and job performance. The wage scheme currently in operation for executives and employees consists of annual salary system plus competence and performance-based system. The annual salary system has been introduced and implemented since 1996 for executives, statutory, professional, and the 1st class personnel, and for 2nd class employees since 2000. The difference between basic annual salary and performance-based salary is gradually being widened, about which a survey of employees' attitudes is being conducted. As for the employees who are below the 3rd class and members of the union, a salary class system is currently being implemented for them, and the question of applying annual salary system to them will be subject to the agreement between labor and management after some basic researches has been completed.

**:: Fulfillment of obligations for tax payment**

As a public corporation which is supposed to assume its social responsibilities, K-water has been fulfilling its tax obligations with sincerity. We paid 76.4 billion won in corporate tax (including corporate income tax, resident tax, special tax for agricultural and fishing villages) in 2006, and 15.1 billion won in local tax (including resident tax proportionately allotted to corporate tax, regional development tax, and business office tax).

**:: Dividends and interest expenses**

Dividends and retained earnings are paid annually to investors and creditors. K-water paid a total of 23.8 billion won to creditors in interest expenses, and a total of 39.1 billion won was paid to investors in dividends in 2006.

**:: Support for residents around dams**

K-water assisted the residents living around dams in the amount of 46.7 billion won for their increased income, improved welfare, and better living conditions in 2006 (See page 104 for further details).

**:: Government subsidy**

As it carries out business of public weal, K-water receives a part of its business expenses from the government in the form of a subsidy. We have received government subsidy for the last 3 years for introducing advanced purification facilities, which is one of the Ministry of the Environment's model projects, and for increasing the rate of running water. In addition, it received 24 billion won in 2005 and 18.5 billion in 2006 respectively for building up infrastructure for national rental apartment complexes.



With Nature :: Environment

# Nature for People

A world of happiness filled with green nature and clean water together, a world where nature coexists with people... This is the kind of place we're aiming to create. K-water spares no effort to provide people with a place to rest through environmentally-friendly water resources development projects and for people to keep happily utilizing abundant clean water through strict management of water sources.



# Environmentally Sustainable Management Strategy

K-water reestablished the management strategy to embody a model for an excellent public corporation through sustainable management based on environmental management and to reinforce environmental management in order to improve value for stakeholders.

Embodying an ideal image of the public corporation and improving value for interested parties

- design and construction for environment
- providing clear and clean water
- responding to global warming and producing clean energy
- reducing environmental risks and creating new environmental values



- Environmental performance evaluation and environmental accounting system
- Publishing and verifying sustainability management report
- Acquiring and maintaining certification

- Building up brand of Environmental management and educating professionals
- Efforts to preserve biodiversity
- Environmentally friendly communication

- Since the announcement of environmental management in 2002, K-water has continued to pursue environmentally-friendly management and switched to a management system where economic efficiency harmonizes with environmental soundness.
- K-water is leading efforts to protect the environment including ecology protection for biodiversity in river areas and the creation of environment-friendly spaces around project areas by periodically measuring the environmental impact and improving the environmental management performance generated by management activities.
- As an environment-friendly company, K-water is assuming various roles for public goods including operation of the Water Love School and water education for citizens.
- K-water is setting up a partnership with stakeholders on the environment including customers and partner companies, local residents and civic groups, media, and government, in order to provide transparent information and to invigorate communication activities.

# Environmental Management System

Since the proclamation and introduction of environmental management in 2002, K-water has been leading environment management in the public sector by upgrading environmental performance through various environment management programs and by reducing potential environmental risks.

## Environmental Management System

Following the initial certification of the Environment Management System (ISO 14001) in October 2002, the efficacy of the environment management system is validated by a renewal audit every three years. The standard of ISO14001 environmental management system and the standard of ISO9001 quality management system are included in the company regulations of K-water. According to the procedure of environmental management work as detailed in the company regulations, all divisions carry out works related to the environmental impact analysis, goal setting, environmental audit and outcome evaluation. Also, K-water acquired the certification for competitive quality company sponsored by Ministry of Commerce, Industry & Energy &

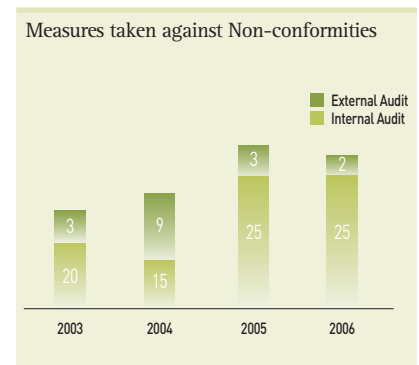


| Certification for Competitive Quality Company in 2006 |

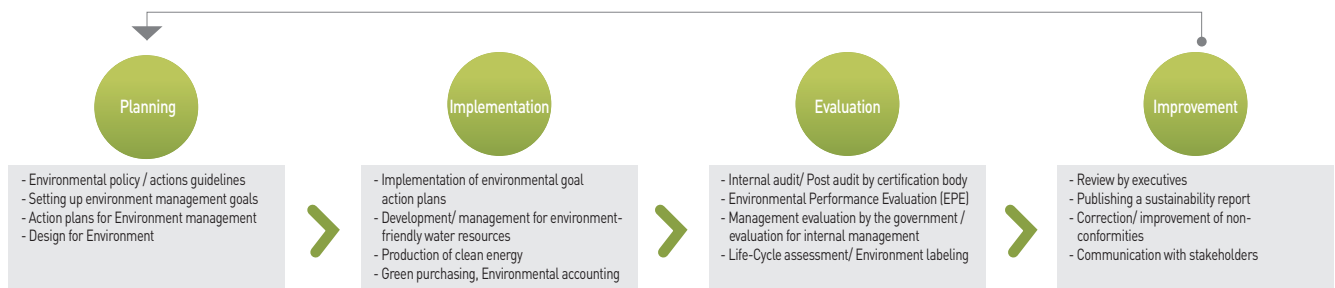
the Korean Standards Association (KSA) in November 2006, which provided an opportunity to verify the K-water's quality management system and its management performance.

## Environmental Audit

Environmental audits are conducted for each business unit annually in order to inspect and improve the environmental management system. An internal inspection is conducted in all business units, except the Head Office, and then business units representing each



## Continuous improvement



| Environment Management System and Programs |

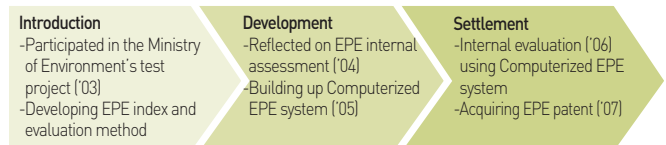
business division are selected at random by an independent certification body to examine all aspects of environmental management system, including management processes, education programs and emergency countermeasures. In 2006, 25 cases of non-conformity in the internal audit and 2 cases of that in the external audit were discovered by the environmental audit and corrected accordingly.

## Environmental Performance Evaluation

For the systematic management of the environmental outcome to be achieved through environmental management activities, Environmental Performance Evaluation Program based on ISO 14031 has been introduced and run since 2003. In the meantime, the results of environmental performance evaluations were reflected on 3~5% of the performance evaluation of each business unit to improve the environmental performances through the internal competition. In 2006, the project on setting up the computerized system for the environmental performance evaluation was completed and the environmental performance management and internal assessment has been conducted based on the system. In addition, the patent on the computerized system for the environmental performance evaluation was acquired in January '07, for the first time in the country and it provided an opportunity to suggest a standard model for EPE system in the water services sector.

## Part of the Environmental Performances (Enterprise) |

| Index Name   | Unit    | 2005 (until the fourth quarter) | 2006 (until the fourth quarter) | Rate of Increase |
|--|---------|---------------------------------|---------------------------------|------------------|
| No. of Meetings with Stakeholders Trend per year       | (times) | 19                              | 27                              | 43.8% ▲          |
| Green Purchasing Percentage (Among supplies budget)    | (%)     | 20.2                            | 20.0                            | 0.9% ▼           |
| Coagulants Input Rate of the Water Purification Plants | (mg/L)  | 21.2                            | 21.6                            | 2.1% ▼           |
| Discharge Days of Turbid Water(over 20NTU)             | (days)  | 34                              | 29                              | 13.6% ▲          |
| Discharge Rate of SS (Water Purification Plants)       | (%)     | 17.2                            | 15.2                            | 11.6% ▲          |
| Discharge Rate of BOD (Wastewater Treatment Plants)    | (%)     | 24.0                            | 22.6                            | 5.9% ▲           |
| Recycling Percentage of Construction Wastes            | (%)     | 97.9                            | 90.0                            | 7.7% ▼           |



# Producing Purified Water by Life-Cycle Assessment

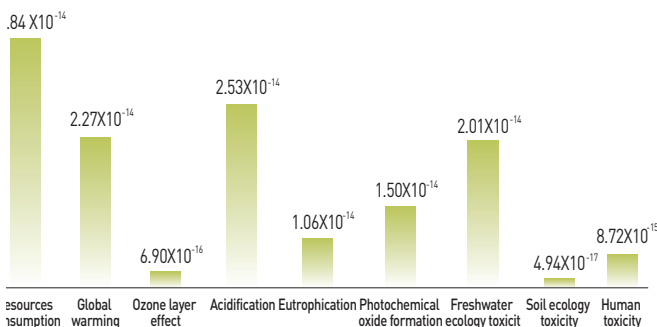
K-water produces clean tap water, considering the entire process of water purification from source water to the final production of tap water.

## :: LCA: Life Cycle Assessment

LCA is a technique intended to quantify and evaluate the affecting factors on environmental pollution generated throughout the process of manufacturing and supplying tap water "from source water to clear well" and at the same time to reduce and improve them. In 2006, the life-cycle assessment method was applied throughout the entire production process for water at the Go-san water plant of the Jeollabuk-do regional headquarters, whose source water is the Yong-dam Dam. Upon the analysis on the contribution as per level of environmental impact on nine causes including resources consumption and global warming following environmental assessment across categories, "resources consumption" was found to possess the largest environmental load while the contribution to the environment in producing 1 m<sup>3</sup> of water was found to be 3.84X10<sup>-14</sup> (based on overall contributing weight of one per influencing factors) at the most. Sludge transportation is the process with the largest environmental impact and the optimal sludge treatment method to minimize the sludge transportation distance has been sought after in order to improve the process of tap water production in an environment- friendly method.



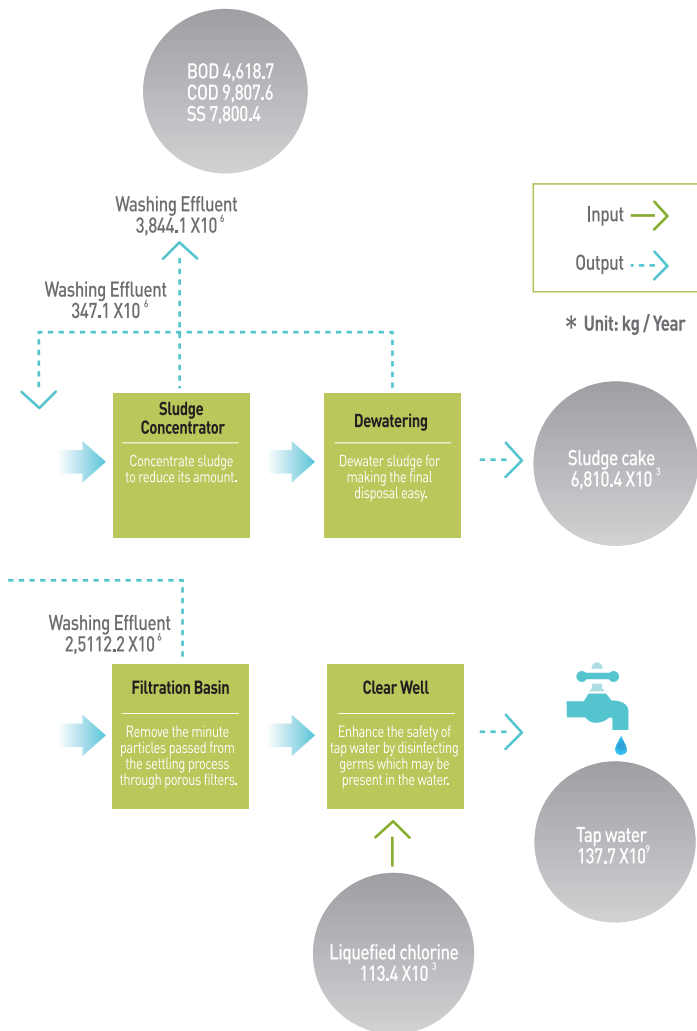
| Contributing factor per influencing categories |



## :: EDP: Environmental Declaration of Products

EDP is a Type III Environmental Declaration which quantifies resources being used throughout the product's lifecycle as well as environmental pollutants being discharged as well as their environmental impact. K-water acquired the EDP Certification for the first time ever for water, based upon the life-cycle assessment carried out at the Go-san water plant. (Certification number: 2007-002). LCA and EDP certification are going to be carried out on Cheong-ju water plant at the Chungcheong-do regional headquarters in 2007 and will be expanded to all workplaces under K-water in the long term.





# Life-Cycle Thinking to Emission Zero

## INTERVIEW



Kim, Yong-yeon  
Water Quality Planning & Management Team Manager

### Restoring Trust in Tap Water with LCA and EDP Certification

Water is a product which should be provided safely and cleanly to all and the manufacturing process should be managed in a safer and more environment-friendly method than any other products. Thus in order to produce safe and clean water, the environment in which water is produced is most important.

K-water is working to enhance the reliability of tap water by demonstrating the environment-friendliness of the water production process in the most transparent manner by introducing a technique called a life cycle evaluation which calculates environmental results of the product and system. As a first step, in 2006, the Life Cycle Assessment on the water produced from the Go-san water purification plant, which has Yongdam Dam as its source water, was carried out, and acquired EDP certification from the country in January 2007. EDP is a leading environment-friendly certification granted to products which opened up its environmental information for the entire process from the ingredients to the manufacturing process. K-water is planning on its gradual spread to other purification plants in order to release environmental information on the water manufacturing process. In 2007, K-water is also planning on having EDP certified for tap water and bottled water from the Cheongju purification plant which has Daechung Lake as its source water. Moreover, based on this, we will continue to work on improving environment-friendliness of water through continued monitoring and improvement works. Not satisfied with just acquiring an EDP certification, K-water is coming up with plans to produce water in a more environment-friendly manner using these results and will continue to work in order to improve environmental properties every year.

# Establishing Green Network

K-water enhances the environmental sustainability with the settlement of a green purchasing system and environment-friendly building certification through the supply chain environmental management and environmental accounting.

## Environmental Management for Supply Chain

### Green purchasing

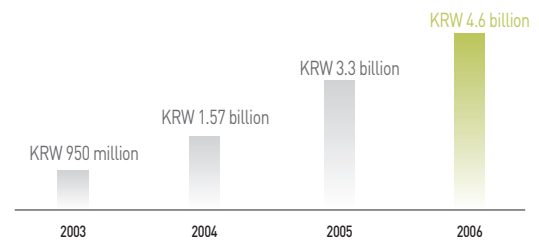
Green purchasing is an act of purchasing environmentally and nature-friendly green products for the preservation of global environment. K-water is managing environment-friendly Eco Label and Energy Recycling Label products, EDP products and energy efficiency management products as green products. Our corporation has been introducing and operating the green procurement system since 2002 and continuously working hard towards revitalization of green procurement by improving the operating structure and the purchasing system. The green procurement statistics reached KRW 6.3 billion in 2006, showing a 145% increase from KRW 3.3 billion in 2005. Purchasing energy saving office supplies and electronic appliances for saving indirect energy is being expanded, and the energy efficiency management product worth KRW 210 million was purchased in 2006.

### Mutual Cooperation with Construction Companies

In order to establish and spread mutually cooperative partnership in the construction field, K-water has selected construction projects being pursued by Ministry of Construction & Transportation subsidiaries.

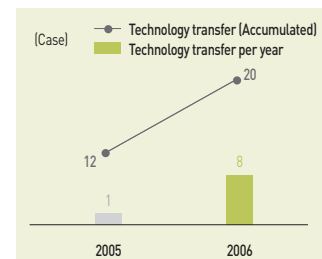
The ordering body, undertaker and the subcontractors are all participating in setting up and operating the mutually cooperative committee. On top of the two project sites appointed by the government, K-water has selected and is running two sites for dam and industrial complex preparation work and is further working towards reinvigorating the projects for mutual cooperation for co-development with small and medium sized enterprises in the construction area and for their technical support.

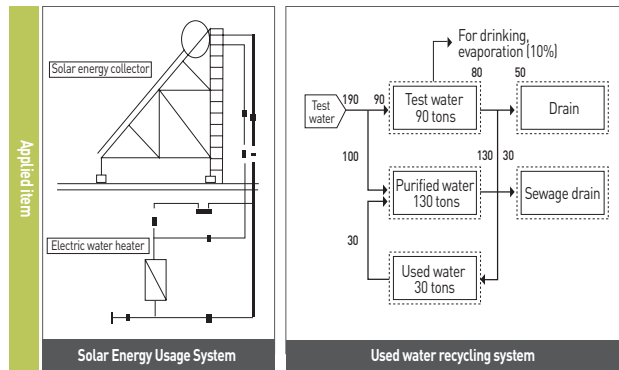
Spending on Green Purchasing



### Expanding Purchase of Products from Small & Medium Sized Companies

Revitalization of small and medium sized company products and technical development products purchasing have been selected as a core task on the corporate level and in December 2006 received the Presidential award upon achieving KRW 26.1 billion, which is a 119% increase from KRW 11.9 billion in 2005. Moreover, in order to confront domestic and international environmental regulations more proactively and to fulfill corporate social responsibility together with partner companies, creating the environmental management foundation for the partner companies will pursue the establishment of the Supply Chain Environmental Management (SCEM) including certification support for the integrated environment management system.





| Environment-friendly items applied to the Integrated Metropolitan Water Operations Center |

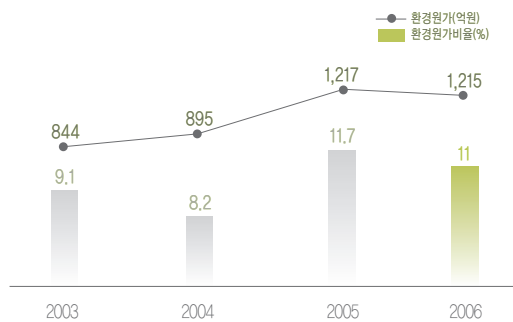
Environment-friendly Building Certification

“Environment-friendly Building Certification System” came into effect based on the common understanding by the Ministry of Construction and Transportation and Ministry of Environment on gradually deepened global environmental issues including global warming and ozone layer destruction. It is a system intended to reduce an environmental burden which may result throughout every course of construction from building design, construction, maintenance and management and at the same time encourage the preparation of a pleasant living environment.

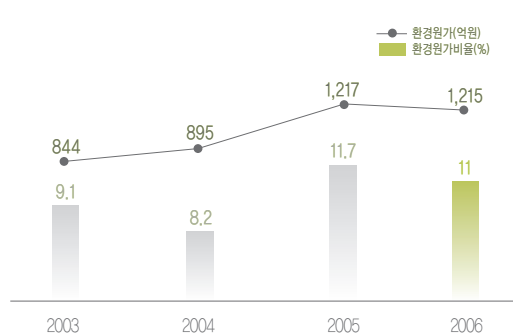
K-water acquired a certificate for the first environment-friendly building (Sept 2006) for public organizations by applying the solar heat usage system and the heavy water usage system to the Metropolitan Waterworks Integrated Operations Center and received the highest award from the 2nd Construction Culture Grand Award (December 2006).

We are in the midst of acquiring an environment-friendly certificate for the International Water Supply and Drainage Education Center which uses an alternative energy usage system such as solar and terrestrial heat and environment-friendly items including the heavy water recycling facility and rooftop afforestation, the integrated water operations center at the Southern Geumgang region and for office buildings at respective headquarters.

Rate of Environmental Investment to Total Investment



Environmental Cost to Total Cost



\* Total cost = Operating expense - dam construction cost - commissioned project cost

Future plans

Short-term task

-To design and acquire the environment-friendly building certificate, meeting the standard of environment-friendly building certificate

Long-term task

-To be designated as an environment-friendly building certificate body  
 -To grant extra points to the companies certified as environment-friendly building in bidding and PQ evaluation

Environmental Accounting

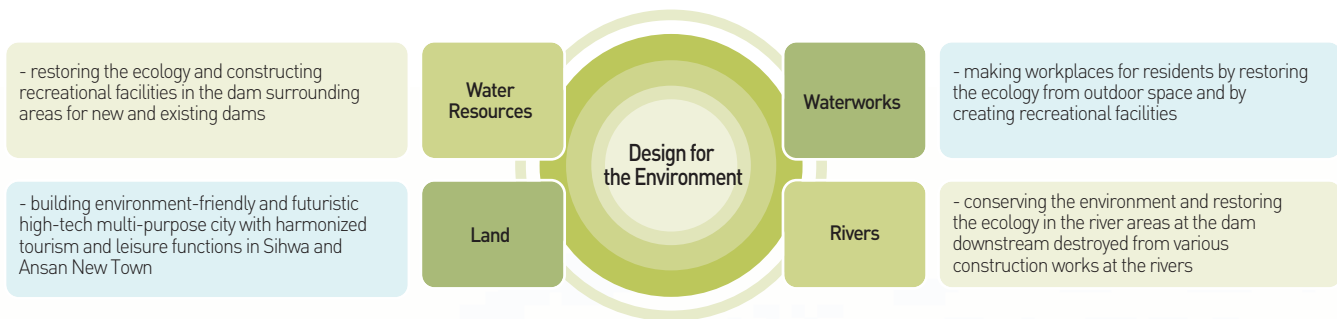
K-water is operating an environmental accounting system in order to support reasonable management decision making and to provide information to stakeholders in an open and transparent method by quantifying the environment management performances. While participating in the environmental accounting test project sponsored by the Ministry of Commerce, Industry & Energy in 2003, the concept and criteria for environmental cost appropriate for K-water have been self derived to come up with yearly environmental cost and environmental investment following 2000. The environmental cost in 2006 has been estimated to be KRW 121.5 billion which is 11.0% of the project cost, while environmental investment was KRW 72.8 billion or 8.9% of the total investment. In 2006, a management audit computer system has been set up in order to run the results of the environmental accounting in a more systematic manner. Using the environment accounting information produced, an environmental accounting system will be developed to enable its application in management decision making when setting up new environmental investment and environmental capital budgets in the future.

# Environment-friendly Development of Water Resources

K-water creates a place of rest and cultural activities for the local community by constructing environment-friendly water resources facilities.

## :: Design and Construction for the Environment

K-water minimizes the environmental impact resulted from construction activities and creates another natural environment where life comes into being by abiding to the "Design Guideline For the Environment (2003)" from planning and designing stage of the water resources, waterworks and development project carried out by K-water.

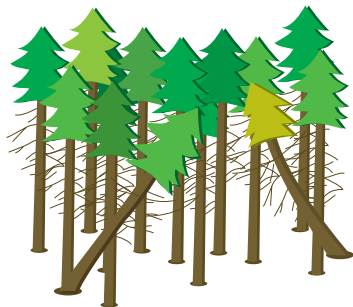


**:: Taking Care of Forests around Dams**

K-water has set up yearly a master plan taking care of forests around dams together with the Korea Forest Service since 2002, while the Korea Forest Service has carried out the schematic design and the construction work. For the last five years starting from 2002, the test project was carried out around 1,800ha and 1,300ha of land around the Jang-heung Dam and the Dae-gok Dam respectively.

“Taking Care of Forests around Dams” brought about an increased ability to retain source water in the forests and promoted ecological soundness. Moreover, it also prevented generation of turbid water and water pollution during flooding seasons as a result of earth and sand drain. Moreover, during the dry season, we are able to provide a sound place for leisure for the people by promoting the role of green dams in maintaining moisture in the soil and by connecting lakes and forests.

|            |   |
|------------|---|
| Until 2005 | *Jangheung and Dae gok Dam project<br>*Setting up a master plan for 8 dams including the Soyanggang Dam |
| 2006       | *Jangheung and Daegok Dam test project completed<br>*Commenced work on 8 dams including Soyanggang Dam  |
| After 2007 | *Continued project work as per year<br>- 25 dams including Daechung Dam                                 |



| Before “Taking Care of Forests” |



| “Taking Care of Forests” |



| After “Taking Care of Forests” |

“Taking Care of Forests” is to create an ecologically sound forest through afforestation pruning, thinning, and renewal of tree species and by creating a multi-layered forest.

**:: Producing an environment-friendly slope vegetation service guidebook**

Services guidebook for minimizing damage to the natural environment and vegetation of the inclining slope for ecological recovery has been produced in-house for efficient use by staff on-site for construction projects, and in this guidebook, inclining slope vegetation design, inclining slope vegetation method material, growth characteristics of a plant, presenting environment friendly slope vegetation, ecology restoring vegetation, characteristics and summary of an vegetation method in key local slopes are among its contents.

**:: Received an excellence award at the 3rd 「Korea Landscaping Award (May 2006)」**

Took part in the 3rd Korea Landscaping Award Competition<sup>2)</sup>, sponsored by the Korea Institute of Landscape Architecture and hosted by the Ministry of Construction & Transportation, Ministry of Environment, Ministry of Government and Home Affairs, Ministry of Culture & Tourism, SBS and YTN, with its efforts in pursuing the environmentally and community friendly landscaping project including the ones at rear side afforestation of Jang-heung Multi-purpose Dam, Ansan Lake Park and opening the HQ building as a core theme and received an excellence award in the Landscaping Project (Minister of Construction & Transportation Award) in the public sector. The competition was prepared for preparing a sustainable land space conserving an preserving the ecosystem, and for highlighting the role of the 21C landscaping paradigm and the regional administration and public sector.



# Redevelopment of Existing Dams

The redevelopment of agricultural dams makes the usage of water resources efficient by the agreement between water related organizations.

## :: Contract of redevelopment agreement on the Sungduk agricultural Dam with the Korea Rural Community and Agriculture Corporation

As a means to resolve difficulties in development of water resources which includes reduction of ideal spots for dams, increasing compensation, etc. in order to redevelop the previously developed dam into a multipurpose dam, six redeveloped dams have been reflected in establishing a long-term dam building plan in December 2001.

Starting with the agricultural purpose Sungduk Dam owned by the Korea Rural Community and Agriculture Corporation as its test project, the agreement has been signed (December '06) for its redevelopment into a multi purpose dam following a series of consultations with concerned organizations (including the Korea Rural Community and Agriculture Corporation and the Ministry of Construction & Transportation), and this redevelopment project is anticipated to become a new development model for the SOC project, the reasonable water resources. The agreement upholds a win-win strategy achieved through mutual cooperation between the Korea Rural Community & Agriculture Corporation and K-water including protection of the previously obtained water rights and on the collaborative construction by the Korea Rural Community & Agriculture Corporation. We wish to contribute to resolving the country's water resources problems by redeveloping more agricultural dams in the future.

## :: Redevelopment of the Sungduk Dam

With the establishment of a redevelopment plan according to the superior administrative plan on the dams (December 2001), the construction work began (November 2006) following lengthy discussion with concerned organizations. The Sungduk Dam is currently under construction with the aim of completing the construction in 2010, following the redevelopment in the 1.2km downstream area of the existing dam. With a dam height of 58.5m, a dam length of 274m and a flood control effect of 4.2 million tons, water supply is designed to become 20.6 million tons. Sungduk Dam is expected to contribute greatly to resolving water issues in the region and revitalize the economy.

### What is the redevelopment of the existing dam?

- Dam project which increases the height of previously developed dams or adds new facilities at the downstream of the existing dam
- Beneficial in resolving environmental changes and resolving regional conflicts by efficient use of water resources at previously developed dams

### | Achievements |

- Drawing social consensus by organizing and running a regional committee and holding community hearings
- Drawing and concluding the mutual development agreement on the national level (December 2006)
- Announcement of working plan and construction commencement (November 2006)

### | Performances |

- Redevelopment project to resolve water issues and reduction of national budget (KRW 97 billion)
- Creating a new and reasonable development model of water resources through the agreement with outside organizations

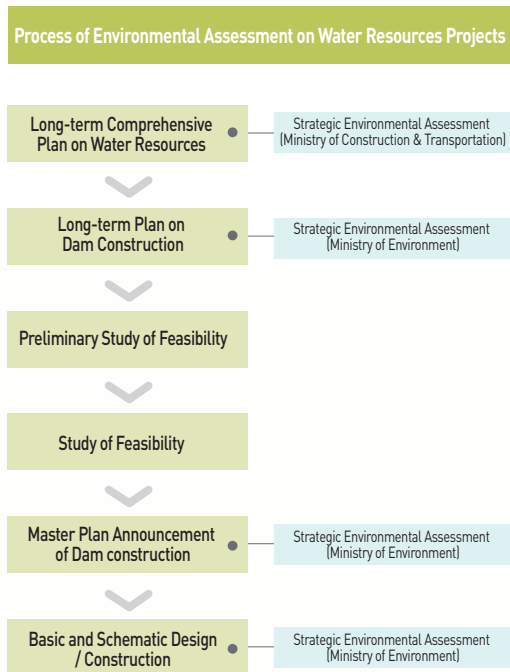
### | Summary on Sungduk Dam Redevelopment Project |

| Classification         | Before (Reservoir)             | After (Multi-purpose dam)       |
|------------------------|--------------------------------|---------------------------------|
| Pondage                | 0.8 million m <sup>3</sup>     | 27.9 million m <sup>3</sup>     |
| Flood regulation       | -                              | 4.2 million m <sup>3</sup>      |
| Water supplied         | 0.2 million m <sup>3</sup> /yr | 20.6 million m <sup>3</sup> /yr |
| Electricity generation | -                              | 1409MWh/yr                      |



# Strategic Environmental Assessment

K-water is trying to realize the strategic water resources plan that democratic planning, development and environmental values coexist together with stakeholders by carrying out the strategic environmental assessment at the planning stage for water resources.



## Substantial Strategic Environmental Assessment

The Strategic Environmental Assessment is a means of supporting the systematic decision making which considers an environmental impact together with a socio-economic impact from early stages of administrative planning prior to the development project, and it is an institutional device which regulates and resolves conflict between development and conservation in advance.

K-water is leading the establishment of a democratic and environment-friendly water resources plan by carrying out a strategic environmental assessment for the first time in the country targeting the superior national administrative plan in the field of water resources including a long-term comprehensive plan for water resources and a long-term plan for dam construction. By way of mutual agreement among the interested parties, we will try our best in setting up a transparent plan for water resources agreeable by all and in realizing a sustainable policy for water resources following substantial strategic environmental assessment through scoping (assessment criteria selection) to determine the assessment criteria and method for environmental impact, inspecting environmentally for all possible measures including 'No action' and reflecting voice of the local community from community briefing and hearings.

## Contributing to the settlement of a system for domestic strategic environmental assessment

K-water is working hard towards a reasonable development and settlement of a system for domestic strategic environmental assessment which is still in its early stage by proactively investing its abilities and resources into the research for methodology and appraisal of strategic environmental assessment in the field of water resources.

Setting up a guideline for strategic environmental assessment according to characteristics of respective water resources plan will contribute to minimizing trial and error in early stages of introducing the strategic environmental assessment. Also, we wish to fulfill our social responsibilities as a capable national environmental corporation through various research activities, including a guideline for drafting an environmental impact analysis in the field of water resources, and research for methodology of environmental impact assessment.

Moreover, we wish to resolve social conflicts in advance and set the foundation to realize a sustainable policy of water resources.

# Environmental Improvement of Areas adjacent to Dams

The areas adjacent to dams are being transformed into environment-friendly spaces to pursue an improvement project for the surrounding areas of existing dams in order to provide a rest place for people and to reinvigorate the local economy.

## Background of the Environment Improvement Project

In Korea, the development of water resources in the past followed a development oriented policy focused on the economy, so dams built in the past were lacking in sufficient measures to restore the ecosystem and preserve the environment. Moreover, lack of relocated roads due to flooding, shortage of infrastructure such as the sewage treatment facility, various regulations including restricted areas for development and the protection areas for water sources contributed to hindering the development of areas adjacent to dams, thus highlighting negative aspects of dams. Various environment improvement projects in the areas adjacent to dams are being pursued in order to resolve such negative awareness on dams and to create the dam reservoir as a familiar rest place for people by becoming a water-friendly spot in the region.

### Environment improvement Project details

Landscape lighting, Installing an event space, Water-utilizing parks, Creating artificial marshlands, Creating riverside parks, Installing an observation elevator, etc.

## Setting up the Master Plan of Environmental Improvement and Project Implementation

We have succeeded in securing expenses for support and maintenance in the areas adjacent to dams following three amendments of dam regulations since 1999 and provided grounds to prepare the areas adjacent to dams in an environment-friendly manner. With revision of the dam related regulations, the project has become possible to implement the redevelopment projects in the areas adjacent to dams by the individual local governments following a discussion with the Ministry of Construction & Transportation from 2003. Thus, in order to resolve issues of water quality and environment in advance due to the overlapped investment on the project and environmentally inconsiderate development on the areas adjacent to dams, a master plan for systematic environmental maintenance has become necessary while carrying out the project upon setting up a redevelopment master plan for some 18 locations including the dams and the areas adjacent to dams. Following such project, the existing dams will be reborn into an environmentally and water-friendly space and seek the revitalization of the local economy.

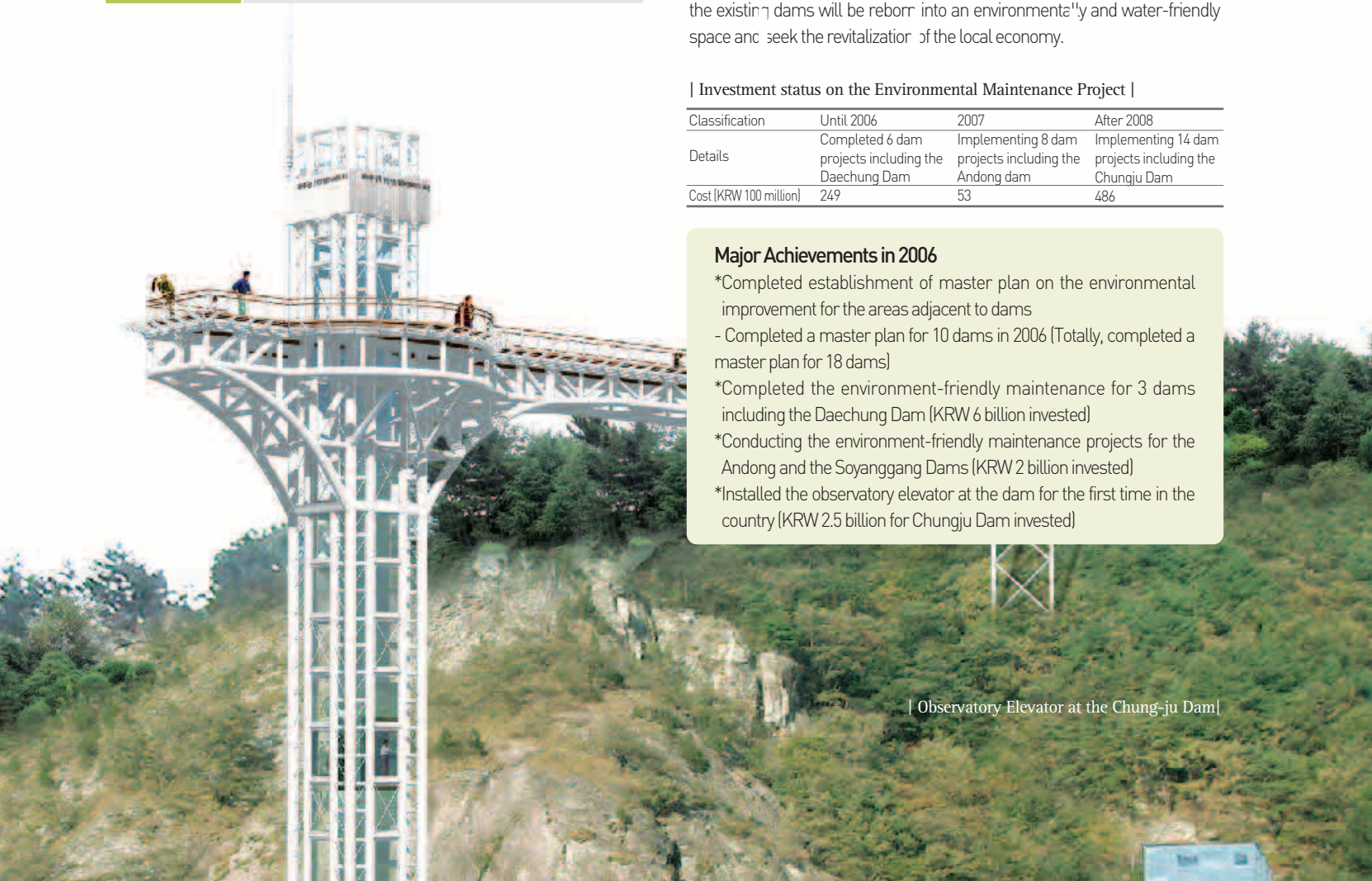
### Investment status on the Environmental Maintenance Project

| Classification         | Until 2006  | 2007   | After 2008   |
|------------------------|---|--|--|
| Details                | Completed 6 dam projects including the Daechung Dam | Implementing 8 dam projects including the Andong dam | Implementing 14 dam projects including the Chungju Dam |
| Cost (KRW 100 million) | 249   | 53   | 486  |

### Major Achievements in 2006

- \*Completed establishment of master plan on the environmental improvement for the areas adjacent to dams
- Completed a master plan for 10 dams in 2006 (Totally, completed a master plan for 18 dams)
- \*Completed the environment-friendly maintenance for 3 dams including the Daechung Dam (KRW 6 billion invested)
- \*Conducting the environment-friendly maintenance projects for the Andong and the Soyanggang Dams (KRW 2 billion invested)
- \*Installed the observatory elevator at the dam for the first time in the country (KRW 2.5 billion for Chungju Dam invested)

| Observatory Elevator at the Chung-ju Dam |







| Water Culture Center at Andong dam |

❖ Remodeling water culture centers

As a part of the environment improvement project in the areas adjacent to dams, a project of improving the water culture center is being leveraged into an opportunity to transform the people's awareness to be favorable to a policy of national water resources by promoting activities of K-water, promoting a dam which exists with its community through securing and displaying an open space for exchanging regional culture, and being regenerated into a dam contributing to the regional economy by encouraging more tourism. Among water culture centers in 11 dams, currently water culture centers in 9 dams, including the one at Daechung Dam, have been renovated and extended while projects for water culture center at Hapchun Dam and Buan Dam are in progress.

| Status for Remodeling Project of Water Culture Center |

| Classification | Facilities                        | Cost (KRW 100 million) |
|----------------|-----------------------------------|------------------------|
| Until 2006     | 8 dams including the Daechung Dam | 184                    |
| 2007           | 1 dam including the Hapchun Dam   | 31                     |
| After 2008     | The Buan Dam                      | 20                     |

Contribution to the Fund for Improving Air quality of the Sihwa & Banwol Industrial Complex

Following its initial contribution worth KRW 5 billion in 2004, K-water contributed additional KRW 10 billion to "Siheung Environmental Technology Development Center (SETEC)" designated by the Ministry of Environment as a professional research institute in June 2006, in order to improve bad odor and atmospheric environment in the Sihwa & Banwol Industrial Complex.

The fund contributed is providing support to install control facilities and to replace old facilities in major companies discharging bad odor and atmospheric pollutants from the Sihwa & Banwol Industrial Complex. In time, with enforcement of the bad odor preventive regulations, on additional contribution of KRW 15 billion will be made, which is expected to play a pivotal role in making an epochal improvement of the air conditions in this area by encouraging the improvement of voluntary facilities by companies in the Sihwa & Banwol Industrial Complexes generating air pollutants and bad odor.



# Clean Management of Water Sources

Cleanliness of tap water depends on strict management of water sources.

K-water works hard to improve water quality of the rivers flowing into dams and water at the dams.

## :: Management of Pollution Sources around Dams

For the purpose of treatment of the domestic sewage and livestock wastewater causing water pollution in dams, 91 environmental basic facilities are constructed and operated in the upper streams of Yongdam Dam, Daecheong Dam, Jangheung Dam, and Chungju Dam. Especially in the upper stream of Yongdam Dam, a control system for integrated surveillance was introduced in 64 environmental basic facilities scattered in 3 provinces. Consequently, we increase the reliability of water quality which is treated and save the cost of maintenance and management by improving water quality in reservoirs for dams and increasing the operation efficiency with the nation's first integrated operation and management by basin.

The nonpoint pollution source that is the major cause of water pollution in dams, flows into the rice fields, and patch cultivation in the upper stream basin takes 40 to 50% from the total pollution load.

As a consequence, K-water operates 190087 of artificial swampy lands on the river flowing into the upper stream of Daecheong Dam and water plant culture islands for the prevention of green algae. Also, we established the reduction measure of nonpoint pollution source in the upper stream of Namgang Dam in 2006 and built an infrastructure for the pollution source management in dam basin.

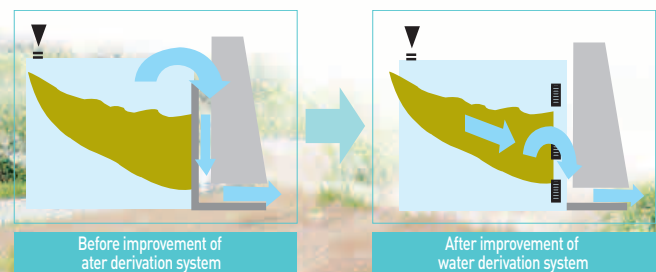
In addition, on the land under cultivation around dam, we created 3 eco-friendly agriculture model complexes in 2005, and contrived the water quality of reservoir with expansion of 8 model complexes including Soyang-gang Dam in 2006, with 380% of cultivation areas and 778% of participants.

## :: Management of Turbid Water Flowing into Dams

We make and promote various measures for the solution of muddy water problem in the reservoirs for dams caused the landslide from the water damage which is increasing yearly including the landslide and overflow in the area of the upper stream of dams due to the change of precipitation pattern such as typhoon and local downpour. To understand the present status of muddy water that flows into the reservoirs of dams and moving condition, we install and operate automatic turbidity measuring equipment. Also, we conduct the measure for the reduction of muddy water influence in the downstream of dams by means of the discharge of muddy water flowing into dams or clean water with improvement of selective water derivation system by the depth of water.

| Plan for decrease of turbid water |

| Measure in basin  | Measure for inside of dams   |
|---|--|
| <ul style="list-style-type: none"> <li>*Readjustment around patches including construction of the detour watercourse</li> <li>*Consolidation of small rivers and restoration of water damage in the upper stream</li> <li>*Project for reduction of nonpoint pollution in the high altitude area</li> <li>*Debris barrier construction, etc.</li> </ul> | <ul style="list-style-type: none"> <li>*Installation of automatic turbidity measuring equipment</li> <li>*Improvement of water derivation device, etc</li> <li>*Project for protection of schools of fish</li> </ul> |



Improvement of turbidity in dams with selective removal of high level of turbidity layer by the depth of water through the improvement of tower for water derivation



**:: Collection & Disposal of Flood Debris**

Every year, garbage dumped at the upper dam areas as well as plants and wasted trees from forest and farming areas flow into the dam in great quantities with heavy rain during flooding. Such flood debris will obstruct the lake's scenery and deteriorates water quality, but the types and amount of flood debris flown into the dam are increasing in bulk due to recent heavy rains.

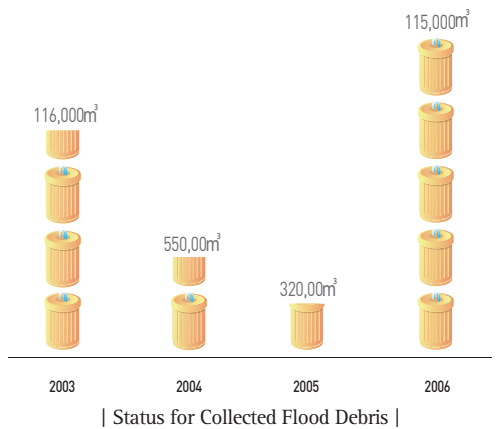
**Efforts to Reduce Flood Debris on Incident Areas**

We are encouraging voluntary environmental protection activities by vacationers and local residents by installing educational signage and banners in places around reservoir and rivers where illegal dumping is likely to happen. Moreover, special examination on the reservoir surrounding areas and general cleaning on the inflowing river area has been carried out prior to the summer flooding season and is working on fundamentally reducing the amount of inflowing debris by designating and selecting local residents in the areas adjacent to dams as water watchers (2006: 568 persons).

**Prompt Collection & Disposal of Flood Debris Inflowing to Dams**

Due to typhoon Ewiniar's influence, floating garbage (175,000M3, 17,500 trucks of volume of 15 tons) amounting to 20 times more than the average from the previous year has drifted into the dam and by investing KRW 5.8 billion, drifting waste matters flowing into the dam have been removed within a month in order to minimize water pollution.

Following the process of selection, collected debris is being provided to the areas adjacent to dams where plants and grass will be used for sawdust, compost and as firewood. Moreover, by 2009, KRW 9.22 billion will be invested to set up and carry out comprehensive measures to handle dam floating matters in order to secure collection boat, carrier, isolation net and treatment facilities on the yearly basis.



| Collection & Removal of Flood Debris |

**Comprehensive Countermeasures against Flood Debris**

**Target**

- To collect flood debris within one month for large dams
- To collect flood debris within 2 weeks for small and medium sized dams

**Supplement of facilities for collecting flood during three years (2007~2009) & introduction of large scale equipment**

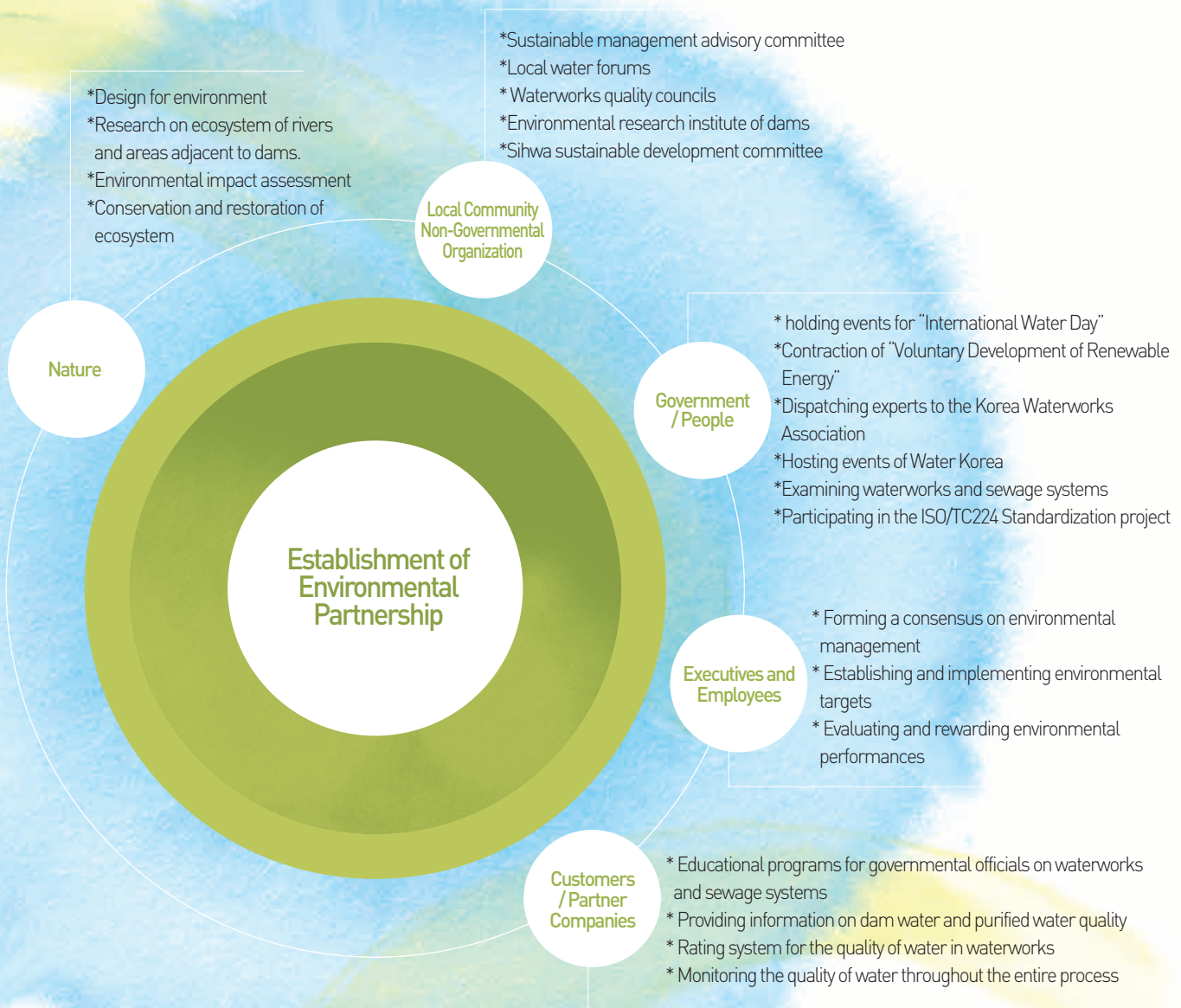
- Installing 20 facilities (incinerators, open-air storage, etc.) at 11 dams including the Daechung Dam
- Introducing 9 carriers at dams including Soyonggang Dam



| Production of Sawdust Using Wood Crushing Machine |

# Environmental Communication

Our Door is always open to stakeholders to ensure smooth communication.  
 K-water looks forward to transparent disclosure and good communication through partnership in environmental activities.



# Strict Water Purification Treatment

K-water is improving water quality using an advanced technology of water purification.

## :: Improving Water Treatment Process

In 2005, for the first time in the country, pH-regulating equipment using carbon dioxide has been installed at the Dukso purification plant whose source water lies at the Han River's water system at the lower Paldang Lake, and its impact analysis was carried out in 2006. The results of analysis showed the overall enhancement in water quality shown by the decrease in turbidity underwater following the improvement in cohesion efficiency, reduction in remaining aluminum concentration and reduction in residues from sterilization. This signifies an appropriate usage of coagulants without excessive input, thus resulting in enhanced water safety. In 2007, four additional water purification plants requiring regulation facilities for source water pH will be installed and continuous efforts will be made in order to enhance water quality and safety.

**Adjustment of pH of source water**  
 Source water's pH is reduced in order to enhance safety in water treatment as well as efficiency in the process by pouring in pH regulator carbon dioxide or sulphuric acid in the process of producing water with source water from lake or river with high pH.

## :: Rating system for the quality of water in water plants

Since 2003, the water grade assessment at the purification plant has been carried out voluntarily for 11 categories including turbidity, residual salinity, taste, odor, sterilization by-products among metropolitan water purification facilities producing tap water. The water grade assessment at the purification plants will induce competition among water purification plants, and it is being carried out for the purpose of producing high quality tap water through voluntary improvement of facilities and management for operations. As a result, K-water succeeded in achieving the maximum daily turbidity of 0.1NTU or 98.2%, while less than 1mg/L or 98.8%, which is a much further reinforced figure from that of the legal standard of 4mg/L or less was achieved as per the remaining chlorine in 2006. People will be capable of segmenting the direct diminishing criteria of taste and odor into sensual evaluation and instrumental analysis while the remaining chlorine density will also be differently graded per season for test operations in 2007.

## Preparing for the ISO/TC 224 System (International Standardization on Waterworks Service)

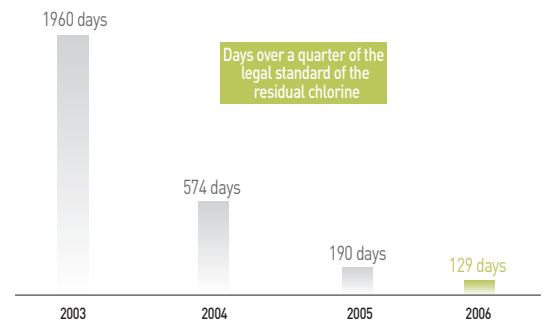
IST/TC 224 is a technical committee set up for the standardization of the water supply and drainage service at the ISO which an international standard for water supply and drainage service will be set up in October 2007. Opening up the water market is expected to gain momentum with local market entry by the leading overseas water companies as a consequence providing an opportunity.

In preparation for the introduction of the global standard system for water supply and drainage, K-water is leading reinforcement of competitiveness in the local water works and sewerage industry by setting up expert workshops for early adaptation and preparedness, developing PI (performance index) conforming to the international standard, preparing related regulations and means for system maintenance, expanding research & development, developing core technologies, etc.

## | Adjustment Project of Source Water pH |

| Water Quality Criteria                    | Before Installation | After Installation | Improvement Effect |
|---|---------------------|--------------------|--------------------|
| Source water pH                           | Above 8.5           | 7.5                | 11.7% ↓            |
| Turbidity of settled water (NTU)          | 0.56                | 0.46               | 17.9% ↓            |
| Concentration of residual aluminum (mg/L) | 0.07                | 0.02               | 70.5% ↓            |
| Disinfection By-Products (mg/L)           | 11.7                | 9.2                | 21.4% ↓            |

## Days over the targeting standard



\* Days over the targeting standard per total operating days (30 plants \* 365 days) of water purification plants

## | Items for Water Quality Rating System |

| Category                                   | 2005  | 2006                        |
|--|---|-----------------------------|
| Number of Items for Water Quality Rating   | 7   | 11                          |
|  | Disinfection-by Products added (THM, HAA, CH) | Mn, Al, 2-MB, Geosmin added |
| No. of Targeting water purification plants | 29  | 30                          |

K-water is reinforcing the management on water quality by carrying out a water quality rating system on the criteria people are capable of sensing directly including taste and smell of water.



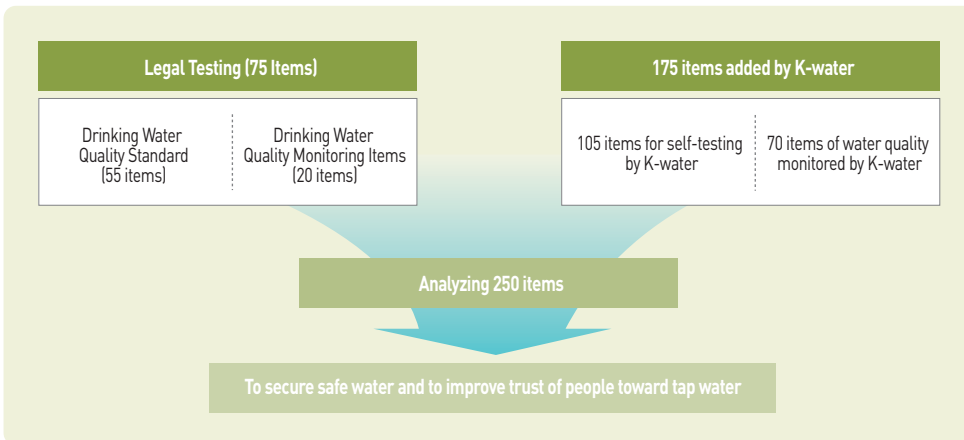
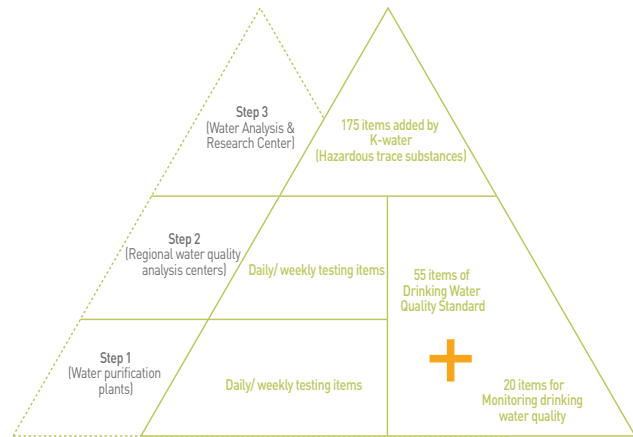
| Workshop for taking a counteraction against ISO/TC 224 |

# Strict Management of Water Quality

K-water supplies safe water to our customers through strict test of water quality and monitoring of water quality throughout the entire process.

## :: Strict Water Quality Testing

Considering the instruments and human resources necessary for testing, the water quality tests are conducted in 3 steps (1st step: 34 water purification plants; 2nd step: 4 regional water quality analysis centers; and 3rd step: Water Analysis & Research Center), and there are 250 items to be tested in accordance with the international standard. Each plant conducts the water quality test as required for its process management daily, each center for regional water quality analysis conducts a monthly test, utilizing an advanced analysis technology with legality, and the Water Analysis & Research Center is monitoring hazardous trace substances to be controlled for supply of safe water.



### Comparing Water Quality Testing items

- 250 items tested by K-water
- 145 items tested by the Seoul Metropolitan Government
- 102 items tested by US (Environmental Protection Agency)
- 205 items tested by the Health Canada
- 251 items tested by the NHMRC (National Health and Medical Research Council) of Australia

## :: Water Quality Monitoring for the Entire Process

The wide range of water quality monitoring devices is installed and is being run in real-time throughout the entire process of supplying water from source water to the water purification plant and the reservoir in local governments. Moreover, water quality management from the water purification plant to the reservoir in the local governments is being reinforced by installing an automatic monitor to measure turbidity and residual chlorine for real-time monitoring in 94 posts at the pipe's turning point and at reservoir in the local governments while carrying out the old monthly visiting inspections at the same time.

Moreover, in order to enhance reliability, data on source water from 2 water intake facilities run by K-water and the purified water quality from 26 water purification facilities nationwide is available on K-water's homepage in real-time while information on water quality inside the water pipes at Jungeub city, Jeollabuk-do is being provided in real-time using the LED.

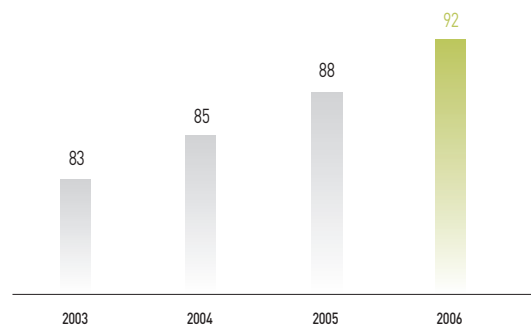
### | Installation of real-time water quality monitoring facilities |

| Category                 | Item                                  | 2005    | 2006     |
|--------------------------|---------------------------------------|---------|----------|
| Water intake plant       | 5 items including alkaline level etc. | 2 posts | 26 posts |
| Water purification plant | 3 items including turbidity etc.      | 8 posts | 2 posts  |

| Replacement of worn out pipes |

| Category              | 2003 | 2004 | 2005 | 2006 |
|-----------------------|------|------|------|------|
| Length replaced (km)  | 25.4 | 18.4 | 14.2 | 11.3 |
| Cost (KRW 10 billion) | 97   | 179  | 130  | 101  |

Installation of Corrosion Prevention Facilities (%)



Continuous Replacement of Worn out Pipes

Although tap water may have been produced safely at the water purification plant, it could become contaminated while being transported through worn out pipes before reaching the tap, which is a key cause of rust water. K-water is trying not only to improve water purification facilities but also to work hard in order to provide a stable supply of quality water by continuously improving worn out pipes by designating sections for worn out pipe improvement (replacement, reinforcement, and regeneration) every year. In order to select the worn out pipe segments necessary for improvement, pipe aging assessment is carried out for pipes 20 years old or more and for pipes extending up to 1,414km necessary for further analysis as a result of the assessment, an improvement plan for the worn out pipes has been set up upon conducting a detailed analysis on the courses.

Moreover, in order to reduce water leakage by replacing the worn out pipes and to prevent secondary water pollution which may be result from pipe corrosion, continuous improvement of the worn out pipes, including replacing 11.3β∞ of worn out pipes of multi-regional waterworks in 2006, managed to provide clean water, and also the average revenue of water in multi-regional waterworks run by K-water since 2001 has been maintained 99% or more every year.

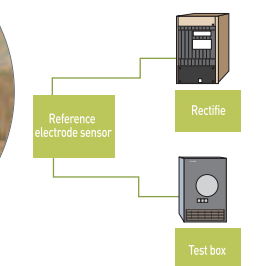
Prevention Project for Corrosion of Worn out Pipes

Facilities for preventing corrosion have been set up and are in operating in 2,247km among 2,445km of the steel pipes while for pipelines for protecting corrosion among 3,770km of aqueduct and water pipes, and an improvement plan for anticorrosion facilities has been set up and amended for putting efforts to prevent leakage and suspension of water due to corrosion of pipes.

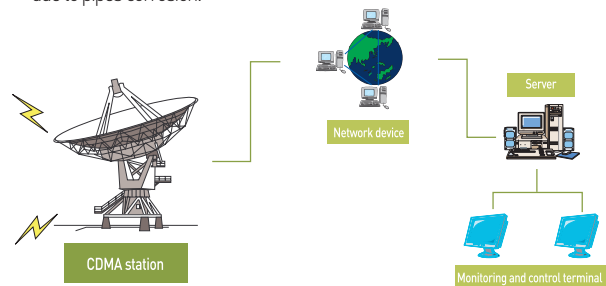
Moreover, since the remote type control for the pipe system in the Ulsan area has been introduced for the more scientific and systematic management of facilities for preventing corrosion on aqueducts and pipes buried in a wider area in 2004, a remote system in multi-regional waterworks has been introduced in 2006 and managed intensively on the potential prevention of corrosion on the segments with high risks for corrosion including interfering courses with the subway, and bad insulation courses with other facilities which contributed greatly to pipes rupture and leakage incidents due to pipes corrosion.



Metal pipe



Automatic rectifier



Remote data communications

Monitoring and control

| Remote Typed Control System |

# Responding to weather changes and CDM project

K-water contributes to prevention of global warming by producing clean energy.

## :: Developing new and renewable energy

In order to positively respond to the climate changes due to global warming and carry out a master plan for development of the new renewable energy on the national level, K-water is actively pursuing projects for development of the new and renewable energy including small-scale hydropower, tidal power, wind power, solar power, water temperature difference, air conditioning and heating using water temperature differences, etc. The master plan for development of the new and renewable energy has been set up in June 2006 for systematic implementation of the development per energy sources and upon signing the Renewable Portfolio Agreement

(RPA, July 2005) with the government, a total of KRW 32.8 billion will be invested into a project for development of the new and renewable energy including small hydro power, wind power and solar rays with a total 8,730kW size of facilities by 2008. In recognition of such waterpower generation and development of the new and renewable energy, K-water received the Prime Minister's award from the 22nd Kyunghyang Electricity & Energy Grand Award in November 2006 and using this opportunity, we wish to contribute to nationally sustainable development by fulfilling the social responsibility and developing the clean energy as an environment-friendly energy corporation.

### | Yearly Plan for Development of New and Renewable Energy |

| Category   | Until 2005   | 2006   | 2007  |
|--|--|--|---|
| Sihwa tidal  | - Starting the construction of tidal power plant   | - National approval for CDM, UN registration           | - Electricity generation and trade of carbon emission   |
| Small hydraulic power  | - Developing a small-scale hydropower plant of 14,274kW  | - Developing a small-scale hydropower plant of 1,970kW | - Developing a small-scale hydropower plant of 9,950 kW   |
| Wind power   | - Conducting a feasibility test for Sihwa wind power generation                                  | - Schematic design for wind power of 3,000kW           | - Developing a wind power plant of 38,000kW   |
| Solar power  | - Developing a solar power plant of 10kW   | - Developing a solar power plant of 30 kW              | - Developing a solar power plant of 2,900kW   |
| Air conditioning and heating using water temperature differences | - Reviewing the introduction of air conditioning and heating using water temperature differences | - Water temperature differences of 200,000 Kcal/h      | - Continuous development of air conditioning and heating system using water temperature differences |

## :: Small-scale Hydropower Development

With the small-scale hydropower plants at Dalbang and Juam starting operations in 2007, the capacity of the total facilities for small-scale hydropower development for efficient use of water resources was increased to 15,434kW while annual electricity generation was recorded 63,120MWh (based on December 2006). Moreover, K-water is contributing to the advancement in technology of local hydropower generator by mutually pursuing tasks on technical development of the new and renewable energy sponsored by the Ministry of Commerce, Industry & Energy with related academic world and industries. For active utilization of the Hydropower recognized as a realistic clean energy resource due to its high energy density, small-scale hydropower plants using existing facilities and rivers will be continuously developed.

## :: Sihwa Tidal Power Generation

The Sihwa tidal power plant, whose construction works began in 2004, with world's largest scale (254000kW), produces 552 million kWh of electricity every year using the tidal differences, bring about 862000 barrels of oil substitution effect and 315000 tons of carbon dioxide reduction effect. The Sihwa tidal power plant project, which is anticipated to contribute to improving water quality of Sihwa Lake and producing an environment-friendly clean energy, is being spurred, with the aim to be completed in 2009.

## :: Wind and Solar Power Generation

Construction of a 3,000 kW size wind generator using abundant wind power resources surrounding Sihwa Bangameori is being carried out, and in order to maximize efficient usage of wind power, installation of two 1,500kW units is being planned. The wind generator expected to be completed in 2008 will become a theme park for the new and renewable energy connected to the Sihwa tidal power plant and is expected to contribute greatly to revitalizing the regional economy. Moreover, in order to develop infinite clean energy from the sun, a 30kW size solar power plant has been set up at the water culture center at Daechung dam in December 2006. It was implemented as a test project in order to offer an opportunity for education on the new and renewable energy in connection with the hydropower plant at Daechung dam for the people, and the development for solar power generation will continue to be implemented in larger scale within the waterworks facility site in the future.



| Received Prime Minister's Award from the 22nd Kyunghyang Electricity & Energy Grand Award (November 2006) |



**:: Application of Clean Development Mechanism (CDM) to Our Business**

Kyoto protocol enabled use of a flexible mechanism including Clean Development Mechanism (CDM) for achieving the goal for efficient reduction of greenhouse gases. K-water set about the CDM project on Sihwa tidal power, small-scale hydropower and Sihwa wind power for the first time in the public sector in May 2005. The project is the first case among local CDM projects in its independent promotion without investment from leading nations.

In March 2007, K-water managed to position itself as an environment-friendly corporation with nation's best records in the field of CDM projects by registering four CDM projects in the fields including tidal power, small-scale hydropower and wind power generation and by beginning the trade of carbon emission. K-water will not satisfy with the achievement so far, but we will double our efforts for continuous development of the new and renewable energy and to create the new CDM projects to activate CDM projects in response to the UN Framework Convention on Climate Changes.

**:: Efforts to reduce greenhouse gases and air pollutants in order to prevent global warming**

The water purification process does not discharge those materials destructive to the ozone layer such as Freon gas, and regular safety checks are being conducted in order to prevent leakage of Freon gas included in the air conditioning products within buildings. Moreover, although there is no manufacturing process which discharges air pollutants directly, efforts are being made in order to reduce oil consumption by reflecting it on the environmental goal in order to minimize air pollutants which may be discharged by the use of Gasoline and Kerosene consumed for the operation of the workplaces. Upon analysis on the environmental impact following daily commuting and business trips by staffs, findings showed that some 3,468kg of air pollutants including SOx were being discharged, and we are carrying out a car pool system, no-driving day system, etc. in order to minimize such an environmental impact.

| Status for air pollutants discharged in 2006 | (Unit: kg)

| Minute dust | SOx   | CO    | HC  | NOx   |
|-------------|-------|-------|-----|-------|
| 257         | 1,731 | 3,421 | 862 | 9,151 |

| Environmental impact resulted from movement of staff | (Unit: kg)

| Minute dust | SOx | CO    | HC | NOx |
|-------------|-----|-------|----|-----|
| 15          | 105 | 2,982 | 4  | 362 |

**INTERVIEW**

Jung-Cho Hong  
Deputy Head of  
CDM Project Team



**© Leading sustainable development by developing and supplying environment-friendly energy**

Climate variation due to global warming and changes happening around the ecosystem is posing to the new threat to the human beings. Starting from the next year, a period of mandatory reduction on greenhouse gas targeting 38 developed nations will be set off according to the Kyoto protocol, and it is forecasting changes into the global system for carbon economy hereinafter. Korea is showing the highest increase in its energy consumption among OECD nations while it took the 9th place in the world in terms of the amount of discharged greenhouse gases. Active measures are sought to prepare strategies in preparation of its second designation as a nation for obligatory reduction of greenhouse gases and for developing new renewable energy in order to secure Certified Emission Reductions (CER). In the upcoming system for carbon economy, corporations or countries that possess environment-friendly technologies and adapt to the new project environment will become capable to continue to growth. Korea is working hard towards developing and widely spreading environment-friendly energy and launched the National Energy Committee presided by the President in November 2006, thus making commitment to bring up the distribution of new renewable energy up to 9% by 2030 through the "Energy Vision 2030".

K-water is actively pursuing the development of new renewable energy which includes hydraulic, tidal, wind and solar powers. Furthermore, we are actively corresponding to the Climatic Change Convention by connecting the effect on reduction of greenhouse gases with CDM projects. Especially, with the successful signing of the Emission Reductions Purchase Agreements (ERPA) on small hydraulic power CDM project last May, we have managed to secure the first ever trading results among unilateral CDM projects locally. K-water is leading sustainable development as a corporation for environment-friendly water management by further reinvigorating the CDM project corresponding to the sustainable development of new renewable energy and the Climatic Change Convention.

# Energy Conservation

K-water strives to save energy through continuous management of electric power consumption and improvement of facilities.

## :: Energy Consumption

The total energy consumption during 2006 was 203,000 TOE, which was decreased by 5.2% compared to last year. Most of this consumed energy consisted of electricity used for intake and supply of water, as well as operation of pumps in water boosting stations. The direct greenhouse gas emissions from consumption of gasoline and gas amounted to 26100 CO2 tons and the indirect greenhouse gas emissions from consumption of electricity and recorded 395800 CO2 tons. Moreover, other indirect greenhouse gas emissions amounted to 1851000 CO2 tons as a result of movement by staff including business trips and daily commuting of employees.

## :: Efforts for Saving Energy

Saving energy is very helpful for raising our competitiveness such as improving air quality, reducing costs of water production, etc. In order to enhance the efficiency of our energy consumption system, K-water has evaluated the efficiency of energy usage from the stage of reviewing and designing various facilities, and we have also intensified our management for electric power consumption at existing facilities. In particular, we have concentrated our efforts in strict management of electric power consumption as this is the largest portion of our costs in the water supply business. However, electrical power consumption increased by 0.1% in 2006 compared to 2005. This is due to an increase in electrical power consumption by the increased amount of water supply in the pipe ends from the metropolitan area.

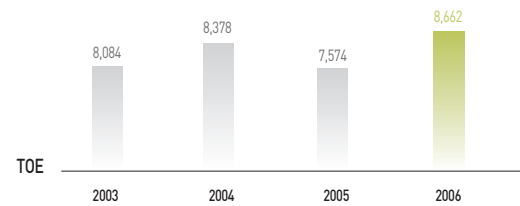
| Energy-saving programs        |   |
|-------------------------------|---|
| <b>Management Focus</b>       | <ul style="list-style-type: none"> <li>In buildings - Flexible operation of air conditioner and heater temperature                             <ul style="list-style-type: none"> <li>- Program for control of direct load</li> </ul> </li> <li>On transportation - Abiding by regulations for no driving day                             <ul style="list-style-type: none"> <li>- Activating a car pool system</li> </ul> </li> <li>For PR and training - Expanded operation of the energy savers                             <ul style="list-style-type: none"> <li>- Monitoring status of energy conservation</li> </ul> </li> </ul> |
| <b>Water Supply Focus</b>     | <ul style="list-style-type: none"> <li>Designating management goal by electricity source unit</li> <li>Management effort by electricity source unit                             <ul style="list-style-type: none"> <li>- System improvement including revision of Korea Electric Power Corporation's electricity supply regulations</li> <li>- Optimizing operation and management at clear and distributing well</li> <li>- Designing the new technology and optimal process for low energy consumption</li> </ul> </li> </ul>   |
| <b>Power Generation Focus</b> | <ul style="list-style-type: none"> <li>Management of in-house electricity consumption</li> <li>Management of in-house electricity reduction                             <ul style="list-style-type: none"> <li>- Facilities improvement including elevator winch</li> <li>- Using natural lighting and putting out window lighting</li> <li>- Education campaign for energy conservation etc.</li> </ul> </li> </ul>  |

### Accomplishments of energy-saving programs

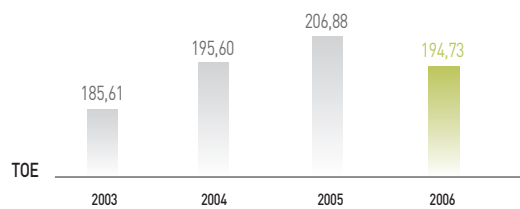
- Reduction of electricity cost by managing the program for control of direct load (KRW 5 million)
- Reduction effect by managing electrical power consumption on waterworks (KRW 3166 million)
- Saved amount of 3265000 kWh for in-house electricity in power generation business

### Direct energy consumption

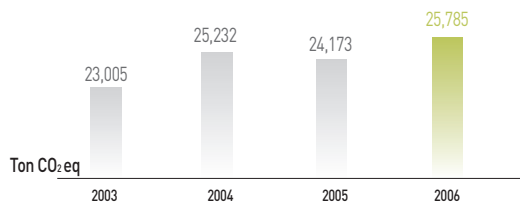
※ TOE = Ton of Equivalent



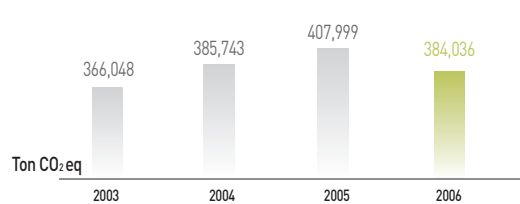
### Indirect energy consumption



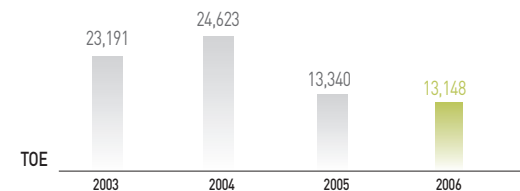
### Indirect CO2 emissions



### Direct CO2 emissions



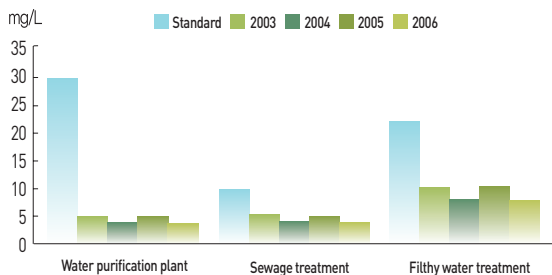
### Energy Savings by implementation of the energy-saving programs



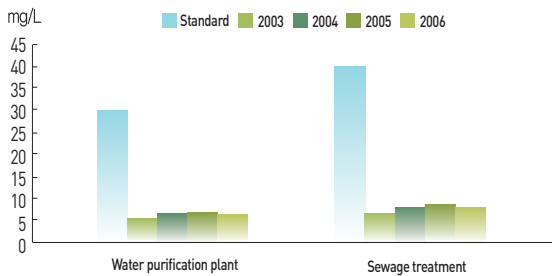
# Prevention of Water Pollution

K-water has enforced our own environmental standards which are far stricter than the corresponding legal standards for preventing water pollution and protecting the ecosystem on the discharge area.

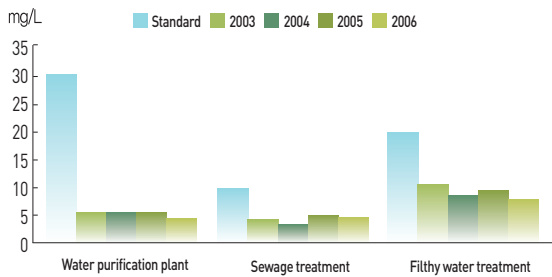
## BOD



## COD



## SS



## Management of Discharged Water

Since the amount of water discharged and its quality from the water purification plant and sewage treatment plants may have a considerable influence on the river water quality and the ecosystem, K-water is applying strict management standards beyond the legal requirements, and the quality of discharged water is continuously being monitored in order to minimize the impact to the ecosystem on the water discharge area and to conserve the water quality at the downstream. Moreover, the quality of the discharged water has been selected as a core index for the environmental goal and environmental performance evaluation for the sites of dam project operating waterworks facilities and sewage treatment facilities, and such results have been reflected as divisions' assessment criteria since 2004.

The status for the quality of discharged water in 2006 is as follows.

### Water purification plants

Average quality of the discharged water at water purification plants in 2006 was enhanced to BOD 3.0mg/L, COD 5.5mg/L, SS 4.4mg/L, showing the improvement from 2005. It is within 15% of the basis of discharge taxes levy, BOD 30mg/L, COD 40mg/L, and SS 30mg/L.

### Sewage treatment plants

Average water quality of the discharged water from 14 sewage treatment plants currently being operated in 2006 was BOD 2.2mg/L, COD 7.0mg/L, SS 3.2mg/L, which was a mere 22%, 18%, 32% of the reinforced water quality standard for discharged water based on specific regions including the clean area which was BOD 10mg/L, COD 40mg/L, SS 10mg/L, respectively. Moreover, K-water is also assuming leadership in enhancing the water quality of discharged water with the optimal means of operation using the self-developed sewage treatment program (PASS2).

### Simple Sewage treatment facilities

Average water quality of the discharged water is BOD 7.6mg/L, SS 7.0mg/L, which is within 37% of the legal requirement of BOD 20mg/L, SS 20mg/L.

| Discharges from the sewage treatment plants (2003~2006) |

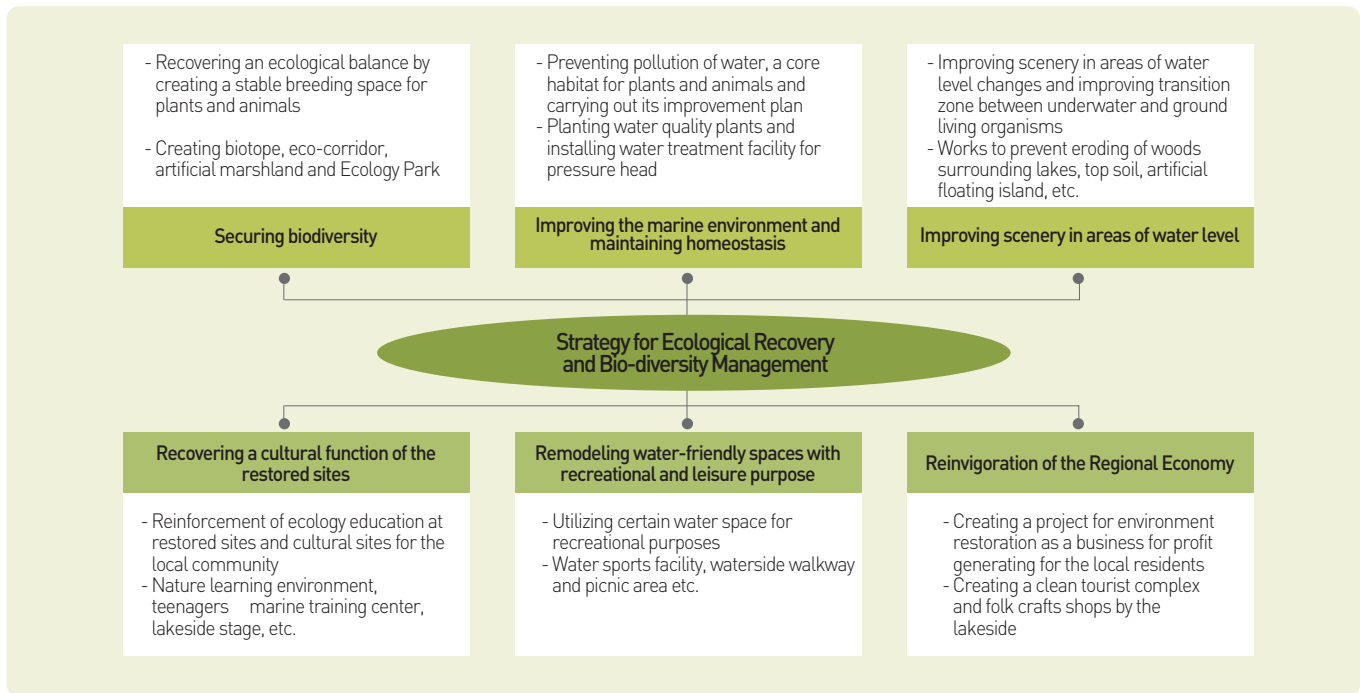
Unit: m<sup>3</sup>/day

| Project site | Yongdam dam |        |          | Daechung dam |       |          |        |      | Chungwon-gun |        |       | Chilgok-gun |        | Busan city |
|--------------|-------------|--------|----------|--------------|-------|----------|--------|------|--------------|--------|-------|-------------|--------|------------|
|              | Jin-an      | Jangsu | Jang-gye | Boeun        | Nesok | Samseung | Hwabuk | Maro | Nesu         | Buyong | Miwon | Oe-gwan     | Yakmok | Dongbu     |
| 03           | 2,159       | 648    | -        | 8,412        | 880   | 340      | 165    | -    | -            | -      | -     | 12,148      | 9,983  | -          |
| 04           | 2,328       | 732    | 607      | 7,965        | 918   | 284      | 158    | -    | -            | -      | -     | 10,395      | 8,216  | -          |
| 05           | 2,425       | 1,086  | 818      | 7,872        | 1,260 | 267      | 171    | -    | -            | 945    | 654   | 9,976       | 8,840  | -          |
| 06           | 2,363       | 946    | 1,033    | 7,193        | 1,277 | 252      | 163    | 356  | 3,761        | 1,942  | 610   | 21,736      | 14,298 | 46,579     |

Note) No data for discharges prior to the consignment

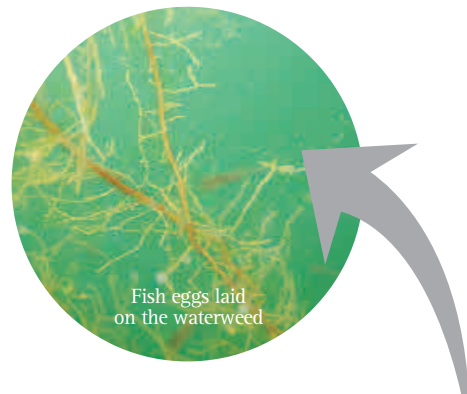
# Protection of Bio-diversity

K-water gives thoughtful consideration to the environment to minimize environmental changes and to maintain a sound ecosystem.



## ❖ Preserving a bio-habitat environment and providing a space for nature education

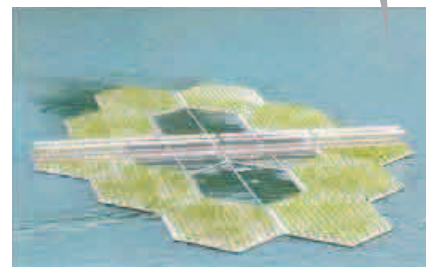
Diverse activities from stages of design to construction and management are being carried out for the preservation of the bio-habitat environment such as minimizing destruction to the natural environment from development projects, restoring the destroyed ecosystem and creating an enhanced ecosystem. Not only for insects, amphibians, reptiles and birds, but also for the habitat of otter that is a natural treasure, pile of stones, heap of wood, ecology pond and artificial marshland and the natural river with water quality purification are being created while fish way and spawning ground are being set up for the protection of fish resources. Moreover, in order to stop extinction and fragmentation of the ecosystem and improve further the ecosystem from an integrated perspective, the passageway for wild animals previously cut off due to a diverging road has been created, and the best efforts are being made at completely ecological integration of both left and right sides of the dam through afforestation of the rear side of the dam which creates harmony with the surrounding plant communities.



| Fish habitat of the Jang-heung dam |



| Overpass-type Wildlife Corridor at the Pyung-lim dam |



| Fish spawning facility at the In-ha dam |



**∴ Preserving natural cultural heritage within construction site**

A huge old tree whose existence was endangered due to drainage construction of the Gulpo stream was transferred and preserved. The 250 year old tree is an important regional cultural heritage as a symbol of worship to the people, which provided places for endless rest. By naturalizing the tree into the newly prepared park, we were able to enhance the love for the hometown and preserve excellent life characteristic resources. Moreover, in other construction projects including the one at Buhang dam, regional cultural heritage will be succeeded and developed to seek the development of water resources in tandem with the regional community.

**∴ Monitoring environment changes in project**

In order to identify environmental impacts and changes resulting from the project, the project sites including Gunnam flooding control facility, Gulpo stream drainage, Buhang Dam, Hwabuk Dam, Sungduk Dam, Pyunglim dam and Jangheung Dam have been carried out monitoring of environmental changes on the status of animals and plants, water quality, air quality, noise, vibration, changes to the crops, etc. Although fry stocking program focused on economical fish species are

being carried out per multipurpose dams every year, due to insufficient review on the selection of fish species appropriate for the dam water environment and for its low effectiveness, a research on the 「Method of Conservation and Preservation of Fish Ecospecies in the River and Lakes」 was carried out. First by selecting endangered species within the Geumgang's watersystem and fish species for restoration among Korea's indigenous species, we have succeeded in the fry production using external fertilization in October 2005. Furthermore, we have carried out stocking of fry to restore the ecology (14000 Black shiners and 6000 Coreoperca herzi), and the outcome of the project was found out to be successful upon monitoring the returning fish species by the capturing investigation and underwater filming.

Intake of water from the rivers for the purpose of producing tap water may possibly bring about changes in the ecosystem which include lowering of water levels from the intake source including dam and rivers and reduction of fish resources as a result. Recently, with construction and operation of the Sueo Dam and Daap water intake facility, the estuary of the Seom-jin River is being turned into the ocean thus bringing about changes in the ecosystem which includes reduction of fish resources. Thus, the research and investigation is being carried out on the site in order to identify an accurate cause of the phenomenon.

**| Status of rare and endangered species at major dams |**

| Classification | Rare and endangered species  |
|----------------|--|
| Soyanggang Dam | 1 fish including yellow mandarin fish, 2 plants including paeonia ovovata, 3 amphibians and reptiles including short tailed viper snake, and 7 mammals including a wildcat |
| Namgang Dam    | 2 insects including Anax nigrofasciatus, 1 fish including Pseudobagrus brevicorpus, otter, and 1 bird including kestrel.   |
| Chungju Dam    | 4 plants including buckler fern, 1 amphibian and reptiles including short tailed viper snake, and 2 mammals including flying squirrel                                      |
| Juam Dam       | 5 amphibians and reptiles including freshwater tortoise, and 3 mammals including marten  |

# Recycling Resources and Waste Reduction

K-water is fulfilling the responsibility in order to set up sustainable nature-circulating society by promoting recycling of waste materials.

## :: Sludge from Waterworks and Sewerage Treatment Systems

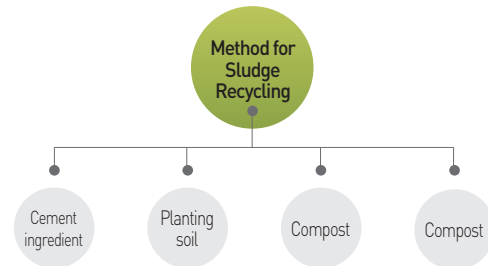
The sludge produced in the course of water treatment of 1m<sup>3</sup> was 75 g and the quantity of sludge produced from sewage was 8300 tons in 2006. 94646 tons, 89.2% of out of this, were recycled into cement, filling materials, planting soil. The total quantity of sludge produced in the water purification process in 2006 amounted to 9172 tons, 2734 tons, 30% out of this, was recycled into planting soil, cement ingredients and compost, and 6,438 tons have been discharged to the seas. Currently, recycling facilities are being built for businesses discharging sludge to the seas, and the sewage sludge from all sewerage treatment plants managed by the Korea Water Resources Corporation will be recycled 100% after 2008 when the construction will be completed. Especially, following the restriction against discharging sludge to the seas (admission to the protocol of London Dumping Convention in 1996), discharging sludge from water purification plants to the seas has been banned with amendment of enforcement regulations in the Maritime Pollution Prevention Law (Ministry of Maritime Affairs & Fisheries Regulations No. 330, on February 21, 2006) from January 1, 2007, and K-water has managed to recycle 100% of sludge generated from water purification facilities since November 2006.

## :: Recycling of Construction Waste

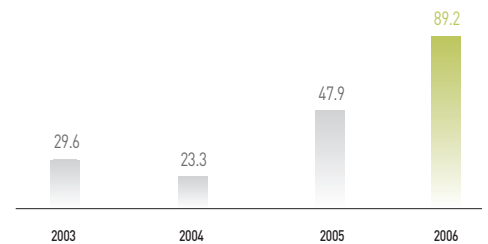
K-water is trying its best to preserve the national environment and improve the resources conservation and public welfare by appropriate and environment-friendly handling of ever increasing construction waste and by continuous recycling efforts. As a result of these efforts, 46623 tons of construction wastes have been recycled as road and park site preparation soil, and 14304 tons of wood wastes were also processed into wood chips to be distributed to local residents for compost and firewood for heating. Proactive efforts will be made by active pursuit of reduction policy which will minimize wastes at its generation stage and further expand the scope of recycling for the settlement of resources circulating society. In order to achieve this, continuous efforts will be given to predict the amount of waste generated per processes on the site, to set up their corresponding plans for treatment, and to maintenance and manage accurately discharge conditions and timing in the waste treatment plan.



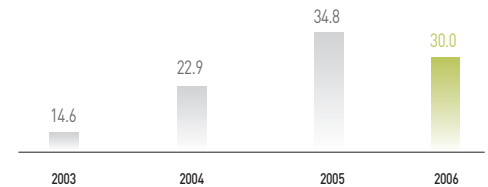
| Producing artificial soil using construction wastes |



Recycling of sludge from water purification plants (%)

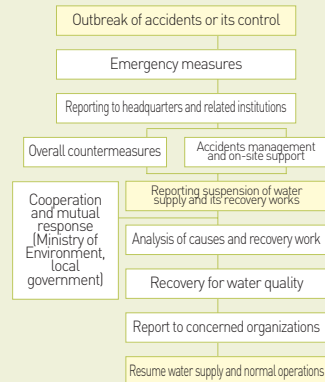


Recycling of sewerage sludge (%)



## :: Discharge management of hazardous materials

We are abiding by the related regulations through strict handling of the hazardous materials generated from the project site. So far, there has been no incident in leakage of major hazardous materials. Moreover, a capability of management for crisis preparedness is being developed by establishing a crisis preparedness manual in preparation for outbreak of various accidents including leakage of hazardous materials and following regular exercises.



| Response system against leakage of hazardous materials |

# Performance for Environmental Management

We set up practical targets for environmental management, and continuously improve our environmental performance.

## Practical targets for environmental management

K-water has been continuously improving the environmental performance through the dynamic circulation process of P(Planning), D(Deed), C(Checking) and A(Amendment) reflecting ISO 14001 requisites, and in 2005, Having achieved 96% of our 33 practical targets in 2005, we have continued our efforts to raise our achievement rate. In 2006, we set up 31 environmental targets in 8 major areas and achieved 98% of them.



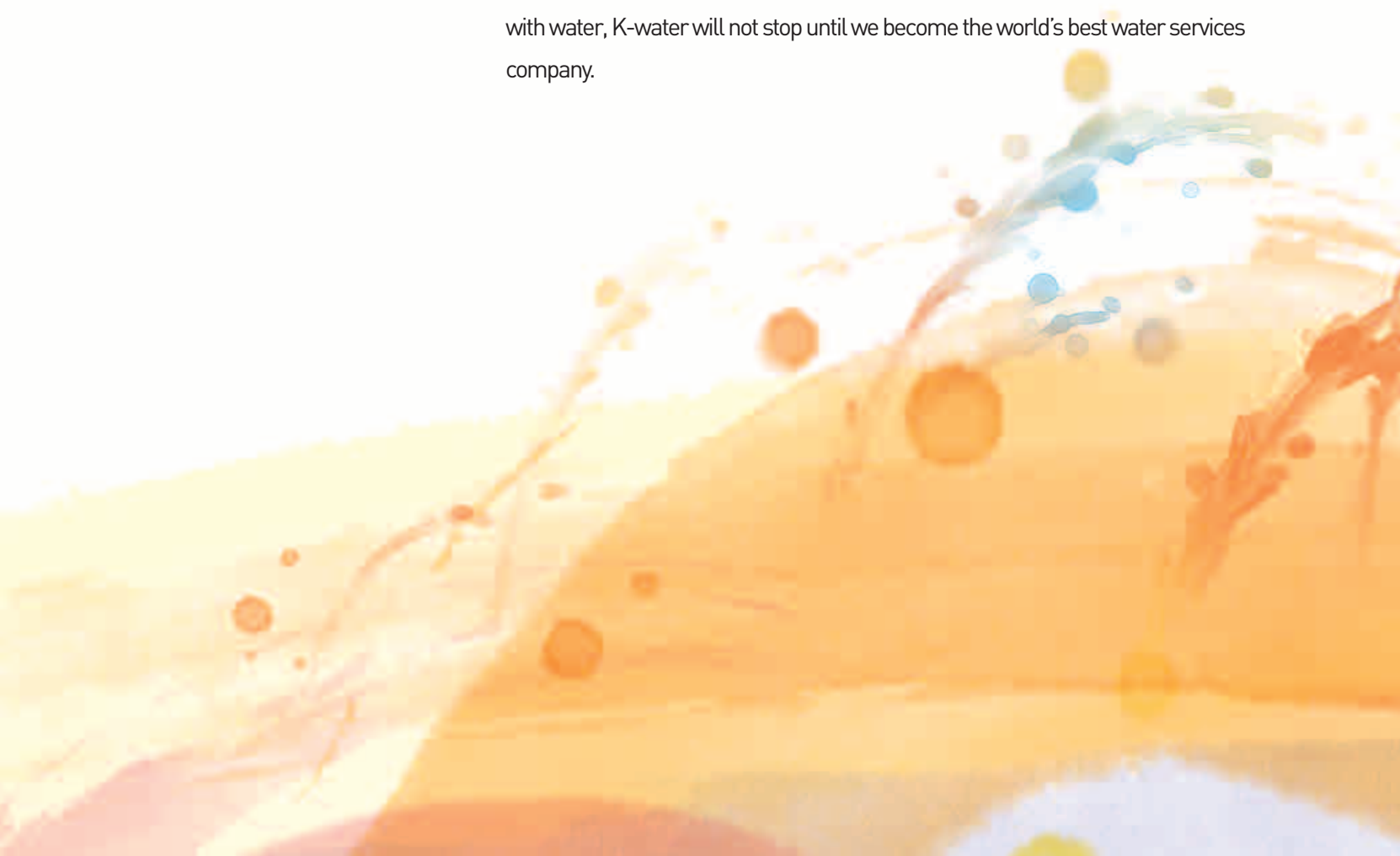
### | Achievements of Environmental Management in 2006 |

|   |   |  |
|---|---|--|
| <b>Environment-friendly development and management</b>              | 2 cases of Design for Environment (DfE)   | Improvement of quality of dam water (COD 2.4mg/L in average)   |
|   | 30 cases of Environmental impact assessment by project  | Improvement of water quality (Purified water: 0.1 NTU 98%; settled water: 1 NTU 94%)                           |
|   | 2 cases of environment-friendly development   | Sewage treatment rate in upstream of dam (44% ⇒ 48%)   |
|   | 6 cases of environment-friendly management of facilities  | Solution on distrust for tap water: supply of water of 6.867 million bottles                                   |
|   | 57% achieved in management of revenue water rate at regional waterworks   | real-time exposure on water quality at 28 facilities   |
| <b>Reduced consumption of resources and recycling</b>               | KRW 121.5 billion of environmental cost, KRW 72.8 billion of environmental investment   | <b>Production and consumption of environment-friendly products</b>   |
|   | Reduction in cost of chemicals for purification of water (KRW 5.8/m <sup>3</sup> in unit requirement of chemical)   | Production of hydropower energy (2,183 GWh)  |
|   | Electricity consumption at project sites<br>- reduction of 3,265MWh (7.19%) in dam project<br>- increase of 35,000MWh/m <sup>3</sup> (3.8%) in water services                       | Green purchasing (KRW 3.3 billion → KRW 6.3 billion)   |
|   | Reduction in oil consumption (LNG 451000 m <sup>3</sup> , Gasoline 684000 L, Kerosene 308000 L) recycling of waste materials  | <b>Reduction in discharge of pollutants</b>  |
|   | Recycling of waste<br>- Recycling of construction waste (92%)<br>- Recycling of floating waste matters from dam (36%)<br>- Recycling of sludge from water purification plants (89%) | Improvement of discharged water quality from water purification plant (BOD 3.0mg/L, COD 5.5mg/L, SS 4.4mg/L)   |
| <b>Environment, safety and public health control</b>                | Reduction in food waste (discharge of food leftovers generated from headquarters 190kg/day)   | Control of discharged water quality from waste water treatment facility (BOD 7.6mg/L, SS 7.0mg/L)              |
|   | Reduction in usage of backwash water at water purification facilities (1.5% of clean water production)  | Reduction in discharge of sludge from water purification plants (discharge of sludge: 0.075kg/m <sup>3</sup> ) |
|   | Reduction in usage of waterworks following application of heavy water (9000m <sup>3</sup> /year)  | <b>Strengthening ties with civil society</b>   |
|   | Noise and vibration control: 60 dB or less (Pumping station: 90 dB or less): Proper   | Environmental volunteer activities (86 times/ 9,240 hrs)   |
|   | Compliance with environmental laws and disaster prevention penalty for violation of environmental laws: 0 won<br>Accident in environment, safety and public health: 0 cases         | Implementing cooperative programs with nongovernmental organizations (operating councils)                      |
| Education on environment, safety and public health (15hours/person) | Tour of inspection on water resources corporation (for 19,407 people/ 404 groups)   |  |
|   | Promoting Forest Management Program (completed 2 dams: area 3,063ha, project cost KRW 376 million)  |  |
|   | <b>Other activities for environment management activities</b>   |  |
|   | Opening of performances for environmental management (publication of report for sustainable management and registration of GRI)   |  |
|   | Development of water resources in underdeveloped countries (5 overseas projects/ KRW 10.5 billion)  |  |

With People :: Society

# Human in Harmony

Precious friends giving and receiving love through sharing. All of us living together in the world are friends. To be a wise corporation preparing for the future of Korea, K-water will be a friend to all Koreans. To provide a happy future with water, K-water will not stop until we become the world's best water services company.







# Socially Sustainable Management Strategy

We strive to achieve a socially sustainable management by building a win-win partnership according to strategies for value promotion of each concerned party.

## :: Execution of Strategies for Value Promotion of Each Concerned Party

K-water strives to execute the strategy for socially sustainable management established in 2005. K-water strives to reflect the execution plan to the new vision and strategy, and promote values of each concerned party.

### Transparent & Ethical Management

K-water strives to establish a transparent and honest managing action and a process. We will lay the foundation for a culture of ethical management within the daily works and lives of executives and employees.

### Human Rights Management and Safety & Public Health

K-water considers the human rights, safety and public health of every single employee in all establishments, and works hard to protect the rights of minorities such as the handicapped, women, etc.

### Human Resources Management

K-water supports the career development of every employee starting from joining of the corporate until retirement, taking into consideration the individual's competence and value of life.

### Customer-Oriented Management

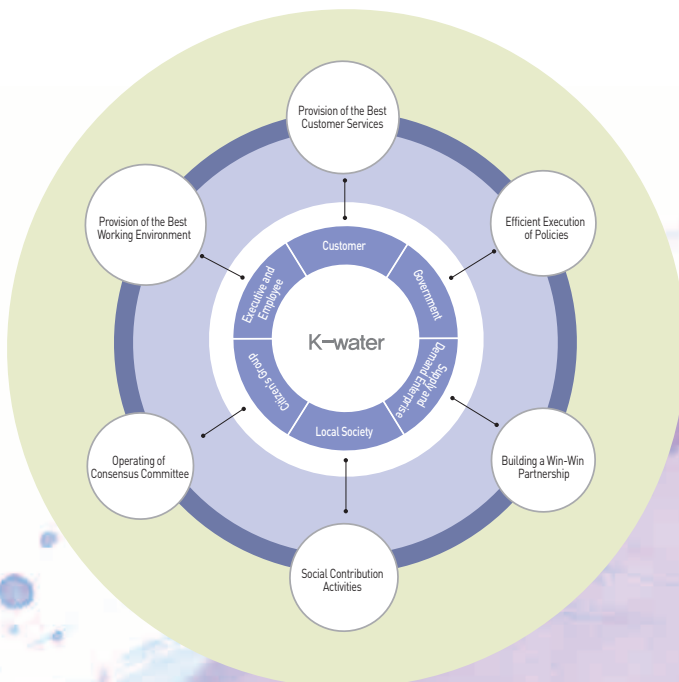
K-water always thinks our customers deserve the best, and gives pleasure by providing clean water and the best service for water provision.

### Win-Win Partnership

K-water has built a firm partnership with the supply and demand enterprise and is practicing the win-win management by collaboration such as cooperation with the construction company and expansion of purchasing products of small and medium enterprises.

### Local Contributions

K-water runs a variety of collaboration programs for local residents and strives to contribute to the development of local societies and further the country through social contribution activities with the theme of 'water.'



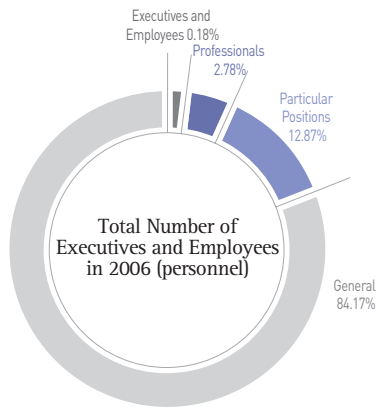
| Index of Estimation for BSC related to Socially Responsible Management |

| Classification               | '06  | '07~'09           | '10~'12           | '13~'15           |
|------------------------------|------|-------------------|-------------------|-------------------|
| Customer satisfaction (NCSI) | 87   | 90                | 90                | 90                |
| Transparency Index           | 9.08 | over 9.0          | over 9.0          | over 9.0          |
| Social Contribution Rank     | A1   | Maintenance of A1 | Maintenance of A1 | Maintenance of A1 |
| Social Contribution Index    | 78.7 | 80.0              | 85.0              | 90.0              |
| Core Labor Index             | 22%  | 25%               | 28%               | 30%               |

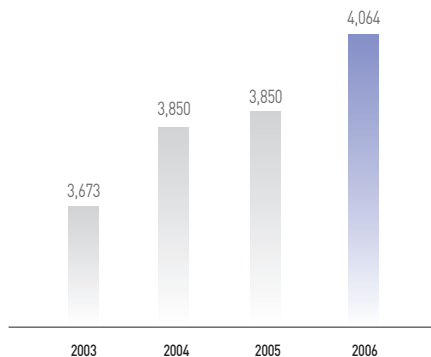
Core Labor Index: (Ph.D.\*1.5+Master\*1+Professional Engineer\*1.5+6 Sigma Belt\*1) / Total Number of Employees

# Happy Workplace

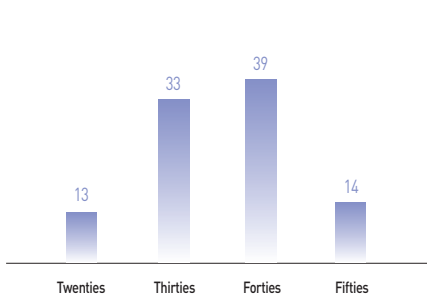
We build a workplace that makes all executives and employees happy.



Status for Executives and Employees (personnel)



Composition by Age (%)



## •• Status for Executives and Employees

Including the seven executives, the total number of employees is 4064, which increased by 4.7% since 2005. Due to the government's policies for solving the unemployment problem of youth and to the change in employment in accordance with undertaking of district waterworks, the number of new positions has increased. The number of new employees is 110 in total, with 73 (66%) hired via open employment. The gender ratio among the employees of 2006 is 91% male to 9% female. However, thanks to having enacted a system of female employment since 2003, the number of new female employees has reached 35% in 2006 and is expected to increase further.

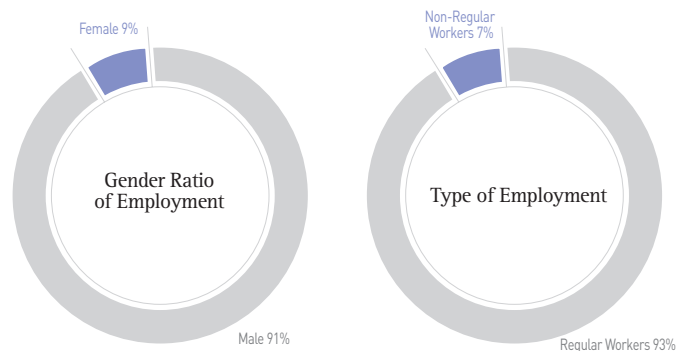
## •• Improvement of Working Environment for Non-Regular Workers

Today of 2006, the ratio of non-regular workers has reached 7% of total number of employees. It is precisely for this reason that we have established a comprehensive management plan for non-regular workers. Employees have been categorized according to their work into the uncomplicated jobs and those resembling regular works, which were further categorized into indefinite contract workers and definite contract workers. As a result, 217 non-regular workers among the total of 752 have been converted by degree to indefinite contract workers, bringing stability to the lives of those workers and enhancing their competence.

- Indefinite Contract Worker: A worker without a specified period of employment who is a stabilized labor force without the refreshment of a contract period (Government guidelines)
- Definite Contract Worker: A worker with a specified period which cannot exceed two years (Government guidelines)

## •• Outsourcing of Non-Core Works

Since 2001, K-water has been outsourcing non-core tasks such as facility management, guard, uncomplicated work, information management and so on. Instead, K-water has been focusing management resources on core tasks, increasing the competence of the entire organization. 1042 outsourcing people have brought about a cut in labor costs in 2006. Labor forces saved by outsourcing are utilized in new projects such as local waterworks project, foreign projects, etc.

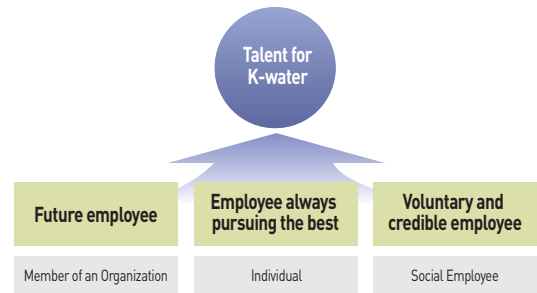


# Creative Human Resources Management

HR-BANK, an integrated system for managing human capital, will increase the competence in human resources through managing human resources based on work and ability.

## :: HR-BANK for Human Resources Management

HR-BANK is our Human Capital Management System (HCMS), which infers the reservoir of human resources and develops competent individuals. The HR-BANK was established by utilizing the ERP of the German company SAP, focusing on securing, arranging, and developing the talent. Through the HR-BANK, basic functions of human capital management and data have been integrated to increase impartialness and transparency in personnel management. Also, it is now possible to utilize the accumulated data to bring about the more scientific and systematic personnel development as well as the promotion for competent human capital.



## :: Competency Reinforcement Plan

By providing employees with various education programs, it is possible to develop each individual's ability. This program is a Competency Reinforcement Plan (CRP) which allows each employee to increase his/her proficiency in a certain field by himself/herself. The basic concept of CRP is the T-style human capital development, a T-style employee being an individual with professional knowledge of a field as well as a broader knowledge and perspective of related fields. This program educates on a professional field from the beginning of joining in the company for a certain period, followed by a broader education about the overall process of the company after becoming a member of the board.

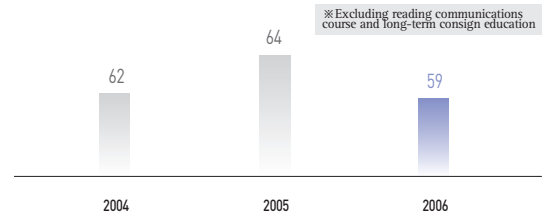
|                                    |   |
|------------------------------------|---|
| <b>Job Professionals</b>           | To develop all employees into job professionals, develop PhDs, masters, engineers and 6 Sigma executive individuals that can initiate the settling of a job process-oriented organization culture |
| <b>Global Experts</b>              | To ensure our global competency and promote foreign businesses, develop the talent for overseas studying and training   |
| <b>Professional R&amp;D Forces</b> | Initiate execution of technology road map (TRM) for securing core technologies, secure and enhance the quality of professional researchers by expanding international technology exchanges        |

CRP: A process of educating individuals in order to strengthen individual and organizational competency, including computer systems and education programs after consulting with a supervisor about the individual's current ability and the job field in interest

## :: Competence System-Base Education

Our education system is based on the system of individual's abilities. There are three categories; general competency, leadership competency, and job competency. The number of courses has increased from 271 in 2003 to 336 in 2006, and the number of employees enrolled in these courses such as ethical management course, global course, and job course has increased to 11,513 (annual), which increased by 114% comparing with that of 2003.

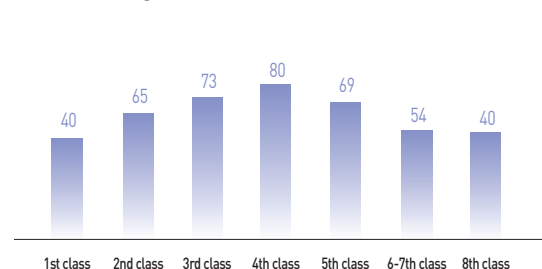
Annual Average of Education Hours per Person



### | K-water Competency Model |

|                              |   |
|------------------------------|---|
| <b>General Competency</b>    | Common factors shared and practiced by every employee<br>- Innovative, Sovereign, Customer-Oriented, Trustworthy  |
| <b>Leadership Competency</b> | Crucial competency for every leader (starting from team leader) for the purpose of achieving a strategic goal<br>- 30 competency pools in five fields (Employee, Organization, Alteration, Achievement, Confidence) |
| <b>Job Competency</b>        | Job Execution Competency: Individual characteristics and behavioral patterns demanded depending on the 83 standard jobs.<br>Job Proficiency Competency: Knowledge and skill required for each standard job          |

Annual Average of Education Hours for Each Class



# Impartial Personnel Management

We strive for impartial employment, transference, promotion and retirement management, ultimately leading to a higher quality of life.

## :: Customized Individual Employment

By abolishing various limitations by age, academic background, and gender, we have enabled an open employment where anyone can apply, providing an expanded opportunity for individuals with various abilities. Our unique test for verifying job abilities having been developed since 2006 has been applied from the employment of 2007. This test, K-water Attitude Test (KWAT), enables the more accurate employment of individuals appropriate for each categorized core competency as a part of the personnel management innovation.

## :: Fair Promotion

By using a personal directory which makes it possible to evaluate the proper job efficiency and MBO accomplishment information as the data for determining promotion, it has been possible for fair promotion of those employees with outstanding accomplishments and sincerity. Also, we ensured the objectivity of process for promotion determination by relieving the difference in promotion between job fields as well as contriving to harmonizing different generations in the formation of promotion committee.

## :: Fair Transfer

We strive to increase flexibility in human resources management by separately running a class and a rank through guaranteeing multiple

classes and ranks. By posting newly promoted employees at the actual job site, they can experience the importance of interface with customers. We reflect survey results regarding this high rank with job importance, proficiency and uniqueness resulting in a reinforced competition-based human resources system. Also, we take into consideration the desires of employees who have worked in remote departments such as backland sites, ensuring fairness in employee transfers.

## :: Fair Evaluation and Compensation

The monthly wage of a new employee is set at 270% of the legal minimum. All employees are subject to a periodic evaluation. Executives receive piece rates according to their accomplishments after closing a management contract with the president. For recipients of pensions, the first class employees are evaluated on department evaluation, while the second class employees are evaluated on their individual MBO evaluations in order to receive piece rates. Employees under the third class receive piece rates in accordance with the department evaluation.

## :: Retirement Management

In recent years, the number of retirees has increased, but the transfer rate has decreased. The total number of transfer was 66 in 2006, which only reaches 1.7% of transfer rate. Average age of retirees in 2006 was in the fifties for males and thirties for females.

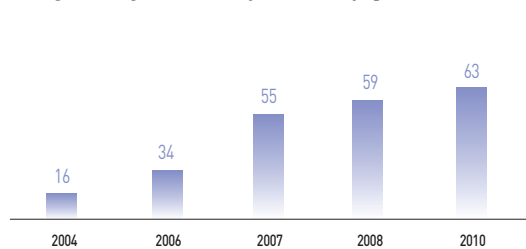
## :: Retirement Grants

We guarantee the immediate and total retirement grant payment, accumulating retirement grant complement and considering the average wage during 3 months in work and before retirement as stated in the Labor Standard Act. Retirement Pension Policy is enacted with the agreement of the Labor Union.

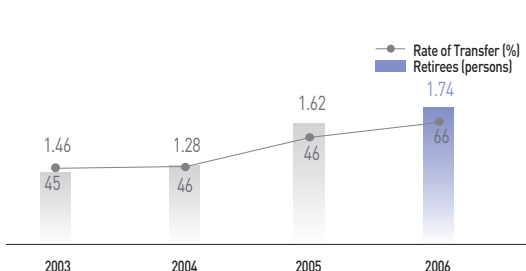
## :: Support Program for Retirees

With the introduction of Salary Peak Policy in 2004, the number of career changes has increased. For this, we run the 'Evergreen Program' to help salary peak subjects and the third class employees having 2 years before retirement to prepare for a new life by career education and consultation.

Change of Subjects for Salary Peak Policy (persons)



Retirees and Rate of Transfer



### | Evergreen Program |

| Subjects and Management  | Education Program                          |
|--|--|
| Subjects for Salary Peak   | Introduction to career change              |
| -Maximum 8 courses in 3 years                                    | Module 1: Finances, Real Estate            |
| -4 modules each executed every 6 months                          | Module 2: Re-employment, Inauguration      |
| -Annual average of 40 hours of education                         | Module 3: Practical Law, Taxation Business |
| Employees under the third class having 2 years before retirement | Module 4: Leisure, Volunteering Services   |
| -Open management of 4 modules during 2 years                     | Education 1 Month before Retirement        |

# Safety & Health of Executives and Employees

We strive to make a safe and healthy workplace.

## :: Health Examination

According to the results of health examination in 2006, healthy groups (A and B class) increased from 88.15% to 88.3% compared with 2005, and commented groups (C2 and D2 class) decreased from 11.9% to 11.7% compared with 2005. The ratio of diseased patients among the total examinees has decreased from 3.4% in 2005 to 3.2%, which shows some improvement. However, most of the people included in the commented groups are diagnosed with geriatric diseases such as hypertension, diabetes, and liver and intestinal diseases which call for more attentive stress care. There is no outstanding job field which is particularly hazardous interms of accidents or occupational diseases. We have improved a health care system to manage more systematically the results of health examinations and related health information during work. Moreover, we have expanded health programs such as classes for quitting smoking, obesity and mental health care, mental health programs, etc. in order to prevent diseases and continue health care.

## :: Clinics within Company

We run dental and oriental medicine clinics within the company for employees and their families. Also, we run a filial piety clinic jointly by oriental clinics and Water Love Volunteers for local aged people as social services. We implemented dental utensils such as Panorama X-Rays and a Unit Chair to improve the quality of health care in 2006, while preparing a welfare center to accommodate more health clinics by remodeling of the building.

## :: Improvement in Work Environment

To improve the work environment within the company, we have established a criteria for appropriate space and equipments in five fields offices, cafeterias, fitness centers, employee lounge, and employee rotation systems to make a more pleasant work environment model.

## :: Improvement in Industrial Disasters

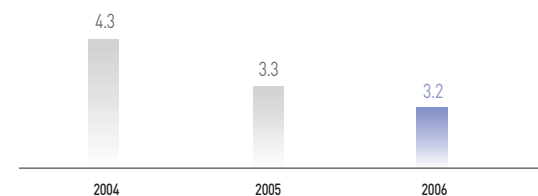
For the safety of employees, through reinforcement of industrial safety and health education, safety management at construction sites, and prevention from accidents during internal sports competitions, the rate of industrial disasters has decreased from 0.31% in 2005 to 0.26% in 2006. Importantly, we have decreased the number of accidents during internal sports competition which was the major cause of company accidents in 2005.



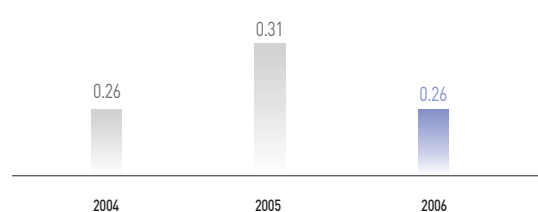
| Opening of Culture and Sports Center |



Diseased Employee (%)



Industrial Disasters (%)



※ Formula: Number of industrial accidents / Total Number of employees

# Stress Management

We run the Employee Assistance Plan (EAP) for executives and employees.

## :: Employee Assistance Plan (EAP)

We offer the EAP by professional consultant such as clinical psychologists, therapists and organizational therapists for employees with private matters to help them solve their own problems.

## :: Purpose and Background of EAP Introduction

We strive to enhance work satisfaction by introducing EAP to cope with stress induced from various reasons such as increase in work load, maladjustment in the organization, etc. Due to increases in work load in accordance with cutbacks following IMF, increases in stress induced by governmental innovation on government enterprises, and increases in the number of following diseased patients, the background of introduction the labor union and the company agreed upon the introduction of EAP in 2005, reintroducing the EAP system associated with a professional institution from 2006.

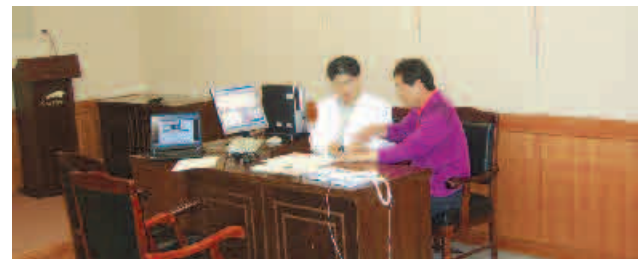
## :: Company-Management for Employees Stress

One of the most efficient ways to solve the high stress of employees is to bring in help of experts. Accordingly, we have introduced the EAP to examine the stress of employees and run group therapy for stress management to care for employees with extremely high stress, enabling individual stress management via individual stress consultation with an expert.

## :: Expectation for High Spirit and Productivity

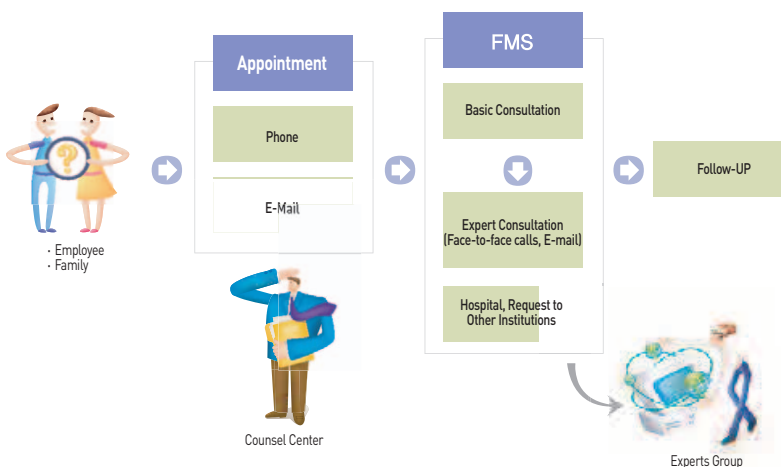
The EAP makes it possible to solve conflicts within a family such as child

| Company  | Employee   |
|--|--|
| Organizational Management  | Individual Management  |
| <ul style="list-style-type: none"> <li>-Organizational diagnosis</li> <li>-Mental health care</li> <li>-Managing precedents</li> <li>-Manager education</li> </ul> | <ul style="list-style-type: none"> <li>-Psychological counsel</li> <li>-Mental health care</li> <li>-Lectures, seminars</li> <li>-Relationships within the organizational</li> </ul> |



| Scene of Employee Stress Examination |

problems and spouse problems through professional consultation and immediate crisis intervention required for emergent emotional stability. As a result, the organization can ensure and continue a stabilized labor force and expect improvements in productivity.



### Stress Examination

- Subject: All employees
- Execution: annual survey examination and medical equipments examination
- Management: Survey, Equipment examination

### Individual Consultation

- Subject: aspirants among all employees (including spouses)
- Execution: Counseling once a week (demanded via e-mail or phone)

### EAP Homepage Management

- Subject: Employees and family members in a direct line (including spouses)
- Execution: Opening an exclusive homepage:
  - Oasis→Bulletin→Let's go together→Health care
  - Post latest information on managing and getting rid of stress

### Stress Management Program

- Subject: Aspirants according to results from stress examination
- Execution: Capacity - minor group with about 10 people
- Progress: Work according to degree of stress

# Win-Win Collaboration via Capital-Labor Conciliation

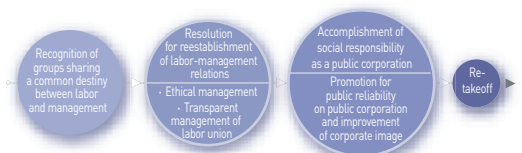
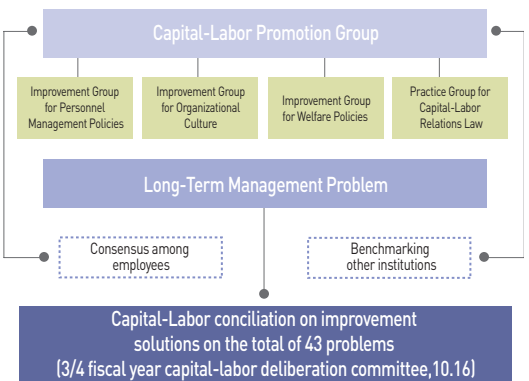
We strive to restore the win-win capital-labor conciliation to fulfill our social responsibilities.



| Manifesto for New Capital-Labor Relationship (CEO and Union Representative) |

| Basic Mind and Guidelines for New Capital-Labor Relationship |

|                    |   |
|--------------------|---|
| Common Values      | <ul style="list-style-type: none"> <li>Bilateral trust and spirit of sharing a common destiny</li> <li>Grow into the world's best water services company</li> </ul>             |
| Development        | <ul style="list-style-type: none"> <li>Take initiative for accumulating the global standard technology</li> <li>Increase competence and develop employees' abilities</li> </ul> |
| National Trust     | <ul style="list-style-type: none"> <li>Increase transparency and efficiency</li> <li>Public enterprise trusted by the nation</li> </ul>   |
| Sustainable Growth | <ul style="list-style-type: none"> <li>Establish ethics accepted by customers</li> <li>Lay the foundation for sustainable growth</li> </ul>                                     |
| Respect for Human  | <ul style="list-style-type: none"> <li>Workplace harmonizing work and life</li> <li>Create lively atmosphere</li> </ul>   |



⚡ Labor Union

The Labor Union, established in November 1987, is for employees under the third class and has adopted the Union Shop system by which an employee is automatically admitted on joining the company. Currently, there are 3004 members, representing of the total number of employees.

⚡ Capital-Labor Collaborated Safety and Health Committee

Capital-Labor Collaborated Safety and Health Committee run by K-water is managed as Capital-Labor Consensus Committee, consisting of 8-9 members from both Labor and Management. The Capital-Labor Consensus Committee deliberates on pending problems every fiscal year, striving to decrease conflicts through bilateral comprehension and satisfactory explanation, increasing productivity and employee welfare, leading to the common gain.

| Safety and Health Matters in Capital-Labor Consensus Committee |

- Establishment of Health Management System
- Clinic for quitting smoking and receiving obesity
- Introduction of EAP
- Body composition tests and exercise prescriptions

⚡ Advanced Notice via Collective Bargaining

Collective bargaining is practiced on important matters affecting employees such as work conditions. Under Article 21 of collective agreement (responsibility of notice), the Labor and Management must notify each other on occurrence of important matters such as alteration on article of association and work conditions.

⚡ Establishment and Operation of Capital-Labor Collaboration Promotion Team

We have selected 46 Capital-Labor Collaboration Recommendation Committee members in July 2006 and opened multiple workshops to deduce unfair customs and problems in personnel management, improvement on policies, improvement on organizational culture, and advancement for welfare policies. As a result, we have produced 43 solutions.

- Committee Chair: Co-Chair (Administrative Services Division Executive Director General Manager, Union chief vice-chairman)
- Committee Members: Same number of people from each Labor and Management (Head Manager and Manager in charge and vice-chief, Capital-Labor director and confederacy member)

⚡ Arrangement of Ground for Capital-Labor Conciliation

We hosted the K-water Capital-Labor Together Festival including music performances, sports competitions and other festivals for employees' families as an act of Capital-Labor conciliation. We opened a working culture competition among different areas to commemorate the 19th founding anniversary of the Labor Union in November 2006.

⚡ Manifesto of New Capital-Labor Relationship

In September 2006, the Labor and Management announced the New Capital-Labor Relationship pledging a firm resolution to fulfill social responsibilities as a public enterprise through ethical management and transparent Capital-Labor Union based on bilateral trust and collaboration pursuing the common destiny.



# Welfare Policies

We offer various welfare policies to increase productivity by motivating employees, increasing their quality of life and stabilizing the living foundation as well as the four major social insurances set by law.

## :: Stabilizing Living Foundation and Increasing Quality of Life

In order to solve housing problems due to nationally scattered waterworks, we provide boarding houses and company houses, and give loans for buying a house, ultimately providing for stability of housing and living status through purchasing a house.

## :: Maternity Protection and Work/Home Compatibility Support

For maternity protection, we implemented women's lounge and built a nursery within the company. We are working toward the improvement of child care programs, remodeling and expanding space in order to implement the company nursery, making work and home compatible.

## :: Family-Friendly Welfare

For individual welfare we run a welfare program for families to give them a strong impression and stable trust, increasing the actual productivity. Through the additional service for anniversary celebration and Family love Tour, employees are motivated to work and families are touched. Moreover, by admission to a culture organization, they can experience a high quality of culture and art.

## :: Customized Welfare System

In order to offer satisfactory welfare with limited budget, we introduce a customized welfare system which allows the employee to choose freely from the offered welfare items within a certain cost limit.

### | Operation of Welfare |

|   |   |
|---|---|
| <b>Stabilization of Living Foundation and Improvement in Life Quality</b> | <ul style="list-style-type: none"> <li>• Loan for buying a house</li> <li>• Clinic for quitting smoking and reducing obesity</li> <li>• English camp for children</li> </ul>  |
| <b>Family-Friendly Welfare</b>  | <ul style="list-style-type: none"> <li>• Family Day</li> <li>• Support for Family Love of various contents - Various culture festivals, company tours, anniversary celebrations</li> </ul>                                    |
| <b>Productive Welfare</b>   | <ul style="list-style-type: none"> <li>• Abolishment of Wednesdays Sports Festival for the increase in productivity - to 40 hours a week working policy</li> </ul>  |
| <b>Reinforcing Welfare According to Class</b>                             | <ul style="list-style-type: none"> <li>• Increase fairness between headquarters and actual job sites</li> <li>• Offer education for retirement</li> <li>• Maternal protection, support for work/home compatibility</li> </ul> |
| <b>Establishing Advanced Welfare Policy</b>                               | <ul style="list-style-type: none"> <li>• Activate customized welfare (welfare card system)</li> <li>• Total funeral services</li> <li>• Improve disaster aid money (expand group insurances beneficial)</li> </ul>            |



# Human Rights Protection

We strive to protect the rights of minority employees and handle employee troubles.

## :: Efforts for Human Rights Protection

K-water has a policy to protect the rights of minority employees and handle employee troubles. We run various programs such as expanded employment, gender equality and maternal protection programs to protect the rights of minority employees such as handicapped people, female employees and contract employees, and we also have a Gender Equality Department within the Labor Union. We expect to expand human rights education which is yet at preventive state. Also, we guarantee the right of forming associations and the freedom for collective bargaining stated by the collective agreement, which ensures the complete protection of rights in every job site.

## :: Handling of Employee Troubles

### Settlement of Employee Troubles by Regular Troubles Window

We set a Troubles Window in HR-BANK for smooth approach. OASIS e-mail enables troubled employees to consult with a personnel manager at all times, with ensured privacy which allows employees to participate more freely, increasing their quality of life. K-water follows equality policies such as international regulations on all job fields, and there has been no discrimination occurrence reported during the period.

### EAP (Employee Assistance Program)

Stress induced by various causes such as maladjustment to organization, work overload, etc. is managed by the company taking measures to prevent and solve the problem to provide a healthier and more pleasant life within the organization, increasing the quality of life.

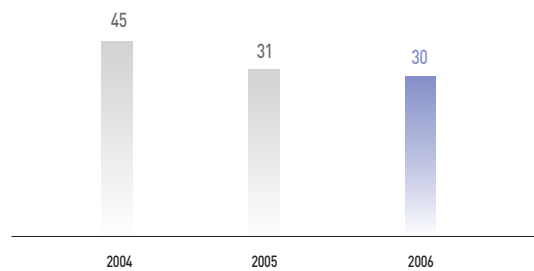
### Solving Employee Troubles Caused by Periodic Transfer

Through on-line and face-to-face counseling, we solved 30 employees' (77%) troubles after a suitability test in 2006. Unsolved cases are considered in the following periodic transfer.

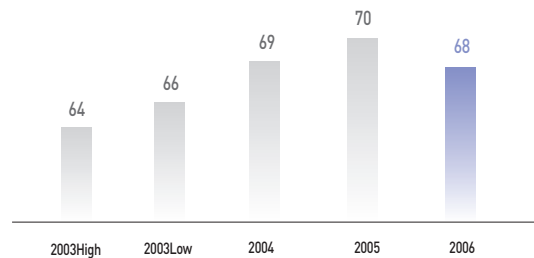
## :: Expanded Employment of the Handicapped

We give disabled people additional points during employment. In the first exam, a handicapped person is given additional points of 3-5% of the whole score according to the degree of disability. Disability after joining the company also qualifies for 100% of the basic salary. Registered handicapped employees are treated as equally as a subject of employment protection, and are given an item of encouragement and 3 days paid leave before and after the Day for Disabled People. Also, there are convenient facilities in the building such as exclusive parking area, stairs, washroom, etc. Employment rate of handicapped people is currently 2.3%, which has exceeded the 2% obligatory employment rate of disabled people for seven years in a row since 2000.

Occurrence and Handling of Employee Troubles (cases)



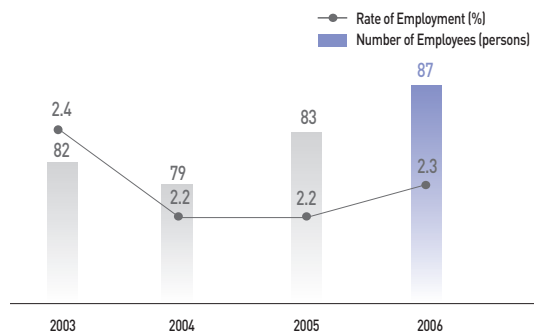
Employee Satisfaction (grades)



### Survey for Employee Job Satisfaction

Survey for employee job satisfaction is carried out every November to understand employees' satisfaction and customer satisfaction on employees, increasing external customer satisfaction.

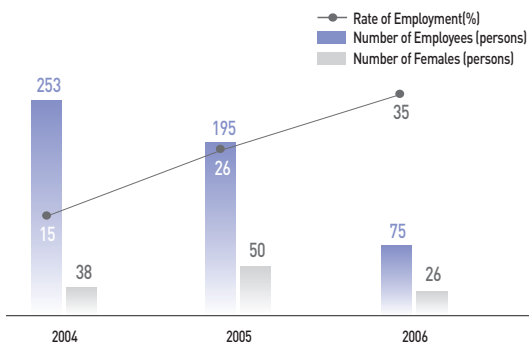
Handicapped Employment (Total Number/Ratio)



**:: Increase of Female Recruitment**

As of June, 2007, 9% of a total 357 new employees have been female. Among them, there are 2 directors (level 2), and 11 vice-directors (level 3). Since the introduction of the Female Recruitment Target Plan, the rate of female recruitment has increased steadily in the past 3 years. The expansion of the target plan to more job categories resulted in 35% of new employees. Particularly, 35% of new employees in job categories of administration, civil engineering, environment, and computation were females, surpassing the target of 30% set for those job categories.

New Employment of Female Resources



**:: Human Rights Investigation on Investment Agreement or Contract**

Human rights investigation is applied to organizations participating in cooperative business in areas that are deeply interested in the protection of such rights. International projects of K-water are mostly small investment projects such as Official Development Assistance (ODA) and engineering (investigation layout, execution supervision, etc.) technology export, which do not include subjects of the protection of human rights. In the future, we will include subjects of human rights in direct investment projects. Furthermore, we are eliminating corporations which do not meet our basic ethical standards when sealing a domestic goods or construction contract. We collectively evaluate the company's financial soundness, credibility, quality of products, and business showings in substitution of human rights investigation of those companies we work with.

**Prohibition of underage employment and forced labor**

According to the employment rules, we prohibit employment of those under age 15, or middle school students under age 18. We abide by the Korean Labor Standard Law on the subject of prohibition of forced labor.

**Gender Equality and Maternity Protection Program**

**:: Gender Equality Program**

The first public enterprise to announce gender equality in 2004, we took an action by increasing female resources and supplying equal opportunities in personnel management. Also, we have put together a substitute resource pool in order to cover those in maternity leave.

The pay level is identical for both male and female at the same level in case of same entrance year. Gender equality is applied to promotion and compensation as well.

**:: Education for Sexual Harassment Prevention**

According to the 'Enforcement ordinance on prohibition and relief of sexual discrimination, we operate education programs to prevent sexual discrimination within the working environment and report results to the Ministry of Gender Equality. For better protection of individual rights and prevention of decrease of productivity, one person from every department must acquire a cyber education degree and transmit to the rest of the department annually.

- Completion of education: 3443 (93%) in 2005, 3501 (92%) in 2006

**:: Maternity Protection Program**

In effort to reduce a conflict between work and family of employees and childcare responsibilities of working parents, we operate childcare facilities within the company and voluntary closing hours.

- Childcare Facility: Water Lovers Daycare
- (Childcare Day) Every Wednesday
- Introduction of Temporary Rest with Spouse
  - Condition: in case of overseas service of 1 year or more, educational dispatch, and temporary rest for employee's spouse
  - Period: Once, 2 years
- Improvement of Maternity Leave Policy
  - Employees with a child under age 1 to 3
- Childbirth Promotion
  - Distribution of childbirth bonus, exceptional application for circulation work of pregnant women and nursing mothers
  - Installation of feeding equipment, exclusive parking area for pregnant women and nursing mothers

# Cooperation with Local Community

We operate programs to improve a relationship with the local community to minimize environmental and social effects in process of business promotion and protect the rights of local residents.

## :: Protection on Rights of Local Residents

Conflicts and law suits have arisen with local residents in the process of dam, waterworks, and complex development constructions. The cases are mostly involve land compensation. 34 cases occurred in 2006; 13 are concluded and 21 are still in process. But, K-water is putting forth its best effort to solve these problems as soon as possible while protecting the rights of former residents who have to leave the area.

## :: Management and Evaluation of Local Community Effect

Business promotions are differed at each development level according to its environmental and social effect. In effort to reflect opinions of local residents in advance and relieve conflicts, opinions are collected from the primary stages of dam construction design. Also, a joint committee is operated for the better communication.

**Evaluation for Strategy Environment Effect:** An evaluation for strategy environment was executed upon establishment of long term dam construction plan.

**Investigation of post-environment effect:** According to evaluation contents on the evaluation sheet of environmental effect, post management, direction and accuracy of prediction are inspected. 18 cases including Buhang Dam were subject to this process in 2006.

**Preservation of Cultural Assets and Environment Restoration:** Preservation of local cultural assets that could be damaged by water supply development and restoration of environment are currently in operation. The Jangheung Dam historic park, Daegok Dam cultural artifacts pavilion, Gulpo stream old tree transfer, Jangheung Dam eco-pathway and artificial creek have been created.

## :: Local community Relationship Improvement Program

As a support plan for the post dam construction, the 'law about support for dam and adjacent areas' considering support of local residents has been established followed by various subsidies. For the new dam site residents, future life plan services are provided to offer actual help to locals.

**Dam site support work:** A part of the dam water sales profit is used in supporting local residents to relieve traffic inconveniences and environmental restrictions caused by the dam construction.

**Future planning service for dam compensation:** We offer life design and financial consult to submerged residents to support and improve their lives after they have left the local area post dam construction.

**Satisfaction survey for local resident:** A satisfaction survey for residents living near dams, water fields and construction sites have taken place annually since 2003, its results are being reflected on management.

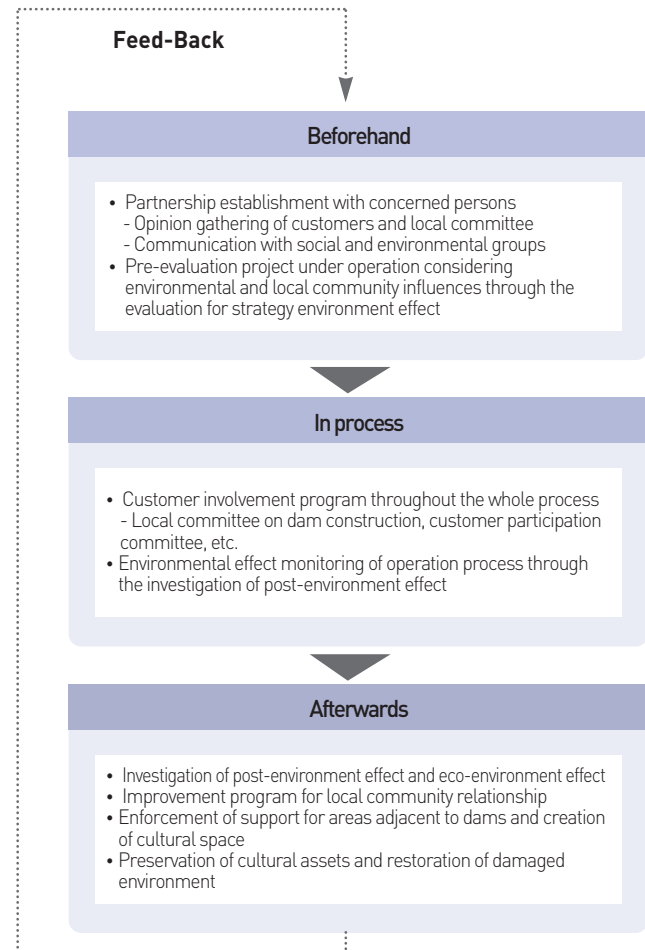
## :: Cultural Space for Local Residents

In effort to improve a relationship with the local community, various local friendly programs have been promoted. Cultural spaces and relaxation spots have also helped to improve local economy.

**Improvement of former dam facilities:** Improvement plans for outworn facilities of completed dams offer the resting space for local residents.

**Water Culture Center:** We have established a water culture center to reproduce the local environment and acknowledge the importance of water, offering spectacular sights to visitors.

**Creation of Rest Park:** Ansan Lake Park, Shihwa Oi-do Park, and Shihwa Reed Creek Park have been created to offer local residents a place to rest.



# Social Contribution to Local Community

We promise to help all people enjoy the benefits of water equally and contribute to the local community.

## :: System for Social Contribution Activity

There is polarity even in water supply. The national waterworks rate measures up to 90%, while the other 10% do not receive a benefit of clean water. In order to solve this problem, our company has selected a promotion task under the motto to become a 'company that contributes to the local community and the people to get benefits from water equally' and has supplied system and financial resources. As the best water services company, we plan to use our expertise and experience to make this world a better place by selecting major promotion fields related to 'water.'

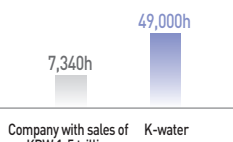
|   |  |  |
|---|--|--|
| <p><b>Introduction of Strategic Social Contribution Concept in 2004</b></p> <p>Establishment of social contribution system: strategy, system, financial resources<br/>Foundation of Water Love Volunteers</p> | <p><b>Fixation of Social Contribution Activity in 2005</b></p> <p>Various social contribution activities<br/>Fixation of activities of Water Love Volunteers</p> | <p><b>Social contribution Pioneering Company in 2006</b></p> <p>Reinforcement of social contribution in strategic fields<br/>Activation of Water Love Volunteers</p> |
|---|--|--|

## Realization of Best National CSR Company

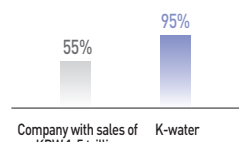
Dual system for subjects promoting social contribution into "company" and "employees"

| Company   | Employee  |
|---|---|
| <ul style="list-style-type: none"> <li>Strategic field: business relieving the polarity of water benefit</li> <li>Cooperative work on local community (Support for areas adjacent to dams, voluntary work of rural technology, etc.)</li> </ul> | <ul style="list-style-type: none"> <li>Voluntary work development through the social voluntary group 'Water Love Volunteers' (Specialized voluntary work for filial piety)</li> </ul> |

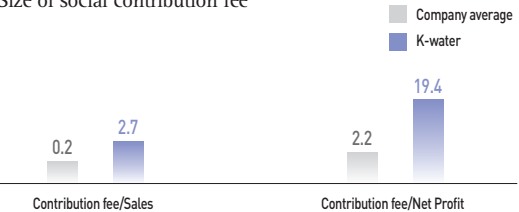
Annual total voluntary time



Participation rate of voluntary work

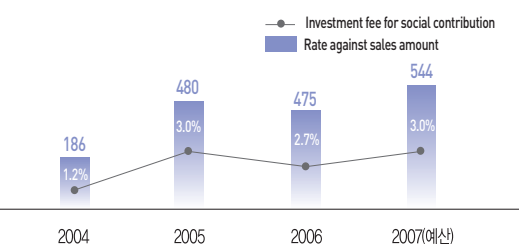


Size of social contribution fee



Source for company average: Federation of Korean Industries/Non-profit Organization (2005)

Investment fee for social contribution



## :: Financial Resources for Social Contribution Activities

Financial support has increased annually, adding up to a total of KRW 47.5 billion in 2006 and the amount is expected to increase to KRW 54.4 billion won. The employees have voluntarily collected donation money for the underprivileged, and the company has operated a 'Love Fund' supporting the same fund [Matching Grant] along with it. Moreover, the donation from the employees to help starving children out of their compensation has been carried out.

## :: Voluntary Work Management: 'Love' System

We operate a management system for independent voluntary work each designed to fit the uniqueness of each public corporation so that all activities are manageable throughout the whole process of the voluntary work. With the 'Love' system, the whole process of voluntary work (club opening, member recruitment, plan input, financial resource prepayment, post-activity preparation, prepayment settlement, etc.) is constantly managed. Activation of voluntary work is promoted by club finance referral and management ability, input and management of individual voluntary work mileage.

## :: Analysis and Feedback of Social Contribution Activity

We have developed our own feedback system for all staff members to participate actively and share opinions. Social contribution activity points are reflected in the end-of-year personnel management and office evaluation, promoting competition and active participation in a contest for model case.

|                                    |  |
|------------------------------------|--|
| Reflection of personnel evaluation | - Consideration of social contribution in multilateral evaluation of level 1-2 employees |
| Reflection of office evaluation    | - Inclusion of local community satisfaction in internal evaluation standards             |
| Analysis of activity               | - Analysis of Water Lover Volunteers activities and overall contribution activity        |
| Compensation for model case        | - Annual contest for social contribution   |

# K-water's Social Responsibility Management



## INTERVIEW

Il-Joong Kim  
Professor of International  
Commerce Department in Dong-  
guk University

K-water is a public enterprise which supplies the Korean people with water through development and management of water resources. It is inevitable for the K-water to be a public enterprise because the development of water resources damages the natural environment in exchange of supplying the public with the benefits of water. The vision, objective and strategy for social

responsibility management must be built upon this basic cause of company's existence. In this perspective, it's only natural that the company has set its goal of 'water for the happier world' and set the slogan of 'together with water, nature and people.' We have set the main focus of the social responsibility management as promoting the value of concerned parties, thinking that customer-oriented management, environmental management, and social responsibility as basic ethics of the organization. Also, the economic responsibility, one of three factors of social responsibility management, is included in the provision of integrated services, pursuing the

“To become a sustainable developing company, we must include equality between generations and strongly move forward as a part of management innovation.”

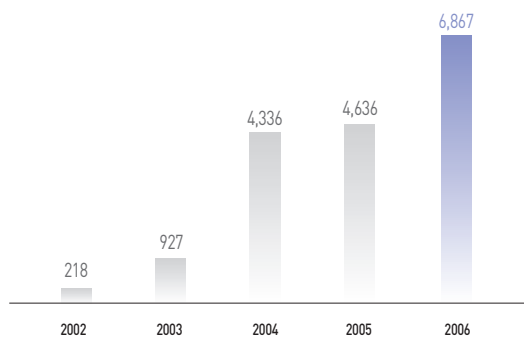
minimization of new developments and making the best out of existing resources, in accordance with the basic direction of K-water. Moreover, it is remarkable that K-water's management strategies are now focused on environment-friendly dam construction and preservation of ecosystem as a part of the environmental responsibility practice. Based on these various social services, K-water held the first place in customer satisfaction among government enterprises, and ranked second in transparency among government-invested institutions in 2006, also contributing to resolving a negative image as an innate developing company.

Despite these efforts to change, K-water still retains the negative image from citizens because K-water is still in the middle of the social issue related to development of Kyung-in canal and Han-tan River dam and is distinguished for its development-oriented corporate culture rather than social services practices. Therefore, reinforcing social services management with sustainable development values such as equality between generation's waterworks can solve those problems and continue to develop. Considering future generations in the management philosophy of K-water will change customers and concerned parties of K-water, leading to reset management purposes and strategies.

# Equal Distribution of Water Benefits

We strive to distribute the benefits of water to everybody.

Accomplishments in Water Bottle Supply (Unit: Thousand bottles)



| Supply of Meal Water | Station | Cost |
|----------------------|---------|------|
| First (2003~2005)    | 103     | 50   |
| Second (2006)        | 20      | 2    |
| Total                | 123     | 52   |

### Installation of Water-Purifier using Membrane Filtration

Supply of meal water of elementary and middle schools is done by water-purifier using membrane filtration which lets minerals favorable to the human body pass and prevent harmful matter such as germs, endocrine disruptor and nitric nitrogen.



| Welfare service on islands |

### Water of Love: Support for Emergent Water at Water Shortage Areas

We support emergent water to areas with water shortage due to natural causes or disasters. Through supporting people with water bottles since 2002, we have supplied approximately 17 million bottles by 2006. Also, we help areas hit by storms or draught and where water is cut solve the water shortage problem by using water cars. For swift and smooth water supply, we built a water bottle factory at the Cheong-Ju water purification plant in May 2006.

In addition, with a more efficient management of water cars, we expect to help more people with water shortage with Water of Love.

### Water of Hope: Support for Meal Water in Elementary and Middle Schools

Most schools in remote farming and fishing villages drink groundwater, which is not managed cleanly. For this reason, K-water strives to fulfill its duty as a public enterprise on water services by supplying meal water to schools with inferior groundwater as drinking water since 2003. There are 123 schools in service up to 2007, and K-water supplies and manages these purifiers without any cost for 10 years to minimize the burden of school, enabling it to focus only on educational affairs.

### Water of Life: Installation of Seawater Desalination Plants on Islands

'Water of Life' is a project run by K-water to solve the water shortage problem on islands and beaches. Instead of inefficient desalination plants due to resident management leading to lack of technology and high cost, K-water has sealed a convention with the local autonomous entity on entrusting it to manage the installation starting from June 2004. Now, among 68 seawater desalination plants in 16 cities and counties, K-water manages 40 facilities in 8 cities and counties. We have increased the working ratio by improving the installation and decreased water price to 1/3~1/5 of existing price, and strive to distribute resident welfare benefits through periodic water quality examinations and customer-oriented services.

#### | Support for Infrastructure in Water-Related Districts |

| Category      | 2006 Support  | KRW Million |
|---------------|---|-------------|
| Water of Love | Support for annual production of water bottles (6,867 thousand bottles) | 1,200       |
| Water of Hope | Installation of meal water facility in elementary/middle school         | 200         |
| Water of Life | Management of seawater desalination plants on islands                   | 2,441       |
| Total         |   | 3,841       |

# Support to Areas Adjacent to Dams

We work to help local economy by support to areas adjacent to dams.

## Support Policy of Areas Adjacent to Dams

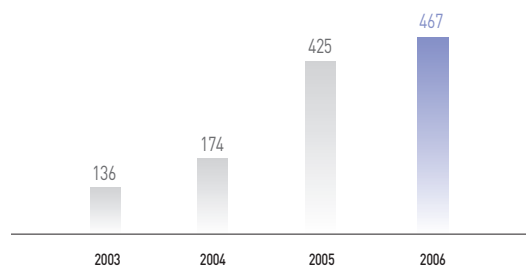
We operate support programs that offer direct help to residents in areas adjacent to dams and help boost the local economy. In order to improve living environment areas adjacent to dams, maintenance work such as production base creation, welfare-cultural facility construction, and public infrastructure is in operation. An annual post-construction support program for the improvement in local resident's income and welfare is also being held. KRW 46.7 billion was supported to offer the actual help to residents as medical and educational fees in 2006.

| Financial resources | Dam water sales   | Development sales |
|---------------------|---|-------------------|
| Constitution        | 20%   | 6%                |
| Basis               | Law on dam construction and financial resources of adjacent areas |                   |

## Beautiful Flower Gardens in Land for Flood Control

Lands for flood control are empty lands prepared from spring in case of heavy rain in the summer, ruining beautiful landscapes. In order to achieve both improvement in scenery and increase in profit, we are creating a flower garden in these lands. We built an exhibition valley near the Daechung Dam and Soyanggang Dam in 2006. Furthermore, we plan to expand this idea to all dams to create a beautiful dam where water and flowers join together.

Supporting Expenses in Areas Adjacent to Dams (KRW 100 million)



### | Promoting Results |

|   |                       |
|---|-----------------------|
| <b>2006 Exhibition Project</b>                          | 1200000m <sup>2</sup> |
| - Buckwheat flower and oatmeal garden in Soyanggang Dam | 116.0                 |
| - Rape flower garden in Daechung Dam                    | 2.3                   |
| - Buckwheat flower garden in Yongdam Dam                | 1.7                   |
| <b>2007 Project Target Plan</b>                         | 280000m <sup>2</sup>  |
| - 8 dams including Nam-gang dam, 12 stations            | 28                    |

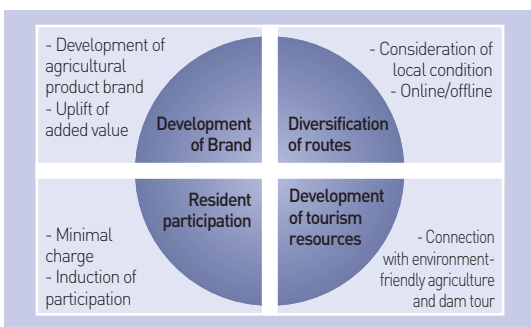
**Land for Flood control:** Land between normal water level and flooded water level within the dam area is in charge of control for flooding. Illegal cultivation has brought on water pollution and damage of scenery around water, and regulation and prohibition of these acts have not been easy in this area.





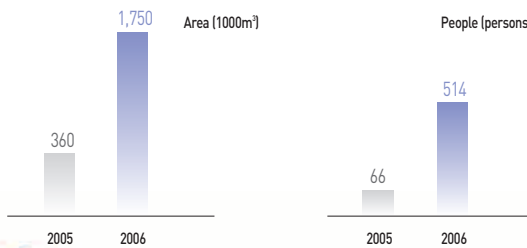
| Plan for environment-friendly agriculture expansion |

| 2005                 | 2006                 | 2007                  |
|----------------------|----------------------|-----------------------|
| Experimental complex | Experimental complex | Expansion to All dams |
| 3 stations           | 8 stations           | 15 stations           |



| Support system for environment-friendly agriculture |

Environment-friendly area and participants



| Buckwheat flower garden in Soyang-gang dam |

⚡ Expansion of Environment-Friendly Agricultural Complex

We are preventing water pollution of reservoirs and growing a wholesome environment-friendly agriculture in collaboration with local residents. The eco-friendly experimental complexes which started in 2005 around upper stream areas such as the Soyanggang, Daecheong and Andong dams have expanded to dam areas in Imha, Hapcheon, Juam, Chungju and Namgang dams. In these areas, we grew rice, corn, bean, potato, wheat, cabbage, broccoli, and strawberry in eco-friendly methods on a total of 17.2km<sup>2</sup> of land. In 2007, we plan to increase the number of these eco-friendly complexes to increase local resident incomes and relieve water pollution.

Support for Sales Route of Agricultural Product

In order to support harvested eco-friendly products and expand sales routes, we created a brand, supported an online sales website, turned experimental complexes into tourism resources, and offered collaborative sales routes with agricultural association and woman's association especially in Soyanggang Dam and Daecheong Dam. As a result, we sold all eco-friendly products in the 8 dam areas (KRW 382 million) contributing to resident income.

⚡ Customized Future Plan Service for Compensated People

Many of those who had to leave their homes were not familiar with managing the compensation money. The unstable lives of these compensated people led to a negative view towards the dam and are a main obstacle in dam construction. In an effort to solve this problem, we applied a trial future life plan service for compensated people to lead a better life after leaving their homes starting at the Buhang Dam.

⚡ Interest in Life of Compensated People

We work towards alleviating the lack of trust of the displaced by holding local, village meetings on future life design support policies. We show examples of failed cases of compensated displaced people, attracting the great attention from the local community and media. Through this experience, we could see a hope for leading the compensated people to a stable future resulting in relieving many negative views toward dam construction.

**Life plan consult for compensated people**

Service consult: life design education (3 sessions), life plan consult (20 households)

**Financial consult for compensated people**

Accountant request: tour lecture (2 sessions), financial consult (60 people)

# Filial Piety Project

We run a filial piety project for the aged near dam and waterworks as social services.

### :: Filial Piety Welfare Center

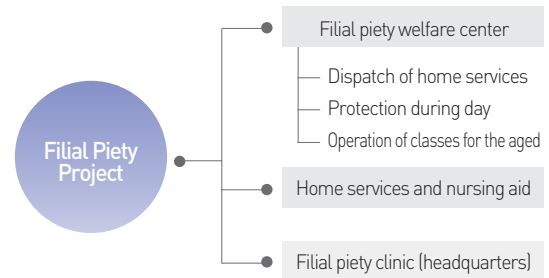
For the enhancement of life quality of aged people in areas adjacent to dams where the ratio of people over 65 is increasing, we have built a Filial Piety Welfare Center. At the Filial Piety Welfare Center near HapChun Dam which opened in June 2006, we offer services of actual benefits such as dispatching home services, protection during the day and operating classes for the aged (30,000 people after opening) which have been quite popular. The Welfare Center is expected to serve as a model of customized welfare support suitable for lifestyles of residents in areas adjacent to dams and to expand it to all dams until 2010 to provide a comfortable life to the aged and give them hope for life.

### :: Support for Home Services and Nursing Aid

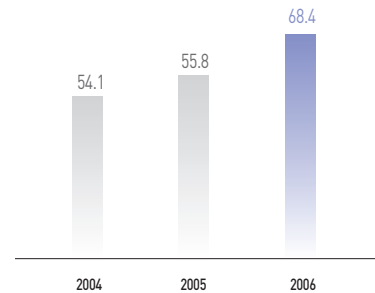
For the old, solitary and alienated people in areas adjacent to dams who are limited in doing daily chores due to their ages or disabilities, we offer home services and nursing aid to help with cleaning, doing laundry and being someone to talk with them. In areas near AnDong, ImHa, HapChun and YongDam dams where welfare institutions are poor, we give love to estranged neighbors of 644 households.

### :: Free Oriental Medicine Care in Filial Piety Clinic

As a part of respecting and helping the aged, we give free oriental medical care connected with the clinic within the company to help unhealthy, low income people among the old by giving free acupuncture and oriental medicine every month, and also offer vehicles services for people without means of transportations.



Increase in local residents' satisfaction (score)



# Sharing Love with Local Community

We share love together with local residents.



| Volunteer Work of Agricultural Technology around Dams |



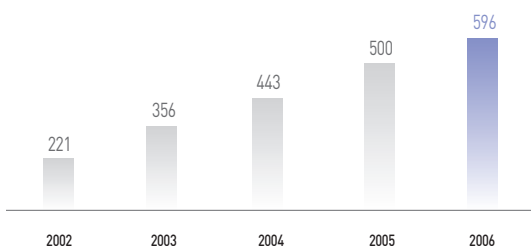
| Appearance Ceremony of Native English Teacher |

## Volunteer Work of Agricultural Technology

We carry out agricultural volunteer work each year using technologies and equipments to solve inconveniences of residents in agricultural area, mostly around the nation's dams and waterworks offices. We are offering villages free of charge with electric equipments and safety inspections and restoration, agricultural machine repair, home appliances repair, village public facilities restoration, well water quality inspections, etc. We are listening to the complaints of residents who live near dams from their position, gathering opinions to work on customer satisfaction and actually help local residents.

| Category             | 2004  | 2005  | 2006  |
|----------------------|-------|-------|-------|
| Attendants (persons) | 822   | 1284  | 992   |
| Supporting houses    | 2,371 | 3,974 | 1,766 |
| Supporting cases     | 4,243 | 7,792 | 8,190 |
| Total (KRW million)  | 80    | 145   | 109   |

Status of PC support (no. of PCs)



## Support for Information, Sharing PCs of Love

As a part of social contribution activities to realize various sharing management, we are presenting local residents living around dams, orphanages and facilities for the disabled with second-hand PCs that come from the company every year. We have supported around 1500 PCs since the start of our information support business in 2002, and presented 596 PCs to local societies and neighboring residents in 2006 to raise the use of information resources and continuously work on reducing the polarization of information technology for residents near dams.

## Support for Native English Teacher to Elementary School in Inland around Upstream Dams

We are providing native English teachers for students living in inland around dams. This activity contributes to producing talented people in local areas by improving academic skills of students living around dams and optimizing the educational environment, and plays a big role in relieving the financial burden of local residents by reducing private education fees for English. Starting with the area around Youngchun Dam in 2006, children of 21 elementary schools in areas around Andong Dam, Imha Dam and Unmun Dam are also receiving English lessons based on speaking twice a week, 3 hours a lesson in 2007, giving them a vision of venturing to the world.

# Support for Natural Disaster Recovery

We are making efforts to share the burdens of local residents through support activities for natural disaster area.

## ⚡ Restoration support for flooded areas from hurricane and localized torrential downpour

We sent rescue articles and drinking water to flooded areas in Injae and Pyeongchang of Gangwon-do, Danyang of Chungcheongbuk-do, etc., that were severely damaged due to hurricane 'Ewiniar' and torrential downpour in July, 2006, together with the emergency rescue work of Water Love Volunteers. Support activities this time were carried out especially quickly with close cooperation of related organizations such as the National Emergency Management Agency, the Red Cross, and local self-governing organizations.

- Restoration support activities for Disaster with Water Love Volunteers (18 times, 3500 hours)
- Emergency drinking water (330,000 bottles) and emergency water wagons (65 times) support to flooded areas
- Money donation for flood damage restoration: 100 million won
- Related emergency rescue articles: 100 million won worth
- Dispatching technical support personnel for early restoration and stabilization of water facilities

## ⚡ Technical support for stabilization of water facilities

An emergency technical support group was dispatched in a hurry to all water national water facilities in areas with flood damage, for early restoration and stabilization. We presented facility emergency restoration and permanent restoration methods and many counteractive methods for flood damaged disasters, supporting function for revival of drowned or damaged water facilities, and various water inspections, together with the field local base, until flood damage restoration finished.

| Area     | Facility   | Damage  | Technical Support   |
|----------|--|---|---|
| Injae    | 5 facilities including Duksan water purification plant | Water intake plant, filter basin flood, collecting basin, power outage etc. | - Facility emergency restoration and permanent restoration methods<br>- Methods to handle water when waters of high turbidity inflows |
| Yangyang | 7 facilities including Osaek water purification plant  | Water intake plant flood, loss of pipelines, power outage etc.              | - Restoration of submerged facilities<br>- Support for water quality inspection   |
| Danyang  | 3 facilities including Danyang water intake plant      | Water intake tower, power outage  |   |



Support for flood damage restoration in Injae of Gangwon-do |

# Loving Our Rivers

We want to let people know the value of rivers, which are the breath of our lives.

## :: Field investigation of Nakdong River's area with Nakdong River Community Co.

The first field investigation (Sept. 1~3, 2006) and the second field investigation (Nov. 9~11, 2006) of Nakdong River took place with the Nakdong River Community Co. from the source of the river along the waterway to the mouth of the river to directly experience the history, culture and environment of the natural river, and its ecological values, and to activate an area community network to strengthen ties between citizens and environmental organizations in the area. It was a good opportunity to enhance our understanding of the general Nakdong River area, including use of water resources, condition and ecology, and we recognized a need to consider not only the dam area but also the general conditions of upstream and downstream areas when constructing dam plans in the future.

### Investigation course:

Daejeon Station → Busan Station → Nakdong River mouth → Summit of Mt. Ami (combined orientation) → Eulsookdo → Namgang Dam → Hapcheon Dam → Nakdong River Finding Life Lecture → Hwang River → Flower garden confluence → Munbyeong → Taebaek (mini seminar) → Source (Hwangji Pond) → Construction site → Bonghwa gorge → Andong dam → Imha dam → East Daegu Station → Daejeon Station

## :: Field investigation of Gapchun and purification movement with river guide

We experienced the historical, cultural and ecological value of the natural stream of Gapcheon through a field investigation of Daejeon's 3 major river ecological culture guide, and carried out a purification movement at Norubul near Gapcheon, to contribute to local society as a part of our social volunteer work.



| Field investigation of Nakdong River valley |



| Field investigation of Gapchun |

# Waterway Field Investigation

We carry out waterway field investigations to cultivate awareness of water in our future generation.

## :: Contents of pursuit

This event, which aims to cultivate awareness for water in children and youths who are our future generation, consisted of a water facility-related expedition and experience program, and took place from July 24, 2006 to July 27, for 3 nights and 4 days. The 144 elementary school and middle school students who were selected nationwide explored the water systems of South Han River and North Han River.

## :: Major course for field investigation

A sufficient number of leading personnel (1 personnel per 8-9 participants) were especially secured for an easy and safe event, and special care was taken for the safety and health management for participating students, by placing specialist emergency personnel in case of emergency and establishing a real-time system for emergency contact with medical facilities and fire stations etc.

In addition, an Internet board was opened on the K-water website as a place of communication for participating students and their families where they could share information real-time. Most of the participating students and families said they would like to participate again, and we received around 250 letters of thanks.

## :: Major Accomplishments

With more than 24,000 inquiries on our homepage about the event, it enlightened youths who are the leaders of our future, about the value of water by provoking an interest in water, and was a point to spread correct and new knowledge on water through various water resource-related facilities expeditions and water related learning experiences.

In addition, this event contributed to improving awareness for water of not just youths but the entire nation, by being introduced in major media like YTN and the Chosun Ilbo.

| Date             | South Han River Course  | North Han River Course   |
|------------------|---|--|
|                  | Main office in Daejeon (Departure 11:00)<br>(Water Resources Operations Center, Water Analysis & Research Center)   |  |
| July 24 (Mon.)   | (Moved) Jincheon Nongdari, Gumryongso (source of Han River) [Accommodation: homestay community in Mt. Taebaek]  | (Moved) Jincheon Nongdari, Soyang-gang Dam [Accommodation: youth hostel in Gangchon]                     |
| July 24 (Mon.)   | Goshi cave, Chungju Dam, Cheongpoong cultural assets area [Accommodation: Weol-ak youth hostel]   | Pyeonghwa Dam, water cultural center, Bimok Park, Nami island public garden [Accommodation: Nami Island] |
| July 26 (Wed.)   | Paldang Dukso water purification plant, 'Water Love Festival' (Seonyudo Park in the Han River), group talent show [Accommodation: youth training center in Sungsan of Gangwha Island] |  |
| July 27 (Thurs.) | Questionnaire survey and disbanding ceremony (10:00), Gangwha Island foreshore center expedition  |  |



# Water Tour

Direct experience of water facilities lets people know our efforts to manage water and aims to strengthen two-way communication with our customers.

## :: Helping understanding through two-way communication

K-water felt the need for a change in promotion in the year 2000, from general promotion aimed at communication with customers, and established a basic plan for Water Tour for 50 organizations and 5000 people, including local water facilities operation and effectiveness business-related civil servants, press, water resources-related major university students, foreigners, and dam area residents. The expedition course starts from the main office, Daecheong Dam and Chungju Dam, and has been pursued for 3 years, now being a major promotional brand that spreads the positive function of water resource facilities and sustainable management efforts.

## :: Changed from a Sightseeing Tour to an 'Experiencing Tour'

The tour was expanded and changed to a 'Water Culture Tour' together with dam and lake tours of Daecheong dam, Chungju dam and Sihwa Lake, and related local cultural assets tours of dam article cultural centers and

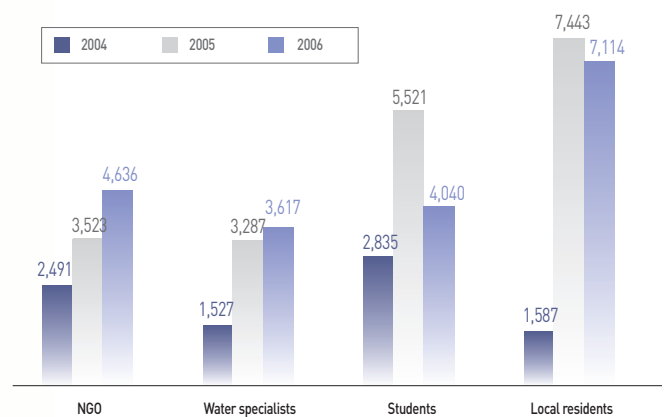
surrounding areas, to keep up with the change in trend from a looking expedition, where people look at things, to an experiencing expedition, where people participate, following social environmental changes such as the 5-day working week. The Water Tours took place for 8490 people (130 groups) in 2004, for 19774 people (427 groups) in 2005, and for 19407 people (404 groups) in 2006.

## :: Efforts to step one step forward to people

We are opening environment-friendly water resources development and management field learning programs for water resource-related major university students who are the leaders of the future to teach them our human resources and facilities specialties and technological power as a company for water services. Our tour of 'Making the Happier World with Water' for the alienated, such as seniors who live alone, the disabled, foreign women agricultural workers, and child heads of families, is playing the role of mentor that shows the people the mission of the company.



Status for Water Tour (No. of people)

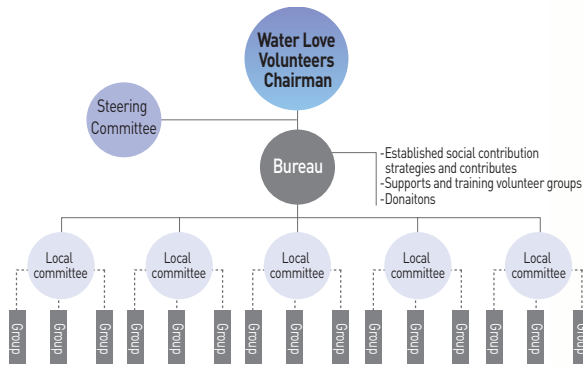


# Water Love Volunteers

We share much love to make a world where people live together.

## :: Activities for Water Love Volunteers

Water Love Volunteers, a social volunteer work group, was founded on July 30, 2004 to systemize the volunteer work of employees and give official company support, and is currently working for local communities. 95% of the total employees are participating in 2007, 87 groups around the country and around 3700 members are giving love. We are working towards making the volunteer work not just a one-time charity work, but corporate culture that always shares with local residents. The volunteer work is allowed once a month during working hours, and regulations of Water Love Volunteers have been turned into company regulations to allow financial support and encourage free sharing.



| Structure of Water Love Volunteers |



## INTERVIEW

Yong-Ku Son  
Chairman of Water Love  
Volunteers

### Social contribution of a corporation is carrying out its social responsibilities.

K-water is carrying out active social contribution activities to execute its corporate mission, "We make the happier world with water." The Water Love Volunteers are especially active in the main office and each business group, to improve the value of people living near dams and other places of water business.

3700 group members in 87 groups, which were formed from a deep common understanding and voluntary actions of employees, are experiencing a life of sharing through social contribution activities. They realized the true meaning of life through volunteer work, and confirmed that our small gestures can relay love and be a big help to people. They have become more passionate from learning a mind of humility through small actions of love, and this has become the greatest motivation that moves the Water Love Volunteers.

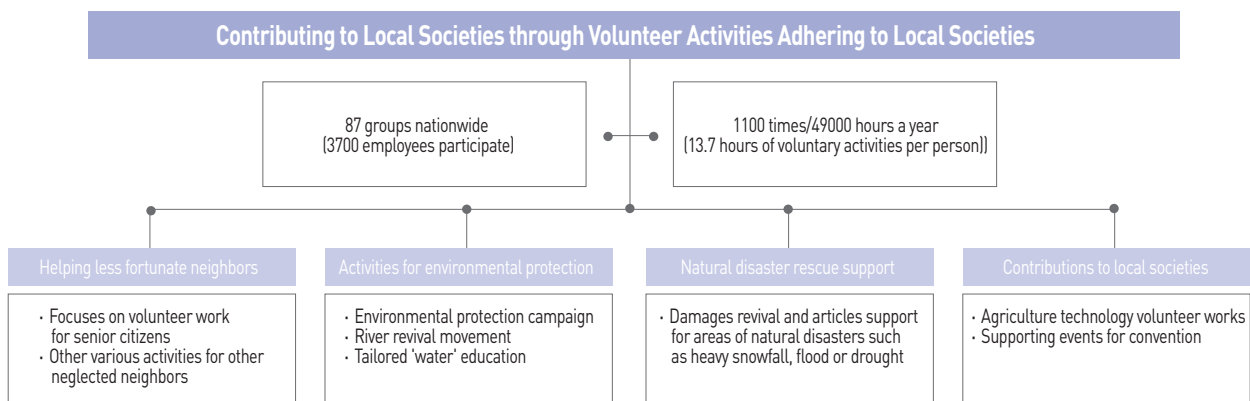
K-water is continuously carrying out various activities such as relieving polarization of "water" benefits, strengthening support for areas surrounding dams, domestic and foreign natural disaster rescue activities, and

contributions to neglected classes and local societies using our expertise on water and the characteristics of each volunteer group, to be "together with water, together with the world." We will continue to fulfill our social responsibility as a public enterprise by expanding support of social contributions such as strengthening collective activities of each field and improving social contribution infrastructures, to become a corporation that can continue to be respected as the best social contribution company (A1) in Korea.



**:: Fields of activity**

The Water Love Volunteers is carrying out environmental protection activities with local social environmental organizations and local residents, and systematic rescue activities each time a natural disaster such as flood or drought strikes. We are also doing a variety of themed activities to contribute to local societies such as campaigns to help less fortunate neighbors.

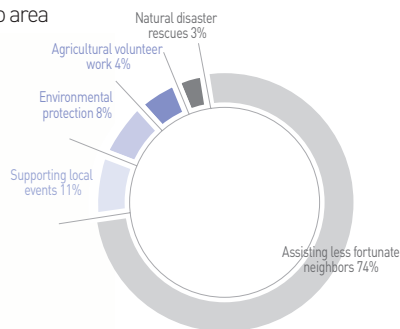


**:: Status for activity**

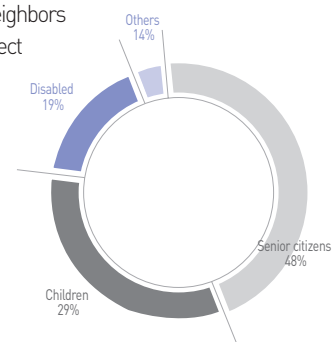
- Contributions of executives and employees to local societies



**• Activities according to area**



**• Assisting less fortunate neighbors activities according to subject**



**:: Our resolution**

K-water Water Love Volunteers shall put its efforts in to raising the value of the people's and customers' lives through volunteer work, and resolves to do the following.

First, we shall take an interest in the problems of our neighbors and local societies, and voluntarily give love and share.

Second, we shall work on making "a happier world" by carrying out volunteer work for water, nature and people.

Third, we shall fulfill our social responsibility as a corporation through volunteer work, and plan the development of individuals and our neighbors.

# Water Love Volunteers Social Contribution Activities



1. Social Contribution Activities of CEO
2. Social Contribution Activities of director
3. Installation of PCs for free in agricultural areas
4. Basic necessities support for flood damaged areas
5. Restoration support for flood damaged areas
6. Agricultural volunteer work
7. Cherry blossom outing
8. Operation of free of charge filial duties clinic



# Third Party's Assurance Statement

## Introduction

The KFQ was requested to verify the 「K-water Sustainability Report 2007 (hereafter called 'report')」. It is the responsibility of the manager of K-water to write the report, and KFQ shall only give its opinion of verification of the report.

## Independence of assurance

KFQ does not have any relations with K-water that aim for any benefits of business activities, and shall only provide a third party assurance service. In addition, it has no prejudiced opinions on any related figures of the company.

## Standard and range of assurance

The KFQ was planned and executed according to the KFQ assurance system, which was developed based on the GRI 「Sustainability Reporting Guidelines(G3)」 and the AA 1000 announced by the Account ability company in 2003.

The assurance range was the sustainability management efforts and accomplishments of the K-water head office, 54 Korean business places, and foreign business places (8 countries, 9 projects), and assurance was based on assurance rules of importance, data integrity, and counteractive characteristics.

## Assurance process

This assurance was planned to gain rational confirmation about whether or not the contents of the report have any major errors or inappropriate information, an internal process and system were confirmed for reliability of the claims of the report, and to write up reported data and a report.

### Document inspection

A GAP analysis in comparison with the GRI G2 index was carried out about the provided report, and benchmarking was carried out on important issues and accomplishment areas of the Application Level evaluation and report. Also, field assurance was planned to confirm details of sustainability management activities and accomplishment data.

### Field assurance

Field assurance took place to evaluate the preciseness of information in the report, and the validity of the information administration system and/or the report writing process. 1 multipurpose dam and 1 multi-regional waterworks, excluding sampled field sites, were sampled according to the sampling rules placing considering their importance, to assure the past 2-year report of the head office. Objective evidence on open sustainability management activities and accomplishments in the report were collected by checking head office information and data, and through interviews with the person in charge of information, and an analysis was carried out on the preciseness of the data and information by researching and analyzing the system and report writing process to manage such information.

### Confirmation and judgment

We confirmed that some errors and inappropriate information in earlier stages were corrected and reflected in the final report. We redid the GRI G3 comparison GAP analysis of the final report, wrote up an assurance opinion sheet based on the application level evaluation and verification results, and presented an assurance opinion paper after deliberation.

## Points of consideration and conditions

Assurance of financial information shown in this report was done by comparing it to information of the '2006 business

report,' which passed inspection, and seeing if the information matched. In order to completely understand the financial state of K-water, take note of the K-water business report that was externally inspected in December 31, 2006.

Take note that the 'Overseas business accomplishments (8 countries, 9 projects) information' in the report were only assured by documentation in the confirmation and judgment stage.

### Assurance conclusion

We believe we gathered enough rational evidence supporting the report in the process of verification, to present the following conclusions.

1. K-water opened its sustainability management activities and accomplishments during the period of the report, making them reliable.
2. K-water is appropriately carrying out processes to understand continuity possibility management accomplishments related to the structure's activities, products and services, etc.
3. K-water is validly carrying out systems to manage its sustainability management accomplishments, and appropriately used a report writing process to fulfill the expectations of stakeholders
4. K-water self-evaluated using the GRI sustainability reporting guidelines (G3) standards of the report, and made appropriate claims according to the GRI evaluation standard.

### Excellent points

K-water reports made attempts to report all key indexes and additional indexes demanded to be opened in the GRI Index by adapting the GRI G3 in its third sustainability report. Also, efforts to maintain a balanced position in information decision processes and to eliminate exaggerations in the information opening process were confirmed.

### Propositions for improvement

K-water is expected to gain even bigger effects from its efforts in various areas to fulfill demands, if the people who are carrying out the 'Sustainability management vision and strategy' duties that were announced to meet the demands of stakeholders as a water combination service institution, on behalf of all the employees and structures, were to have more broad understanding and make detailed goals related to economy, society and environment issues, and carried out these goals. We especially propose that K-water makes the data collection and process, intended for a systematic relationship between the head office and other branches, more detailed and shares them, each branch will be able to more effectively use information to satisfy the demands of people by using such information for various communications on the sustainability management accomplishments of branches.



July 31, 2007  
CEO Jae-Ryong Kim

# Publishing the Sustainability Report . . .

The report did its best to reflect the voices of stakeholders in the process of issuance, and was assured by the third party.

K-water mainly aims to issue a corporate accomplishment report that will earn the trust and respect of stakeholders. We asked for advice from internal and external major stakeholders on the planning and writing of the report, and made efforts to stay true to the accomplishment index presented by the G3 guideline, an international standard, in the sustainability report.

### ■ Report range of accomplishment index

The report presents the sustainability management status and accomplishments of 57 domestic branches, including the head office, and 8 overseas branches. Since the 3 K-water financing companies have the same accounting periods as our corporation, it did not have an effect on comparison possibility of periods and structures, and the share method and cost method were used for the share ratios.

### ■ Report standards of accomplishments data

The report made efforts to stick to the report rules stated in the G3 guidelines. Accomplishments data on economy, environment and society, were found according to the index agreements attached to the G3 guidelines. The EPE system from the 2005 computation system was mainly used to quote data in the environment part, and the financial part used financial statements and settlement of accounts that were inspected by accounting. Social part and other data were received from each related department and used. Each accomplishment index presented the tendency data of 3-4 years, and not only ratio but absolute value was also presented to help understand the data.

### ■ Efforts for sustainable improvements

It is the third year since the first report in 2005. However, the report still lacks many points to become a report appropriate for the standard of expectations and interests stakeholders have in it. K-water will make efforts to more actively collect opinions of internal and external stakeholders, and reflect them to make a more sophisticated report and sustainability management in the future.

### ■ Standard of G3 guideline adaptation

The K-water sustainability report 2007 was written to fulfill the conditions of level A of the G3 guidelines application levels. KFQ confirmed through assurance that the report was appropriate for level A+.

| Report standard |   | C  | C+                          | B  | B+                          | A  | A+                          |
|-----------------|---|--|-----------------------------|--|-----------------------------|--|-----------------------------|
| Standard notice | G3 profile notice<br>Results                                    | Notice categories<br>1.1, 2.1-2.10,<br>3.1-3.8, 3.10-3.12<br>4.1-4.4, 4.14-4.15                                      | Outside assurance of report | All items of level "C"<br>and 1.2, 3.9, 3.13, 4.5-<br>4.13, 4.16-4.17  | Outside assurance of report | Same as requirements<br>of level B   | Outside assurance of report |
|                 | G3 Management<br>method notice<br>Results                       | No need  |                             | Notice of CMA of all<br>indexes  |                             | Notice of CMA of all<br>indexes  |                             |
|                 | G3 Accomplishment<br>index and additional<br>indexes<br>Results | Must report at least 10<br>accomplishment<br>indexes (At least on<br>economy, environment<br>and social index, each) |                             | Must report at least 10<br>accomplishment<br>indexes (At least on<br>economy, environment,<br>social and product<br>liability index, each) |                             | a) Report all G3 core<br>indexes and industrial<br>guide indexes according<br>to the importance rule,<br>or b) if not, explain why |                             |

## Appendix

Code of Ethics Preamble, Environmental Management Policy, Customer Charter Preamble, Declaration of our Vision for Innovation

GRI Report Content Index

Key Performance Index

Definition for Terms

# Code of Ethics Preamble, Environmental Management Policy

## Code of Ethics Preamble

K-water is a corporation of people focused on enhancing people's life and contributing to national development by developing, managing and conserving Korea's water resources in an environmentally, economically and socially sustainable manner while also providing the highest quality products and services to our customers. With confidence and pride, K-water has committed to complying with the following to establish it as a global leader in water services entering into the "Age of Water in the twenty-first century"

- We will endeavor to fulfill our mission with creative thinking and a spirit of creativity, while performing our duties in an upright and fair manner, and by putting transparent management into all our management practices;
- We will practice environmental management as we recognize that the Earth's environment is one our most valuable assets and that it is the foundation for a healthy and happy life, both now and for future generations;
- We will provide the best products and services to our customers and practice the "Customer-First" principle through our management, pursuing customer satisfaction and the creation of new values;
- We as a member of the local community will respect the traditions and culture of the community and contribute to its growth by helping citizens enjoy a more prosperous life;
- We will observe moral and legal values, respect the market order of free competition, and pursue fair competition;
- We will respect the human dignity of individuals, abstain from discriminatory treatment, and support the individuality and creativity of individuals;
- We will pursue common prosperity with a conscious effort towards unity between labor and management and thus build a partnership that is based on mutual trust and accord.

※ You can find the detailed information in code of ethics and action plans on our homepage.

## Environmental Management Policy

K-water is well aware that we are required to try our best to promote sustainable development in harmony with our surroundings in order to keep our environment pleasant and inhabitable.

K-water is specialized in dealing with water, the source of all life, and therefore we, including all executives and employees at K-water, hereby affirm our environmental management policy. This action confirms our commitment and efforts towards making K-water into a leading environmentally-friendly company, which is both trusted and respected by all Koreans. Thus, we pledge the following:

- We will take initiative in the preservation of the purity of water and air as well, as the habitat of our natural environment;
- We will make every effort to ensure all our activities are in harmony with environmental conservation in advance by carefully assessing the impact on the environment caused by the development and management of water resources, and by continuously promoting the conservation of the natural ecosystem, prevention of pollution and improvement of the environment;
- We will develop societal norms for consumption that save and recycle materials and energy, as well reinforce the commitment to detail so as to prevent harm to the environment that may be caused by our inattentiveness;
- We will endeavor to increase the reliability of K-water and its transparency in business by surveying opinions from our stakeholders with an eye towards using this information to establish environmentally-friendly plans whenever possible and to the disclosing of information and data to the public wherever possible.
- We will take responsibility and assume our obligation to prevent environmental pollution before it occurs, and we will make all possible effort to adequately resolve any problems regarding environmental pollution resulting from our corporate activities;
- We will continuously conduct educational programs on the environment so that our actions can serve as an ethical norm, and we will renew our commitment to research and development focusing on the conservation and improvement of the environment.

All of the executives and employees at K-water promise to work to put this declaration into practice so that we can all enjoy prosperity in a pleasant environment, generation after generation.



# Customer Charter Preamble, Declaration of our Vision for Innovation

## Customer Charter Preamble

K-water will do its best to implement customer-oriented management so as to get closer to our customers based on our management philosophy of "Our Customers' values are our values."

- We will establish standards for service performance that reflect our commitment to conducting business from our customer's point of view whenever possible.
- We will put transparent management into practice by disclosing as much information as possible when requested by our customers.
- We will listen to our customer's complaints and advice carefully, in addition to collecting their opinions on a regular basis to improve performance.
- We will reasonably compensate our customers for any damages sustained by them due to our noncompliance with our standards of performance of service as promised.
- We will not discriminate against any customer when carrying out business, and we guarantee to provide maximum benefits to all of our customers by pursuing the most economical and efficient management practices.

## Declaration of our Vision for Innovation

We pledge the following in order to provide all Koreans with clean and safe water, to protect both lives and property from water-related disasters, and to become a leading organization in the water services field through continual development and innovation:

- We will make customer satisfaction a top priority, and change our values to focus on our customers and practices;
- We will carry out our work honestly and fairly while upholding fairness and a commitment to law along with active participation in volunteering so that K-water will be recognized as our nation's most reliable public company;
- We will be globally-competitive in order to achieve our vision with self-confidence and enthusiasm, without fear of change, and establish a firm foundation for sustainable and stable growth;
- We will do our best to conservation the environment, as we recognize the importance of our environment for healthy lives and for sustainable growth for future generations.
- We will be committed to the development of K-water so that it will be recognized as the best company in providing services to all Koreans, the most competitive company, and the most respected organization nationwide.

# GRI Report Content Index

GRI Index reporting degree ● Fully reported, ● Partially reported, ○ Not reported, N/A

| Index | Contents of Index   | K-water Adaptation Index   | K-water Adaptation Index | Page           | Report rate |
|-------|---|--|--------------------------|----------------|-------------|
|       | <b>Strategy and Analysis</b>  |  |                          |                |             |
| 1.1   | Vision and Strategy   | CEO Message, Strategy and Vision   |                          | 4-5, 8-9       | ●           |
| 1.2   | Major effects, Threatening factors and Opportunity factors  | Continuance possibility factors, Ethics, Crisis management                                     |                          | 8-11           | ●           |
|       | <b>Structure Profile</b>  |  |                          |                |             |
| 2.1   | Structure Name  | Company Name   |                          | 7              | ●           |
| 2.2   | Major brands, products and services   | Major brands, products and services  |                          | 18-39          | ●           |
| 2.3   | Structure of major business departments, operating company, subsidiary companies, collaborating companies, Structure of major business departments, financing companies, etc.                                     | Structure of major business departments, financing companies, etc.                             |                          | 7, 9           | ●           |
| 2.4   | Location of head office   | Location of head office  |                          | 7              | ●           |
| 2.5   | Number of countries reported structure is operating in, Names of countries that have detailed relations with the problem of continuance possibility handled in the report   | Number of businesses, number of overseas business companies                                    |                          | Intro<br>28-29 | ●<br>●      |
| 2.6   | Characteristics and legal form of owned structure   | Financial provider structure, shares structure   |                          | 7, 12          | ●           |
| 2.7   | Subject market  | Subject market and customer categories   |                          | 54             | ●           |
| 2.8   | Size of reported structure  | Number of executives, sales, total assets, total debts   |                          | 7              | ●           |
| 2.9   | Important changes in size, structure or owned structure during reported period  | No important changes   |                          | Intro          | ●           |
| 2.10  | Awards during reported period   | Breakdown of overseas awards and certificates  |                          | Wing           | ●           |
|       | <b>Parameters</b>   |  |                          |                |             |
| 3.1   | Report period   | 2006, part of 2007   |                          | Intro          | ●           |
| 3.2   | Date of most recent report  | October, 2006  |                          | Intro          | ●           |
| 3.3   | Report cycle  | Annual   |                          | Intro          | ●           |
| 3.4   | Inquiries on report and related areas   | Report inquiries   |                          | Intro          | ●           |
| 3.5   | Report contents definition process  | Subject readers and stakeholders   |                          | Intro          | ●           |
| 3.6   | Report border   | Korean businesses and overseas business accomplishments  |                          | Intro          | ●           |
| 3.7   | Detailed restrictions of report range or report border  | Accomplishments of overseas business   |                          | Intro          | ●           |
| 3.8   | Reporting standard of things that may have a large effect on comparing possibilities according to period or structure, such as collaborating companies, subsidiary companies, rented facilities or outside duties | Same term as 3 financing companies<br>Used share method or cost method for accounting handling |                          | 118            | ●           |
| 3.9   | Data measurement methods including presumptions and methods that support accomplishment index and other predictions adapted in information collection process, and calculation standard                           | Financial, environmental, social data measurements   |                          | 118            | ●           |
| 3.10  | Effects of re-stating information presented in last report and explanation of reason for re-statements  | No change  |                          | Intro          | ●           |
| 3.11  | Big change in report range, border and measurement method compared to last report   | Change in Korean place of business and overseas projects                                       |                          | Intro          | ●           |
| 3.12  | Index that shows the position of standard notices in the report   | GRI Content Index  |                          | 122-125        | ●           |
| 3.13  | Policies and current activities to find an outside verifier   | Third Party Verification Report  |                          | 116-117        | ●           |
|       | <b>Dominating structure, responsibility, participation</b>  |  |                          |                |             |
| 4.1   | Dominating structure of organization  | Authority, structure and responsibility of Board of Directors                                  |                          | 12             | ●           |
| 4.2   | Chairman Board of Directors and executive   | Mayor as Chairman of Board of Directors  |                          | 12             | ●           |
| 4.3   | In case the Board of Directors is unified, the Board of Directors states the number of independent people who are not executives  | Permanent and temporary directors  |                          | 12             | ●           |
| 4.4   | A mechanism where stockholders and employees give advice to or present a direction for the Board of Directors   | Operation of Youth Board of Directors consisting of Employees                                  |                          | 15             | ●           |

GRI Index reporting degree ● Fully reported, ◐ Partially reported, ○ Not reported, N/A

| Index                                      | Contents of Index   | K-water Adaptation Index  | K-water Adaptation Index | Page         | Report rate |
|--|---|---|--------------------------|--------------|-------------|
| 4.5  | Relationship between compensation of directors, high administrators and executives, and accomplishments of the organization                           | Evaluation and relation of Board of Directors Operation Results   |                          | 12           | ●           |
| 4.6  | Process to prevent conflict of understanding within the Board of Directors  | Strengthening of Fast and Sufficient Pre-Deliberationa  |                          | 12           | ●           |
| 4.7  | Process to decide qualifications of Board of Director members and standard of expertise to support financial/environmental/social strategies          | Permanent director and Outside director Appointment Procedure   | Intro                    | 12           | ●           |
| 4.8  | Mission/core values statement, action outline and rules made internally in relation to financial/environmental/social accomplishments and activities. | Ethical Outline, Environmental Management Course, Innovation vision Mission                                     |                          | Supplement   | ●           |
| 4.9  | Process of the Board of Directors understanding financial/environmental/social activities and directing management.                                   | Board of Directors Operation Procedure  |                          | 12           | ●           |
| 4.10                                       | Board of Directors financial/environmental/social accomplishments evaluation process  | Government analysis of operation results, Accomplishment yearly salary graded                                   |                          | 12           | ●           |
| 4.11                                       | Explanation of prevention rules and selection of approach method and selection  | Prevention Rules and Approach Methods   |                          | 16           | ●           |
| 4.12                                       | Membership or support of outside initiatives such as financial/environmental/social fields and rules  | Declaration to Abide by Global Compact  |                          | 10           | ●           |
| 4.13                                       | Status of Korean and overseas committees and policy facilities membership   | Members domestic and foreign committee and policy facilities activities   |                          | Wing         | ●           |
| 4.14                                       | List of participating stakeholder groups  | Stakeholders group  |                          | 16-17        | ●           |
| 4.15                                       | Participating stakeholders identification and selection standard  | Stakeholders identification and selection   |                          | 16-17        | ●           |
| 4.16                                       | Status of Stakeholders Participation method   | Method of Stakeholders Participation  |                          | 16-17        | ●           |
| 4.17                                       | Points of Interest presented by stakeholders and counteraction methods  | Stakeholders' Points of Interest and Counteractive Methods  |                          | 16-17        | ●           |
| <b>Financial accomplishments index</b>     |   |   |                          |              |             |
| EC1  | Direct creation and division of economic value  | Creation and division of economic value   |                          | 57           | ●           |
| EC2  | Threat to business activities due to financial effect of change in climate, and threats and opportunities   | Counteraction to change in climate and CDM project  |                          | 80-81        | ●           |
| EC3  | Pension support range   | Retirement fund management, retirement program  |                          | 93           | ●           |
| EC4  | Government support fund accomplishments   | National Treasury support fund  |                          | 59           | ●           |
| EC5  | Salary of new employees compared to legal minimum wage at major business places   | Salary of new employees compared to legal minimum wage  |                          | 93           | ●           |
| EC6  | Location purchase policy, actions and ratio at major business places  | Local purchase policy   |                          | 57           | ●           |
| EC7  | Employment of local personnel priority at domestic major business field offices and local high executives ratio                                       | Employment of local personnel at domestic field offices   |                          | 57           | ●           |
| EC8  | Service support and infrastructure investments that prioritize public benefit, and its effects  | Investment in social indirect fund facilities, Improvement of existing dam environments                         |                          | 57           | ●           |
| EC9  | Awareness and explanation of indirect financial wave effects  | Economic activation support for dam surrounding areas   |                          | 57           | ●           |
| <b>Environmental accomplishments index</b> |   |   |                          |              |             |
| EN1  | Weight or volume standard materials used  | Knowledge on quality of substances in entire process evaluation   |                          | 64-65        | ●           |
| EN2  | Ratio of reusable materials used  | Rate of reusing sludge and construction waste   | 7                        | 86-87        | ●           |
| EN3  | Direct energy use according to 1st stage energy sources   | Direct energy use according to 1st stage energy sources   |                          | 82           | ●           |
| EN4  | Indirect energy use according to 1st stage energy sources   | Amount of electricity used from outside purchase  |                          | 82           | ●           |
| EN5  | Amount of energy reduced due to saving and efficiency   | Amount of reduction from using energy saving program  | 8                        | 82, 87       | ●           |
| EN6  | Efforts to supply energy efficient or reusable energy based products and services, and amount of energy reduced by this business                      | Purchase of energy saving products, energy reduction  | 9                        | 66, 82       | ●           |
| EN7  | Indirect energy reduction business and accomplishments  | Efforts to reduce energy use, turning of the PC during lunch hour, 5-day car cycle, other energy saving efforts | 8                        | 82           | ●           |
| EN8  | Total amount according to source  | Amount of water at purification centers   |                          | 127          | ●           |
| EN9  | Water sources that were largely affected by water taken.  | Sources worried to change the ecology from water taken  | 8                        | 85           | ●           |
| EN10                                       | Total amount and ratio of reusable and reused water   | Amount of water material used   | 8                        | 127          | ●           |
| EN11                                       | Location and size of land owned, rented and managed around protection areas and areas where the biological value is high                              | Environmentally-friendly water resource facilities, Diverse biological conservation facility and space          | 8                        | 68-69, 84-85 | ●           |

GRI Index reporting degree ● Fully reported, ● Partially reported, ○ Not reported, N/A

| Index | Contents of Index  | K-water Adaptation Index   | K-water Adaptation Index | Page  | Report rate |
|-------|--|--|--------------------------|-------|-------------|
| EN12  | Effects of activities, products and services in protection areas and areas where the biological value is high on biological variety value              | Monitoring environmental change in business areas  | 8                        | 85    | ●           |
| EN13  | Protected or restored habitat  | Organism habitat environment and conservation for environment cultural heritage                    | 8                        | 84-85 | ●           |
| EN14  | Biological variety management strategy of protected or revived land, current actions and future plans  | Biological variety management strategy   | 8                        | 84    | ●           |
| EN15  | Number of national endangered species on IUCN Red List living in business affected areas, and endangered rate  | Awareness of endangered species according to major dams  | 8                        | 85    | ●           |
| EN16  | Total discharge of direct and indirect greenhouse gases  | Amount of greenhouse gases discharged according to direct or indirect energy consumption           |                          | 82    | ●           |
| EN17  | Other indirect greenhouse gases discharge amount   | Amount of greenhouse gases discharged due to office travel and business trips of executives        |                          | 82    | ●           |
| EN18  | Greenhouse gases reduction business and accomplishments  | CDM project  |                          | 80-81 | ●           |
| EN19  | Amount of ozone destructing substances discharge   | No discharge of ozone destructing substances   | 9                        | 81    | ●           |
| EN20  | Amount of discharge to the atmosphere of NOx, Sox and other major contaminating substances   | Amount of discharge to the atmosphere through energy consumption                                   |                          | 81    | ●           |
| EN21  | Waste water discharge amount and water quality according to final place of discharge   | Quantity and quality of water discharged from purification plants and water sewage treatment sites |                          | 83    | ●           |
| EN22  | Waste discharge amount according to form and treatment method  | Amount of construction waste and sludge  |                          | 86    | ●           |
| EN23  | Number of important dangerous substance leak cases and amount of leakage   | No leakage accidents   |                          | 86    | ●           |
| EN24  | Movement/import/export/treatment of waste stated in I, II, III, VIII of the Bajel Agreement and ratio of waste sent overseas                           | No waste discharged overseas   |                          | 86    | ●           |
| EN25  | Water areas affected by waste water discharge of organization and name of land, size, protection situation and biological diversity                    | Conservation of ecological environment and water quality of discharged water                       | 8                        | 83    | ●           |
| EN26  | Reduction of products and services on environment activities and accomplishments   | Water contamination prevention activities and environmental management accomplishments             | 8                        | 83-87 | ●           |
| EN27  | Products sold and ratio of reusable packaging  | No relation because of product characteristics   | 7                        |       | N/A         |
| EN28  | Number of fines and non-financial restraints from environmental law violations   | Abiding by environmental laws and preventing accidents   | 8                        | 87    | ●           |
| EN29  | Important environmental effect of moving products and basic materials and executives travels   | Environmental effects according to movement of executives  |                          | 81    | ●           |
| EN30  | Environmental protection expenditure and investment total  | Environmental investment and environmental cost  |                          | 67    | ●           |
|       | <b>Labor accomplishments index</b>   |  |                          |       |             |
| LA1   | Form of employment, employment contracts and personnel status according to location  | Form of employment, employment contracts and personnel status according to location                |                          | 91    | ●           |
| LA2   | Number and ratio of people that left the company   | Number and ratio of people that left the company   |                          | 93    | ●           |
| LA3   | Privileges of full-time employees that are not given to part-timers  | Privileges of full-time employees  |                          | 97    | ●           |
| LA4   | Ratio of employees that are subjects of group negotiations   | Ratio of employees that are subjects of group negotiations   | 3                        | 96    | ●           |
| LA5   | Minimum period for reporting important change in business  | Reporting period according to group agreement  |                          | 96    | ●           |
| LA6   | Employee ratio represented by labor union joint Health and Safety Committee  | Changed to joint labor-management conference   | 3                        | 96    | ●           |
| LA7   | Number of injuries, work diseases, days lost, and work related disasters   | Rate of industrial disasters and diseases  |                          | 94    | ●           |
| LA8   | Education, training, counseling, prevention and threat management programs to support seriously diseased employees, their families and local residents | EAP<br>Operation of local residents filial piety project   |                          | 94-95 | ●           |
| LA9   | Welfare and Safety conditions ? formal subject of negotiations with joint labor-management conference  | Joint labor-management conference agenda   | 3                        | 96    | ●           |
| LA10  | Average education hours per day according to form of employee  | Average training hours per year according to employee grade  |                          | 92    | ●           |
| LA11  | Duties education and lifelong education programs for continuous employment and retiring employees support  | Evergreen program for retirees   |                          | 93    | ●           |
| LA12  | Ratio of employees subject to evaluation of regular accomplishments and experience development   | Employees subject to accomplishments evaluation  | 6                        | 93    | ●           |

GRI Index reporting degree ● Fully reported, ◐ Partially reported, ○ Not reported, N/A

| Index  | Contents of Index   | K-water Adaptation Index  | K-water Adaptation Index | Page   | Report rate |
|--|---|---|--------------------------|--------|-------------|
| LA13   | Structure of Board of Directors and employees   | Status of executives structure  | 6                        | 12, 91 | ●           |
| LA14   | Ratio of basic salary of newly recruited men and women personnel according to employee range  | Ratio of basic salary of newly recruited men and women personnel  | 6                        | 99     | ●           |
| <b>Human rights accomplishments index</b>          |   |   |                          |        |             |
| HR1  | Number and ratio of major investing agreements that include human rights protection clauses or that passed human rights evaluation  | Contracts and agreements including human rights evaluation  | 2                        | 99     | ◐           |
| HR2  | Human rights evaluation ratio of major supply companies and contract companies  | Method of evaluating human rights of supplying companies, etc.  | 2                        | 99     | ◐           |
| HR3  | Employee training on duties related human rights policies and processes   | Human rights related education (Sexual harassment prevention education)   | 2                        | 99     | ●           |
| HR4  | Total discrimination cases and related handling   | Management and counseling through executives' difficulties handling system  | 2                        | 98     | ●           |
| HR5  | Duty fields evaluated to have a chance of serious violation of association or group negotiations freedom, and management to guarantee such rights.                                | Rights and benefits protection for women and the disabled, etc.   | 1                        | 98     | ●           |
| HR6  | Business fields with a high chance of child labor and management to stop child labor.   | Restraint against employing youths (Employment rule)  | 5                        | 99     | ●           |
| HR7  | Business fields with a high chance of forced labor and management to stop such labor.   | Forced labor prohibition rule (Korean labor standard law)   | 4                        | 99     | ●           |
| HR8  | Ratio of security personnel that have certified human right policy and process education.   | Education accomplishments of human rights related security personnel  | 1                        | 99     | ●           |
| HR9  | Number of local residents rights violation and related management   | Civil treatment of local residents  | 2                        | 100    | ●           |
| <b>Social accomplishments index</b>                |   |   |                          |        |             |
| SO1  | Characteristics, range and effect of program that evaluates local social effects from beginning, during and finishing stages of duties.   | Environmental evaluation according to stages, aftereffects evaluation   |                          | 100    | ●           |
| SO2  | Number and ratio of business units analyzed to have corruption risk.  | Inspection of high positions or departments with high chance of corruption through department purity evaluation   | 10                       | 10     | ●           |
| SO3  | Ratio of employees who received anti-corruption policy and process related education.   | Rate of ethical management training certification   | 10                       | 45     | ●           |
| SO4  | Management of corruption cases.   | Handling of corruption cases  | 10                       | 10     | ●           |
| SO5  | Position on public policies, establishment of public policies and participation in lobbying.  | Participation in public policies, such as carrying out government policies  |                          | 17     | ◐           |
| SO6  | Total amount donated to parties, politicians or related facilities according to nation.   | Support in the name of the corporation is legally prohibited  |                          | 57     | N/A         |
| SO7  | Number of unfair competition activities and monopoly actions that were dealt with legally, and the results.   | Regular Free Trade Commission inspections   | 10                       | 55     | ●           |
| SO8  | Number of cases of fine and non-financial restraint due to violation of law or regulations.   | Number of violation cases and fines   |                          | 55     | ●           |
| <b>Product responsibility accomplishment index</b> |   |   |                          |        |             |
| PR1  | Stage of deliberation of life cycle that evaluates health and safety effects of product and service, ratio of major products and services that actually carry out the evaluation. | Evaluation of entire tap water process and introduction of environmental score note<br>Highly purifying treatment facility established, strengthening of purification plant water quality grade evaluation system |                          | 55     | ●           |
| PR2  | Number of violation of customer health and safety effects related restraints and voluntary rule violation cases in product and service life cycle.                                | Efforts to abide by laws related to health and safety of customers  |                          | 55     | ●           |
| PR3  | Necessary product and service information type for process, ratio of products and services with such information.   | Efforts to provide information on tap water quality, etc.   |                          | 55     | ●           |
| PR4  | Number of product or service information labeling related restraint voluntary violation.  | Efforts to provide information on tap water quality, etc.   |                          | 55     | ◐           |
| PR5  | Customer satisfaction related activities including customer satisfaction evaluation survey results, etc.  | Customer satisfaction research results  |                          | 55     | ●           |
| PR6  | Marketing communications such as advertisement, promotion, sponsorship restraints, standard and voluntary rule abiding program.   | Abiding by marketing related restraints   |                          | 55     | ●           |
| PR7  | Number of marketing communications such as advertisement, promotion, sponsorship restraints, standard and voluntary rule violation cases.   | Efforts to abide by promotion related laws  |                          | 55     | ◐           |
| PR8  | Number of complaints on violation of customer personal information protection and customer data loss.   | Number of Internet civil cases and breakdown  |                          | 55     | ●           |
| PR9  | Total fine from violation of laws and regulations on product and service supply.  | Efforts to abide by service supply laws   |                          | 55     | ●           |

# Key Performance Index

| GRI  | Indicators   | Unit                   | 2003      | 2004      | 2005      | 2006      |
|------|--|------------------------|-----------|-----------|-----------|-----------|
| EC01 | Total Sales  | millions in KRW        | 1,480,979 | 1,493,084 | 1,590,951 | 1,721,105 |
| 2.8  | Dam water supply                                     | Million m <sup>3</sup> | 4,281     | 4,443     | 4,616     | 4,706     |
| 2.8  | Service water supply                                 | Million m <sup>3</sup> | 2,667     | 2,838     | 2,881     | 2,972     |
| 2.8  | Unit price for dam water supply                      | KRW/m <sup>3</sup>     | 35.12     | 41.70     | 47.93     | 47.93     |
| 2.8  | Unit price for service water supply                  | KRW/m <sup>3</sup>     | 231.57    | 259.10    | 286.60    | 286.60    |
| 2.8  | Accounted for Water Rate (Multi-Regional Waterworks) | %                      | 99.03     | 99.24     | 99.00     | 99.52     |
| EC01 | Interest Paid to Fund-Providers                      | millions in KRW        | 33,718    | 44,804    | 28,942    | 23,814    |
| EC01 | Dividends Distributed to Investors                   | millions in KRW        | 23,947    | 22,010    | 35,281    | 39,111    |
| EC01 | Operating Income to Sales                            | %                      | 23.1      | 14.7      | 18.7      | 16.87     |
| EC01 | Tax Amount Paid                                      | millions in KRW        | 84,647    | 58,921    | 76,730    | 78,952    |
| 2.8  | Number of Dam Water Customers                        | Sites                  | 130       | 125       | 108       | 88        |
| 2.8  | Number of Service Water Customers                    | Sites                  | 1,303     | 1,397     | 1,538     | 1,543     |
| PR05 | Customer Satisfaction Index                          | Points                 | 78.0      | 80.0      | 83.0      | 87.0      |
| LA01 | Total number of employees                            | Persons                | 3,673     | 3,850     | 3,880     | 4,064     |
| HR04 | Total number of female employees                     | Persons                | 230       | 266       | 309       | 357       |
|      | Labor hours (Statutory labor hours)                  | Hours/week             | 50.25(44) | 46.75(40) | 46.75(40) | 46.75(40) |
| LA01 | Number of New Employees                              | Persons                | 110       | 271       | 239       | 110       |
| LA02 | Number of Exiting Employees                          | Persons                | 45        | 46        | 61        | 66        |
| LA10 | Number of Trainees                                   | Persons                | 5,565     | 8,241     | 12,926    | 11,513    |
| HR05 | Labor-Management Agenda and Consensus                | Cases                  | 23        | 23        | 14        | 12        |
| LA07 | Industrial Accidents                                 | Cases                  | 17        | 9         | 14        | 7         |
| LA07 | Industrial Accident Rate                             | %                      | 0.5       | 0.25      | 0.38      | 0.18      |
| LA07 | Patients   | Persons                | 139       | 154       | 127       | 122       |
| LA07 | Prevalence Rate                                      | %                      | 4.20      | 4.30      | 3.30      | 3.20      |
| EC09 | Aid to Local Communities around Dams                 | Billions in KRW        | 136       | 174       | 425       | 467       |
| EC09 | Investment in Social Activities                      | Billions in KRW        | 158       | 198       | 480       | 475       |

| GRI  | Indicators  | Unit                 | 2003      | 2004      | 2005      | 2006      |
|------|---|----------------------|-----------|-----------|-----------|-----------|
| EN16 | Total Carbon Dioxide Emissions  | tCO <sub>2</sub> e   | 389,053   | 420,975   | 432,171   | 409,821   |
| EN03 | Total Energy Consumption  | TOE                  | 193,698   | 203,379   | 214,460   | 203,099   |
| EN03 | Power Consumption for Production of Water   | MWh/m <sup>3</sup>   | 0.3011    | 0.3010    | 0.3164    | 0.3167    |
| EN08 | Total amount of water obtained  | 1,000 m <sup>3</sup> | 2,683,442 | 2,850,329 | 2,898,823 | 2,971,662 |
| EN06 | Power Generated from Multi-purpose Dams   | GWh                  | 3,290     | 2,708     | 2,457     | 2,183     |
| EN22 | Total Sludge from Water Treatment Plants  | tonnes               | 93,509    | 103,622   | 100,174   | 106,052   |
| EN22 | Sludge from Water Treatment Plants  | %                    | 29.6      | 23.3      | 47.9      | 89.2      |
| EN10 | Quantity of Recycled Water (Head Office Consumption)                                      | m <sup>3</sup>       | 6,000     | 6,576     | 8,531     | 9,423     |
| EN14 | Young fish stock  | One thousand fishes  | 1,547     | 2,142     | 1,445     | 1,982     |
| EN21 | BOD of Water Discharged from Water Treatment Plants                                       | mg/L                 | 4.2       | 3.2       | 3.9       | 3.0       |
| EN21 | COD of Water Discharged from Water Treatment Plants                                       | mg/L                 | 4.2       | 5.9       | 5.7       | 5.5       |
| EN21 | SS of Water Discharged from Water Treatment Plants  | mg/L                 | 5.5       | 5.5       | 5.5       | 4.4       |
| EN21 | Water sewage treatment BOD  | mg/L                 | 3.4       | 2.7       | 2.9       | 2.2       |
| EN21 | Water sewage treatment COD  | mg/L                 | 6.1       | 7.2       | 7.8       | 7.0       |
| EN21 | Water sewage treatment SS   | mg/L                 | 3.2       | 3         | 3.3       | 3.2       |
|      | Replacement of Worn-out Pipes (Length)  | km                   | 25.4      | 18.4      | 14.2      | 11.3      |
|      | Replacement of Worn-out Pipes (Cost)  | Millions in KRW      | 9,746     | 17,852    | 13,046    | 10,059    |
|      | Water Quality Control Cost per Ton (Unit Requirement of Chemicals)                        | KRW/m <sup>3</sup>   | 4.3       | 4.8       | 5.56      | 5.8       |
| EN30 | Investment in Environmental Facilities  | Millions in KRW      | 75,320    | 117,801   | 54,812    | 72,842    |
| EN30 | Environmental Investment to Total Investment  | %                    | 8.01      | 14.10     | 7.0       | 8.9       |
| EN30 | Environmental cost  | Millions in KRW      | 86,756    | 89,477    | 121,705   | 121,504   |
| EN30 | Environmental Cost to Project Cost ISO9001/14001  | 9.06                 | 8.22      | 11.70     | 11.0      |           |
| 4.15 | Follow-up Management and Review for Maintaining Integrated Certification of ISO9001/14001 | Cases                | 1         | 1         | 1         | 1         |
| 4.11 | Environmental Impact Assessment   | Cases                | 10        | 12        | 10        | 2         |
| 4.11 | Preliminary Environmental Feasibility Review  | Cases                | 7         | 4         | 3         | 10        |

# Important Financial Indexes

## | Summarized Income Statement |

| Unit: Millions in KRW | 2004      | 2005      | 2006      |
|-----------------------|-----------|-----------|-----------|
| Sales                 | 1,493,084 | 1,590,951 | 1,721,105 |
| Total sales profit    | 284,461   | 376,530   | 360,143   |
| Sales profit          | 218,938   | 297,545   | 290,325   |
| Regular profit        | 203,292   | 295,522   | 295,958   |
| Period net profit     | 144,454   | 218,791   | 217,005   |

## | Summarized Balance Sheet |

| Unit: millions in KRW | 2004              | 2005              | 2006              |
|-----------------------|-------------------|-------------------|-------------------|
| <b>Assets</b>         | <b>10,732,265</b> | <b>11,120,617</b> | <b>11,397,405</b> |
| Liquid assets         | 813,951           | 956,403           | 816,125           |
| Fixed assets          | 9,918,314         | 10,164,214        | 10,581,280        |
| <b>Liabilities</b>    | <b>1,918,618</b>  | <b>1,814,131</b>  | <b>1,743,575</b>  |
| Liquid liabilities    | 665,474           | 730,442           | 620,629           |
| Fixed liabilities     | 1,254,144         | 1,083,689         | 1,122,946         |
| <b>Capital</b>        | <b>8,813,647</b>  | <b>9,306,486</b>  | <b>9,653,830</b>  |
| Capital               | 5,713,101         | 6,027,001         | 6,188,501         |
| Capital surplus       | 1,451,379         | 1,451,379         | 1,451,379         |
| Profit surplus        | 1,644,777         | 1,840,743         | 2,021,664         |
| Capital settlement    | 4,390             | -12,637           | -7,741            |

## | Safety Index |

|                                  | 2004   | 2005   | 2006   |
|----------------------------------|--------|--------|--------|
| Current ratio                    | 122.31 | 130.93 | 131.50 |
| Debt ratio                       | 21.77  | 19.49  | 18.06  |
| Interest compensation ratio(ICR) | 4.89   | 10.28  | 12.19  |

※ ICR : Interest Coverage Ratio

## | Profit index |

|                                 | 2004 | 2005  | 2006  |
|---------------------------------|------|-------|-------|
| Sales net profit ratio          | 9.67 | 13.75 | 12.61 |
| Total fund sales profit ratio   | 2.04 | 2.68  | 2.55  |
| Equity capital net profit ratio | 1.64 | 2.35  | 2.25  |

## | Activity Index |

|                       | 2004 | 2005 | 2006  |
|-----------------------|------|------|-------|
| Fixed assets turnover | 0.15 | 0.16 | 0.16  |
| Stock assets turnover | 7.63 | 6.18 | 18.33 |
| Sales credit turnover | 3.93 | 4.20 | 5.43  |



# Definition for Terms

**Thinning out** The process of thinning out comparatively thicker trees, general 10-20 years after planting

**Convention on Climate Change** An international convention organized to prevent global warming by regulating greenhouse gas emissions including carbon dioxide.

**Green Dirt** Dirt used to spray over dirt to make a foundation for grass to grow.

**Membrane Filtering** Technology widely applied to production of ultra-pure water for industrial and domestic use. This advanced water purification and treatment technology is applied to produce clean water by filtering raw water containing pollutants through a high polymer membrane. It is very effective in eliminating turbidity and micro-organisms.

**Non-point Pollution Source** A pollution source having an irregular discharge route, unlike point pollutants sources, such as human populations or livestock having regular points of discharge. This source pollution is calculated by the pollution load arising from land use in watersheds (including paddies, fields and forest), and usually discharged to water system by rain.

**Biotope** A compound word made of Greek words, bios (life) and topos (territory). It refers to a common habitat of various species including human being, animal, and plant.

**Disinfection by-product** Cancer-causing substance such as THM or HAA that is produced when disinfection products used in the purification process reacts to organic compounds in the water.

**New and Recyclable Energy** Three kinds of new energy including hydrogen, fuel cell, and liquefied coal gas and eight kinds of recyclable energy including solar heat, solar light, bio energy, wind power, hydro-electric power, terrestrial heat, marine energy and energy from waste.

**Sludge** Sediments produced from sewage treatment or water purification process.

**Prevalence Rate** The number of patients divided by total population surveyed at a certain region at a certain time

**Life Cycle Assessment (LCA)** Technique for evaluating environmental impact of a product or service by quantitatively measuring the substances and energy consumed and discharged in an entire process of the product or service.

**Geosmin** One of the substances that cause drinking water to smell, and cause a fungus smell from tap water

**Environmental Impact Assessment** Estimations, analyses and assessments of the impact of Social Overhead Capital (SOC) facilities, such as roads, ports, railroads, airports and industrial complexes, as well as reclamation projects, on the environment

**Seawater Desalination** Technology for production of potable water by removing salt and other chemicals from saline water. Most small or medium sized facilities use the Reverse Osmosis Method, a type of membrane filtering method, as it is preferable in the aspects of energy consumption and maintenance

**Deep Seawater** Seawater flowing at depths 200 meters from the surface of the sea where sunlight cannot reach, recently there is increasing demand for this by many industries, such as fisheries, food producers, beverage companies, cosmetics and pharmaceuticals.

**BSC (Balanced Scorecard)** Performance management system consisting of comprehensive indexes that enables to measure mission and strategy of an organization

**CDM (Clean Development Mechanism)** One of the Kyoto Mechanisms under which developing countries can participate in the reduction of greenhouse gas emissions

**COD (Chemical Oxygen Demand)** Amount of oxygen consumed by oxidizing pollutants contained in water by an oxidizing agent. Higher levels of COD indicate higher water pollution amounts.

**ESCO (Energy Service Company)** A System of energy-related business, under which an investment and its return can be recovered by the cost and expenses reduced by energy savings achieved by the investment.

**GEF (Green Energy Family)** Voluntary and national movement organized to contribute to prevent global warming and reduce energy consumption by promoting the distribution of highefficiency energy saving equipment.

**GRI (Global Reporting Initiative)** Organization founded with the support of the UNEP in 1997 to develop the guidelines for "Sustainable Management Reports."

**ISO14001** International environmental management system standards as prescribed by the ISO (International Organization for Standardization).

**ISO/TC 224** The technical committee in charge of establishing international water supply and drainage standard for those under the ISO

**NOx** An atmosphere contaminating nitric oxide substance such as NO or NO2 that causes acid rain.

**MTV (Multi-Techno Valley)** A latest 21st century complex area of electronics/electrics, R/D, etc., that is being built in the reclaimed land north of Shihwa.

**NTU (Nephelometric Turbidity Unit)** Unit of turbidity of water samples measured by the intensity of light dispersed on the sample.

**ODA (Official Development Assistance)** Assistance of highly developed countries to developing countries of international facilities

**SOx** Sulphate substances in the air such as SO2 or SO3 that cause acid rain

**SS (Suspended Solid)** Particles that are 0.1 $\mu$ m or more in diameter and float in water to make it turbid.

**TOE (Ton of Oil Equivalent)** The amount of energy use such as use of electrical energy, gas and oils, converted to crude oil (tones).

**UNFCCC** A convention organized to regulate artificial emissions of greenhouse gases for prevention of global warming. Its full name is the United Nations Framework Convention on Climate Change).

### Listening to Our Readers

Your comments will be of great help to us in promoting our activities for sustainable management.

We are looking forward to receiving your comments and suggestions regarding this Sustainable Management Report, as well as our activities for sustainable management.

We appreciate your comments and suggestions very much and will include them, when possible, in our next report.

Please fill out the questionnaire attached and send it to the our Corporate Social Responsibility Team in Management Innovation Office via fax (+82-42-629-2399) or e-mail ([sustainability@kwater.or.kr](mailto:sustainability@kwater.or.kr)).



This report is also available on our homepage ([www.kwater.or.kr](http://www.kwater.or.kr)) for download in PDF file format. If you wish to have further details on our activities and achievements in sustainable management, please contact us at the address stated below.

We are very grateful for your concern about our sustainable management activities.

**Production** Corporate Social Responsibility Team in Management Innovation Office

**Design** Sungwoo Adcom ([www.swadcom.co.kr](http://www.swadcom.co.kr))

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