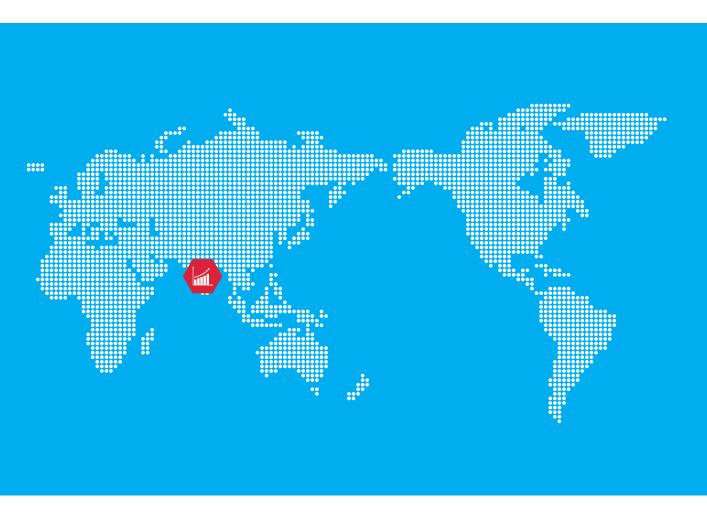
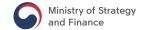


2016/17 KSP-IDB Joint Consulting Project:

Establishing IT-Based Performance Monitoring and Evaluation System of State-Owned Enterprises (SOEs) in Jamaica









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Project Title Establishing IT-Based Performance Monitoring and Evaluation System of

State-Owned Enterprises (SOEs) in Jamaica

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List of Abbreviations

ALIO All Public Information In-One

CPs Corporate Plans

EA Enterprise Architecture

EBITA Earnings Before Interest, Taxes and Amortization

EPB Economic Planning Board

FAA Act Financial Administration and Audit Act

KDI Korea Development Institute
KIPF Korea Institute of Public Finance

KPI Key Performance Indicator

K-Water Korea Water Resources Corporation

MEGJC Ministry of Economic Growth and Job Creation

M&E system Monitoring and Evaluation System

MFPS Ministry of Finance and Public Services (Jamaica)

MoSF Ministry of Strategy and Finance (Korea)

NWC National Water Commission

OECD The Organisation for Economic Co-operation and Development

OUR Office of Utilities Regulation

PB Public Body

PBMA Act Administering the Public Bodies Management and Accountability Act

PED Public Enterprises Division

PI Public Institution

PPP Public Private Partnership

PUBMIS Public Management Information System

SFPB Self-Financing Public Bodies SOE State-Owned Enterprise

Summary

The purpose of this research is to show the main contents of performance evaluation of SOEs in Korea and identify the major factors of the system came about. The research conducted an in-depth study on the overall condition of Jamaica to present an effective plan to introduce a customized performance evaluation system that the Jamaican government can utilize based on the experience of Korea. The study includes policy implications and strategies for Jamaica to successfully adopt the performance evaluation system based on the background and success factors of Korean SOEs performance evaluation.

Public enterprises play important roles in developing countries where the market economy is not yet fully developed. In the case of Korea, public enterprises functioned as one of the key policy instruments in process of implementing the five-year economic development plan from 1960s to 1970s. However, in the 1980s, the governance and inefficiency problems of SOEs that had been overlooked during the continuous economic development stage were called into question. Together with the introduction of a large-scale privatization policy in the 1980s, the Korean government introduced a public enterprise management evaluation system in 1984 for the public enterprises, and since then, evaluation system of public institutions has become a critical policy tool for public enterprise management in Korea. Based on the Organisation for Economic Co-operation and Development (OECD) guidelines on the management of public enterprises in 2005, Korea restructured the public enterprise management system and enacted the "Act on the Management of Public Institutions". The main characteristics of the Korean public corporation evaluation system are the followings:

First, the monitoring ownership is centralized. The Ministry of Strategy and Finance (MoSF) is in charge of general management of public corporations such as human resource management, organization, finance, and evaluation. Therefore, the intervention of other ministries may happen in terms of economic or industrial governmental policy. In short, the MoSF is responsible for the corporate evaluation of all public agencies as a whole.

Second, it has an independent and professional decision-making structure through establishment of a public agency steering committee. The chairperson is the Minister of Strategy and Finance, but the committee includes a majority of external members. The committee officially reviews the results of the management evaluation and has the right to nominate chief executive officer (CEO), director, and auditor of public agencies. Formally, it is a public body that is charged with the professional and objective operation of public institutions.

Third, a public enterprise management evaluation team is formed every year to evaluate public enterprises. In order to evaluate about 100 public institutions in a consolidated manner and to enable objective evaluation, it consists of about 150 experts from outside the government administration. These include professors, certified public accountants, and doctoral researchers, etc.

Fourth, highly sophisticated evaluation indicators are developed and applied. The indicators consist of quantitative and non-quantitative measures. In order to maximize the objectivity, more weight is given to quantitative indicators.

Fifth, it has a strong feedback system. The results of the management evaluation affect the performance incentive of all staff members in public institutions. The director who received grade D for two consecutive years is subject to dismissal.

Sixth, an IT-based system has been established in order to improve efficiency in the evaluation process of the public institutions, such as to periodically update data. Also, evaluators are encouraged to use such evaluation systems in the evaluation process. However, the IT-based system of internal management is not yet activated because of the management of the non-quantitative indicators.

Lastly, an integrated information management system is in place. 39 business management information about all 321 public institutions is managed through the consolidated system. This is also a way to enhance managerial efficiency and comparative analysis.

Meanwhile, public enterprise management policy of Jamaica appears to be distinguished from that of Korea in several aspects from the viewpoint of the evaluation system.

The first and most important difference is the absence of concentrated ownership for evaluation of public enterprises. The Jamaican Ministry of Finance and Public Services (MFPS) is responsible for reviewing public enterprises' budgets comprehensively and submitting the results to the Parliament, but this is limited to the budgetary area and debt management.

Second, it appears to obtain less objectivity in the evaluation procedures of project and performance management, and are intervened by individual ministries. Because individual ministries manage the projects and plans of individual public bodies, Jamaican government may introduce a system that evaluates all public enterprises through standardized performance evaluation indicators.

Third, sophisticated evaluation indicators and Key Performance Indicator (KPI) are not being systematically managed. Through conducting the pair review between the two institutions, Korea's evaluation index of the Korea Water Resources Corporation (K-Water) was applied to the Jamaica National Water Commission(NWC). As a result, implications have been brought up to develop a cross-board evaluation system, so that the objectivity and comparative evaluation can be guaranteed.

Fourth, parent ministries respectively appoint directors of the public bodies in Jamaica, where there are difficulties to lay responsibilities upon the result of the business performance. However, in the case of Korea, the evaluation committee is organised by external experts, who are professors, CPA and researchers at national think tanks, for the purpose of guarantee on objectivity of the evaluation. If Jamaica were to introduce such committee, it may be expected to enhance the transparency and expertness of the evaluation.

Fifth, if the evaluation results are to be related to an incentive-based remuneration system, the effectiveness of the evaluation system may be enhanced.

Lastly, to manage the evaluation efficiently, there is a need for managing the consolidated information system for all public enterprises.

From this point of view, the policy recommendations for the reorganization of the management system in Jamaica through the introduction of the public enterprise evaluation system are summarized as follows. Particularly, short and long-term classification is critical. This is based on the relationship between the MFPS and line ministries in terms of ownership.

Table 0-1 | Policy Recommendations for Roadmap

	Short Term	Mid-Term	Long Term
Governance	Current governance structure Financial Management by MFPS Standard evaluation within MFPS	Current governance structure Distribute the standard evaluators to the each line ministries	 Restructuring governance structure Consolidated evaluation system by MFPS Objective outside experts
Responsibility for Evaluation	• MFPS	Individual line ministriesCommittee by each ministry	 Consolidated evaluation by MFPS Consolidated committee for evaluation
Task Force for Evaluation	Within MFPS Outside Experts	MFPS supports individual line ministries to compose Task Force	• Joint Task Force
Targeted Public enterprise	Public enterprises under MFPS	Whole public enterprises	Whole public enterprises
Performance indicators	 Financial analysis Quantitative indicators (Labourproductivity,C apitalproductivity) 	 Managerial indicators Cooperation with MFPS and line ministries 	Business indicators Qualitative indicators
Feedback system	Performance based incentive system	Performance based incentive system	Performance based incentive system (Qualitative)
IT based evaluation	Financial focused quantitative evaluation	Systematic management of KPI	Qualitative indicators Automatic report by each SOE
Consolidated information management system	Financial focused information management	Consolidated information management system	Consolidated information management system

Sources: Complied by Authors

I. Project Overview

1. Project Background and Objectives

This study was carried out as the KSP project which is knowledge-driven economic cooperation program designed to share Korea's development experiences with partner countries' policymakers, enhancing their capacities and confidence. There are two forms of KSP, one is bilateral policy consultation and the other is multilateral joint consulting promoting tripartite cooperation among Korea, partner country and the international organization.

For this project, the latter form of KSP was determined and carried out by the Export-Import Bank of Korea (Korea Eximbank) under the overall planning by Ministry of Strategy and Finance of Korea (MoSF) with Inter-American Development Bank (IDB), one of the international organizations to expect synergy based on the partnership and the mutual learning of all parties involved.

This study will identify the governance structure and evaluation methodology as two important factors of Korean SOEs performance evaluation and delve more deeply into Jamaica's practical needs.

In Jamaica, there are more than 200 PBs (SOEs)¹⁾. Although they play an important role in the national economy, the performance has not been satisfactory as is seen in the ratio of return on investment (ROI), which decreased by 55.6% between 2002 and 2012. To respond the moral hazard of PBs, Jamaica has paid much attention to the issues such as privatization, a public-private partnership, and corporate governance framework. But it is not designed for a consistent institutional framework for PBs with regard to a managerial perspective. There

¹⁾ The term State Owned Enterprise (SOE) refers to any corporate entity recognized by national law as enterprise, and in which the state exercises ownership, as is defined by OECD. Korea used the term Public Institution which covers public enterprise and quasi-governmental institutions, while Jamaica used the term Public Body. In Jamaica, public body refers to all statutory body, authority and any government company, but does not include an executive agency as designated under the Executive Agencies Act.

appears not to be a consolidated and organized system to monitor and assess the performance of PBs.. In this context, we will try to suggest how to improve the monitoring and evaluation system of PBs in Jamaica by drawing implications from the Korean system.

To overcome the moral hazard of PIs, the Korean government has developed many policy instruments among which a performance evaluation system by outside experts and a consolidated information management system are considered the two most important instruments. The performance evaluation system, which was adopted in 1984, has contributed to the monitoring and accountability. The performance evaluation system in Korea has a well-designed framework including performance indicators.

On the other hand, the consolidated information management system, adopted in 2006, has guaranteed the efficient management of Pls. As of 2016, Korea has 321 Pls including public corporations, quasi-government organizations, and non-classified public institutions. 37 categorized data of all Pls are managed by an IT-based system under the supervision of the Ministry of Strategy and Finance (MoSF).

This research is to make a new approach for performance evaluation of PBs in Jamaica by introducing the Korean performance evaluation system, especially focusing on the IT-based performance evaluation system. The consolidated information management system might help the monitoring and evaluation (M&E) system of PBs in Jamaica to be more sophisticated and improved.

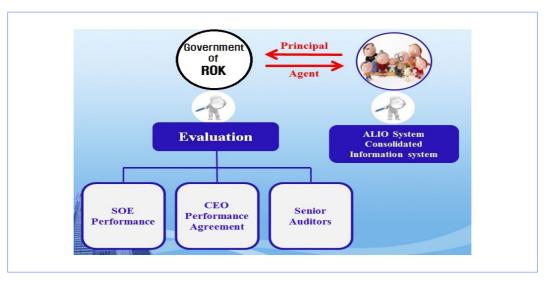


Figure 1-1 Korea's Best Practice for Coping with Moral Hazard

Sources: Complied by Authors

It will propose standardized and categorized monitoring and evaluation indicators based on the level of development of PBs in Jamaica by constructing the consolidated and consistent M&E system suitable for Jamaican PBs. It might be expected to improve their internal and external competitiveness.

Furthermore, this project is planning to provide the roadmap for establishing IT based performance evaluation system, which is expected to enhance the capacity of relevant Jamaican public officials to utilize the information provided by each PB through the IT-based system.

Then, the study needs to address why Korean Public Institutions (PIs)' performance evaluation system is so significant in the reform process of public corporations in Korea, then in Jamaica. The two countries have similarity in the following points.

First, SOEs represent a substantial part in the national economy, and a number of SOEs exist in both countries.

Second, Korea and Jamaica are both scares in natural resources but has well established political and administrative system infrastructure. Jamaica owns an accumulation of human capital and significant levels of public officials' professionality.

Third, the political and social demand for SOEs reform is very high in both countries, and share a similar experience of implementing public sector reform under IMF agreement. Jamaica is currently in the middle of running government debts reduction program under the IMF agreement, thus PBs performance evaluation and integrated information management system can work as a key solution for PBs efficiency.

2. Project Activities and Expected Results

2.1. Scope of Research

2.1.1. Performance Evaluation System

The purpose of this study is to research and analyze relevant information on current status of SOEs and the monitoring and evaluation (M&E) system in Jamaica. So the diagnostic study will be conducted on the current status of PBs and the M&E system of PBs in Jamaica.

The part of the current status of PBs will include their operational statuses such as the number of public bodies, the number of employees, debt ratio, and the results of management performance. The analysis of M&E system in Jamaica will include following areas: (i) operational efficiency, (ii) governance, (iii) financial management, and (iv) legislative frameworks and their actual application. Based on the analysis of the current operation of PBs and the M&E system, major constraints and issues will be identified.

In line with this analysis, policy recommendations and roadmap will be suggested for improving the M&E system of PBs in Jamaica based on a case study on Korea's experience in developing the M&E system of Pls.

In additions, the analysis of the M&E system will include the development of key performance indicators, data collection, and evaluation, and will be carried out by the following agenda.

- Legal basis
- · Ownership function
- Governance structure
- Time schedule
- Performance indicators
- · Methodology to measure the indicators
- · Feedback scheme

2.1.2. Consolidated Information Management System Framework for the M&E System of SOEs

A consolidated information management system can guarantee the efficient management of whole SOEs through transparency and accountability and help track performance trends. Regarding the establishment of the consolidated information management system, following agenda will be analyzed.

- · Items included in the system
- · Data collection
- · Data classification
- Verification
- Database(DB) system

2.1.3. Pair Review of the Water Resource Corporations of Jamaica and Korea

With the general comparison, it is not easy to understand the evaluation system in detail. So this research will have a pair review as a case study. To draw practical implications, a market-based SOE will be chosen for a possible quantitative comparison. Therefore, K-Water and National Water Commission will be compared with each other in terms of performance evaluation. The following agenda will be analyzed in the comparison.

- Legal basis
- · Governance structure
- · Time schedule
- · Performance indicators
- Methodology to measure the indicators
- · Feedback scheme

Two PBs, K-Water and National Water Commission were selected as an object of this research. The reasons for choosing these two particular PBs for comparative assessment were as follows: First, the K-Water scored an excellent performance evaluation result "A" with good performance evaluation team and showed excellent learning ability; Second, NWC, the largest PB in Jamaica, possesses a similar performance evaluation system with K-Water with excellent management capacity; Also, the executives of both K-Water and NWC pay a lot of attention to performance evaluation.

2.2. Expected Results

Through this research, followings are expected.

First, the consolidated and consistent M&E system of PBs will be suggested to Jamaica, which will allow the comparative evaluation possible.

Second, this research will assist capacity building of the relevant Jamaican public officials

Third, enhance efficiency by IT - based evaluation. IT-based system has two implications; one is to manage the integrated information system including all SOEs; the other is to manage the evaluation system by modernizing reporting to reduce administrative cost.

Forth, the purpose is to increase the competitiveness and capability of SOEs in Jamaica

Lastly, this endeavor will help to enhance the accountability of SOEs by managing the relevant evaluation information, including consolidated information, with regard to managerial perspective.

3. Project Implementation Plan

3.1. Procedure

- 1) Diagnostic study on the current status of the M&E system of SOEs in Jamaica
- 2) Case study on the M&E system of Korean SOEs
- 3) Case study on the Korean IT based evaluation system
- 4) Case study on the consolidated information management system
- 5) Pair review of relevant SOEs
- 6) Policy recommendations and roadmap for improving the monitoring and evaluation system of SOEs and installing the consolidated information management system in Jamaica
- 7) Capacity building workshop and final dissemination seminar

3.2. Inception Workshop

The Inception Workshop was delivered in in Jamaica on November 29, 2016, discussing the details of activities and scope of the KSP project with MFPS, Jamaica.

3.3. Interim Report

The KSP consultants delivered an interim report including results of the diagnostic study of current Jamaican PBs and their M&E system, a case study on Korea's best practices, a pair review of PBs in Jamaica and Korea, and preliminary policy recommendations, by the end of February 2017. The reviews on the interim report have been made by all parties, particularly Ministry of Finance and Public Services (MFPS) Jamaica, with a focus on the accuracy of the diagnostic study and feasibility of the proposed recommendations.

3.4. Final Report

The KSP team delivered a final report on the establishment of M&E system of PBs in Jamaica

before the end of April 2017. Based on the feedbacks for the interim report from MFPS Jamaica and IDB, the final report provided applicable policy recommendations. It was submitted in English and reviewed by all parties. Necessary modifications were made, and the report was finalized by the end of May 2017.

3.5. Capacity Building Workshop in Korea

In reference to the results of the above mentioned studies and activities, the KSP came up with the agenda for the capacity building workshop focusing on sharing Korea's knowledge and experience. The workshop was comprised of lectures and study-visits to relevant institutions. The KSP jointly hosted a capacity building workshop in Korea, and relevant officials of Jamaica are invited to participate. The details of the workshop including a number of invitees and schedule are as followings.

3.6. Final Dissemination Seminar in Jamaica

The dissemination seminar was held in Jamaica before the end of May to share the final results of the project. The seminar aimed to disseminate the project outputs for the national and local stakeholders, experts of concerned sectors, and participating parties of the project.

4. General Status of Jamaica

4.1. Political System

As part of the Commonwealth of Nations, Jamaica is a constitutional monarchy where formally Queen Elizabeth II serves as the head of state. The Queen appoints the Governor General of Jamaica, recommended by the Prime Minister of Jamaica, but the Governor-General does not have clout. Since February 26th of 2009, Sir Patrick L. Allen has maintained the position of the Governor-General of Jamaica.

The executive branch maintains a parliamentary system where the leader of the party that gets the most seats in the House of Representatives becomes the Prime Minister of the administration. The Prime Minister holds 5-year terms, but, depending on political circumstances, early general elections can be held. The executive branch is comprised of the Prime Minister and Ministers. The Prime Minister appoints each Minister from the members of the ruling party of House of Representatives but also appoints some Ministers from the

ruling party members of the Senate. However, the Minister responsible for Finance must be a member of the House of Representatives.

The legislative branch upholds a bicameral parliament that consists of the Senate and the House of Representatives. While the Senate members are appointed, the members of House of Representatives are directly elected. The members of the House of Representatives where there is a total of 63 seats serve 5-year terms and are directly elected by citizens. The members are elected by simple majority vote in single-seat constituencies, so the candidate that gains one more vote than others in a certain constituency becomes the elected representative in the House. The House of Representatives deals with key national functions such as legislation, supervision of government expenditure, and approval of tax and funds.

The members of the Senate where there is a total of 21 seats serve 5-year terms and are appointed by the Governor General on the recommendation of the Prime Minister for 13 seats and the leader of the opposition party for 8 seats. The Senate reviews legislations approved in the House of Representatives. The session of both the Senate and the House of Representatives begins in April every year and finishes in February of the following year.

The judicial branch follows the Common Law System of the United Kingdom (U.K.), so judgments are bound to precedents. The branch maintained the system of the Parish Court, Supreme Court and Judicial Committee of the Privy Council.

The party system traditionally has been a two-party system, with power alternating between the People's National Party (PNP) and Jamaica Labour Party (JLP). The PNP is the party with the longest history among the parties in English speaking Caribbean nations, founded in 1938 by Norman Manley as a democratic socialist party. It claims to stand for the centre-left leaning social democracy and realizes political activities allied with the Jamaican labour unions such as the Trade Union Congress and National Workers Union. The current leader of the party is Peter Phillips, who succeeded Portia Simpson-Miller in 2017. The PNP has held majority seats for 31 years since the country's independence in 1962.

Alexander Bustamante established the JLP in 1943. The party shows a centre-right tendency that advocates nationalism and a pro-western inclination. The current leader of the JLP is the Prime Minister Andrew Holness, who was appointed the leader of the party and Prime Minister in 2011 when he succeeded Bruce Golding. The JLP has held majority seats for 24 years since the country's independence.

Besides the two main parties, there is the National Democratic Movement (NDM) led by Michael Williams, which is still in its nascent stages of development, as it was formed in 1995. The party did not win any seats during the last general election held in February 2016.

4.2. Overview of Economy

Primary industries such as agriculture and fishing account for 6.7%, secondary industries 21.3%, and service industries 72%. Among them, tourism and remittance of foreign exchange account for 30% of Gross Domestic Product (GDP) and the exportation of bauxite and alumina 5%.

Jamaica's asthenic fiscal stance is characterized by low economic growth and high public debt. Jamaica's growth over the last 20 years has underperformed the Latin America and Caribbean average of 3.9% growth. Due to the dependence of the Jamaican economy on the USA as its primary trading partner, the global financial crisis hit Jamaica early and had a severe impact on its already anemic growth. Real GDP Growth rates became negative in the fourth quarter of 2007 and remained negative until 2010. Thereafter, growth rates returned to its average of below 1% until 2016.²⁾

In 2006, Jamaica's public debt as a percentage of GDP stood at 135.4%. Since then, the Government of Jamaica made valiant attempts to reduce this ratio through its Jamaica Debt Exchange in 2010, seeking to reduce overall interest expense by roughly \$42.8 billion annually. This was followed in 2013 by the National Debt Exchange of additional local bonds to change the debt structure from variable rate instruments to fixed rate instruments and to lengthen the maturities of the debt. Further, the GOJ successfully brokered a debt buy-back with Petro-Caribe in 2015.

Another challenge which had to be faced by the Government of Jamaica was their operation of a negative fiscal balance for well over a decade with the exception of one year (2013). Jamaica's primary surplus has averaged 5.7% over the last decades.

The debt exchanges, along with an Extended Fund Facility (EFF) agreement with the IMF, signed in May 2013, made way for significant structural shifts in the management of the fiscal budget with committed loans over four years in the amount of USD 501 million each by the IDB and World Bank. The loans allowed the GOJ to implement major fiscal policy changes which addressed the lack of strong fiscal rules, as well as capacity within the three revenue agencies of the Government; Customs, Tax Administration and the Ministry of Finance (MFPS). The policy changes addressed expenditure and the divestment of public enterprises together with institutional reforms.

The government of Jamaica successfully completed the EFF with the IMF over the four years and has recently entered into a Stand-By Arrangement. Throughout the period, performance

²⁾ Bank of Jamaica, 2007-2015, Annual publication "Jamaica in Figures", Bank of Jamaica

on the primary surplus, fiscal deficit, and net international reserves was strong. Jamaica's long-term rating was upgraded by S&P to B- from CCC+, reflecting the progress in stabilizing the economy and gaining access to new external funding from official creditors. Unfortunately, growth remains weak and some structural challenges remain, including the extremely slow implementation of the GOJ's Master Rationalization Plan and the realization of the observation of the new rules regarding timelines for submission of annual returns by public bodies within a 4 month time period following their financial year end.

It is also important to note that in spite of the strong efforts made to decrease Jamaica's debt, GDP ratio remains high, though decreased, at 120% of GDP as of end FY 2016. Much of the issue is owing to the low growth rates of the economy, and its vulnerability to shocks, such as an extended drought in 2014–2015, which caused the already fragile economy to reverse some of the progress made in the two years prior.

In addition to fiscal structure issues, Jamaica also remains below 40% on the Perception of Corruption Index maintained by Transparency International; ranking the country as 73/146 countries. This is one of the major challenges faced by the economy. Jamaica also faces social challenges, with unemployment rates in excess of 13% high, though declining, poverty levels which in 1991 had peaked at above 40%, declined to 16.5% in 2001 and have since been on the rise to reach 19.9% in 2015.³⁾

The GDP of Jamaica is US\$14.057 billion (estimated in 2016), and GDP per capita is US\$4,968 (estimated in 2016), ranking the country as a middle-income country. Growth has averaged 0.8% over the IMF programme period. The country demonstrated a recent slight improvement of the economy, improving to 1.4 percent in Q1 of FY16/17 due to the structural fiscal changes implemented, supported by improvements in the global economy. Growth in FY2016/17 is expected to reach 1.7 percent in FY16/17. Inflation rate had increased to 3.7% in 2015, subsequently declined to 2.5% in 2016, which have been the lowest levels in recent decades.

Jamaica has a mixed economic system of public and private companies. Major economic sectors are Distribution, Government Services, Real Estate Renting & Business Activities, and Financial Services. Major industries are agriculture, mining, manufacturing, tourism, and financial and insurance services. Particularly, mining and tourism are the main productive sources of foreign exchange, in addition to remittances received from Jamaicans living overseas. Every year around 1.7 million tourists visit Jamaica.⁴⁾ In 1991, as part of economic liberalization policy, Jamaica changed from a fixed exchange rate to a floating exchange rate, which resulted in reducing inflation and removing restrictions on foreign investment.

³⁾ World Bank, 2015, EconomicUpdateonJamaica, World Bank

⁴⁾ Jamaica Tourist Board Annual Travel Statistics, 2015, Average number of Stopover Visitors 2001–2015 p.2, Jamaica Tourist Board Annual Travel Statistics

The long-term impact of the floating exchange rate regime in Jamaica, however, has been found to have a declining impact on inflation. That is, after an initial shock of devaluation, there is an 80% pass through to the inflation rate. However, 6 months following the devaluation, the pass-through rate is only 45%.⁵⁾ Nevertheless, Jamaica's inflation rate has declined since its peak in the 1990s (over 30%) and following the structural fiscal policy changes that have been implemented since 2007, inflation rates have declined to single digit figures for the first time in decades.

For the last fifty years, the average economic growth rate of Jamaica has been 1.7%, which is lower than the world average of 3.1%. Moreover, the average annual per capita GPD growth rate of Jamaica is 0.6%, which is only one-third of the world average of 1.8% and far less than its regional counterparts, the LAC-7, which have enjoyed growth rates of above 6% following the global financial crisis, and 3.7% for the past 20 years prior.⁶⁾ However, the number stated as "Real Gross Domestic Product (GDP) recorded moderate growth of 1.7% for the calendar year 2016" is supported by the Agriculture Sector. The macroeconomic indicators generally improved, with declines in the inflation and unemployment rates and improvements in the current account balance and Net International Reserves (NIR) for the first two-quarters of the fiscal year.⁷⁾

The public debt ratio to GDP has exceeded almost 90% since the 1970s. Particularly, from 1996, the debt accumulation has intensified so that it reached 145% of the GDP in 2013 although; recently it has been slightly alleviated, reduced to about 120 percentage currently.⁸⁾ The problem of the debt of Jamaica is that the debt does not arise in the domestic market but in overseas, therefore it is negatively impacted by the devaluation of the Jamaican Dollar aimed at easing local inflation rates.

Jamaica is a small, open economy with a relatively narrow export base and high dependence on commodity imports. The economy relies heavily on remittances and tourism, each one typically accounting for about 15% of gross domestic product (GDP). External trade in goods and services amounts to approximately 80% of GDP, with mineral fuels alone representing on average a third of the total value of imports. The serious national debt is the result of the chronic trade deficit. Since 1980, with a few exceptional years, Jamaica has experienced a Balance of Payments deficit, excluding capital inflows.

⁵⁾ IDB, 2004, Revitalizing the Jamaican Economy: Policies for Sustained Growth by Inter-American Development Bank p. 157, IDB

⁶⁾ E. Talvi, 2013, Latin America Macroeconomic Outlook: A Global Perspective Are the Golden Years for Latin America Over p.1, Brookings

⁷⁾ Ministry of Finance & The Public Service, 2017, Medium Term Debt Management Strategy-February 2017, Government of Jamaica

⁸⁾ IMF, 2016, Jamaica's New IMF Arrangement to Support Growth, Create Jobs, IMF

Table 2-1 Debt Ratio of Jamaica and its Progress

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/ 17 (Proj.)	2017/ 18 (Proj.)	2018/ 19 (Proj.)
Debt/GDP	134.0%	132.0%	135.6%	133.1%	129.9%	122.3%	124.1%	119.7%	113.0%
Domestic Debt/GDP	69.1%	72.4%	75.4%	70.0%	67.1%	48.3%	48.5%	42.9%	39.1 %
External Debt/GDP	64.9%	59.5%	60.2%	63.0%	62.8%	74.1%	75.6%	71.7%	67.8%
Interest/ GDP	10.9%	9.6%	9.5%	7.5%	7.9%	7.4%	7.9%	6.8%	5.8%

Sources: Ministry of Finance & The Public Service, 2016, Medium-Term Debt Management Strategy.⁹⁾ Government of Jamaica

Jamaica relies on the importation of most daily necessities such as raw materials like petroleum, machinery and vehicles, as well as building materials and food. Jamaica relies on the exportation of the primary industry commodities, such as mineral (aluminum and bauxite) and agricultural (sugar, banana, and coffee) products, that are heavily influenced by the global raw materials market. The total export and import in 2016 were US\$1.3 million and US\$3.7 million respectively, which show the trade deficit of over US\$2 million. The major export partner is the United States (US), which accounts for 25% of total export, followed by Canada, Russia, Netherlands and the U.K. whose shares are 16.5%, 9.3%, 8.9%, and 5% respectively. The US is also Jamaica's biggest import partner, which accounts for 33% of total import, followed by Venezuela (12.4%), China (12%), and Trinidad and Tobago (11.1%) respectively.

While Jamaica's BOP problems are primarily impacted by the significant trade deficits over decades since its independence, they are exacerbated by GOJ's fiscal position. High levels of foreign debt meant that valuable government resources that should have been spent on the productive sectors were being spent on servicing the high levels of external and local debt.

Besides bauxite, Jamaica has few mineral products. The bauxite reserve in Jamaica stands at 2 million tons, and every year the country produces 500,000 tons that are the fifth in the world and the second in Latin America after Brazil. The reserves are located in the central area of Jamaica such as St. Elizabeth, Manchester, Clarendon, St. Catherine, St. Ann, and Trelawny.

Portia Simpson-Miller's PNP administration set up the goals such as the government transparency, anti-corruptions, constitutional compliance, and job creation and financial soundness through renegotiation with the International Monetary Fund (IMF) under a four-year Extended Fund Facility (EFF). Some of the critical legislative actions which were taken under the PNP administration with the support of the IMF, IDB and World Bank are the Public Bodies

⁹⁾ GOJ defined total debt includes Central Government, Bank of Jamaica and External Guaranteed Debt.

Management and Accountability (Amendment) Act, 2014; the Financial Administration and Audit (Amendment) Act and the Fiscal Incentives Act (FIA). The FIA repealed several other laws which granted tax incentives to certain sectors of the economy, granting unfair incentives to some industries over others. Some of the fiscal Incentives enacted by the Act which established a more competitive business tax regime include (i) Lower corporate income tax rate, (ii) Caps on Tax Losses Carried Forward, (iii) Employment Tax Credit, (iv) Capital Allowance Reform and (v) Income Tax Relief: Large Scale Projects & Pioneer Industries.

In addition to legislative amendments, capacity within the Ministry of Finance, Tax Administration Jamaica and Jamaica Customs Agency were improved with the implementation of (i) the Revenue Administration Information System (RAiS) which allowed the Government to enforce the electronic filing of tax returns and the (ii) Automated System for Custom Data (ASYCUDA World). Additionally, (iii) the GOJ implemented the Central Treasury Management System (CTMS) to allow for the consolidation of government's cash resources under the control of the Account General (AG), with the Bank of Jamaica (BOJ) as the custodian of a Treasury Single Account (TSA).

Andrew Holness' JLP administration that won the general election in 2016 drew up medium and long-term national development plans through the Vision 2030. The administration set priority to national tasks which are economic growth, employment creation, and public debt reduction. In order to achieve the tasks the government has revitalized home economies by expanding the number of people exempted from income tax, continued implementing new loan programs under the current IMF financial relief system, which cancelled the remaining tenor of the EFF and replaced it with a Stand-By Arrangement (SBA), and revamped regulations to facilitate foreign investments in Jamaica.

Since Jamaica has encountered economic difficulties, the reform of the public sector is an important political agenda. To this end, the restructuring of the SOEs sector has been implemented steadily.

5. Status of PBs in Jamaica

5.1. Category of PBs in Jamaica

5.1.1. Definition

The term, PB, is now being introduced to the Jamaican public sector. Within the Jamaican

context, government institutions are termed public bodies, defined in the Public Bodies Management and Accountability Act (PBMA Act):

a statutory body-established by an individual enabling legislation-or authority or government company. A government company is registered under the Companies Act of Jamaica and is one in which the Government or an agency of the Government holds shares and is in a position to direct the policy of that company.

As of 2012, Jamaica's Public Sector employed 125,300 employees (inclusive of 4,200 Jamaican Defence Force personnel) in 17 Ministries (including the Office of the Cabinet and the Office of the Prime Minister) and 230 entities (statutory bodies, limited liability companies, executive agencies and other public bodies).¹⁰⁾

As of August 2015, the list of active public bodies was 194 (including "inactive" public bodies, the number would exceed 200). But as of 2017, the numbers of active public bodies are 173. The active public bodies were included in the GOJ's Master Rationalization Plan (MRP, revised in 2011), which contains the recommendations for the transformation of the public sector. The MRP was a result of Cabinet Decision #49/09 dated November 2, 2009, which stated the decision of the Cabinet to rationalize the Public Sector. One of the primary justifications for the rationalization is to address the high wage bill relative to GDP, which stands at over 10%, consistently exceeding its target of 9%.

The newly executed Public Bodies Management and Accountability Act (PBMA Act) requires PBs to prepare annual corporate plans and budgets, which must be debated and approved by Parliament. The PBMA requires that PB performance is to be monitored against agreed targets and goals, with oversight by stakeholders including representatives of civil society. However, implementation of the approved PBMA is sorely lacking and many of the requirements are not being met by the PBs such as timely submission of annual reports with audited financial statements and ultimately the performance monitoring of these PBs. Additionally, the PBMA is "unspecific about the roles and responsibilities of the Board and Management, procedures for the conduct of the Board and the relationship between Ministers, Boards, and Management."

Because the PBs lack profitability motives, the GOJ absorbs the debt of the loss-making public sector enterprises, leading to unwelcome fiscal surprises. A Corporate Governance Framework for Public Bodies was approved in 2011 and revised in 2012 with the aim of

¹⁰⁾ Government of Jamaica, 2016, Assignment of Subjects and Departments, Agencies and other Public Bodies, Government of Jamaica

"improving accountability, probity, and transparency among Public Bodies in order to achieve a more compliant, responsive, efficient and effective Public Service." ¹¹⁾

The Framework included the following elements and principles: (i) Effective Board of Directors - Every Public Body should be headed by an effective Board which is collectively responsible for strategic management and oversight, serves as the focal point for Corporate Governance and is accountable to the Responsible Minister and shareholder representative as determined by law; (ii) Board Performance & Evaluation - The Ministry of Finance & Public Service should develop a Performance Evaluation Template to be used by all Boards. The Board of a public body should be subject to a formal, objective and rigorous annual appraisal of its performance and that of its committees and individual directors. The evaluation should address whether the objectives of the board of committee are being met in an efficient and effective manner and would be linked to the implementation of the organization's operational plans; (iii) Independence Audit - The Board of every public body should have an effectively functioning independent Audit Committee: (iv) Managing Stakeholder Relationships-MFPS should develop a protocol for communicating with stakeholders and the media as communication to the public is part of the overall accountability of the public sector.

The following Figure 2-1 shows the Corporate Governance Framework as elaborated:

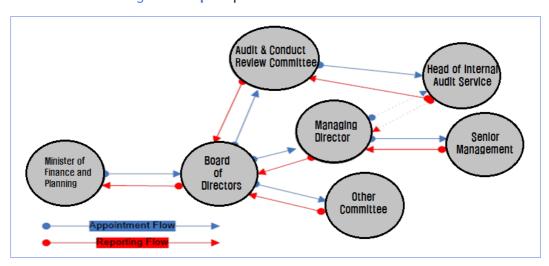


Figure 2-1 | Corporate Governance Framework

Sources: Complied by Authors

¹¹⁾ Government of Jamaica, 2011, CorporateGovernanceFrameworkforPublicBodiesinJamaica, Government of Jamaica

Public Bodies are required to report as follows:

- The annual report including audited financials within 120 days of the end of the Financial Year to the Ministry of Finance and Public Services
- Quarterly Contracts Awards which are submitted to the Office of The Contractor General on a quarterly basis
- Monthly procurement reports which are required by the Ministry of Finance and Public Services under the Public Reporting System

5.1.2. Sectors/ Industries in which Public Bodies Operate

Public bodies, constituting statutory entities and authorities, as well as government-owned limited liability companies, undertake an important role in the economy of Jamaica. They are involved in 13 sectors and cover a wide range of activities including developmental, regulatory, social and commercial. The sectors in which Jamaica's PBs are active include agriculture, mining, energy and transport. 67 out of 173 public bodies are self-financing and are expected to compete fairly, with no preference applied, with private sector entities, including tax requirements.

The public bodies provide services to the public which may include private firms. PBs engage in sectors which may be considered monopolistic and may also be commercial in nature.

5.1.3. Register of Public Bodies

As of 2017, there are 173 active public bodies 67 of which are characterized as self-financing public bodies (SFPBs). The other entities are included in the central government budget and financial reporting. SFPBs are entities which have authority to collect revenue, borrow and spend outside of the central government budget.

The register of public bodies identifies their legal status and funding source. This is posted on the website of Ministry of Finance and Public Services (MFPS).

Clear recommendations were made for the rationalization of the public sector to reduce the burden on the debt of those non-performing entities or entities which duplicate services to the public or entities which provide services which would better be provided by the private sector. The Public Sector Master Rationalization Plan referred to above made many recommendations for mergers, privatizations, and closure of public sector entities. It did not specify the privatization or merge of any mining entities/departments/agencies. However, the

following recommendations were made regarding entities that work in the sectors of Agriculture, Energy, and Transport.

The entities listed under the Ministry of Agriculture for which recommendations were made for privatization or mergers include:

Agriculture Entities to be merged and retained: (i) Export Division and Commodities Boards (Banana, Coconut, Cocoa) to create a single entity managing and developing agricultural produce.

Agriculture Entities to be privatized: (i) Wallenford Coffee Company Ltd. - decision to divest was already agreed and the process has begun; (ii) Commercial arm of the Cocoa Board to be privatized and the remaining functions to be undertaken by the Commodities Board; (iii) Sugar Corporation of Jamaica - to be wound up. Currently, the debts relating to the Government's sugar assets are managed. The entities listed under the Ministry of Transport for which recommendations were made for privatization or mergers are included.

Agriculture Entities to be merged and retained: (i) Port Authority of Jamaica/Airports Authority of Jamaica and development functions of the Jamaica Railway Corporation - to be named Ports Authority of Jamaica; (ii) Island Traffic Authority, Transport Authority and regulatory functions of the Jamaica Railway Corporation - to be named Land Transport Authority.

The following recommendations were made regarding public bodies which work in the Transportation Sector:

Transport Entities to be contracted out: (i) Port Authority Management Services - (management services); (ii) Kingston Container Terminal - (management services); (iii) Norman Manley International Airport Ltd. - the airports/aerodromes management functions will be privatized.

Transport Entities to be privatised: (i) Boscobel Aerodrome; (ii) Tinson Pen Aerodrome; (iii) Negril Aerodrome; (iv) Ken Jones Aerodrome; (v) Jamaica Railway Corporation - commercial services to be privatized.

Transport Entities to be merged and retained: (i) Merge administratively BATCO, JBM with JBI to realize greater efficiencies.

In terms of the Energy Sector, the following recommendations were made:

Energy Entities to be divested/privatized: (i) Wigton Wind Farm - Wind Farm to be privatized and renewable energy functions to be assumed by PCJ- medium term; (ii) Petrojam Ethanol - self-financing entity involved in the production and sale of ethanol - medium term; (iii) Clarendon Alumina Production Limited - medium term; (iv) Font Hill properties.

Energy Entities to be abolished: (i) Electricity Authority (ii) Jamaica National Oil (iii) PCJ Developments (iv) PCJ Engineering. The Ministry is already in the process of winding up these entities.

Once the Government carries out these suggestions, the positive fiscal contribution of the self-financing entities will be realized.

5.1.4. Contribution of Self-Financing Public Bodies

Total gross assets in a subset of sixty-four (64) public bodies were projected at J\$1,125,679 million for the fiscal year (FY) 2016/17 while it was J\$1,065,625 million for the FY 205/16. The combined employment level is expected to be 13,994 while it was 13,154 for the FY 2015/16. With the utilization of these resources, they are expecting to generate total revenues of J\$355,918 million from which profits before tax of J\$35,285 million will be derived.

5.2. Role of PB in the National Economy

5.2.1. Current Status of PBs in Jamaica

The PBs in Jamaica operate in almost every sector of the economy where they provide public transportation, banking, airports, water, housing, ports, hotels, mining, and petroleum-related services.

As of 2017, there are 173 public bodies 67 of which are characterized as self-financing (SFPBs). The other entities are included in the central government budget and financial reporting. SFPBs are entities which have authority to collect revenue, borrow and spend outside of the central government's budget:

1) Their gross assets were equivalent to 74.6% of GDP and their staff complement was 10% of the total public sector workforce, based on the result of 2013.¹²⁾

¹²⁾ Most recently, total gross assets of those entities has increased from approximately J\$1,196,000 million in 2014 to J\$1,311,255 million in 2015, while the combined employment level has also increased from 13,208 to 13,852

2) In 2015, they generated total revenues of J\$404,621 million from which profits before tax of J\$52,973 million, and net transfers to the Jamaican government were J\$18,885 million, which consist of corporate taxes, financial distributions/dividends and program support of J\$39,415 million against the government support in the form of grants of J\$20,530 million.

While PBs have taken a large share of the Jamaican economy, they are also very substantial in terms of social and developmental realms. The SOEs in three sectors of the economy account for 73% of the capital expenditure/investment of the entire SOE sector, with housing accounting for 42%, energy 17%, and water 14%. For example:

- 1) National Housing Trust (NHT) planned to spend J\$22,761 million on housing activities by 2016, which was expected to result in the creation of approximately 6,000 mortgages and include the commencement of 2,376 housing solutions and the completion of 1,686.
- 2) National Water Commission (NWC)'s capital projects valued at J\$8,199 million was planned to be implemented in 2016, of which J\$3,541 million and J\$1,208 million will be spent on the Kingston Metropolitan Area (KMA) Water Supply Improvement and the Caribbean Regional Fund for Wastewater Management Projects respectively.

5.2.2. PBs' Influence on the Entire Economy

Since the PBs have been taking a large share of the economy and producing a wide range of services nationwide, their fiscal conditions, in fact, have been very vulnerable and experienced volatile economic growth. Over the past 20 years, the average annual per capita GDP growth has been negative 0.1%, which placed Jamaica at the lowest in the Caribbean except for Haiti. The economy is smaller today than in 2008, and poverty has doubled since 2007 while the unemployment rate is higher than during the height of the global recession due to anaemic growth and continued austerity.

At the centre of this national fiscal unsustainability, PBs have been major contributors.

1) Low Return of Asset & Return of Equity

The Jamaican PBs' low productivity has contributed to the slow economic growth. For example, the average Return of Asset (ROA) and Return of Equity (ROE) of the 24 SOEs, predominately self-financing entities, in FY 2003-2012 were -3.7% and -55.6%, respectively. These SOEs' low productivity has caused slow economic growth, contributing 1.5% to GDP in 2012 (Figure 2-2). However, to absorb these losses and keep the SOEs operating, the

government of Jamaica had to inject over J\$250 million during this period, whereas it could have been spent on vital social services such as health and education.

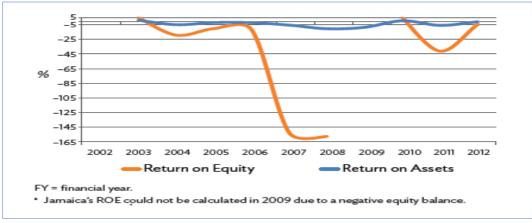


Figure 2-2 GDP Growth of Jamaica, 2002-2012

Sources: Public Enterprise Division's internal information

2) Increased Debt Burdens and Deficits

The PBs have increased the Jamaica's debt stock significantly in recent years. The country's debt to GDP ratio increased from 31.7% in the FY 1990/91 to 135.7% in the FY 2014/15, while the domestic and external debt to GDP ratio grew from 7.3% and 24.4% in the FY 1990/91, respectively, to 67.5% and 63.1% in the FY 2014/15. (Figure 2-3).

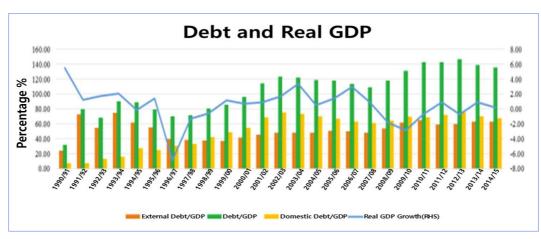


Figure 2-3 Debt and Real GDP

Sources: Inter-American Development Bank's internal information₩

Jamaica's high debt level is largely attributed to the government's subsidized debt and absorption of losses and debt from loss-making PBs. Clarendon Alumna Partners (CAP), for example, is a perennial money-losing PB. Prior to the decision in 2013 to insulate the budget from CAP's operations, its expenditure outpaced income by almost 2 to 1. The entity was running losses of 0.6% of GDP, which, when coupled with a net debt, equivalent to approximately 2.5% of GDP. NWC and Jamaica Urban Transit Company (JUTC) are in similar positions. They are both loss-making PBs with a combined net debt position of 3.5% of GDP. An assessment of the accounts of all three PBs suggests that current operations are such that in the absence of a commitment to substantial restructuring, the residual obligation would accrue to the government. As such, the government has assumed loans totaling US\$1.3 billion (J\$143.3billion) or 9.7% of GDP on behalf of PBs for the period between 2010 and 2014.¹³)

The absence of a commitment to restructuring in loss-making PBs can be explained by two factors. First, the interest rates PBs pay on their debt are substantially below commercial rates because of explicit and implicit government guarantees and soft loans provided by the government (Figure 2-4)

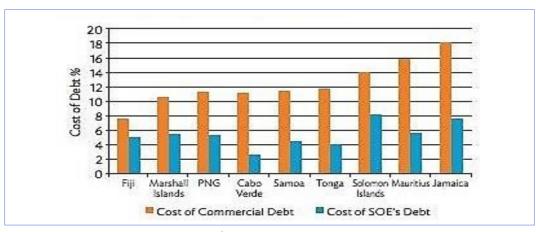


Figure 2-4 | Average Cost of State-Owned Enterprise Debt Vs. Commercial Debt Rate, 2002-2012

PNG = Papua New Guinea, SOE = State-Owned Enterprise, vs = Versus. Sources: Inter-American Development Bank's internal information

Second, the Jamaican PBs have benefited from ongoing government equity contributions. These are typically provided to finance assets, retire debt, and simply absorb accumulated losses. In Jamaica, the total government transfers to PBs exceeded profits during between FY 2003 and FY 2012 (Figure 2–5).

¹³⁾ Inter-American Development Bank's internal information

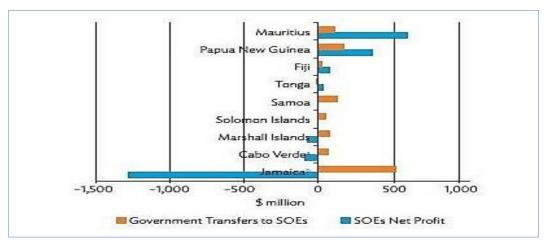


Figure 2-5 | Total Government Transfers to State-Owned Enterprises Vs. Total State-Owned Enterprises Net Profits, FY 2003-FY 2012

FY = Financial Year, SOE = State-Owned Enterprise, vs = versus.

a Since 2008

b Since 2003

Sources: International Monetary Fund, 2013, GovernanceFinanceStatisticsYearbook,IMF

These favourable financial supports (Soft Budget Constraint) for PBs not only directly increase the amount of government's debt, but also indirectly distort the economies by crowding out the private sector and dampening the competitiveness of domestic industries, which contributes to fiscal deficits.

3) Decreased Infrastructure Spending of PBs

As part of the IMF agreement in 2013, which aims to lower Jamaica's public debt to 96% of GDP by the end of 2020, Jamaica undertook severe austerity measures through freezing wages and cutting spending. This agreement has contributed to a slowdown in government spending, which has resulted in negative growth in the 'producers of government services' sector. Even though the producers of government services sector does not reflect all spending by related PBs, it is a fact that infrastructure spending by PBs have decreased over the first two years of the IMF program (Figure 2–6).

As can be seen above, the investments by PBs decreased from 4.2% of GDP in 2009/10 to an estimated 2.7% of GDP in 2014/15. Investment by PBs is substantial enough that it can boost the economy's long-term productive capacity through contributing to aggregate demand and mobilizing idle resources. However, decreasing infrastructure spending by PBs have slowed down the economic growth in Jamaica.

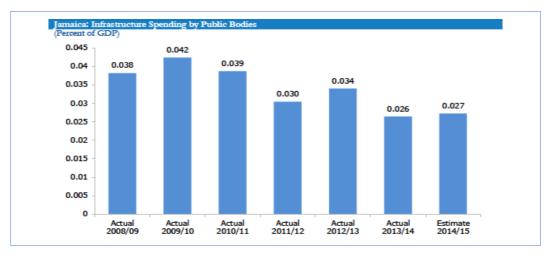


Figure 2-6 Infrastructure Spending by Public Bodies, Jamaica

Sources: Ministry of Finance and Planning's internal information

The NHT withdrew J\$11.5 billion per year for 4 years from the government to replenish government coffers drained to pay off the loans. There has been substantial public outcry since 2012 when it was first proposed and implemented by the then ruling PNP government. Notwithstanding these ongoing withdrawals, the NHT remains solvent, and has made investments each year in housing expenditure of J\$17,899.9 million (2015/16) and J\$21,842 million (2016/17).

Thus, the immediate causes of poor performance of PBs to their chronic negative balances can be generalized as a cycle shown in Figure 2-7.

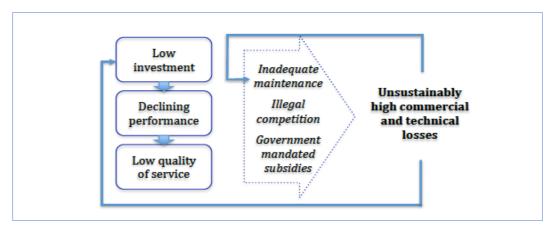


Figure 2-7 | Cyclical Relation of Low Investment and Low Performance

Sources: CompliedbyAuthors

6. Performance Evaluation of the PB

6.1. Government Oversight and Monitoring of Public Bodies

Public bodies are assigned to portfolio/parent ministries which provide policy directives/guidance. The Permanent Secretary, administrative head of the ministry, has general oversight responsibility and is required to give account on the operations of the public assigned to the Parliament. The shares of public bodies, established under the Companies Act, are held by the Accountant General, and the department reports to the MFPS. Subsidiary public bodies' shares will be held by the parent company. The MFPS exercises ownership or financial responsibility for public bodies and seeks to promote sound management practices within public bodies in order to improve their financial viability and reduce dependency on Government's resources.

All public bodies are held accountable to statutory requirements including those defined in PBMA Act, the Financial Administration and Audit Act (FAA), and the Companies Act. The budgeting, control and reporting requirements for all public bodies are outlined in the PBMA Act.

The Government of Jamaica has increased efforts to update and improve the governance framework within which PBs operate. This has been done through the following amendments:

- 1) Administration of PBMA Act 2011 and the FAA¹⁴), and
- 2) Implementation of the principles of the corporate governance framework for public bodies.

The Cabinet approved Ministry Paper No. 14 in January 2017, which proposed the development of a Competency Profile Instrument for Boards of Public Bodies. The Ministry of Finance created Terms of Reference for the provision of services to develop a Performance Evaluation Instrument for Boards of Public Bodies in the Government of Jamaica. 15) A number of entities have already been privatized per recommendations in the Master Rationalization Plan.

The Code of Conduct for Boards of Public Bodies remains to be developed, along with full implementation of the Master Rationalization Plan.

¹⁴⁾ Applicable mainly to public bodies fully and partially funded from the Consolidated Fund

Ministry of Finance and Public Services, 2015, Retrieved from http://www.mof.gov.jm/downloads/strategic-public-sector-transformation/TOR%20for%20Board%20Perfor mance%20Evaluation%20_5_.pdf

6.2. Critical Provisions of the PBMA Act.

6,2,1. Submission of Corporate & Operational Plans (inclusive of budgets)

A Budget Call is sent out to each SFPB by September 30 each year setting out broad parameters which will guide in the preparation of each budget. Draft Corporate Plans (CPs), inclusive of budgets are due by November 30th. The final plans are due by December 31st. These Plans are submitted to the portfolio/parent ministry and copied to the MFPS.

The CPs are assessed vis-a-vis the requirements of the Budget Call with ongoing dialogue and communication with the SFPBs regarding their plans. The MFPS reviews and submits a Consolidated Estimates of Revenue and Expenditure for the SFPB to the Parliament. Documents are posted on the Ministry's website https://www.mof.gov.jm.

While the aggregated/consolidated corporate plan/budget is tabled in the Parliament, so a report on the actual outturn is submitted.

The public bodies, however, have had a low rate of compliance with the rules as set forth in the law. As at 2014/2015, of the 89 public bodies monitored by the MFPS, only around 30 were submitting annual reports within the four months period required. Some public bodies have been reported by the Accountant General's Office to the Attorney General's Chambers for sanctions to be placed against them, but not all cases have had any action taken.

The public Administration and Appropriations Committee (PAAC) of Parliament has voiced its concern about the large number of public entities that are continuing to break the law by not tabling financial reports, highlighting that out of 170 public bodies, only 36 public entities were current in submitting accounts.

The 2016 report also highlights that 56 entities were as much as one to two years behind, 36 were three to five years behind, 14 were six to eight years behind, 5 were over nine years late, while there were no records of 23 entities ever having submitted an audited report. The PAAC made a recommendation that quarterly or biannual reports should be uploaded to the websites of the Houses of Parliament and the Office of the Cabinet and the Ministry of Finance and the Public Service to ensure continual monitoring by the PAAC. Recommendations were also made for capacity building in the area of financial management of various public bodies.

¹⁶⁾ Ministry of Finance 2014/15 report on Selected Public Bodies Monitored by the Ministry of Finance & the Public Service

6.2.2. Performance Monitoring

The public bodies' performance is monitored during the year against the approved budget. Monthly periodic reporting is required by public bodies, and the Financial Secretary has right to request any report from the public bodies. Substantially the financial performance is assessed, and it is done within the context of the operational plans and targets, however, as mentioned prior, the assessments are not done in the cases where financials are not submitted and where financials are submitted late, this impacts the scheduling of the performance assessment and ultimately the ability of the MFPS to plan and manage its budget effectively.

6.2.3. Approval for Accessing Debt

In order to access both domestic and external loan financing, approval must be sought of the MFPS. The public bodies' ability to service new debt and the attendant risks are evaluated within the context of their financial performance/position.

6.2.4. Establishment of Audit Committees

Each public body is required to establish an Audit Committee, a sub-committee of the board of directors. The Audit Committee is required to oversee the implementation of internal controls, the engagement of the external auditor and liaises with the internal auditor of the public body. There is no report on the progress of Public Bodies in implementing these legal requirements.

6.2.5. Submission of Annual Reports

Annual reports are to be submitted 4 months after the end of the public bodies' financial year through the portfolio ministry to the Parliament. MFPS/Portfolio ministries monitor the compliance of public bodies with this requirement. Public Bodies that do not meet this are liable to be sanctioned under the Act by the Attorney General. However, as previously noted sanctions have not yet been actioned by the Attorney General's Chambers. It has been reported that letters of warming sent to some non-compliant entities have yielded results; however, detailed reporting on these matters is not publicly available.

6.2.6. Financial Distribution

The Regulation provides for distribution of 5% to 10% of surplus/profit, and the Financial

Secretary may request a special distribution. This is reviewed within the context of the provisions of the Regulation, and the distribution is made to the MFPS for the Government.

6.3. Corporate Governance Framework

6.3.1. Current Mechanism

The Corporate Governance Framework (CGF) for public bodies is intended to strengthen the mechanisms for the accountability of Chief Executive Officers (CEOs), and other key personnel such as the Chairman and Company Secretary and the Board of Directors of Public Bodies. Additionally, the CGF seeks to ensure that the public interest is advanced by adherence to proper standards and codes of conduct.

The CGF seeks to strengthen the governance and accountability systems of public bodies in order to facilitate greater probity and transparency and efficiency among Public Bodies in order to achieve a more responsive public sector. The MFPS continues to monitor the implementation of the recommendations of the CGF and conducts sensitization sessions / seminars to increase the public bodies' awareness of the PBMA Act and the CGF.17)

- 1) Shared information on national approaches to aggregate reporting on PBs. Participants notably discussed reporting undertaken by state holding companies (on a select portfolio of PBs), reporting encompassing the entire PB sector and the use of web-based communications to facilitate public access to information. The main findings of ongoing OECD work on national practices towards aggregate reporting were presented.
- 2) The main function of Public Enterprises Division (PED) is to constantly examine the financial performance of public bodies. The performance is measured against the budget and agreed targets under the public sector financial program. The Division assesses the impact of enterprises on the overall economy and develops as well as advises the Financial Secretary and the Minister of Finance and the Public Services (MFPS) on appropriate policy options for ownership and control of individual enterprises. To this end, the Division is integrally involved in the privatization program of the government. The Division is also required to promote sound financial management practices within these enterprises in order to reduce dependency on Government's resources and improve their financial viability.

¹⁷⁾ Government of Jamaica, n.d., Retrieved from http://www.mof.gov.jm/documents/documents-publications/document-centre.html

6.3.2. New Vision

The new CGF for public bodies has been intended to strengthen the mechanisms for the accountability of public bodies. Three main ideas regarding the CGF are the followings. First, each line ministry manages KPI with regard to the core business, while the financial performance is evaluated by MFPS. This approach reflects the dual ownership function. Second, the performance agreement is expected to be done by the individual board, but to be reviewed and appraised by Cabinet Office. Third, the whole results will be approved by the Parliament. Implementation of the Framework as set out in the CGF continues. These ideas were provided by the Jamaican Government in 2011, and under consideration for implementation.

Public bodies were sensitised about the best practices recommended in the CGF. Nevertheless, the Ministry acknowledges that there have been delays in the implementation of some of the tools which are to be developed under the framework, including the Performance Evaluation Instrument. Various tools have already been developed (including the Competency Profile and guidelines on the Roles and Responsibility of Corporate Secretaries). Meanwhile, others are at advanced stages, which include being considered by the Cabinet and the Attorney General.

The CGF does not mention Performance Agreements for Board members but rather, Board Evaluation. Performance Agreements were mentioned in the Accountability Framework and does not relate to Boards. In addition, the Performance Evaluation Instrument for Boards is currently being considered by Jamaican Cabinet.

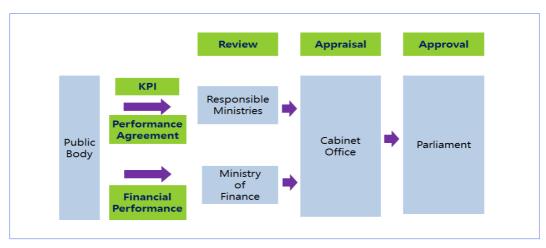


Figure 2-8 New Vision for CGF

Sources: Government of Jamaica, 2011, Corporate Governance Framework for Public Bodies in Jamaica, Government of Jamaica

6.3.3. Utilization of the Evaluation Result

1) Incentive Scheme

The board is composed by the Secretary of State and the CEO is elected by the board. Therefore, the link between the results of the performance management evaluation and the personnel performance is weak. The logical link between the results of current management evaluation to performance bonuses of individual employees is also weak. In the end, we can understand that the introduction of the performance management system in Jamaica has not been fully implemented, so the overall performance management system has not been fully established.

2) Relationship with the Parliament

The budgets of all public enterprises are determined through deliberation of the Parliament. Therefore, the Parliament has a powerful means of controlling public enterprises. Besides, since the annual reports of all public enterprises are submitted to the Parliament, the Parliament has a means to control public enterprises based on the evaluation indicators contained in the annual report.

However, Jamaican Parliament lacks a system to manage the public enterprises based on the performance indicators in this process. As a result, although the Ministry of Finance and Public Services does not have the concentrated ownership authority, the MFPS gets to have the right to propose budgets, which is the basis for managing individual public enterprises.

6.3.4. Reform of Management Evaluation on Public Enterprise

1) Current Status

The performance evaluation of individual public bodies is done mainly based on their business activities, rather than based on the exact cost-benefit comparison. In addition, except for the financial information by financial report, there are not enough unified indicators to be used to evaluate the whole public corporation under consistent standards.

In addition, even though the overall governance structure has been established in compliance with the PBMA Act and the Financial Management and Audit Act (FMAA), still there is a lack of monitoring and sanctions on the implementation of the system. Delays in interim reports

and the preparation of audited financial reports have imposed limits on the assessment of budget execution and sanctions against corrupt managers. About 50% of public bodies in 2013 didn't submit their annual reports on time, and they were required to pay a fine of \$ 10,000 according to the regulation, the amount of which is not a big burden for large-scaled public bodies in reality.

2) Reform of Public Bodies

The IMF and Jamaican government decided that Jamaica needed to introduce a monitoring and evaluation system (M&E system) to improve the administrative process in order to achieve economic growth. In September 2015, two kinds of improvements were agreed with through the Letter of Intent (LOI). One is that annual report (including audited financial statements) should be submitted within six months by the end of the fiscal year. The other one is that the auditor should endeavor for the timely collection of financial statements and to conduct an in-depth analysis.

In addition, the IMF considers applicable administrative procedures for integrating operations of monitoring and evaluation system.

Some of the recent improvements madae in public corporation management are as follows.

First, the SFPB, which operates as an independent financial entity, get to operate outside the budget of the central government endowed with the right to make profit, borrowing and spending. The Jamaican government is targeting privatization of these public bodies (SFPB), and more than 15 of them have been excluded from the jurisdiction of the government in 2016. The remaining public agencies are included in the central government budget and financial report. According to the law, the Auditor General issues a certification to discriminate them from the public agency of the independent financial entity.

Second, PPP (Pubic-Private Partnership) projects have been promoted.

Third, the investment examination for public bodies has been strengthened, as part of the Public Investment Management System since May 2015.

Fourth, the types of public institutions have been newly categorized by Fiscal Affairs Department of IMF and the Jamaican Government, which are now divided into 13 sectors including development, regulation, social and commercial sectors etc.

II. Performance Evaluation System in Korea

1. History of Performance Evaluation

Since the first Republic government was established in 1948, many kinds of efforts have been made to improve the policy on Public Institutions (PI) to adapt to the changing economic climate of Korea society. Various divisions by period can be made to explain the government control on PI, but we will divide them into four sections as follows. This is not a simple system chronology but an examination of the political/economical condition, Public Institutions reform demands, problems and handlings during the actual operational process, and the system changes accordingly.

1.1. The First Period (1948. 8~1962.8): The Decentralized System

The first phase is the time before the Budget and Accounting Act was enacted when PIs were loosely controlled. In terms of legal basis, there were no laws related to the control of PIs other than the establishment law of each SOE. Therefore, the control of the PI was left to each line ministry, and there was no so-called central control by the MoSF. Moreover, in general, the control of the responsible line ministry was loose.

The first period was the time when government control of the PI was unstructured and loose so that the relationship between government and each PI was determined by the will of the individual minister.

1.2. The Second Period (1962~1984.2): Strengthened Control

The second period is classified as the time when the budget and accounting law of the government investment organization was applied, and the period of control over the government investment institutions was extremely strengthened compared to the first period.

According to the relevant laws and regulations, there were the Budget and Accounting Act of the Government Investment Organization enacted in 1962 and the Government Investment Management Act enacted in 1973. In this period, the government-invested institution's Budget and Accounting Act, which formed the basis for the control of government-invested institutions, was not just a substitute for the sporadic control by the each individual ministry, but a strong control by central government, especially by Economic Planning Board. Meanwhile, the Government Investment Management Act was enacted by MoSF to control the board system, policy for shareholders and policy for surplus, etc. Those laws were enacted to control and manipulate government-invested institutions from the perspective of the national economy as a whole. However, unlike the motivations of these enactments, the Budget and Accounting Act has resulted in a strong budgetary control over government-invested institutions, impairing the autonomous management of investment institutions.

In conclusion, the second period was characterized as a regime that strongly controlled the public enterprises in various ways.

1.3. The Third Term (1984. 3~2006): Self-management and Management Evaluation

The strict oversight of ministries led to the lack of self-control of PIs and appointing politician as executives blocked the specialization of management. The demands for more efficient and transparent PIs management had emerged.

For a very long term, developing management expertise was particularly difficult since ranking officials and veterans were appointed as executives from above. Also, there were problems of government intervention on personnel and business decisions, lack of consistent managerial objectives from CEO and the executive branch, and many incidents of CEO abusing his authority. Because of the rigorous control of the competent ministry, there weren't many ways to overcome these problems.

The third phase is the implementation period of the Basic Management Act for the Government-Invested Institutions, while the control of government-invested institutions was somewhat eased compared to the second stage. In the second period, it had long been pointed out that there were many difficulties in securing autonomy due to the excessive control over the investment institutions. Thus, in 1983, the government decided to diversify these pluralistic and miscellaneous preconditioning systems and to convert them into post-evaluation, based on managerial perspective. The characteristics of the Basic Management Act for the Government-Invested Institutions can be summarized as follows.

The first is the introduction of self-responsible management. Self-responsible management means, in short, assuring the autonomous operation of an investment organization, and then evaluating the business performance and asking for responsibility according to the result.

The second is the relaxation of the control by the competent Minister. The control over human resources, and the related function, as well as financial control, has been greatly weakened, while control over the decisions made upon political perspective in economy, industry, or social areas remains inevitable. It was to abolish the control exercised by the competent Minister during the enforcement process of this period.

The third is the maintenance of central control. The introduction of the liability management system and the relaxation of the control by the competent ministries did not mean a return to the situation prior to the enactment of the Budget and Accounting Act of the Government Investment Organization (August 1962). The steering committee, composed of the Minister of Planning and Budget as chairperson, competent Vice–Ministers as members, not only sets up the guidelines for budgeting, but also evaluates the performance of the management and asks for responsibility for the evaluation. Unlike the second period, the process of budget deliberation and confirmation was left to the investment institution in the third period.

Fourth, external audit and management performance evaluation have been strengthened. In the third period, it is no exaggeration to say that the most effective control measure of the government investment institution was the management performance evaluation. The evaluation of management performance, which endows autonomy to investment organizations, assesses management performance afterward, and reflects the result in bonus payment, was a new beginning of a public enterprise management policy.

1.4. Fourth Period (from 2006): Act on the Management of Public Institutions

In 2006, the Act on the Management of Public Institutions was enacted in order to unify the legal system which is disturbed by various laws, including the Basic Act on the Management of Government-Invested Institutions and the Basic Act on the Management of Institutions under the Government, and to guarantee the consolidated management of all the kinds of public institutions. The law that restructures the existing legal system in its entirety has some characteristics in terms of control.

First, the target organizations were reformatted. In terms of governance, rather than the scope of government investment, government reorganized the typology into market-based

public enterprises, quasi-market-based public enterprises, commissioned executive quasi-government agencies, and fund-management quasi-government agencies. According to this typology, the market-type public corporations are principally operated by the board of directors of private companies.

The second is the concentration of ownership. The most important characteristic of the law of the operation of public institutions is the promotion of the status of the MoSF. Although the supervisory function is handled by individual ministries from an industrial policy perspective, the consolidated control power belongs to the MoSF from a perspective of management and evaluation. Consolidated management system symbolizes the concentration of ownership. In order for support of this function, the Public Agency Steering Committee, chaired by the Minister of Strategy and Finance, has been established. In this case, the Committee symbolizes the concentralization of ownership.

Table 3-1 Classification of Public Institutions

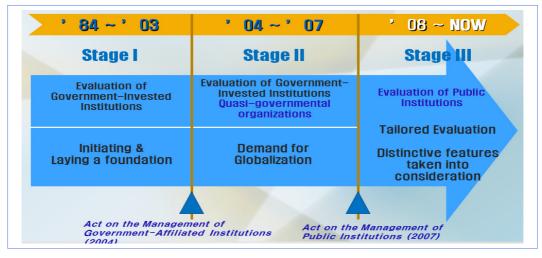
Classification	Classification Criteria
① Public corporations (30)	 Institutions whose prescribed number of personnel are at least 50 people and whose self-generating revenue¹⁸⁾ accountsforatleast50%oftheirtotalrevenue
 Market-based public corporations 	Institutions whose self-generating revenue accounts for at least 85% of their total revenue (with a minimum asset size of two trillion won)
 Quasi-market-based public corporations 	 Public corporations excluding market-based public corporations
② Quasi-governmental institutions (89)	 Institutions whose prescribed number of personnel are at least 50 people and whose self-generating revenue accounts for less than 50% of their total revenue
 Fund-management-based quasi-governmental institutions 	Institutions that manage (or are commissioned to manage) funds in accordance with the National Financial Act
 Commissioned-service-based quasi-governmental institutions 	 Quasi-governmental institutions other than fund-management-based quasi-governmental institutions
③ Non-classified public institutions (201)	Public institutions excluding public corporations and quasi–governmental institutions

¹⁸⁾ Self-generating revenue refers to the revenue excluding contributions, subsidies, and other financial support from the Government. The proportion of self-generating revenue among the total revenue of an institution is calculated after being weighted according to the monopolistic and mandatory usage of products or services that an institution supplies.

Table 3-2 | Trends in the Control of Government Investment Organizations

	First (1948~1962.8)	Second (1962.8~1984.2)	Third (1984.3~2005)	Fourth (2006~)	
Relationship Regulations	Establishment method of each investment institution	The law of establishment of each investment institution, the budgetary accounting law of the government investment institution, the government investment institution management law (1973)	The establishment of each investment institution, Government Funds Management Act	The establishment of individual public enterprises, Act on the Management of Public Institutions	
Control over investment institutions	To the Parent Minister (loose control)	Strength of State Control and Central Control	Control of the Ministry of State and central control	Introduction of governance perspective	
Deliberation and confirmatio n of budget	Confirmed by the approval of the Parent Minister	After approval by the State Council and President of the Parent Minister and the Ministry of Finance and Economy	Confirmed by resolution of the board of directors	Confirmed by resolution of the board of directors	
Business performanc e evaluation	No system itself	System was in use but not used properly	Use it aggressively	Use it aggressively	

Figure 3-1 Development Stages of Evaluation System on SOE



1.5. Analyzing Success Factors of Introducing Pls Performance Evaluation in Korea

In the previous chapter, we examined Korea's performance evaluation system in a chronological order. Many trials and errors have arisen during the system implementation process, and we will analyze the success factors of overcoming these difficulties.

The interest of stakeholders (CEO, executives and union of Pls, competent ministry, Economic Planning Board, political group, evaluation staff and academic circles) by adopting Pl's performance evaluation system is described below.

Table 3-3 | Stakeholders' Gain/Loss by Adopting Performance Evaluation System

Stakeholders/ Gains & Losses	Gains	Losses
SOEs	Diminish Political Appointment Expand self-controlling	Reduce Political SupportStrengthen Accountability on EvaluationIncrease of Workload
Parent Ministry		Reduce Administrative spoil Loss of Control Power
MoSF	Strengthen Monitoring Ownership	Lose budget formulation right
Political Group	Expand Available Resources through SOEs efficiency (macro-level, secure justification for reform)	Loss of Political spoil (micro-level)
Academic Circles	Participate in Performance Evaluation	

Sources : Complied by Authors

As a matter of fact, the biggest beneficiary of performance evaluation is the one who is being evaluated, the PIs. Even though it goes through some difficulties of strengthened responsibility and lessened political support, PIs can expand their operational autonomy with less pressure of political appointment eventually.

On the other hand, a labor union of PIs opposed performance evaluation initially, though the union's power at that time wasn't as strong as today because of the influence of authoritarian government. The competent ministry was actually who opposed performance evaluation being centralized to EPB the most since political intervention regarding PIs personnel and financial assistance had to be reduced. Although budget formation and approval power would be diminished, The EPB was in favor of the system because the centralization of evaluation jurisdiction meant magnified authority for the organization. The academia was also in favors since it can participate in system building as well as taking part in members of evaluation staff. Political groups such as veterans and the Blue House were the loudest against the system with the loss of political leverage, but there was also benefit to the Blue House of gaining more available resources in the long run as well as justification of Pls reform.

Thus, against strong opposition from political groups and competent ministries the performance evaluation system was introduced by the enactment of "Framework Act on Public Investment Management of the Institution" in 1984. This was the result of the leadership push made from President Jeon Doo-hwan and chief secretary Kim Jae-Ik, the support of research institution such as the KDI and the effort of a public official of the EPB (At that time, MoSF was called EPB, Economic Planning Board). In addition, continuous participation to the evaluation staff by the academia that led to improved expertise, sustained system management and accumulation of data was another important success factor.

The main issues and success factors on the governance aspect and performance evaluation methodology are described in the following table.

Table 3-4 | Main Issues and Success Factors of Public Institution Performance Evaluation

	Main Issues	Success Factors
Governance	 Conflict Between MoSF and Competent ministries on Evaluation initiative Political appointment of Executives Control of day-to-day operation by competent ministry Opposition of Institutions subject to evaluation 	 Strong Will of the President Support of the Media/Public The Passion of Ministry of Strategy Bureaucrats, Creating New Department Revision of Legal System through interest coordination
Performance Evaluation Methodology	 Heterogeneous nature between SOEs Difficulty of Qualitative Evaluation such as Leadership Performance of Regulatory Agency Objective Evaluation 	 Support of Specialized Institutions (ex.KDI,KIPF) Utilizing External Experts such as Professors, CPAs Build up expertise of Participants of Evaluation (form community of Public Institution evaluation)

1.6. Implications for the Jamaica Management Evaluation System

In advanced countries, autonomous and decentralized performance management is common. Why is it important to establish centralized evaluation governance in Korea and Jamaica and to use unified evaluation indicators?

In terms of governance, the Jamaican government must reduce its public debt to 96% of GDP by 2020 in compliance with the agreement with IMF in 2012 – the Extended Fund Facility and Consolidated Fiscal Rule, – which result in Jamaica to continually cut public sector wages and government expenditure. Although the privatization and reform of public bodies are demanded with the strengthening of fiscal regulations, and the necessity of public bodies performance evaluation is recognized as well due to the political structure of Jamaica and by the interests of the ministries and agencies, the actual tangible reform operations are taken in retarded manner.

It took 30 years to introduce and institutionalize the Korean performance monitoring and management evaluation system. In order for the management evaluation of public enterprises to be effective, there are important implications in terms of solving two problems, namely, governance structure and management evaluation methodology.

As the ruling party and the opposition party are tightly confronted with the secure of a Parliamentary seats, while the influential members of Parliament are also the ministers of several departments, reform of the governance structure of the public enterprise is not easy, rather quite a challenge, in the short term. Therefore, heavy importance is imposed upon the role of the Ministry of Finance and Public Services (MFPS), also with the necessity arisen to integrate performance reports drawn from individual institutions in terms of evaluation methodology.

In addition, in terms of the evaluation index, it is necessary to improve the Jamaica's economic growth rate and the efficiency of public bodies by applying the government's recommended policies along with the traditional management indicators that have been applied to individual public bodies. Along with this trend, the leading role of the Ministry of Finance and Public Services is important for introducing the evaluation system from the standpoint of performance monitoring of public bodies. In the course of strengthening the performance evaluation system of the Jamaican government, it may be led by the Cabinet Office's "performance and monitoring bureau" if it is to be applied to all the public enterprises. However, in the sense of unifying management rights of public enterprises, MFPS may be considered to be the key ministry for the governance structure reform with regard to the introduction of performance monitoring and evaluation systems for Jamaican public bodies.

2. Pls Covered in the Performance Evaluation

Article 48 of the Act on the Management of Public Institutions designates the performance evaluation system in Korea. Public institutions in Korea are classified into the following groups: public enterprises, quasi-government agencies, and other public agencies. Among them, the management evaluation by the MoSF applies to public enterprises and quasi-government agencies.

As of 2017, there are 321 public institutions, out of which 30 public enterprises and 89 quasi-government institutions are evaluated by the MoSF, and the evaluation of other 201 other public institutions are done by the individual ministries. The size and impact of Public Corporations and quasi-government institutions are big and important to the national economy, so the MoSF carries out the unified performance evaluation.

Public Corporations (30)

Quasi-government organizations (89)

Non-classified public institutions (201)

Total employment ≥ 50

Total employment < 50

Figure 3-2 Organizations Subject to Management Evaluation

Sources: Complied by Authors

3. Governance Structure with Performance Evaluation

3.1. Role of the MoSF

Regarding the management of public institutions, Korea takes the form of ownership concentration. It is carried out under the general responsibility of the Ministry of Strategy and Finance. The results of the evaluation are reported to the President and the National Assembly.

The MoSF oversees policies aimed at operating the institutions as stipulated by the Act on the Management of Public Institutions, enacted in 2007 to clearly set up the systemic principles and standards in regards to public institutions.

- 1) Operational guidelines, notifications, and oversight of institutions
- 2) Supervisory responsibilities such as management evaluation, performance management, public information management, and regulations on the establishment.

The MoSF organizes and operates a management evaluation team for public corporations and quasi-governmental institutions to ensure the efficient execution of management performance evaluation and to provide professional, technical research and consultation concerning management performances of public institutions.

To support the research on the public institutions, Korea government established a think tank entitled a Research Centre for PI under the MoSF, whose role includes the evaluation support and the specific research to develop public policies for the MoSF.

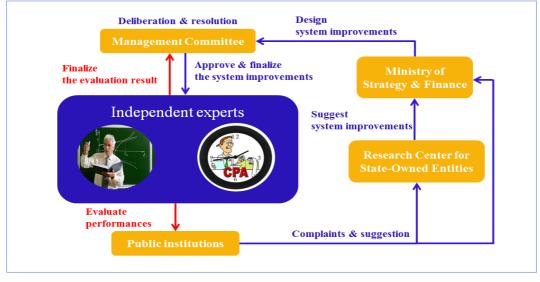


Figure 3-3 | Governance Structure with Evaluation

Sources: Complied by Authors

3.2. Steering Committee for Management of Public Institution

The Committee for Management of Public Institutions plays an important role in the

evaluation process. The Committee has been established under the MoSF in order to review important matters concerning the operation of public institutions on the basis of the Act on the Management of Public Institutions. It carries out the appointment of public agencies, coordination of the functions, the appointment of the executives, and evaluation of the management performance. It consists of government members and 11 or less civilian members (legal, economic, journalistic, academics, labour, etc.). The committee meetings shall be convened with 20 or fewer members including a chairperson and civilian members, which constitute the majority of attendees at the meetings. As there have been nine civilian members in the committee since 2008, the total number of members is limited to 17. This Committee symbolizes the concentralization of ownership.

Korean government strives to maintain professionalism and objectivity. The civilian members are appointed by the President, and they are gathered from various fields including law, economy, press, academia and labour with a sound knowledge and experience in the area of the management and administration of public institutions, for the government's effort to maintain a good reputation for impartiality.

The Committee is working under the jurisdiction of the MoSF in order to efficiently and transparently deliberate and make decisions on issues regarding the operation of public institutions. The Committee, established on April 2007, has deliberated and resolved managerial agenda.

Committee meetings shall be duly formed to open with the presence of a majority of the members and adopt a resolution with the affirmative vote of a majority of the members present at the meeting.

The responsibilities of the committee cover all kinds of activities concerning public institutions. It has the power to resolve the issues related to public institutions.

The committee shall resolve and disclose matters regarding the designation of public institutions, policies for their advancement, the general management, the appointment and removal of the executives, and oversight over public institutions.

Matters subject to deliberation and resolution by the committee can be illustrated as followings:

- Designation of public corporations, quasi-governmental institutions and non-classified public institutions, and cancellation and alteration of such designation;
- Examination of the feasibility of the establishment of new institutions;

- Public disclosure concerning the management of public institutions;
- Personnel actions based on a violation of the duty of public disclosure;
- Developing plans for the adjustment of the functions of public institutions;
- Establishing guidelines for the assistance in innovating public institutions and examining the level of institutional innovativeness;
- Appointment of non-standing senior directors of public corporations;
- · Appointment of executives of public corporations and quasi-governmental institutions;
- Establishing guidelines on the remuneration of executives;
- Evaluation of the performance of non-standing directors and auditors;
- Evaluation criteria for the business performance of public corporations and quasi-governmental institutions and removal (or recommendation of removal) of the executives of institutions with poor performance records;
- Monitoring of the adequacy of supervision over public corporations and quasi-governmental institutions and improvement of such supervision; and
- Guidelines for the management of public corporations and quasi-governmental institutions.

3.3. Task Force Team for Evaluation

The MoSF organizes and operates a management evaluation team for public corporations and quasi-governmental institutions to ensure the efficient execution of management performance evaluation and to provide the professional and technical research or consultation concerning management performances of public institutions.

The management evaluation is conducted by a management evaluation team composed of civilian experts, including professors, accountants, and lawyers. It will select experts in each field through the utilization of pools of ministries and organizations, recruitment pools, etc.

Especially, various devices are provided to maintain objectivity. The system is supplemented to prevent in advance the excessive influence of specific committees such as the termination of the evaluation committee or the possibility of lobbying of the institution. Therefore, it excludes those who have served for three years or more in a row and those who served for four years in the last six years.

Depending on the type of evaluation index, the evaluation group is divided according to institutional types, and at the same time, it is managed as a matrix type classified into quantitative and qualitative areas.

Table 3-5 | Members of Evaluation Team

Items	BizManagement Qualitative	BizManagement Quantitative	Core Business	Remuneration & Welfare Benefits	System Improvement& Indicators Design
Director	1 person				
Deputy Director			1 person		
Sector Secretaries	5 persons (Biz Management Qualitative, Biz Management Quantitative, Core Business 2 persons, Assistant Secretaries)				
Public Corporation1 (10)	4 persons	5 persons	6 persons		
Public Corporation2 (20)	8 persons	8 persons	10 persons		
Commissioned-service1 (12)	4 persons	4 persons	6 persons		
Commissioned-service2 (6)	3 persons	2 persons	4 persons	20 persons	9 persons
Fund-management (13)	4 persons	4 persons	7 persons		
Non-classified public institutions (55)		15 persons	16 persons		

The evaluation team is comprised of Directing Board, Biz Management Quantitative Sector (6 Teams), Biz Management Qualitative Sector including Remuneration and Welfare Benefits Team (6 Teams), Core Business Sector (6 Teams), and System Improvement and Indicators Design Team.

Evaluated 116 institutions are categorized into 2 types of public corporations (Public Corporation1, Public Corporation2), and 3 types of quasi-government organizations (Commissioned-service, Fund-management, Non-classified public institutions).

Directing Board manages evaluation tasks such as evaluation progress review, grading adjustment among evaluation types; maintains the adequacy and objectivity of evaluation criteria and methodology, and produces a general review of the evaluation report.

3.4. Evaluation Schedule

The evaluation index serves as a kind of guideline for the performance of the public institutions because their annual activities based on the evaluation index are the subject of the assessment. An evaluation handbook is provided to the public institutions one year in advance for this purpose, and the year's activities are reviewed the next year.

A management performance report is submitted by the public agency in March, and the on-site evaluation is carried out in April. In June, the final report is submitted to the National Assembly after reviewing of the Committee for Management of Public Institution.

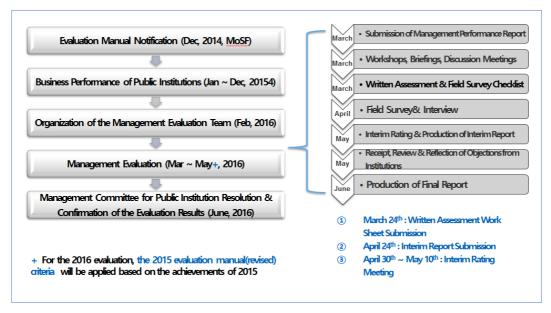


Figure 3-4 | Evaluation Schedule of 2016

4. Indicators with Performance Evaluation

4.1. Category of Indicators

Indicators are categorized into 2 criteria; managerial perspective and quantitative evaluation.

Before 2014, there were 3 categories; leadership, management and core business. Since evaluation for CEO was newly introduced, the categories have been reduced to 2 as the indicators of leadership were transferred to the evaluation components of CEO. The management category consists of 5 items which are standardized for all the public institutions, whereas the indicators for core business have various issues related with public institutions.

The other criterion is the composition of qualitative and quantitative indicators. The ratio of qualitative indicators to quantitative has changed from 45:55 to 35:65 in 2015, which reveals the government's intention to increase the objectivity of the evaluation results by lowering the weight of qualitative indicators.

Table 3-6 | Weighted Value of 2016 Management Performance Evaluation Indicators

		Weighted Value							
	Indicators	Public Enterprise		Fund-management- based		Commissioned- service-based		Non-Classified public institutions	
		Qualitative	Quantitative	Qualitative	Quantitative	Qualitative	Quantitative	Qualitative	Quantitative
	1. Business Strategy & Social Contribution	2	9	2	10	2	10		10
_	(1) Strategic Planning	2		2		2			
Main	(2) Public Evaluation		2		2		2		2
Business	(3) Government 3.0		1		1.5		1.5		
ness	(4) Business Publication Check		1		1.5		1.5		3
	(5) Government Recommended Policy		5		5		5		5
	2. Work Efficiency		8		4		6		5
	3. Management of Organization, Human Resources and Performances	2		2		2			
	4. Finance & Budget Management Results	9	8	9	11	9	9	5	7
	5. Remuneration & Welfare Benefits Management	9	3	9	3	9	3	5	3
	Core Business	13	37	13	37	13	37	10	20
	TOTAL	35	65	35	65	35	65	20	45

4.2. Customer Satisfaction Survey

Every public institution is subject to a customer satisfaction survey. The survey is carried out by an independent private survey company. Even though the weight of the survey is just 2 points, it significantly affects the qualitative evaluation.

In line with this category, policy compliance and social responsibility have also an important implication for the societal context.

4.3. Methodology of Evaluation on Qualitative Indicators

In regard to core business qualitative indicators, the detailed evaluation contents are developed from the PDCA (Plan, Do, Check, Action) perspective and the general management performance and the year on year improvement are considered in the evaluation.

If necessary, the revision and modification of contents are requested (if core business functions are produced with indicators management direction, corrections based on external comments, correct implementation performance indicators, then the activity results of each PDCA phase will be checked).

Classification of Management Performance Evaluation Groups Weighted Target Institution Indicators Value Member Utilization method of Work Sheet is described in details Core Business: during a qualitative workshop Reasons for Addition Points (Reasons for positive evaluation) **Reflection Rates** Grade on Marks 100% Reasons for Deduction Points A0 90% (Reasons for negative evaluation) Field Survey Questions B+ 80% B0 70% Additional Comments after the Field Survey (Good points, Unsatisfactory points) C 60% D+ 50% D₀ 40% Provisional Grade of Evaluation (Confirmed after Field Survey)
[A+ Ao, B+ Bo, C, D+ Do, E+ Eo] 2013 Evaluation Grade 30% E+ of Relevant Indicator E0 20%

Figure 3-5 | Work Sheet for Qualitative Evaluation

The "Overall System Implementation & Management Performance Level" and the "Year of Year Improvement in Overall Management Performance" are divided into grade sections, and then they are combined to decide the grade level from the "absolute evaluation" perspective (absolute evaluation is a principle in assessing grades).

The scale factor depends on the subjective evaluation of experts. However, in order to establish an objective standard for the discretionary judgment of the experts, it is necessary to distinguish the improvement from the previous year compared to the current performance. This is to take into account not only the present achievements but also the efforts of the previous year.

Table 3-7 | Qualitative Grade Evaluation Criteria

		Overall System Implementation & Management Performance Level				
		Outstanding	Excellent	Normal	Unsatisfactory	
	Outstanding	A+	Ao	B+	Во	
Year on Year	Excellent	Ao	B+	Во	С	
Improvement in Overall	Good	B+	Во	С	D+	
Management	Normal	Во	С	D+	Do	
Performance	Unsatisfactory	С	D+	Do	E+	
	Bad	D+	Do	E+	Бо	

4.4. Methodology of Evaluation on Quantitative Indicators

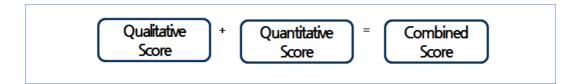
A sophisticated statistical methodology is applied to conduct the quantitative evaluation. The evaluation methods are presented as follows: goal assignment, comparison of the global performance, assigning the mid- and long-term goal, the actual value relative to the target, and β distribution.

Table 3–8 | Methodologies for Quantitative Evaluation

Evaluation method	Evaluation method overview	Remarks (Applicable)
Goal assignment (Deviation)	• The difference between the performance of the year and the lowest goal is divided by the difference of the highest goal, while the highest and lowest goals are set using the standard deviation for 5 years	Estimated target value is accumulated for 5 years and is reliable
Goal assignment	 Pertinent year performance and lowest measured divided by the difference between goals and optimal goal, but the best goal difference with the lowest and highest goals in the baseline for a given percentage taking into account settings 	Estimated target value is less than 3 years or accumulated for 5 years but is not reliable.
Global performance comparison	The difference between the performance of the year and the lowest goal is divided by the difference of the highest goal, while the highest and lowest goals are set using the standard deviation for 5 years	 Indicators that directly compare the performance of the state's leading global companies, international performance indicators that are assessed and certified by internationally recognized organizations, or indicators developed using such indicators
Assign mid-to long-term goals	Establish final goals by utilizing mid- to long-term plan of Ministry of Government Administration and Home Affairs, or advanced countries level The yearly goals are to calculate unit goals by using project duration and final goals	 If it is necessary to promptly improve public services such as those managed through the medium-term plan of the Ministry of Government Administration and Home Affairs, or a lower level than developed countries
Goal Achievement	Present the target number in the handbook and assess whether it has been achieved	• If the target value of the evaluation target is less than 5 years
β distribution	• The standard and the standard deviation are obtained in consideration of the best, the lowest, and the previous year's actual values, and the evaluation of whether the actual value falls within a certain range from the standard value	When the actual value of the evaluation target is accumulated from 5 years to 10 years or less and is reliable
Tendency Value	 Using regression analysis, standard values and deviations are calculated, and evaluation is made to see what actual values are within the range of standard values 	If the performance target value is accumulated for more than 10 years and is reliable

4.5. Categorization of the Result

The evaluation score of each indicator is calculated by multiplying the weighted value of each indicator by the measured score. And the comprehensive evaluation result of the institutions is calculated by adding evaluation scores of the qualitative and quantitative indicators.



The comprehensive evaluation results of the institutions are divided into 6 grades; S (excellent), A (very good), B (good), C (normal), D (poor), and E (very poor). Each individual public institution is evaluated on an absolute scale grade, but based on the results; the relative evaluation is conducted within each evaluation category. The average score and standard deviation of the management performance evaluation are utilized in determining the final grade.

The final result is confirmed through the deliberation and resolution by the Committee for Management of Public Institutions.

Table 3-9 | Comprehensive Evaluation Results

Rating	Level Definition		
Excellent(S)	• We have a systematic management system in all management areas, and we are carrying out effective management activities.		
Very good (A)	In most management areas, we have a systematic management system, effective management activities, and achieve high performance		
Good (B)	• In most business areas, we have a general management system and achieve good results		
Normal (C)	• In most management areas, it has a general management system and the level of general management activities		
Poor (D)	Some management areas have a general management system, but the performance is somewhat lacking		
Very poor (E)	 In most management areas, the management system is not systematic, management activities are not effective, and it is necessary to make an attempt to change to an improvement-oriented system 		

5. Feedback System

5.1. Incentive Payment System to Employee and CEO

There are two main ex-post measures according to the results of the management performance evaluation of public institutions; incentive and penalty.

The incentive bonus according to the evaluation results and the grade is determined under the Guidelines on Budget Compilation of Public Corporations and Quasi-governmental Institutions. Depending on the results of the evaluation, different levels of performance bonus are available for employees. 200-250% of the performance bonus is granted for the S grade, 150-200% for the A grade, 100-150% for the B grade, 0-100% for the C grade, and no bonus payment for below the D grade. Meanwhile, different rates of performance bonus are applied to CEOs.

As a result, members of the public institutions have a strong interest in the evaluation.

In the case of high-risk financial institutions, to those with a high debt ratio, the incentive payments can be limited depending on the assessment results for management and performance of the finance and the budget.

Table 3-10 | Bonus Rates According to the Results from the Management Performance

Subject	Type of public institutions	Bonus rates
CEO incentives	Public corporations	0~120%
CEO incentives (% of annual salary in the previous year)	Quasi-governmental institutions	0~60%
Employee incentives	Public corporations	0~250%
Employee incentives (% of monthly salary)	Quasi-governmental institutions	0~100%

5.2. Control on CEO

The MoSF can propose dismissal of the head of the institutions through the deliberation and resolution by the Committee for Management of Public Institutions. The CEOs who received D grade for two consecutive times are subject to dismissal.

The results from the evaluation of the head of the institutions, auditors, and audit committee members are used for deciding whether they serve consecutive terms. Also, their bonus rates are determined based on the results of the management performance evaluation of institutions.

5.3. Basic Information on Functional Check

Although not intended, the results of the evaluations may accumulate critical information of the SOEs and provide a logical basis for public institution reform. If the agency's score is low every year, it can be diagnosed that there is an inherent problem. In this sense, management evaluation can be a basic data of reform.

Of course, consulting process is supposed to be made for the low scored SOEs by the evaluation team, which can guarantee the managerial enhancement.

6. IT-based Evaluation Support System

6.1. IT-based Support System

In order to improve the effectiveness of the performance evaluation of SOEs, the Korean government, led by the MoSF, implemented an IT-based performance evaluation information system (info-system) of public institutions in 2008. The scope of the stage 1 is about, developing the database and network for performance evaluation information, building a quantitative index evaluation analysis method, and introducing and implementing the system itself. In 2009, a two-step system advancement program was launched to strengthen the feedback function of the evaluation results and to stabilize the operation of the system. The main goals of the advancement program were the improvement of the feedback function, the systematization through computerizing evaluation procedure, the security enhancement and the system stability.

Table 3-11 | Main Contents of Korea's Performance Evaluation Info-System

Stage	Sort	Main Contents
Stage 1	Create the database of performance evaluation info-system	 Creating Database of the annual Public Institution performance evaluation results Creating the database of Performance evaluation standard (evaluation manual) Creating the database of financial information & business performance evaluation results of public institutions Creating the database of Users (Public Institutions, MoSF, management evaluation team) Information Creating the database regarding communities
	Create the network of performance evaluation info-system	 Providing various Community shared space Creating bulletin board for the request of non-submitted & additional data Providing notification service via SMS or e-mail when posts on the board to the person in charge
	Building quantitative index evaluation	Input of basic data of quantitative indexCheck the calculation and results of quantitative index
	System Introduction & Implementation	H/W: Storage S/W: DBMS, WAS, WEB, Search Engine, LINUX, Community
	Improving the feedback function of the evaluation results	Add performance evaluation analysis function Manage historical data of comment and improvement proposal of the performance evaluation
Stage 2	Systematization through Computerization of Evaluation procedure	Systematization of evaluation procedure including performance evaluation & follow-up action
	Strengthen security	Strengthen security of Performance Evaluation info-system
	Securing the stability of the performance evaluation system	System diagnosis & redesign to provide stable service

The goals for the stage 1 have been set to manage the performance evaluation data of public institutions systematically and to strengthen the feedback function.

6.1.1. Purpose of Performance Evaluation Info-System

In order for the above purpose to be achieved, the goals for the stage 1 are as follows.

The first is to create the database of performance evaluation info-system of SOEs. It includes performance evaluation inspection, systematic management of performance evaluation data, the creation of a preserve and search system for performance evaluation data of SOEs, and performance evaluation results by the management evaluation team.

The second is to create the network of performance evaluation info-system. Through the network, the information network is intended to be created among public institutions targeted for a performance evaluation, a management evaluation team and the central government, and to systematize the request and submission process and the history management of the performance evaluation data.

The third is to build a quantitative index evaluation analysis method to systematize the calculation of results from the quantitative index evaluation for efficient verification and management.

The first goal of stage 2 for the performance evaluation info-system is to build a performance evaluation analysis system for the managerial improvement of public institutions, which enables time-series analysis of each quantitative index, comparative analysis of other and high-performing institutions, and correlation analysis between quantitative and qualitative indices.

The second goal is to systematize the performance evaluation results to enable the comprehensive data analysis and to facilitate history management of information for the efficiency of the performance evaluation process.

Table 3-12 | Goals of Creating Performance Evaluation Info-System



Direction of the Program	Main Contents of the Program
Improve Management of Performance Evaluation Data	Build Database of business performance & performance evaluation data,History management of performance evaluation data
Managing Information Exchange of Performance Evaluation Data	Operating the bulletin board of performance evaluationOperating contact system for delivering main messages
Increase efficiency of Performance Evaluation	• Systematizing the inquiry and search process of business performance and reference data

The third goal is to strengthen the security of the performance evaluation info-system.

The fourth goal is to diagnose the current system, to set improvement plans for stable service operation and apply them in the future.

6.1.2. Configuration of the Menu

The configuration of the program menu in the stage 1 to create the performance evaluation info-system of public institutions is described in the table below

Table 3-13 | Content of Menu

Sort	Menu
Performance Evaluation Database(DB)	Performance Evaluation Handbook
	Performance Evaluation Manual
	Business Performance Data
	Performance Evaluation Report
	Management Consulting Data
	The Agenda of the Public Institution Ownership Steering Committee's meeting
	Press Release
	 Matters pointed out from the Board of Audit & Inspection and the National Assembly
Performance Evaluation Computerized System	Information of the Management Evaluation Team Staff
	Performance Evaluation Schedule
	Information on the Evaluation Index
	Evaluation score & grade
	Performance Evaluation Way of Improvement proposals & Recommendation
Quantitative Index Verification System	Quantitative Index
	Quantitative Index Record
	Quantitative Index Score
	Quantitative Index Confirmation & Follow-Up Action
Community	Notice-FAQ-Data Room
	MoSF Management Evaluation Team Bulletin Board Service
	MoSF-Public Institution Bulletin Board Service
	Management Evaluation Team Public Institution Bulletin Board Service
	Management Evaluation Team Bulletin Board Service
Website Guide	Information use guidance
	Modification of membership information
	Unified Search
	• Site Map

6.2. The Characteristics of System Build-up

6.2.1. Technical Aspects

The main characteristics of the Korea's performance evaluation info-system of public institutions are, from its technical aspects, that all management function in the newly built system, including contents, web-site, authority, community and bulletin board are constructed to operate within a single management environment for the convenience of maintenance, management, and operation. It also incorporates a statistical function to figure out users' actual service preferences.

In terms of security, the system, which adheres to the latest web application security standards, has been built for application level security and data schema for further system expansion. It also considers the technical aspects of system extensibility and convenient linkage, and the platform has been established in an open architecture system.

6.2.2. Users' Aspects

The system provides an easy access to the indices and the past performance evaluation data of each public institution and a system management function through each user account and access right to the performance evaluation info-system.

Each public institution provides a history management function for input and modification of the index data. It introduced a community solution of various bulletin board service of each user to maximize the efficiency of information exchange and submission between users and notification duty such as handing out guidelines. It provides notification service to the users, such as MoSF, public institutions, and management evaluation team, via SMS or e-mail on posting on the board.

By adopting a quantitative index evaluation verification service, the system allows the public institutions subject to evaluation to input the preliminary data for the quantitative index evaluation and, based on the data, immediately provides the calculated evaluation results.

While creating the system, it adheres to the standard technology for users to enjoy user-friendly service among various user preferences (IE, Firefox, etc.) and used a Java platform application and web-based technology.

6.3. The Role of Participants

6.3.1. The Role of Pls

Each PIs inputs and updates each index data, as well as effectively manages the history of the data.

Through the IT-based system, each PIs subject to the performance evaluation can submit information, which is not included in the original business performance data due to the limitations of space. The on-line submission of information allows the PIs to reduce a workload and avoid a duplication of information submission. It can systematize the input and modification of information and the history management of the data.

The system has brought about a substantial improvement in the management of PIs through various analyses of performance evaluation results, the enhanced security of the evaluation data and the business efficiency through the history management of the data from the systematization of the evaluation process.

- Submit Performance Data & Grounds based on Each Agency's Index
- Create & Submit Performance Report, Input Online System

6.3.2. The Role and Utilization of the Management Evaluation Team

The submission of performance evaluation information and preliminary data of each public institution to the system enhances the utilization of the data and effectiveness of evaluation, as well as the systematical management of past data and evaluation results.

By adopting the system, the improvement plan for performance evaluation such as the pre-review of the quantitative index evaluation method was introduced, and the systematization of the performance evaluation process improved the business efficiency of the institution. The security of the performance evaluation data is expected to be strengthened as well.

- Evaluate based on Performance Data & Grounds
- · Submit Performance Evaluation Report to System

6.3.3. The Role and Utilization of the MoSF

The Ministry of Strategy and Finance finalizes "Guidelines for preparing Business Performance", prepares the "Performance Evaluation Handbook" and inquires and confirms propriety of the

"Performance Evaluation Handbook".

The MoSF increased the efficiency of the policy decision making process by systematically managing the performance evaluation information and the search and inquiry process. By utilizing the performance evaluation info-system, the MoSF has developed a monitoring and history management system of performance evaluation process and strengthened the security of performance evaluation information through providing stable service.

- · Confirmation of "Guidelines for preparing Business Performance"
- Prepare Performance Evaluation Handbook
- · Inquire propriety of Performance Evaluation Handbook and Confirm

6.4. Implications

By operating the performance evaluation system, the ways to improve transparency, accountability, and applicability need to be explored, as well as continuous transparency and applicability of the All Public Information In–One (ALIO) system. Also, the ways to improve the efficiency of evaluation using the performance disclosure system linked to the ALIO system need to be further studied.

The current performance evaluation info-system mainly works as storage of evaluation data and results and disclosing the results of government policy implementation and business performance of public institution through the ALIO information management system should be actively utilized for enhancing public institution's transparency. The open information through the ALIO system should be applied to institution's monitoring process and policy implementation result to improve the efficiency of the performance evaluation and the transparency of the institution.

6.4.1. Future Tasks

The Korean system still requires more improvements to be made, such as to create an automatic linkage module of standardized quantitative index through the connection of human resources, organization and the accounting system in the near future. The human resources, organization, accounting and performance evaluation system of each SOEs subject to evaluation should be connected to each other by standardizing the linkage between SOEs systems. This would enable each quantitative index of SOEs to be used as an evaluation index.

The connection of database systems and business collaboration also needs to be considered in the future. The use of electronic document needs to be expanded for future consolidated

information management. The public institution management policy needs to include ways for the institution in general could improve effectiveness and acceptance on various matters simultaneously with the settlement of the actual management evaluation system through plans regarding management performance evaluation.

6.4.2. Policy Implication

We need further studies on system improvement at the macro level and ways to improve the responsibility management system of institutions subject to management performance evaluation through the accumulation of quantitative data of the performance evaluation of SOEs in the future. We also need clear evaluation standard for a non-quantitative index that could be controlled by the system to improve the fairness of the evaluation process.

There needs to be a system where it is possible for an institution subject to evaluation to appeal the evaluation results conducted by the management evaluation staff. Also, a consultation system is needed to coordinate differing opinions among evaluation team members before the announcement of the evaluation results.

7. Consolidated Information Management System

The MoSF of Korea has developed the ALIO system, a consolidated information management system of public institutions that allows people to access to major management information on all public institutions such as human resources, finance, external evaluation results, via the internet in a comprehensive manner.

Through the aforementioned activities, ALIO is purposed to make public institutions more transparent and efficient, and enhance citizen's right to know. To achieve its purpose public institutions provide core management information such as resources, finance, external evaluation results through the advanced ALIO consolidated information management system.

By providing public institutions' management information via the internet (http://www.alio.go.kr/home.do), the information management policy acts as a means of controlling public institutions, which are directly connected with the national interest.

7.1. The Purpose of the Consolidated Information Management System

In Korea, the MoSF runs the consolidated information management system on the ALIO

website. Currently, ALIO provides the key management information of 321 Korean public institutions to the public through the internet. All SOEs have to disclose its management information of 39 items across 5 categories in ALIO. The data of ALIO provides comparative measures between institution's management efficiency.

The development of the consolidated information management system is strongly related to the responsibility of the government, SOEs and management evaluation team, planning, and operation, statistics and information management of the system.

At the planning stage, the information on the government's plan and the status of SOE's performance evaluation are needed.

The MoSF may organize and operate an evaluation team for the management of public corporations and quasi-governmental institutions (hereinafter referred to as a "management evaluation team") to ensure the efficient evaluation of management performance and to provide professional and technical research or consultation concerning the evaluation of management performance.

To ensure the efficiency of performance evaluation of SOEs, the MoSF organizes and operates a management evaluation team annually. The evaluation team performs the evaluation through an actual inspection of SOEs and uses information based on the supporting data for deliberation and conciliation, and information that is adjusted by evaluation result. They provide professional and technical research or consultation concerning the evaluation of management performance, and these processes induce SOEs to voluntarily innovate its organization that lays the groundwork for the improvement of management performance. Thus, consolidated management of SOEs is necessary for the creation, submission, and management of system information and the cooperation among institutions concerned.

The consolidated information management process through the consolidated system of SOEs reduces monitoring costs and improves the quantity and quality of goods and services which therefore improves the efficiency and performance of public institution management.

7.2. Korea's ALIO System

ALIO stands for 'All Public Information in One' as described above, and it also means 'informing' in the Korean language. ALIO is a consolidated public announcement system established to allow any Korean citizen to access and utilize the management information of public institutions through the Internet at a glance.

The ALIO was launched in 2006, and it has extended the number of public information items in phases and has upgraded the system annually. In 2015, the ALIO was completely restructured based on the benchmarking of the electronic announcement system of private enterprises.

The ALIO provides public institution's management information, comparative inquiry between institutions, management performance evaluation data and case studies of innovation.

The MoSF identifies and confirms the announcement items and then notifies of the standardized input format. Then, the person in charge of announcement within each public entity inputs the data according to the guidelines and the format. When the format is completed, the MoSF has opened to the public the whole information through the ALIO system. Moreover, for the main information, the MoSF converts the data to readable statistics and then additionally announces them.

Currently, ALIO opens the key management information of 321 Korean public institutions to the public through the Internet. While providing in-depth information, the structure of ALIO is quite simple. 5 main categories in ALIO are general status, the operation of bodies, management performance, internal and external evaluation, and announcement.

The main features of the ALIO system are as follows.

- · Consolidate and standardize the main areas of interest of SOEs and disclose
- Can search by items or by institutions, and see the detailed statistics of public institutions in a consolidated reporting format
- · Can check the recruitment and procurement information in real time
- Can modify, change the disclosed information, and check the history of data¹⁹⁾
- Discloses the person in charge of data input and provides ex-post facto management periodically

ALIO provides the fundamental information to people at any time by just clicking to the web-site. For example, the financial information, as well as information on the increase of debt or welfare status, remuneration system, and the numbers and types of employment of employees of public institutions are available in ALIO. ALIO also plays a role in providing citizens necessary information such as real-time recruiting information. The conditional and comparative search option of ALIO allows users to search necessary information easily.

¹⁹⁾ All the open data in the system are audited financial data.

site map **ALIO Information** Management statistics disclosure About ALIO Key statistics · Disclosure by Item Search statistics · Management disclosure system · Disclosure by institution · Status of Public Major occasional Institutions disclosure Information Use Announcement of officers Research Report Management innovation case National Assembly Points Audit Office / Supervisory Department Internal audit result of Board minutes Internal regulations Recent disclosure Other information Site Info Government Acts / · Copyright policy Guidelines · Unauthorized collection · Public Policy Materials of e-mail · Other information · Privacy Policy disclosure · Download the material Improvement Report · Good / Inappropriate Disclosure Agency Management improvement suggestion Check my suggestions Application Check my complaints site map

Figure 3-6 | Site Map of ALIO Website

Sources: ALIO Homepage

Through the aforementioned activities, ALIO is purposed to make public institutions more transparent and efficient. The use of ALIO system has drastically decreased the number of negligent public institutions every year, mainly because the strict information management policy forced each institution to put forward efforts to self-monitor.

Currently, many Koreans know the important main information of public institutions recorded and stored in the ALIO system. Visitors to the ALIO website are increasing continuously. As of 2016, on average, 200,000 persons per month are visiting ALIO and are utilizing the available information. ALIO can promptly select and deliver necessary information in case of policy making or requests for information from the national assembly. Also, people in academics, media, civic groups and many others are utilizing information from ALIO. This important information is used for research materials, policy data, media and press data, and etc.

7.2.1. The Search Service of the ALIO Website

ALIO provides a search window at the very top of the page where users could easily search the information they want. Users could find important information according to each public institution, or by types of institutions, or by line agencies under ministries.

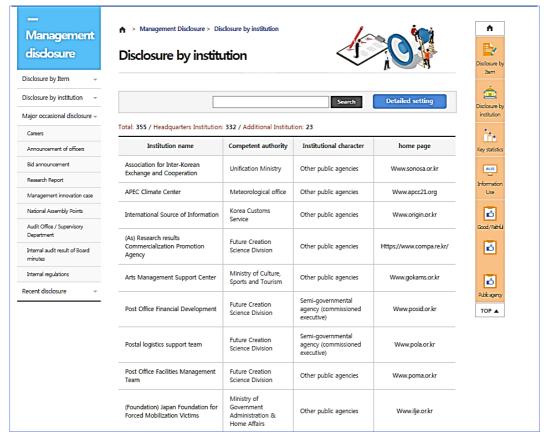


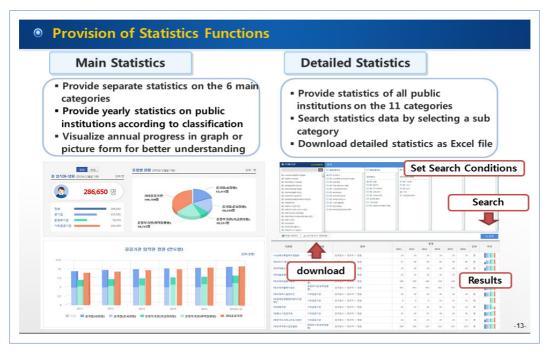
Figure 3-7 | Search Option of ALIO

Sources: ALIO Homepage

Figure 3-8 | 5 Main Categories of ALIO Website

Sources: ALIO Homepage

Figure 3-9 | Statistics of ALIO Website



Sources: ALIO Homepage

The system also provides statistics for the six main areas of interest that are separately processed and then consolidated to provide comprehensive information of all SOEs and public institution in Korea, such as the number of employees, average remuneration, employee benefits etc. These main stats are provided to people with the aid of visualizations such as annual trend graphs to help them easily understand.

7.2.2. Information Management on Item-by-Items Basis

The ALIO provides detailed information of public institution to the public. Initially, 20 items of information were open to the public and by 2016, 39 items including 83 sub-items are publicly available. These items include most of the key information that citizens want to know such as a number of executives in each public institution, debt status, fringe benefits, and employment information.

A provisional disclosure is presented as a form of bulletin board so that you can check the information on an item-by-item basis. The information from various organizations will be displayed on the bulletin board in a chronological order. If you click on a preferred item at the top of the menu in the ALIO website, you can view its details and can even download data and index in Excel or PDF files.

7.2.3 Information Management by Institution Basis

There is a total of 344 institutions, including 321 public institutions and 23 auxiliary institutions disclosing management information at ALIO website. The users can check either the itemized report or quarterly report. There are six main categories of information is listed in ALIO; i) general status, ii) operation of institutions, iii) core business and management performance, iv) internal and external evaluation, v) notification, and vi) current administration's policy framework for a public institution.

The figure below is an example of K-water's announcement page on ALIO.

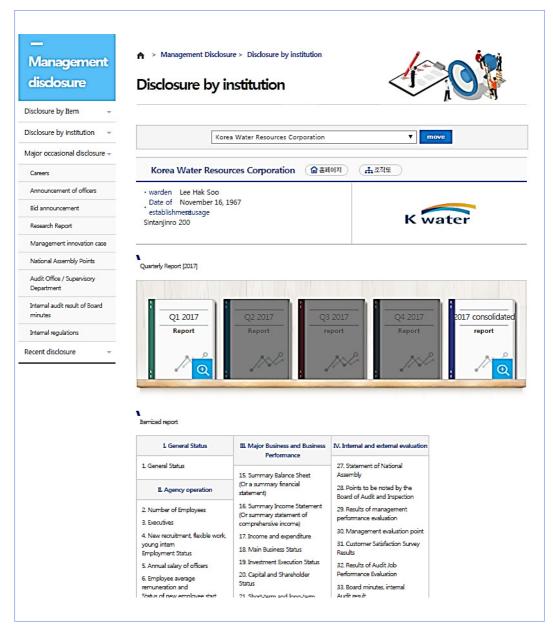


Figure 3–10 K-Water Information Page in ALIO Website

Sources: ALIO Homepage

By clicking the quarterly report menu, users could browse the page of 6 main categories and 39 items of information of K-Water shown above in figure 3-12. For a usage convenience, users could also download the information in PDF files.

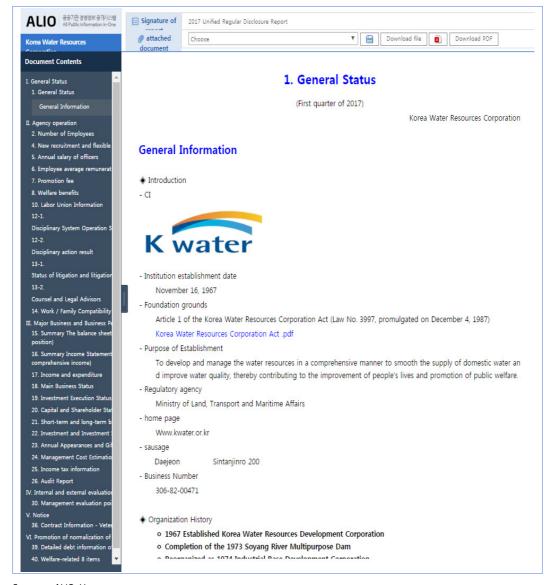


Figure 3–11 K-Water Information Page Details

Sources: ALIO Homepage

7.2.4. Disclosed Information in ALIO.

The 39 items of information of public institutions currently disclosed through the ALIO system are as follows.

Table 3-14 | Open Information of Public Institution through the ALIO System

Category	Item
General status	1. General status
Operation of Institution	 Number of executives and employees Current status of executives New employment and flexible hours arrangements Annual salary of executives Average monthly salary of employees & salaries of new employees Business expenses spent by the head of institutions Welfare expenses Details of executives' overseas business trips Current status of labour unions Employment rules Enforcement of disciplinary actions Current Status of lawsuits and attorney
Core businesses and Management performance	 14. Condensed balance sheet 15. Condensed income statement 16. Revenue and expenditure 17. Core businesses 18. Ongoing investments 19. Status of capital and shareholders 20. Short and long-term borrowings 21. Investments and contributions 22. Annual endowments and grants 23. Other overhead costs 24. Tax payment status 25. Audit reports
Internal and external evaluation	 26. Feedback from the National Assembly 27. Feedback from the Board of Audit and Inspection of Korea & the competent ministry 28. Results of performance evaluation 29. Feedback from the results of performance evaluation 30. Results of customer satisfaction surveys 31. Results of auditor's job performance evaluation 32. Articles of association, minutes of directors' meetings, and internal audit results
Notification	33. Management innovation practices34. Information for job applicants35. Bidding information36. Research reports37. Other information
Current Administration's policy framework for Public Institution - "The Normalization of Public Institutions"	38. Detailed information on the debt status of major overleveraged institutions39. 8 items of employee benefits

7.2.5. Functional Classification of ALIO Website Application

The ALIO website is divided into three applications according to its functional usage; the public usage portal, public institution administrator, and the MoSF administrator.

Table 3-15 | Functional Classification of ALIO Website Application

1) Feature List of the Public Usage Portal

Division	Sub-Division	Task & Functions
	Search/Browse	Consolidated Search/Detailed Search of Report
Main Screen	Access Guide	• Copyright, Not receive unauthorized e-mail, Privacy statements
	Shortcut	MoSF website, Job ALIO website, Sitemap
	Introducing ALIO	Introducing ALIO
Introduction	Management Disclosure System	Introducing Management Disclosure System
of ALIO	Current Status of Public Institutions	• Definition, Classification, and Designation of Public Institutions
	Access Guide	Access Guide of ALIO
	Itemized List of Disclosed Information	Search Itemized List of Information
Managamant	Disclosed Information by Institutions	Search Disclosed Information by Institution
Management Disclosure	Provisional disclosure items	 Search recruiting information, executive recruiting information, procurement information, research paper, management innovation case studies, comment of National Assembly, comment of Board of Audit & Inspection/competent Ministry, board meeting minutes, and internal audit result
	Latest Disclosure	Search Last 1 Month of disclosed Information
Statistics	Main Statistics	 Core Browse statistical information on core items of public institutions of the last five years Core items Tab option A number of employees, average remuneration, employee benefits, etc.
	Detail Statistics	• Search detail data on specifically disclosed items of each institution
	Law Decree/ Guideline of Public Institutions	Introduce Laws, Guidelines, standard regarding Public Institution
Other Information	Public Institution Policy Data	• Public institution designation status, Address book
IIIOIIIIauoii	Other Information disclosure	• Provide public institutions' other various information besides disclosure items
	Download Data	• Download Public Institution's General Status data
	Management Disclosure by public institutions	• Data of Management Disclosure by public institutions
	Main Statistics	Main Statistics
ALIO Mobile Service	Public institution designation status	• Introducing Public institution designation basis and status
	Research paper	Search Research paper on Public Institutions
	Procurement nformation	Procurement information of Public Institutions
	Recruiting information	Recruiting information of Public Institutions

2) Feature List of the Public Institution Administrator

Division	Sub-Division	Task & Functions
		Initial Registration of Institution's Accredited Certificate
Main Screen	Log-In	Accredited Certificate Log-In
		• ID / PASS Log-In
	Periodic Disclosure	 Submission status of Periodic Disclosure Report Items include the number of employees, salaries, debt information, fringe benefit and so forth
Status of Data Submission	Provisional Disclosure	Submission status of Provisional Disclosure Report Items include recruiting information, executive recruiting information, procurement information, research paper, management innovation case studies, comment of National Assembly, comment of Board of Audit & Inspection/competent Ministry, board meeting minutes, and internal audit result
Submission	Information Centre	Register Executive Recruiting Notice, recruiting information, procurement information, Research papers, Public Institution Policy data, other disclosed information
	Person in Charge of disclosure	Register the Person in Charge of specifically disclosed report
	Disclosure Modification	Modify submitted Disclosed data
Search Report	Search Report	Search Report by items/date, status of disclosure by stage of review
	Notice	Notice of ALIO system operation
Participation Board	Q&A	Register Questions & Check Answers
	FAQ	Search Frequently Asked Questions
Modify Information	Modify Information	Modify Information from Institution administrator

3) Feature List of the MoSF Administrator

Division	Sub-Division	Task & Functions		
,		Initial Registration of Institution's Accredited Certificate		
Main Screen	Log-In	Accredited Certificate Log-In		
		•ID / PASS Log-In		
	Periodic Disclosure	Status of the Review List of Periodic Disclosure		
	Provisional Disclosure	Status of the Review List of Provisional Disclosure		
Managamant	Modification history of Management Disclosure	Check modification history report		
Management Disclosure	Progress Status	• Progress, New account/Post, Information non-submitted institutions stat		
Diociosare	Contents Review	Search report, Download Excel file of data		
	Penalty Points management	Check Penalty points history of by Institutions		
	Person in Charge of disclosure management	• Register/Modify the Person in Charge of disclosure by institutions		
	Results of performance evaluation	Register the Results of performance evaluation		
Performance Evaluation	Results of customer satisfaction surveys	Register the results annual customer satisfaction surveys		
Disclosure	Results of auditor's job performance evaluation	• Register the Results of standing auditor's job performance evaluation		
	Executive Recruiting Information Notice	Manage the Executive Recruiting Information Notice Disclosure		
	Recruiting Information	Manage Recruiting Information Disclosure		
	Procurement information	Manage Procurement information Disclosure		
	Management innovation case studies	Manage Management innovation case studies Disclosure		
Information Center	Public Institutions Laws/Guidelines	Manage Public Institutions Laws/Guidelines		
	Research paper	Manage Research paper Submission		
	Public Institution Policy data	Manage Public Institution Policy data		
	Other disclosed information	Manage other disclosed information		
	Comment of National Assembly	Manage Comment of National Assembly information		
	Comment of Board of Audit & Inspection/Competent Ministry	Manage Comment of Board of Audit & Inspection/ Competent Ministry		
Dorticipation	Notice	Manage Registration of System Notice Board		
Participation Board	Q&A	Manage FAQ		
	FAQ	Manage Q&A		
	Format Management	Report(Group) addition and Format Management		
	Format Items Management	Manage Format Items		
	Common Code Management	Manage Common Code of ALIO system		
	Institution Management	• Manage ALIO institutions, All Public Institutions, Modification history of Institution Management		
System	Administrators Management	Manage Administrators, un-used ID		
Management	Disclosure Schedule Management	Manage Disclosure Schedule/Deadline		
	Manage permission to modify disclosed information	• Manage permission to modify disclosed information by Periodic Disclosure, Provisional Disclosure and Information Centre		
	Manage Institutions with dishonest disclosure	Register and Manage Institutions of dishonest disclosure		
		Analyze Web-Log, Daily Closing Log, Manage Access History		
Modify Information	Modify Information	Modify Membership Information/ Register Certification		
Courses: Com	nlied by Authors			

7.3. The Principal Agent of the Consolidated Information Management

7.3.1. The Public Institution Policy Bureau of the MoSF

The Public Institutions Policy Bureau (PIPB) of MoSF formulates and implements measures for advancing public firms through privatization and restructuring. The Bureau aims to enhance managerial transparency of public firms and assess their managerial performance to realize efficient and responsible management. The members are civil servants, but it recruits chief executives in an open, fair impartial way and encourages innovative management to improve the public service. The PIPB is one of the bureaucratic organizations while the Steering Committee is a deliberation committee.

It's main duties include, providing public institutions with policy guidelines and improvements regarding management efficiency in public institutions, improving public institution governance by introducing a fairer, more transparent system for senior executive selection, strengthening the role of non-executive board members and auditors, supervising and evaluating how public institutions are managed, and evaluating public institutions' compliance with government guidelines.

Table 3-16 Role of Information Management

Sort	Division	System User	Sort
Overall Control & Managing Body	MoSF	MoSF	 Create and Runs the ALIO system Provide consolidated information history by institutions/by year Manage Law, System and Policy Making/Fulfilment
Information Registering Institution	Institutions providing Disclosed information such as competent ministries and public institutions	Competent ministries and public institutions, SOEs	Check History of consolidated information covering all Public Institutions Check Management Information such as business Information, Debt data and performance index
Information Utilizing Institutions	Professors, Journalist, Researcher, Legislator, and the Public	The Population (Artificial Person./Individual)	Search Public Institution Status Information Check the personalized Information of Institutions (By connecting with the Internal System)

7.3.2. The Research Centre for SOEs, the Korea Institute of Public Finance (KIPF)

The Research Centre for SOEs, the Korea Institute of Public Finance (KIPF) is a government-supported research institute responsible for promoting sustainable growth and ensuring the positive performance of SOEs in Korea. The Centre is responsible for a wide range of research activities such as specialized studies on public policy regarding SOEs, assisting for the improvement of the management evaluation system, and in-depth research and analysis on SOEs' relevant issues. Since its foundation in 2009, the Research Centre for SOEs has played a critical role in performing systematic research in SOEs-related mid- to long-term public policies, and supports the annual performance evaluation of SOEs of MoSF, as well as in-depth research and analysis on the relevant issues of SOEs.

The Centre's main research field includes SOEs' governance structure, SOEs' consolidated information management, the role of SOEs in the national economy, SOEs' performance evaluation system, and SOEs in foreign countries. Furthermore, the centre also focuses on the normalization measures of SOEs, the issue of public debt, the peak wage system, SOEs' functional overhaul policy, and the examination of the public information management system.

7.4. Improvement of the ALIO System

Despite the growing interest and utilization of free management information from the public institutions through the ALIO system, it has raised questions about the quality of information registered with the ALIO system. In particular, the problem of reliability of data is continuously raised due to unexplained information input, input error, and bad input.

At the beginning of the introduction of the ALIO system, there were a number of data entry problems. Although the problems were considerably solved due to the freedom of management information act in 2007, simple errors in data entry and overly simplified input compared with required information have remained as continuing problems. For example, it causes error in information on the institutions to disclose only the total amount of sensitive subjects such as the operating expenses of the head of public institutions and to input data without the primary items of the welfare benefits. This ends up undermining the reliability of the ALIO system by providing distorted information about the public institutions.

However, it takes a lot of effort and time to investigate the authenticity of the released information, while the number of staffs in the management agency is very small and the time allocated to the work is limited. In addition, it is difficult to prevent false information from being posted in the current system where release and quality control of the information are

entirely left to the discretion of the institution itself. Although a management guideline exists to prevent the inadequate release of information, there is any doubt about the reliability as the information quality control is basically up to the institution.

The ALIO system improves consistency of data quality through the automatic verification function of the released report and contributes to the expertise of the official registration staff in public institutions through standard manual and training.

Another issue arises from the representativeness of the released items in the ALIO system. It is difficult to utilize financial information of public institutions published in ALIO system as public policy data due to the difference in accounting standards between government and public institutions. Therefore, there is a lack of comprehensive and meaningful information to understand the current state of the institution. In order to increase the utilization of ALIO system, it is necessary to consider not only providing simple information but also showing a comparison of relevant information or meaningful financial ratios.

7.5. Characteristics of Consolidated Information Management System

The creation of the consolidated information management system has allowed stable public service delivery by separating the important disclosed information of public institution according to user preference. The development of ALIO system has provided various, high-quality information to the public and experts in a convenient way and thus improved the transparency and responsibility of public institutions.

The system has also increased the work efficiency of people in charge of information management, and the introduction of automatic verification of disclosed information has shortened the office hours of many. It is estimated 3.9 billion Korean won would be saved in the next 5 years by the computerization verification system, 1.6 billion Korean won by the computerization of data/statistics history of disclosure, and 3.1 billion won by the shorter work/reporting hours.

7.6. Implication for Jamaica

7.6.1. SWOT Analysis

The results of the SWOT analysis of the Korea Integrated Information System are as above.

If applied to Jamaica, it can be derived as follows.

organization and train professionals at the

by monitoring pan-governmental policies

• Carry out consolidated information management

system that corresponds with government policy

organizational level

[SO Strategy]	[ST Strategy]
 Produce a substantive use plan of consolidated information management system by expanding the awareness of EA within MoSF & Public Institutions Through the operation activation, develop information assets such as the ALIO system and performance evaluation management system into good practice model 	 Based on the excellent level of informatization, spread of understanding regarding Consolidated information management system within the organization Secure Information service budget and build engagement between internal systems of public institutions by creating positive effect through Information asset management
[WO Strategy]	[WT Strategy]
Raise understanding of Public Institutions on management obligation and staff professionals	Form a consensus on the need of consolidated information management system within the

Sources: Complied by Authors

If applied to Jamaica, it can be derived as follows.

through the support and cooperation of external

 Improve utilization of consolidated information management system by benchmarking good

practiced of foreign countries or other ministries

Strength

institutions

- Include EA within the high ranking group of government department according to the Maturity Measurement Result.
- The high informatization level of members of the organization.

Weakness

- Lack of professionals dedicate to EA and deactivation of operating organization.
- Lack of awareness on the need of Consolidated Information Management System within the organization.
- Change management & insufficient use of Consolidated Information Management System within the organization.

Opportunities

- The enactment of 'Act on the Management of Public Institutions' has enabled performance evaluation system of SOEs, which can be widespread through governmental policy and support of MoSF and Public Institutions.
- Guidelines on SOEs and Quasi-governmental organizations' management & innovation.
- Operrational Configuration through Consolidated Disclosure of Public Institutions

Threat

- Lack of awareness & bond of sympathy within the organization.
- Staffing challenge of recruiting trained workers with a specialization in the field of consolidated information management System. Uncertainty of connecting Information service budget with Performance.

7.6.2. Implcations for Jamaica

Currently, public companies in Jamaica do not use IT-based evaluation systems like Korean public institutions. However, the Jamaican government has recently been very interested in managing financial indicators for state debt control. As there might be several difficulties for Jamaica in using the Korean ALIO system at its current level, a step-by-step approach is required.

First, indicators managed in Korea's integrated information management system are likely to be applicable to Jamaica, such as indicators of workforce structure, labor costs, debt, labor productivity, and capital productivity. It is a very basic information service system in terms of the evaluation system in Korea. It would not be much of a problem if a gradual development approach is followed after building a system which provides such basic information.

Next, the establishment of an integrated financial information management system which provides data for time series analysis might be helpful to manage various information of the public companies, and there is no technical difficulty. In order for the establishment and operation of such a system, a step-by-step approach is recommended considering the environment and circumstances of Jamaica. The most important thing is to reduce opposition to the introduction of a new system, which is about the governance framework for management evaluation of public companies.

8. Successful Factors and Challenges

8.1. Successful Factors

So far, evaluation system in Korea has accomplished successful instrument as a tool to control the SOEs. Especially it is a good monitoring scheme for proactive input administration and output evaluation. Also, it created an achievement-oriented culture by competition.

Reflecting the 30 years' experience, some implications for the successful management can be drawn. First, consistent and expectable management was possible by setting up the evaluation system by the laws and regulations. Second, evaluation was carried out not by bureaucrats but by independent and neutral exterior experts. It can enhance the acceptability of the results. Third, the result was a strong instrument for incentive and penalty scheme. According to the result, the salary of all the employees including CEO was affected, the matter fo which becoming the common interest of all people in concern. Fourth, every year the evaluation team tried to change the indicators and methodology by adopting the voice of experts and stakeholder. To do that, after the evaluation, seminar, and conference were held every year. In conclusion, the evaluation system has been improved through continuous improvements drawn by trial and error.

8.2. Challenges

Recently the evaluation system faces new challenges, which is undertaken for embitterment by MoSF.

First, the evaluation is based upon 1-year achievement, so that the SOEs are apt to focus on short-term performance. Even though some response has been attempted to modify indicators to include the long-term strategy and global competitiveness, still the main issue is one year based achievement.

Second, it is a relative evaluation system to compare within six categories. But characteristics of the Institutions vary even within the category so that there have been complaints by the low-grade institutions. It means it is not easy to determine the evaluation grades in comparison with the other public institutions.

Third, with regard to the qualitative indicators, it depends on the subjectivity of experts, where complaints from the SOEs concerned could be derived. To overcome, debate and coordinating body within the evaluation team should be established, but still, complaints against the expertise of the evaluation team from the SOEs are currently inevitable.

Lastly, the implementation cost is critical. About 150 exterior experts participate and US\$3.5 million is allocated for the performance evaluation of the SOEs to cover the operation. The government should contrive to coin out a new methodology to cut down the administrative cost.

III. Pair Review with K-Water and NWC

1. The Significance of Comparative Assessment

1.1. Necessity of the research

Two SOEs, K-Water and National Water Commission were selected as an object of this research. The first reason for choosing these two particular SOEs for comparative assessment was that the K-Water of Korea had an excellent performance evaluation result "A" with good performance evaluation team and showed excellent learning ability.

Second, NWC, the largest SOEs in Jamaica, possessed a similar performance evaluation system with K-Water with excellent management capacity. The executives of both K-Water and NWC paying a lot of attention to performance evaluation also were a factor.

Third, we narrowed out search to only market type SOEs that uses the financial quantitative index for performance evaluation and has the ability to self-finance which allows analysing its management efficiency in a financial standpoint.

Lastly, it was important to choose SOEs seeking overseas expansion for the opportunity of cooperation.

2. Characteristics of K-Water and Analysis of Performance Evaluation Results of PBs

2.1. The Role and Function of K-Water

In most countries, water management area is run by a government organization or as a type of public corporation since it is considered a national project. However, water management was run by the type of SOEs in Korea as part of government national development plan and in the necessity of comprehensive water resources development since 1960's.

2.1.1. The History of K-Water

1) Initial Stage (1966-1973): Korea Water Resources Development Corp.

K-water was founded on November 16, 1967, as the Korea Water Resources Development Corporation in accordance with the national development plan of the government intended to develop heavy and chemical industries and facilitate modernization of the national industrial structure.

K-water made a significant contribution to the growth of the national economy and the improvement of the public welfare by implementing water resources development projects and managing these resources. During this stage, K-water conducted the Han River area survey, with the USBR (United States Bureau of Reclamation), which became the basis of the following water resources projects: Completed the Soyanggang Dam Project and began the Seobingo and Gumi Industrial Complex Projects.

2) Take-off Stages (1974-1987): Industrial Sites and Water Resources Development Corp.

In the 70s and 80s heavy and chemical industries were emphasized for industrialization and the development of economic competence.

K-water, recognized as the only competitive public entity in the local civil engineering sector, was charged with the momentous task of establishing national industrial bases. Based on accumulated experience and confidence in water resources development projects, K-Water developed the Yeochun, Changwon, Onsan and Gumi Industrial Complex Projects and embarked on the management of the Andong Dam, Namgang Dam, Ulsan and other 6 water utility facilities as well as the construction of Banwol New Town.

3) Growth Stage (1988-2012): Korea Water Resources Development Corp.

Entering into the 1980s, as K-water built its reputation on water resources development, water resources management, and industrial complex projects. Water consumption began to surge, heralding a drastic change in the water resources policies of Korea. To address such public needs more actively, Industrial Sites and Water Resources Development Corporation was reformed into

the Korea Water Resources Corporation (K-water) and was made responsible for the management of overall water resources-related projects on July 1, 1988. K-water contributed to the improvement of the quality of public life and public welfare by supplying sufficient clean water, completed industrial complex projects, and managed dams in various river areas. With water utility construction projects being implemented as the corporation's own business in Ilsan and other areas, the construction of multi-regional water supply systems emerged as a key business sector.

4) Smart New Management Stage (Since 2013): K-Water

Since 2013 K-Water has scientifically and systematically managed water resources and operated an ICT-based smart water management system, 'Smart Water Grid.' It has taken a leading role in producing tap water utilizing new concepts, changing the paradigm of water supply from 'safe and clean water' to 'healthy water for the human body'.

2.1.2. K-Water's Mission and Vision

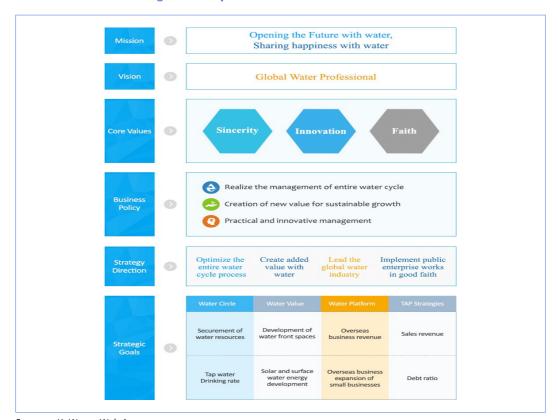


Figure 4-1 K-Water's Mission and Vision

Sources: K-Water Website

K-Water was established to protect the people from water disasters and contribute to economic development and public welfare through the stable water supply. K-Water's mission and vision are as follows.

2.1.3. K-Water's Organizational Structure

K-Water has 7 executives, 3,688 regular employees, and 801 employees in special service as of 2017.

K-Water has various occupational description compared to other institutions, and because of the characteristic of water resource management, 80% of the organization is made up of technical professionals.

K-Water's organizational structure is as follows.

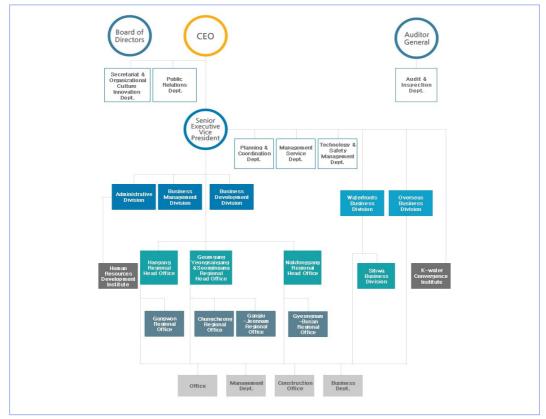


Figure 4-2 K-Water's Organizational Structure

Sources: K-Water, Healthy Water, Smart Water management, Water for a Happier World, 2017

2.1.4. K-Water's Core Business

With its advanced smart water management practices and technologies, K-water has faithfully been doing its part as a government-owned water management corporation which provides Integrated Water Resources Management (IWRM) services all across the national water industry and further leads the global water industry. Since its establishment in 1967, K-water has been implementing national water resources management policies regarding multi-purpose dams, water supply dams and regional water supply systems.

The development and management operation of K-Water can be characterized as complex and uncertain since it deals with natural phenomena such as the flood and drought.

The mid-to-long-term businesses are as follows.

- 1) Consolidated water management: Realizes the one-stop water management of dams
 - & rivers with the IWRM system Safety management for hydraulic structures
 - a) Consolidated water management centre
 - b) Operation of Weir/stream/Estuary barrage /dam
 - c) Survey & management of water resource information
 - d) Safety management for facilities
- 2) Clean energy projects: Leads the energy industry by developing new & renewable energy with water
 - a) Hydropower
 - b) Tidal Power
 - c) Floating Solar Power
- 3) Healthy water supply: Supplies healthy water with the intelligent water management system
 - a) Regional Water Supply & Distribution Networks
 - b) Municipal & provincial water supply & distribution networks
 - c) Customized industrial water
 - d) Wastewater works
- 4) Waterfront development project: Develops environment-friendly cities along waterfronts
 - a) Waterfront cities
 - b) High-tech industrial complexes

5) Overseas projects: Provides the world with total water solutions involving in the whole process of the water cycle.

2.1.5. Evaluation Index of K-Water

The unique natures of K-water, which is reflected in its performance evaluation index, are described in the following.

First, K-Water is especially vulnerable to the complexity and uncertainty of natural phenomenon and external environment such as the intensification of climate change due to its unique characteristics of water management

Second, that its main clients are public sector/public corporations since it has a characteristic of wholesales business.

Third, that it does not only carry out the traditional water resources business but pursue diverse business domains such as energy and land development.

Table 4-1 | Major Evaluation Index

Classifi-	Common	Indictors	Unique Indicators		
cation	Quantitative (weight)	Qualitative (weight)	Quantitative (weight)	Qualitative (weight)	
Biz Mgmt.	People's evaluation(2) Government 3.0(1) Business report audit(1) Government driven policy(5) Labour Productivity(4) Capital productivity(4) Debt reduction (4) Quantitative mgmt overhead ratio (2) Total labour cost increase (3)	Strategic planning(2) Mgmt. innovation(3) Org. HR, performance management (2) Financial budget management (2) Progress on self-rescue efforts (4) Compensation & welfare (6) Labour relations(3)	• Revenue vs. EBITDA (2)	•	
Major Project s		Suitability of integrated water resources mgmt. (7) Suitability of healthy water supply (9) Suitability of waterfront development (2)	Efforts to reduce algae in dams(8) Efforts to reduce flood damage(8) Efforts to prevent water supply disruption(8) Efforts to reinforce quality standard for drinking water(8) Water supply efficiency(5)		
Total	26	40	34		

Sources: K-Water's internal information

And finally, that the business cycle of K-Water has a large gap between cash flow and benefit because it has a greater proportion of business with economic benefit that doesn't provide financial benefit.

The quantitative index can be divided into 3 categories; one is that commonly evaluate the management of all PIs and another is that evaluate K-Water's unique core business, and the last one is specific indexes. Common indicators are used equally in all of the PIs. Major projects consist of key functions of K-Water's strategic businesses. Major projects are included in both indicators (qualitative of Common indicators and quantitative of Unique indicators). The specific businesses are water resources, water supply, and new growth engine.

2.1.6. K-Water's Performance Evaluation Results

The evaluation indexes regarding K-Water's core business are as follows.

- 1) Revenue vs EBITA(Earnings before interest, taxes, depreciation and amortization) has increased from 728 million USD in 2014 to 748 million USD in 2015
- 2) Efforts to reduce algae in dams has reduced from 3,996(mg/m³) in 2014 to 3,528(mg/m³) in 2015
- 3) Efforts to reduce flood damage has maintained as 0ha in 2015
- 4) Efforts to prevent water supply disruption has reduced 145 hours in 2014 to 117 hours in 2015
- 5) Efforts to reinforce quality standard for drinking water has shown dramatic increase of 99.73% achievement rate in 2015
- 6) Water supply efficiency has increased from 83.7% in 2014 to 84.7% in 2015

2.1.7. Feedback System based on Performance Evaluation Results

① K-water Incentive System

- Performance Evaluation Incentive : Headquarter + Division Evaluation Result (0~300%)*
 (Table-1)
- Internal Evaluation Incentive: Team · Individual Evaluation Result (200%)*(Table-2)

② Incentive System Calculation Example

(Example) If "B" Team of "A" Department's Internal Performance Evaluation shows as below;

• Government Evaluation Grade A, Headquarter + Division Evaluation Result : A,

Team Evaluation Result : C.

→ "B" Team's Performance Evaluation Incentive is 240%, Internal Evaluation Incentive is 165%. Therefore, Final Incentive is 240% + 165% = 405%

Table 4-2 | Performance Evaluation Incentive(Fluctuation Incentives based on the Grades)

Incer	ntive Grades	S Grade	A Grade	B Grade	C Grade	D Grade
Proportio	on of Personnel	10%	15%	50%	15%	10%
300%	Rate	400%	350%	300%	250%	200%
(±100%)	Differential Rate	+100%	+50%	0%	-50%	-100%
240%	Rate	320%	280%	240%	200%	160%
(±80%)	Differential Rate	+80%	+40%	0%	-40%	-80%
180%	Rate	240%	210%	180%	150%	120%
(±60%)	Differential Rate	+60%	+30%	0%p	-30%	-60%
120%	Rate	160%	140%	120%	100%	80%
(±40%)	Differential Rate	+40%	+20%	0%p	-20%	-40%

^{*} Government Evaluation: S(300%), A(240%), B(180%), C(120%)

Table 4-3 Internal Evaluation Incentive

Incer	ntive Grades	S Grade	A Grade	B Grade	C Grade	D Grade
Proportion (of Personnel	10%	15%	50%	15%	10%
200%	Rate	270.0%	235.0%	200.0%	165.0%	130.0%
(±70%)	Differential Rate	+70.0%	+35.0%	0.0%	-35.0%	-70.0%

2.2. Implications

The K-Water was ranked 9th out of 13 of then government-invested institutions performance evaluation in 1997. In 1998 and 1999 for consecutive years, the K-Water ranked the 1st place. K-Water also received excellent "A" score in 2011, 2014 and the most recently in 2015's public institutions management performance evaluations. The reason K-Water scored so well on multiple evaluations is because they ran an enterprise-wide system that reflects the entire staff's attention to performance evaluation and day-to-day operations into government performance evaluation and internal evaluation. Some lessons can be learned by looking through K-Water's performance evaluation results.

First, there were plenty of indicators related to the government recommended policy from

a business management perspective commonly applied to all SOEs in Korea besides the traditional management indices such as labour productivity, capital productivity, quantitative management operational cost, and total labour cost increase ratio. This means that K-Water concentrated on company-wide KPI setting based on management strategy and government evaluation.

Second, only the performances on institution's effort excluding external environmental factors such as government-forced national project (ex. Four major river refurbishment project), natural disaster recovery project or long-term project with large economic benefit were evaluated.

Third, performance evaluation not only applies to departments within institutions, but to individual members which ties to performance-based incentives. The strategic performance management will become the norm through the consolidated performance evaluation system, and the development of IT-based real-time monitoring will bring awareness to the problem of low performance. Additionally, coaching and consulting could be conducted not only for members with the low performance but the whole team by balancing competition and cooperation.

Through this process, seniority and evaluation based on team size will be avoided and efforts to maintain the objectivity of the evaluator will continue.

3. Characteristics of NWC of Jamaica and its Performance Evaluation Result Analysis

3.1. The Mission of NWC

3.1.1. Jamaica's Water Resource Management System

The water resource management of Jamaica is divided into the domestic water supply, irrigation, sewerage, surface and underground water resources, and water policy and monitoring, and these management areas are controlled by the Ministry of Economic Growth and Job Creation (MEGJC). Among the departments related to economic development and job creation, the Central Wastewater Treatment Company, National Irrigation Commission Limited (NIC), National Water Commission (NWC), and Rural Water Supply Company, Water Resource Authority (WRA), NWC is the largest organization.

In most countries, water management area is run by a government organization or as a type of industrial complex since it is considered a national project. However, water management was run by the type of SOEs in Korea as part of government national development plan and in the necessity of comprehensive water resources development since 1960's.

3.1.2. The Role and Function of NWC

1) History

The National Water Commission was established in 1980 through the amalgamation of the Kingston and St. Andrew Water Commission and the rurally focused, National Water Authority. The NWC produces more than 90% of Jamaica's potable water supply from a network of wells, rivers sources, and springs. Additionally, the Commission operates sewerage facilities in selected areas island-wide. The Commission is mandated to contribute positively to national development by providing high-quality potable water and sewerage services, to residential and commercial customers in a cost-effective and sustainable manner.

Since then, different approaches and organizational arrangements have been used to extend water supply to various sections of the country. Today, the NWC is the primary provider of potable water in Jamaica supplying more than 2 million persons with water service daily and more than $\frac{1}{2}$ million of those persons with wastewater services also.

2) Function

NWC's main functions are to pursue strategic endeavours consistent with Vision 2030 and the government's policy objective aimed at making potable water available to all Jamaicans and ensuring that sewage generated in major urban centres is treated to meet tertiary quality standards in order to protect the natural environment. In order to achieve these goals, various projects such as IDB funding project and Jamaica water supply upgrade project are being organized.

Also, it is pursuing the responsibility of network management, leakage repair, and energy management for the usage, disposal, and distribution of tab water and the reduction of non-revenue water (NRW), and the expansion of billed revenue, information communication technology improvement, and internal audit efficiency for customer service delivery.

3.2. Organization and Human Resources of NWC

3.2.1. Organizational Structure of NWC

The portfolio ministry of NWC is the Ministry of Economic Growth and Job Creation (MEGJC), and the Board of Commissioners, consist of nine members (chairman, councilor, and etc.) is responsible for monitoring establishment of policies setting and their implementations.

The executive office is consisted of the president (CEO) and 6 members of vice presidents each responsible for the following areas; corporate service, engineering and capital projects, division operations, investment and performance monitoring, finance and procurement. There are also approximately 6 assistant vice presidents in charge of internal audit and potable water systems operation and maintenance.

3.2.2. Organizational Structure of NWC

The NWC has a staff complement of some 1,861 personnel deployed across the island. They are categorized as follows:

Category	Number of Staff	
Pre- Supervisors	1,246	
Supervisors	399	
Managers	216	
Executive		
GRAND TOTAL	1,861	

Sources: NWC's internal information

The NWC is one of the largest employers of engineers on the island. It has staff complement which consists of attorneys-at-laws, engineers, environmentalists, hydro-geologists, technicians, accountants/financial analysts, public relations personnel, human resources professionals, business/commercial professionals, graphic designers, water & wastewater treatment plants operators etc.

3.3. Business and Budget of NWC

3.3.1. Core Business of NWC

NWC was established in 1980 and is governed by National Water Commission Act of 1980. NWC is the principal provider of water and waste water services on island, supplying over 70% of the population with piped water and 15% of the population with sewerage service.

Its primary responsibility is to ensure that the citizenry of Jamaica is provided with adequate potable water and sewerage services of the highest quality and in-keeping with all relevant national and international health standards.

Although the NWC is a publicly owned company with wider economic and social objectives, it has been mandated to operate as a commercially viable entity. This is to ensure sustainability and expansion of its operations, without dependence on the GOJ for financial support. NWC is required to operate efficiently and expects that its tariff is sufficient to recover the cost of service, including its capital cost.

3.3.2. Budget and Financial Structure of NWC

The Financial structure of the NWC is one within which its revenue over the last two years of 2015 & 2016 are JM\$25.2B and JM\$26.0B respectively whilst its expenses are JM\$20.6B and JM\$20.8B. The NWC total long term loan obligation and debt under management is in the amount to JM\$69.1B. Capital Budget averages JM\$8B - JM\$10B per year. Staff and electricity costs each represents just over 32 % of the total revenue and operating costs.

However, the NWC has been making an Operating Profit over the past five years, beginning in 2011/12 when the Operating Profit increased from \$0.96B to \$3.08B in 2012/13. At that time the increase was due primarily to a 10% increase in Operating Revenues and a 1% reduction in Operating Expenses.

There was an 11% reduction in operating profit in 2014 to \$2.73B. During this period, revenues increased by only 11%, while Operating Expenses increased by 14%.

There was a 36% improvement in 2015 to \$3.72B; during that year, Operating Revenues increased by 9% and Operating Expenses increased by only 6%. During the 2015/2016 Financial Year, the Operating Profit increased by only 3% to \$3.84B, there was a decline in Revenue of 3% and also a decline in Operating Expenses by 4%.

3.4. The Current Performance Evaluation System of NWC

The management performance of NWC is monitored and evaluated by various ministries, departments, and agencies (MDA) within the Jamaican government. The performance report of NWC shows the summary of the main performance issues related to NWC in the 2014/2015 fiscal year. The report is presented in the order of NWC's most important functional department. Additionally, there are four or more departments evaluated enterprise—wide from a various point of view, but in terms of our research we focus on key MDAs which have direct fiscal and operational impact directly on the performance of the NWC which are described below:

- 1) Office of Utilities Regulation (OUR): OUR is the economic regulator which establishes and monitors the NWC's Performance and Guarantee Standards. The OUR also sets and determines the NWC's tariff structure.
- 2) The NWC's Portfolio Ministry (now Ministry of Economic Growth and Job Creation) develops and establishes Water Sector Policy guidelines and ensures that the NWC operates within these set guidelines of the Water Sector Policy.
- 3) The Ministry of Finance and Public Services ensures fiscal prudence: wherein, the National Water Commission has to operate within the national fiscal /budgetary allocations and economic policy framework of the Government of Jamaica.
- 4) National Environment and Planning Agency (NEPA). This entity has responsibility for the regulation of the "built" and "natural" environment. The NWC is regulated from the standpoint of its operational compliance of effluent discharge into the environment from its wastewater treatment facilities
- 5) Water Resources Authority (WRA), The WRA regulates all of Jamaica water resources (i.e. surface and ground water resources). In this regard, the NWC has to secure water abstraction licences for the operation and development of new water production facilities.

The NWC has established a number of performance indicators that are monitored in an effort to assess and measure the effectiveness of strategies implemented to achieve its goals and objectives. Also, as a regulated entity, there are also several performance indicators that have been established by its regulators that must be monitored to ensure compliance. Below are some of the Primary Performance Indicators:

Table 4-4 | Performance Indicators of NWC

Performance Indicators

- 1. System Uptime (Actual Time/ Expected Time) (%)
- 2. Customers with service for at least 18 hours per day (Avg. hrs. served/24 hrs.) (%)
- 3. Number of customers affected by unplanned outages lasting over 3 hours (#)
- 4. Coverage of Water & Wastewater Services (% of population with access to NWC Service) (%)
- 5. Non-Revenue Water (Billed Consumption/ Production) (%)
- 6. Energy Efficiency (kwh/g)
- 7. Employee Efficiency (number of employees per thousand customers) (#/1000 customers)
- 8. Collection as a % of Billing (%)
- 9. Average Debt/EBITDA Ratio (US\$M)
- 10. Profitability:
 - Profit Margin (Net Profit (Loss)/ Revenues) (%)
 - Profit Margin (Operating Profit (Loss) /Revenues) (%)
- 11. Liquidity (Current Assets/ Current Liability)
- 12. Number of Customers (Active & Inactive) (#)
- 13. % of active accounts/ Total accounts (%)
- 14. Compliance with IJAM standards (Weighted average of number of samples negative for coliform plus positive for chlorine residual threshold) (%)
- 15. Compliance with NEPA Standards (% Plants Compliant with Standards) (%)
- 16. Compliance with OUR Standards OUR Guaranteed Standards (%)

Sources: NWC's internal information

3.5. Analysis of Applying Korea's Evaluation Index Results

K-Water has two kinds of performance evaluation, one is (external) performance evaluation management applied to all SOEs, and the other is internal performance evaluation management. The internal evaluation indicators adopt some important external evaluation, and the two systems merge systematically by IT-based real-time monitoring system.

Table 4-5 | Suggestions for NWC

K-Water Biz Management	NWC
Common-Quantitative	GOJ's Corporate Governance Framework
People's evaluation (Customer's Satisfaction Survey)	
Government 3.0 (Communication and Cooperation)	N/A
Business report audit	Possible
Government-driven policy	Customers with service for at least 18 hours per day (Avg. hrs served/24 hrs.) Coverage of Water & Wastewater Services (% of population with access to NWC Service)
Labour productivity — Value Added Avg.# of Staffs	Employee Efficiency (# of employees per thousand customers)
Capital productivity Value Added Total Capital	Possible
Debt reduction Amount of Debt reduction performance Amount of Debt reduction Plan ×100	Average Debt/EBITDA Ratio
Quantitative mgmt. overhead ratio	Possible
Total Labour cost increase	Possible
Common-Qualitative	Expert's evaluation
Strategic planning	Possible
Mgmt. innovation	Possible
Org. HR, performance management	Possible
Financial budget management	Possible
Progress on self-rescue efforts	Possible
Compensation & welfare	Possible
Labour relations	Possible
K-Water Major projects	<u>NWC</u>
Common-Qualitative	Expert's evaluation
Suitability of integrated water resources mgmt.	Possible
Suitability of healthy water supply	Possible
Suitability of waterfront development	Possible
K-Water Biz Management	NWC
Unique-Quantitative	
Revenue vs. EBITDA EBITDA /Sales	Profit Margin (Net Profit (Loss)/ Revenues)
K-Water Major projects	NWC
Unique-Quantitative	11110
Efforts to reduce algae in dams Avg. Chl-a(mg/m²) per year× Specific Water Capacity of each Dam	Compliance with IJAM standards Compliance with NEPA Standards
Efforts to reduce flood damage $\frac{Flood\ Disaster\ (ha)}{Flood\ Season\ Precipitation}$	
Efforts to prevent water supply disruption	# of customers affected by unplanned outages lasting over 3 hours
Efforts to reinforce quality standard for drinking water #. of Global Water quality standar ds acheived #. of Drinking Water quality standar ds tested	Compliance with OUR Standards - OUR Guaranteed Standards
Water supply efficiency	Energy Efficiency
Efforts to create waterfront space	<u></u>

Sources: NWC's internal information

As the K-water and the NWC's core businesses have a little difference, it is difficult to apply K-water's evaluation index to NWC. The above suggestions maybe useful for the further research.

4. Comparative Analysis of the Evaluation Results

4.1. Comparing the Current Performance Evaluation System of K-Water and NWC

K-Water is subject to an external management performance evaluation system applied to every SOEs in Korea and the evaluation result is disclosed in the ALIO system.

While there is currently no "systematic external" management performance evaluation system in Jamaica, the NWC has established key performance indicators/measures that are based on the standards and guidelines set by its regulators, international best practice, and its own corporate objectives. These indicators are periodically evaluated and reported to the Board of Commissioners, regulators, its parent ministry, and other relevant stakeholders and GOJ Agencies.²⁰⁾

In the 2015 Annual Report of NWC, the 2014-2015 Performance Report of the NWC is included. The performance report includes the major issues under 5 most important functional divisions. It should be noted that the NWC is in dialogue with the IDB to acquire the "AQUA RATING" Utility Performance Management System, which will be used to facilitate the Performance Monitoring and Evaluation of the entity.

There are two categories of performance evaluation that are used within the NWC, the employee performance evaluation system and the overall organization performance monitoring/evaluation system. The employee performance evaluation system measures the employees' efficiency on achieving the objectives and targets set at the beginning of the fiscal year. The objectives and targets of the system would be based on the divisional objectives and targets, regulatory requirements and the individual employee's job description.

In conclusion, while the NWC doesn't have a systematic external management performance evaluation system that applies to all SOEs in Jamaica, they routinely monitor/evaluates the

²⁰⁾ The meaning of "formal" refers to the standardized and government forced performance evaluation procedures, criteria and methods. In Korea, the Ministry of Strategy and Finance conducted the evaluation every year according to the provision of article 48 of the "Act on the Management of Public Institutions".

company's performance as part of its normal activities, and have an employee performance evaluation system. Therefore, its performance indices are based on KPI that understands performance according to basic operations such as project and service delivery.

In the case of incentive system, K-Water runs an enterprise-wide system that will reflect performance-related pay to spontaneously accommodate the performance of day-to-day operation of its employees. In contrast, the NWC has no incentive system based on performance evaluation at the moment.

The gratuity and performance incentive that the president and some senior executive received are shown in the 2014-2015 performance report of the NWC, but these payments were not related to performance evaluation. The president and some of the senior executives of the NWC are on "contract." The labour law of Jamaica dictates that personnel under contract are entitled to "gratuity payment" in lieu of a pension at the end of his/her each contract period. Therefore, the employees of NWC get paid under this gratuity and there is currently no incentive system based on performance evaluation in NWC.

4.2. Implication of the Evaluation Based on Korea's Evaluation System

4.2.1. The Characteristics of the Evaluation Entity

Under the current political structure of Jamaica, it is difficult to transfer the monitoring ownership to the Ministry of Finance and Public Services, so the realistic approach would be the consolidated management of each SOEs performance report

4.2.2. The Characteristics of Evaluation Index

The evaluation of K-Water consists of evaluation indicators in two areas: (i) internal management and (ii) core business. Internal management evaluation indicators are common performance evaluation indices that can be applied to every SOEs in Korea and includes contents such as national review, government 3.0 program, and government recommended policy. Core business evaluation indicators are indices that apply to a unique set of the business of each SOEs. On the other hand, the evaluation of NWC consists of evaluation indicators on activities index, earnings index, and service index that corresponds to the characteristics of a water management company, and performance evaluation indicators. Those indicators are devices for the purpose of internal management, so that the government policy goals or implementation of the company is not included in the indicators. In Korea, the evaluation

indicators of each PIs may include such goals and implementation results of government.

For the record, the KPI water management evaluation indicators presented by the World Bank, which are expressed in a population of service against the population form, such as water coverage, water production, total water consumption, non-revenue water, pipe failure, unit operating cost, water quality, and fixed asset are similar to NWC's. In the case of K-Water, core business indicators are similar to KPI water management evaluation indicators.

4.2.3. The Assessment of Management Evaluation System of Korea

A performance evaluation system is one that is critical to the operation, management and long-term sustainability of any organization, and one for the water utility company NWC is no exception. It will assist the overall improvement of the organization's operational efficiency and long-term planning horizon. It is also required to benchmark and compare the performance of the utility with other utility operators in the water/sanitation sector.

However, this has to be recognized and done within the context that each utility may be unique, as each may operate in : legislative/legal, political, regulatory, economic, technological, social and cultural environment that will be different from each other.

After the introduction of performance evaluation system, K-water had much discretion power in policy setting and the management of major project and daily operation

Therefore, rather than simply trying to introduce Korea's performance evaluation system of SOEs, especially the evaluation indicators directly to Jamaica, we will focus on the contribution of performance evaluation system on SOEs governance, particularly of how it changed the paradigm of SOEs management.

It is noted that the NWC, because of its share size and magnitudes, accounts for a meaningful portion of the government's debt obligation.

The NWC is led by a Board of Commissioners which set policy guidelines/directives, regulated by the OUR (which also set tariff, performance and guarantee standards), NEPA and is fiscally managed by the MFPS and the MEGJC, institutions of which can influence the overall performance of the NWC. As a result there is an overlap in functions. This will run the risk of NWC for not being held accountable due to the multiplicity of government MDA's that are involved in the monitoring of the NWC.

In keeping with the above issues, instructions and directives that NWC should conform to

become less meaningful. Whenever the MFPS (Jamaica) makes mid-year fiscal adjustments to the NWC's Budget, the adjustment influence with certainty the NWC's objectives and KPIs which were already established at the start of the financial year. Based on this example, the NWC does not have or would have "some-how" lost some control over its operation as these changes are made outside NWC's authority.

It is agreed that whilst the NWC's Board, regulators and agencies of government i.e. the OUR, MFPS (Jamaica), the portfolio Ministry (MEGJC), sometimes NEPA can influence the NWC's budget and its performance output, no one appears to hold "accountable" for the performance even if the governance is structured for the maximization of the national interest.

Despite the fragmented and the multi-MDA government (Ministry, Department and Agencies) approach in the monitoring/regulating of the NWC operation, there appears to be no coordination and exchange of information between the MDA. In this regard, the impact of a particular decision is not addressed beforehand in a comprehensive manner in terms of the benefit and impact on the NWC's operation and the extension of the sector.

In Jamaica, the prime minister is also the head of Ministry of Economic Growth and Job Creation (MEGJC), which is in charge of strategic objectives and economic plan of the state as well as the monitoring and evaluation of the government's performance. The clash between the MEGJC and MFPS, who has the fiscal responsibility of SOEs, seems inevitable.

The president and senior executive of NWC expressed the desire to learn in the following areas of Korea's performance evaluation system during our interview between the KSP consultants and the president of NWC.

- 1) Develop an understanding of the foundation and philosophy of the Korean performance evaluation system of SOEs
- 2) Achieve an in-depth understanding of the similarities and difference of both utilities of performance evaluation system
- 3) Have awareness of the methodologies/approaches applied by Korea in the performance evaluation system of SOEs (i.e. public bodies) similar to NWC

IV. Conclusion-Comparison and Suggestions

1. Evaluation System of Public Institutions at the National Level

The Korean government in the 80's had been operated in top-down maanner, while having limited resources of funding in which the population could accommodate. This was because the 80s was the time where the Korean economy was stuck in-between the ongoing recession starting from the late 1970s oil crisis and slowly pulling off from government market intervention through stabilization policy under the national objectives of improving economic efficiency and international competitiveness. The size of government expenditure of SOEs was massive at that time, where it was estimated that 5% of SOEs' cost of production was equal to the total budget on social development excluding the budget for education, approximately 1.7% of GNP of Korea of 600 billion KRW.

As mentioned above, the request for public sector reform including 64 self-supporting SOEs is very high in Jamaica. Furthermore, there is a demand for efficient resource allocation through SOEs reform, which is well reflected in the negotiation with the IMF.

In comparison with the development process in Korea, the current Jamaican public enterprise management policy corresponds to the period of strengthening control in the first period (1948.8~1962.8) and the second period (1962.8~1984.2). In particular, in the second period, the Ministry of Finance had a consolidated management of the budget as the current Jamaican situation, as when the budget authority of the government-invested institution enforces the fiscal control. In Jamaica, the budget of the individual public enterprises has to be passed by Parliament.

The distinction between evaluation systems of the Jamaica's and the Korea's could be found at the national level in terms of external governance. The most important thing to be pointed out is that Jamaica system is based on dual ownership, while that of Korea MoSF has a strong

management function derived from the concentration of ownership. These different systems give rise to the differences in the management system of the public sector as a whole. In the case of Korea, the MoSF is in charge of managing the standardized evaluation system for all public institutions, and a consolidated evaluation management team is formed. It is possible to make a system that compares the status with each other by collectively evaluating all the public institutions by a certain index. MoSF has authority to concentrate ownership, and there is a mechanism as well to set up a public agency steering committee to support independent, objective and professional decision making processes so that bureaucratic procedures do not dominate power. Above all, these evaluation systems utilize strong incentives and penalties to function as powerful management tools. In addition, IT systems are constructed and managed to reduce the administrative costs of these evaluation systems. In order to clarify the management system of various public institutions, Korea government has established information management system for all public institutions to consolidate and manage the diversified information systematically.

Jamaica, on the other hand, does not currently have such a consolidated management system. On the other hand, individual ministries have a system for managing and evaluating KPIs for individual public enterprises. As a result, Jamaica maintains only the evaluation system of individual public enterprises in comparison with the Korean consolidated evaluation system. Therefore, it is not enough to compare incentives among public bodies. Jamaica's governance structure for public bodies continues to evolve.

In conclusion, public enterprise management system is concentrated in Korea, while distributed in Jamaica, depending on whether or not there is a consolidated management system. In other words, it can be understood that the ownership concentration divides characteristics of each country's system.

Korea has maintained a dual evaluation system using both quantitative (evaluates management performance) and qualitative methods (evaluates organizational capacity, improvement efforts, etc.) that translates the comprehensive evaluation outputs into grades.

The performance evaluation system of public institutions in Korea has played many roles throughout the years and has been established as one of the best practice models for SOEs evaluation. However, some problems or controversies remain. For example, there is continuous controversy regarding the problem of choosing between profitability and public interest, of which to emphasize more, problems of following: the scope and classification of public institutions subject to performance evaluation (SOEs and quasi-governmental organization, SOEs type 1 and type2), conducting the evaluation of SOEs and CEOs together or separately, evaluation period (annually or once every two to three years), scoring method and balance

between quantitative and qualitative methods, simplifying evaluation indicators, and structural advantage of some public institution subject to performance evaluation. In addition, some point out the high compliance cost of performance evaluation.

Table 5-1 | Implications of Comparison

	Jamaica	Korea (after 2006)
Governance	Restructuring Governance structure Financial Management by MFPS Policy guidance by Portfolio/Line Ministry	 Restructuring Governance structure Consolidated evaluation system by MoSF Objective outside Experts
Responsibility for Evaluation	MFPS Portfolio Ministries to lesser extent	Consolidated evaluation by MoSFConsolidated committee for evaluation
Targeted Public enterprise	• Public enterprises under MFPS	Whole public enterprises
Performance indicators	Financial analysisOperational Business indicatorsQuantitative indicators	Business indicatorsQualitative indicatorsQuantitative indicators
Feedback system	Performance based incentive system for some PBsEvolving feedback system	Strong Performance based incentive system
IT based evaluation	Financial focused qualitative evaluation Operational evaluation to a lesser extent	Qualitative indicators Automatic report by each SOE
Consolidated information management system	Information management system not consolidated	Consolidated information management system

Sources: Complied by Authors

Nevertheless, there cannot be any perfect evaluation system that fits everything, the following reasons explaines why Korea's system can be valid to Jamaica current situation.

First, without performance evaluation system of public institutions, SOEs become disengaged from citizen's concern. In the case of Korea, while some of the listed SOEs (Korean Electric Power Corporation (KEPCO), Korea Gas Corporation, Korea District Heating Corporation) are evaluated by the stock market, the evaluation system is what maintains the people's interest on other non-listed SOEs. Since moral hazard of SOEs is a big problem for any countries, the issue of keeping people's attention on SOEs performance is very important to monitor corruption.

Second, without performance evaluation system of public institutions, SOEs lose the opportunity to self-assess and prepare for the future. In 2016, SOEs that were ruled out of privatization since 2006 (Korea Airports Corporations, Korea Gas Corporation, Korea Railroad Corporation, Incheon International Airport Corporation) were re-evaluated for the first time in 10 years and the business management system of these SOEs were lagged behind compare to institutions subject to evaluation for the last equal period of time, with lower productivity and management efficiency caused by negligent management.

Third, performance evaluation helps SOEs to achieve the common objectives of government. In Korea, achieving policy objectives is one of the priorities of SOEs in performance evaluation. In Jamaica, hoping to pull its economy out of chronic recession, connecting national development goals with the business objective of SOEs would be very important.

In Conclusion, it would be meaningful to comprehensively assess whether matching appropriate compensation with accurate and fair SOEs evaluation works effectively as a sorting device and ultimately improves the institutions and employee's' capacity and whether the process and the result of SOEs' business performance induce contribution to public service improvement.

2. Evaluation System of Public Institutions at the Individual Institution Level

Additional in-depth analysis of the condition of Jamaica will be conducted to successfully adopt the experience of Korea to Jamaica.

2.1. Difference in Perception on Performance Evaluation

Before 1984, there was no formal performance evaluation system in Korea although certain form of evaluation of SOEs performance had been conducted. Such form was to use KPI as an internal evaluation method conducted by the SOE which measures business performance by measuring the km of freeway construction or the ton of water supply. In the case of Jamaica, although there isn't a systematic evaluation system conducted by the MFPS each year, there is an evaluation system in place to be developed with potential that better suits the situation in Jamaica. Therefore, there is no need to over-emphasize the excellence of the currently used evaluation system in Korea. Jamaica can build its own evaluation system in its own way under the reference of the Korean system, to promote competitions among Public Bodies in Jamaica.

2.2. Governance of Performance Evaluation

The Jamaican government runs a parliamentary cabinet system which the political interests are coordinated between each government department. Since the difference in the apportionment of seats between the ruling party and the opposition party is usually small in Jamaica, it is difficult to establish a strong monitoring ownership on all SOEs. To overcome this, strategic approach should be taken.

First, the cooperation of international organization(IO) such as IMF and IDB is required, since consulting from IOs on governance innovation could gain meaningful drive force under economy sensitive to foreign environment.

Second, it needs the support of the press through establishing best practices of M&E system, because the local government, as well as the congressman under the cabinet system, are sensitive to public opinion since personnel from both local government and cabinet has to go through regional election

If it is difficult to establish a strong, concentrated monitoring ownership such as the MoSF of Korea in the short run, it will be significant to develop a consolidated evaluation system less related to governance prior to concentration of the owenership, in order to comprehensively manage performance evaluation results of individual SOEs.

Furthermore, Jamaican government should consider MFPS to take charge in including government policy goals under individual performance objectives of Jamaican SOEs.

2.3. Implication of Comparative Methodology

From the comparative study of K-Water, the experience of Korea of introducing performance evaluation system as part of SOEs reform speaks volume to Jamaica, in order to develop evaluation indicators adequate to Jamaica's condition

Thus, it will be important to set-up the exact role of SOEs, MFPS, and staffs suited professionals. Most importantly, it is necessary to unify the Minitries' control to ex-post performance evaluation and develop standardized indicators. To do so, clarify the role of the Public Finance Division of MFPS and establish a pool of few experts in the early stage.

3. Prerequisite and Conditions for Policy Suggestions

In developed countries, autonomous and decentralized performance management is more common. Then, how come we recommend building centralized evaluation governance structure and the use of unified indicators in Korea and Jamaica?

From a governance perspective, the Jamaican Government, based on its Fiscal Rules, which includes the aim to reduce the country's debt to GDP (to 60% by 2025/26), continues to implement relevant measures. One measure is to reduce spending and previous efforts including wage freeze. Significant focus has also been placed on continued reform of the public bodies sector, including rationalization and categorization. A Public Sector Transformation Implementation Unit was established which is leading the process of rationalising public bodies. This Team works with consultants and other private, as well as public sector stakeholders (including MFPS) towards accomplishing the goals. These activities will ultimately impact the categorisation of PBs which is currently being managed by MFPS. Rationalisation and categorisation of PBs should impact positively, on monitoring and oversight of the public bodies sector.

There is an important implication that it took 30 years for performance evaluation system to fully materialize and institutionalize in Korea, and the problem of both governance and performance evaluation methodology must be solved in order for the performance evaluation SOEs to effectively operate.

The current political condition of Jamaica where the ruling and opposition party tensely clash with each other for seats, and institutions can make SOEs corporate governance reform difficult in the short run. For this reason, the role of MFPS and PED would be vital and the effort to integrate performance report conducted by individual institutions would be effective on an evaluation methodology standpoint.

In addition, it would speak volumes to include government recommended policies in terms of evaluation indicators with the traditional indicators that apply to all SOEs to improve Jamaica's economic development and SOEs efficiency even if it seems less feasible in the short run. The policy develops on the premise of the country's developmental stage, and political and economic characteristics. In this context, a strategic plan for enhanced acceptability will be derived.

Currently, Jamaica does not have a centralized management accountability structure for public enterprises, while some of the Latin American and Caribbean countries have a centralised management accountability structure for public enterprises. The powers of individual line

ministries are actively working. It is a so-called dual ownership structure. As a result, the Ministry of Finance (MFPS) does not have a system for evaluating all public corporations. Therefore, it is very unlikely to adopt such a consolidated evaluation system as it is in Korea because the evaluation system is not a technical process that simply develops the indicators and applies them but a political accountability that reflects the power framework. We concur that it may be a challenge to implement the system fully under the current governance structure in Jamaica and that consideration could be given to testing the system with entities within the purview of the Ministry of Finance, only as it relates to the monitoring and evaluation framework In this sense, it is very unlikely to introduce the evaluation system of public institutions in Korea to the current Jamaican public management system. It is possible to introduce evaluation indicators and evaluation methods to convey technical measures, but it is impossible to carry out the consolidated evaluation system based on the standardized evaluation framework due to the decentralized authority of ministries.

Therefore, whether or not to build a consolidated evaluation system in Jamaica is closely related to how governance is structured. Foremost, under the existing governmental power structure that the Ministry of Finance is difficult to manage public enterprises in other ministries, it is necessary to experimentally introduce measures to introduce evaluation system to all the public enterprises concerned with only Ministry of Finance. If this is the case, evaluating indicators based on quantitative indicators will increase the acceptability. And it is necessary to propose the evaluation system to other ministries and proliferate them.

Many efforts should be made to build a system to evaluate IT based system in order to reduce administrative costs of evaluation. Furthermore, constructing an information system that consolidates important policy variables and statistical data for the entire public enterprises will help to effectively manage public enterprises.

The governance structure for Public Bodies in Jamaica is evolving. A Policy on the Rationalisation and Categorisation of Public Bodies was approved by the Cabinet in September 2016. This is expected to facilitate more standardised and risk based monitoring. In addition, an Action Plan to guide the continued rationalisation of Public Bodies was approved by the Cabinet in September 2016 and the activities are being affected, with some requiring further consultations, which are also being undertaken.

4. Suggestion

Based on the above discussion, suggestions for improvement of Jamaican evaluation system of a public corporation are as follows. The most important factor that distinguishes between

short and long term is whether to exercise the centralized ownership by the Ministry of Finance and Public Services. In the short term, the Ministry of Finance and Public Services will conduct a standardized evaluation of public enterprises within jurisdiction of the Ministry of Finance and Public Services. In the medium term, the Ministry of Finance will be extended to utilize these evaluation systems to other ministries. Lastly, in the long term, the Ministry of Finance will exert the consolidated standard evaluation by a special team consisted of outside expert. But if the "Performance Evaluation and Monitoring Unit" of Cabinet Office is supposed to do the centralized ownership function, this unit can do the comprehensive evaluation instead of MFPS.

Table 5-2 | Scope of the Project

	Short Term	Mid-Term	Long Term
Governance	 Current Governance Structure Financial Management by MFPS Standard evaluation within MFPS 	Current Governance Structure Distribute the standard evaluators to the each line ministries	 Restructuring governance structure Consolidated evaluation system by MFPS Objective outside experts
Responsibility for Evaluation	• MFPS	Individual line ministries Committee by each ministry	Consolidated evaluation by MFPSConsolidated committee for evaluation
Task Force for Evaluation	Within MFPS Outside Experts	MFPS supports individual line ministries to compose Task Force	• Joint Task Force
Targeted Public enterprise	• Public enterprises under MFPS	Whole public enterprises	Whole public enterprises
Performance indicators	 Financial analysis Quantitative indicators (Labourproductivity,Ca pitalproductivity) 	Managerial indicators Cooperation with MFPS and line ministries	Business indicators Qualitative indicators
Feedback system	Performance based incentive system	Performance based incentive system	Performance based incentive system (Qualitative)
IT based evaluation	Financial focused quantitative evaluation	Systematic management of KPI	Qualitative indicators Automatic report by each SOE
Consolidated information management system	Financial focused information management	Consolidated information management system	Consolidated information management system

5. Policy Proposal for NWC

The key takeaways from the case study of NWC to improve SOEs evaluation system of Jamaica are as follow. The primary reason for distinguishing short-term and long-term in this study is whether the MFPS can exercise the centralized ownership rights of all SOEs, and whether if this is actually possible. The MFPS must understand the foundation and philosophy of the Korean performance evaluation system of SOEs that standardized all SOEs under MoSF while taking these steps.

First, it needs an in-depth study of the influence of diversified control of NWC by MEGJC, OUR and MFPS. Looking at how the 'Framework Act on Public investment management of the institution' enacted in 1983 was established and how it successfully centralized performance evaluation system to the Economic Planning Board (EPB) may prove useful.

Second, find out whether it is meaningful to introduce a performance evaluation system that applies to all SOEs in Jamaica, whether MFPS has the capacity to manage such system, and if the system is not possible to suggest what mechanism is needed to deliver government policy to SOEs effectively.

And finally, passing the knowhow of how K-Water has run the enterprise-wide system that all employees pay attentions to performance evaluation and that government or internal evaluation could be naturally reflected in day-to-day operations would be more important than introducing Korea's performance evaluation system to Jamaica.

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