# Building a Better Linkage between Policy and Statistics

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## 1. Introduction

Official statistics are utilized throughout the entire process of policy cycles including development, monitoring and evaluation of policies, allocation of resources, and delivering public services. They also underpin the democratic process and promote accountability by allowing citizens to monitor the performance of their government and by enhancing the quality of public debate. To this end, official statistical agencies should honor citizen's entitlement to make informed decisions and so generate progress. This is actually concerned with the first principle of the Fundamental Principles of Official Statistics.

However it seems that recent rapid changes in a society put the national statistical systems under pressure. The article entitled "The Official Statistics Olympic Challenge: Wider, Deeper, Quicker, Better, Cheaper" summarizes this: "The range of statistics needed grows ever wider, the level of geographical and other details ever deeper, the timeliness ever quicker, and the demand for higher quality ever stronger. All of this, of course, the relentless demand for greater efficiency; hence, ever cheaper." (Holt, 2007).

New challenges faced by providers of official statistics come from evolving user requirements such as real time monitoring, monitoring of targets based on statistics, and the use of statistics for special purpose. These new features call for adjustments in the way that official statisticians communicate with users, especially policy makers, particularly when statisticians intend to build a better linkage between policy and statistics.

## 2. Requirements of Official Statistics

### (1) Changes in emphasis

Relevance and impartiality are both core values in the first principle of Fundamental Principles of Official Statistics. Historically, statisticians have placed an emphasis on impartiality and independence to retain public trust in official statistics, which represents their views on priority of statistical integrity. The current trend, meanwhile, is that the emphasis is

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being shifted toward the quality of statistics and how well these statistics meet user's requirements has become more important. For example, user satisfaction surveys and focus group interviews are being performed as part of the process of diagnosis of quality to evaluate the relevance and usefulness of statistics.

This shift of emphasis for official statistics from supplier's requirements to user requirements is mainly caused by the evolving user demand due to changes in the environment. As the economy advances and as society becomes more complex, governments, the greatest users, demand more detailed and integrated statistics which are used in developing policies and measuring the impacts and the effectiveness of policies. An example of this trend is noticed through the increased panel surveys or longitudinal surveys that statisticians had hesitated to produce in the past due to the lack of representativeness. Also, as democratic society matures, citizens and civil societies demand more statistics in order to monitor and evaluate the governments' policies as well as increased for more governmental accountability for the results of policies. As the user demand evolves, increasing demand has been directed toward the relevance and the responsiveness; while relatively less demand has been derived toward the objectivity and independence.

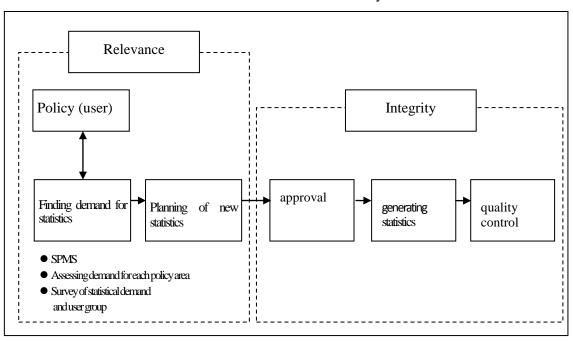### (2) Policy relevance while preserving integrity

For official statistics to be more readily adaptable to government policies, two requirements must be satisfied. The first is to be more responsive to the needs of policy makers and provide them with statistics fit to the purpose of policy, while the second is to provide information on high-profile policy issues that can be the basis for informed policy debate with stakeholders, citizens and policy makers. To meet these challenges, there must be continuous close interactions between policy makers and official statisticians. This process allows for a robust consensus on value-laden concepts and methods.

However, a distinction should be made between the interaction with policy makers and political influence. Developing official statistics to be more closely adapted to policy should not mean that the process of producing statistics is politically influenced. For official statistics, increasing relevance through responsiveness is related to their objectives, while guaranteeing objectivity and integrity through independence is related to their methods and results. Though not frequent, selecting such a concept and a method can readily be influenced politically. Seltzer(1994) proposed the following recommendations to stand against the political influence: "First, attempt to achieve the highest possible standards in terms of the relevance, timeliness and reliability of statistical output; and second, foster laws, regulations, policies, practices and arrangements that raise the political costs of efforts aimed at manipulating official statistics."

Integrity of statistics and responsiveness to policies must be achieved simultaneously and as Seltzer described in the second part of his recommendation, this can be achieved through proper laws and effective statistical systems.

## 3. Efforts of Statistics Korea (KOSTAT)

Official statistical agencies face conflicting challenges of accommodating policy makers' demands while preserving integrity of its statistical data. How can official statistics be politically neutral while satisfying the user demand for greater responsiveness? Could official statisticians be positioned next to policy makers without losing their independence?

< Framework for Statistical Policy>



In response to these challenges, Statistics Korea, as a central official statistical agency, coordinates various statistical policy systems over different phases in order to secure governance over official statistics. Statistics Korea aims to maintain both policy relevance and integrity of statistics. To support policy needs effectively by providing statistics crucial to policies, Statistics Korea utilizes Statistics-Based Policy Management System, Diagnosis of required statistics for Each Major Policy Area, Survey of Statistical Demand, User Group Committee, etc. Demands for statistics are determined based on these various mechanisms.

To compile new statistics, or to change or revoke existing statistics, approval process through Statistics Korea is mandated by the Statistics Act. Duplicity with existing statistics,

credibility of statistics from a technical perspective, and purpose of compiling statistics are all criteria for approval. Since 2006, a Quality Evaluation System (Q.E.S) has been held every five years in efforts to build upon the quality of statistics that have been already approved. If any problem is found through the evaluation process, an action for improvement is requested, and consulting support is provided when necessary. These follow up procedures are based on legal framework and are operated within the scope of supporting policy needs while preserving integrity of data.

Under such a statistical policy framework, this paper focuses on introducing Statistics Korea's efforts to identify the needs of policy makers and users to adequately deal with dynamic demands for official statistics.

**(1)  Statistics-based Policy Management System (SPMS)**

The statistics-based policy management system relies on a regulatory guide that requires central government organizations to prepare for statistics and indicators to be used for the concerned policy when a statute is to be newly enacted or to be revised. This scheme can be considered as a kind of statistics consulting service provided by Statistics Korea to the central government organizations. In October 2007, the enforcement decree of the Statistics Act was revised to include new items; item 33 (Statistics-based policy evaluation procedures and methods) and item 34 (Providing statistics based consulting for policy management) and it has been in effect since January 1, 2008. The Policy Support Division was newly created in KOSTAT to address the related responsibilities covering all policy areas. They work with the central government organizations through bilateral and active communication to ensure proper statistical indicators are available for the newly enacted or revised policies. They also evaluate the adequacy and feasibility of the proposed statistics development plans and their use in policy.

The Statistics system in Korea appears to be decentralized, but is pragmatically close to a centralized system in terms of manpower and funding allocations. More than 80% of statisticians work in KOSTAT. Other government agencies have weak statistical infrastructure and are far short of experts in the statistics area, this necessitates KOSTAT's involvement provided through consultation services to them.

According to the consulting experience of KOSTAT, government organizations face three types of problems when they use or develop statistics for policy implementation. Firstly, statistics are rarely used. Even though there are current statistics developed that can be used for the policy concerned, staffs working in policy departments have difficulty in finding the relevant statistics or using them. Secondly, proper statistics are not available. Very few statistics are available that can be applied properly to a particular policy. This is the case in which the

statistical offices place their greatest resources. Finally, the statistics are often misused. There are cases where statistics are either incorrect, or improperly applied. Prior advice or consultation to prevent this is much more important than reactionary solutions. To address the above problems, it is essential that communications should be made between the producers of statistical agencies and the liaison in the department where the policy is being enacted. This helps to ensure the government organizations and KOSTAT have come to establish the statistics-based policy management system.

In principle, all the regulations and enactments enforced by the central government organizations are evaluated by SPMS. The excluded are some regulations which do not require any statistics at all, or others which are related to national security or to the execution. These are identified in the operation guideline.

Each government agency has an obligation to check the statistics necessary for a policy and to submit a paper of appraisal request to KOSTAT. KOSTAT starts evaluating adequacy based on this request and return the results of evaluation to the agency within the legally defined period (about 20 days). There are two different evaluation steps to improve the efficiency of the system. First is the 'Preliminary Evaluation', and following is the 'Actual Evaluation'. The 'Preliminary Evaluation determines whether application of statistics is necessary for that particular policy. The 'Actual Evaluation' determines whether necessary statistics have been identified, whether they are appropriate statistics, and whether the development plans for necessary statistics have been set up properly (See Figure I).

The major items in the 'Actual Evaluation' step, which is the core stage in the statistics-based policy management system, include the evaluation of statistical indicators and plans for development of statistics. The key examination inquiries are as follows;

| Section | Contents |
|---|---|
| Statistical Indicators | ◦ Have all the statistical indicators necessary for policy been presented?<br>◦ Does an alternative exist in the case of an inappropriate statistical index?<br>◦ Has a stable and reliable system been already created especially for administrative data? |
| Plan for Development of Statistics | ◦ Is the plan appropriate for the purpose of survey, object of survey, survey items, date of release, and survey periodicals, etc.?<br>◦ Does it overlap with an existing statistical survey?<br>◦ In case the plans for development or enhancement are to be implemented by another agency, do the agencies involved share sufficient information? |

In case an addition/modification/deletion is necessary in the statistical indicators proposed by the government agency or in case there are recommendations to revise the plan for development of statistics, KOSTAT communicates with the agency continuously until agreement is reached between the two organizations. KOSTAT can also employ outside experts for impartial evaluation or technical expertise.

To follow up on how the evaluation results are being implemented in the related government agency, KOSTAT performs intermediate checks every year. If the statistics to be developed are considered as a part of national statistics, They can be included in the midterm national statistics development plan (this is a five-year plan updated every year and all the central government agencies participate in developing the plan led by KOSTAT) and the intermediate checks will be performed twice a year.

2010 had 690 requests for evaluations, of which 679 items have been completed. The actual evaluations were carried out for 365 (53.8%) that include 30 requests involved with the development of statistics while 310 requests were recommended to use statistical indicators in place.

It has been three years since the Statistics-Based Policy Management System was adopted. At the earlier stages of the system, there were tendencies to consider this system as administrative burdens. However, after three years, all related government agencies send KOSTAT evaluation requests whenever there is an enactment which requires the policy management system.

<Degree of satisfaction for SPMS>

(5 point maximum)

| Year | 2008 | 2009 | 2010 |
|------|------|------|------|
| Score | 3.5 | 3.7 | 4.0 |

(Source: *The Report on the Survey Results of Client Satisfaction by KOSTAT* (Media Research))

As seen in the above table, the degree of satisfaction by central government agencies for this system has increased continuously and we interpret this as an acceptance of the statistics-based policy management system as a necessary and a useful system.

**(2) Project for diagnosis of required statistics for major policy areas**

This project is aimed at diagnosing the statistics demand in a more systematic and integrated manner. For each of the policy areas, the description of the policy is examined in detail to identify the scope of necessary statistics, usage areas, and areas where improvements are needed. Then the objective of the policy, interrelations among lower level policies, major means to carry out the policy, and statistics needed to evaluate the achievements, will be described. The final goal of each project is to identify and present what statistics are needed to support a concerned policy, and to propose statistics development and improvement in those areas.

This project is carried out by a task force team which is led by KOSTAT in cooperation with government funded research institutes and central government agencies. KOSTAT and the research institutes are jointly responsible for generating preliminary reports. Based on these reports, it is determined whether new statistics are required, and whether any improvement works need to be implemented. Then plans are made according to policy framework and carried out.

During the first year of this project in 2010, a report on 'A study on statistics for policies related to the ageing population society', and a report on 'A study on statistics for policy promoting work and family balance' were published at the end of the year. Based on the results of these studies, plans for development and improvement of new (or existing) statistics were set up and have been executed. In the long run, this project will extend its studies to a range of policy areas including health and welfare, environment, IT and culture, etc.

**(3) Others**

To strengthen the linkage between policy and statistics, official statistics should continually seek to be timely and relevant to policy needs which evolve according to economic and social change. To this end, a positive system which can identify proper statistics must be established. Producing new types of statistics is a long process, so advanced identification of key user needs is essential ("antenna function").

KOSTAT has been conducting surveys on statistics demands on the user side. Surveys are taken twice a year on a wide range of users: central government agencies, local government organizations, statistics committee members, government affiliated agencies and research institutions. According to the analysis of survey results; the addition of survey items and the enlargement of coverage to improve the statistics usages were the primary requests. This survey

has also been a useful channel to anticipate future data needs that are not currently specific but potential.

The user or advisory groups which are often found in centralized statistical system have also been utilized. User groups are formed in specific areas and composed of members from KOSTAT, policy related departments, and researchers. Through these groups, the user needs or requests are being regularly identified. In each of the specified statistics areas, members share the information for social trends and discuss current needs and developments of new statistics. As policy related members participate in user groups, issues can be monitored more effectively and official statistics can become more applicable toward policies.

So far, 4 different schemes have been introduced in the above; statistics-based policy management system, the diagnosis of statistical demand in individual policy areas, survey of statistics demand and consultation with user groups. Among these 4 schemes, the differences can be found from the perspective of its own advantage in linking with policy and function.

The survey of statistics demand and the user group meetings are very helpful for advance identification of statistical needs. Especially in user groups, the participants from government agencies contribute to the improvement of policy-relevance of official statistics. In the statistics-based policy management system, statistical experts from KOSTAT communicate directly with policy personnel so statistical indicators can be identified which meet the needs of a particular policy. Finally, the project for diagnosis of required statistics in individual policy area is to comprehensively analyze the statistical needs for various policies and identify whether necessary statistics available for each policy area. Additionally they derive proposed action plans to develop new statistics or improve existing statistics. Its process is systematically guided by the policy framework so it is more responsible for the cohesiveness between statistics and policy.

<Degree of how tightly statistics is adapted to a policy>

|  | Survey of Statistics Demand | User Group | Statistics-based Policy Management System | Diagnosis of Statistical demand in Individual Policy Area |
|---|---|---|---|---|
| Policy relevance | Weak | Average | Strong | Very Strong |

**Conclusion**

Official statistics have been discussed from the perspective of suppliers focusing on the independence, impartiality and integrity. User relevance, on the other hand, has been relatively short, due to the dichotomous idea that increasing relevance by responsiveness to users, particularly, policy makers could inversely decrease objectivity and statistical integrity and eventually lose public trust. But the idea should be changed in that increasing relevance through responsiveness is related to the objectives, while guaranteeing objectivity and integrity through independence is related to methods and results. Official statistics can be reliable for users when both aspects are fulfilled. Increasing efforts have been taken to strengthen the connection between policy and statistics.

A decentralized system is used in Korea but some characteristics of centralized system also exist. There have been many requests for KOSTAT to support government ministries in developing or utilizing statistics with relation to their policies, and KOSTAT adopted Statistics Based Policy Management System under this unique circumstances. In this system, KOSTAT evaluates if appropriate statistics have been prepared for the policies newly adopted or changed by establishment or amendment of statute, and how adequate and feasible their development plans are. The subjects, objects and procedure for the evaluations of KOSTAT are specifically described in the enforcement of the Statistics Act, so the independence of KOSTAT is legally protected. The most important advantage of this system is the promotion of active communication between statistical experts and officials in charge of each policy. Government is beneficially supported to utilize and develop statistics closely relevant to policies.

Since 2010, the project to diagnose the statistical needs for individual policy areas has made it possible to summarize necessary statistics collectively and systematically, as well as examine the purpose and level of utilization and further needs for development. Through this project, KOSTAT is expected to develop its comprehensive and systematic approaches in discovering and managing the needs for policy-related statistics.

Statistics Korea is also conducting surveys for statistical needs and operating user groups in order to understand and provide necessary statistics in a timely manner. Statistics experts, policy makers and researchers participate in user groups that seek to increase the relevance of official statistics by monitoring social trends and policy-related issues and by discussing statistical development.

In conclusion, the competitive advantage of official statistics in a growing information market lies in building public trust. But it is not enough. Statistics alone are not relevant. They must be given a policy context to yield information for a particular decision. In order to strengthen the relevance between policy and official statistics, it is highly important to emsuring

active communication between statistical experts and policy makers in addition to guarantying the independence of the statistical office by legislation. In this sense, the Statistics-Based Policy Management system in Korea can serve as a positive model for other countries.

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**<Figure I>**

# < Procedure Flow Chart>