Design of Evaluation System and Evaluation Method on Policy Program

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1. Introduction of evaluating policies programs and the role of the Board of Audit

1-1 Significance of evaluating policies programs

Evaluation of policies and programs is the systematic evaluation on how to achieve visions, purposes, and objectives. However, the following problems on policies programs have been pointed out:

(1) There are cases in which the relationship between the resources invested and the efficiency of the results are not clear.

(2) In cases where the effects appear over a period of time, it is difficult to evaluate on a single-year basis.

(3) There are cases in which the relationship among policies, programs and projects is not systematically or adequately reviewed.

(4) There are cases in which the relationship between project planning and the evaluation of policies programs is not clear.

(5) There is a tendency to emphasize the consistency of budget and final account in making assessment and post-evaluation.

(6) Cases where the same results have been attained with lower costs are not evaluated highly.

(7) Self-evaluations by planners and executors on policies programs are not sufficiently made.

(8) Evaluations by local inhabitants (the people), the users of services and third parties, such as experts etc., are inadequate.

In order to resolve such problems, it is indispensable to establish a methodology for systematical evaluation, which relates equally to policies, programs, and projects. However, an effective methodology has not been completed, although there is a long history in policies programs evaluation, and various attempts have been made. It could be said that we are at the stage where we are still developing various methodologies while reviewing their validity. At present, the significance and importance of evaluating policies programs are increasing. The reasons are as follows:

(1) The improvement of the satisfaction felt by users of the services related to particular policies programs can be measured.

(2) The effective and efficient use of financial resources can be examined.

(3) The relationship among vision, planning, and achievement of objectives can be assessed.

(4) National and local governments have about ¥660 trillion of liability, and therefore they are required to evaluate effectiveness and efficiency in management of financial resources for policies programs.

(5) Since large-scale financial resources are often invested in policies programs, evaluating their effectiveness and

efficiency is of great value.

(6) It is necessary to shorten the interval of policies programs evaluation and to review them more frequently because the environment surrounding policies programs is rapidly changing due to the aging of society, the advancement of technology, the diversification of the needs of residents (the people), development of information technology and so on.

(7) Transparency in decision-making process is demanded.

(8) Accountability to inhabitants (the people) and informed consent (explanation to and understanding by local inhabitants (the people)) on policies programs are demanded.

(9) Information disclosure regarding policies programs is demanded by society.

The evaluation of policies has been emphasized also on the national level and taken up in Law on the Administrative Reform of Central Government (which was enacted in June 1998). The following programs have been adopted to improve and strengthen the function of policy evaluation in Paragraph 1–3 of Article 29 (policy evaluation etc.)

Article 29 (policy evaluation etc.)

An evaluating department, which has been given clear authority, should be established in each ministry to evaluate policies rigorously and objectively. (Paragraph 1)

For the purpose of securing wider coverage and greater objectivity in policy evaluation, strengthening the aspect of evaluating policies across the ministry boundaries is essential. (Paragraph 2)

It is important to clarify that the department that undertakes the design planning is accountable to the people concerning the reflection of evaluation results on future policies, and promoting information disclosure regarding policy evaluations. (Paragraph 3)

Article 44 states that a structure will be created to ensure objective evaluations and disclosures, and the subsidy will be reviewed. In this way, the national government is suggesting that the policy evaluation function be strengthened in ministries, and policies programs be linked with budgets.

Further, in June 2001, the "Law on Evaluation of Policies Made by Administrative Bodies" was passed and will be effective from April 1, 2002. The objective of this law is: "The effective and efficient administration, and accountability to the people concerning the activities related to policies will be ensured by stipulating the fundamental items on the policy evaluation made by administrative agencies, by executing the policy evaluation objectively and rigidly, by planning the appropriate reflection of the results on policies, and by disclosing information on policy evaluation." In other words, policy evaluation is required by each ministry, and efficient and effective policy performance and accountability are demanded. Article 3 requests administrative bodies to quantitatively obtain policy evaluation, and Article 4 requests them to make efforts in relating policy evaluation to budgets and demands the efficient use of resources and policies centered on the people.

Administrative evaluation and policies programs evaluation are being systematized in many prefectures, including Miyagi, Mie, Iwate, and Tokyo and so on.

The methodology of policies programs has been attempted from the points of view of policy science, public administration, accounting and management, but has not adequately been systematized yet. Since the characteristics of each region vary, it is still in the experimental stage.

In this paper, designing and systematizing a policies programs evaluation system are attempted in terms of system theory concerning policies programs. We also review how the Board of Audit should be involved in the evaluation of policies programs.

1-2 Importance of policies programs evaluation in accounting audit

Audits are undertaken based upon the following viewpoints at the Board of Audit.

(1) Do financial statements present accurately the status of budget execution? (accuracy)

(2) Is accounting properly treated in accordance with budgets and laws etc.? (regularity)

(3) Are office work and projects executed economically and effectively? (economy, efficiency)

(4) Have projects achieved expected objectives effectively? (effectiveness)

Policy is the means to attain a government's visions and objectives, and programs are the means to achieve

those policies. And each type of actual program is the materialization of programs. Therefore, an evaluation of policy can be determined by referring to the evaluation results of programs, and the evaluation of programs can be determined by referring to the evaluation results of projects.

In many cases, accounting audits produce good results in reviewing the accuracy, legality and appropriateness of budget and projects. Accounting audits consists mainly of process evaluation and post-evaluation of budget and projects, and their results can then be reflected on assessment of budget and projects. Recently, accounting audits lay emphasis on effectiveness and efficiency and their results can be used as information for the assessment.

However, even if the evaluation of effectiveness and efficiency of a business is adequate, it is not immediately related to the evaluation of policies programs. Suppose the assumption that A and B projects are performed, and the accounting audits are made for post-evaluation. As a result, even though effectiveness and efficiency are proved to be superior, they do not immediately correspond to the relevant programs. Suppose other projects C and D are not adopted as projects in the same area. Then, if projects C and D are superior to projects A and B in terms of both effectiveness and efficiency, this means that there were problems with the evaluations of A and B from the criterion of opportunity costs.

And even though project A is evaluated as superior to project B in terms of effectiveness and efficiency, it is possible that project A was evaluated to be lower than B if A's relationship to the actual programs (contribution) is lower than the B's relationship to the programs.

Therefore, if an accounting audit attempts to pursue a view of utilizing the financial resources effectively and efficiently, the evaluation is inadequate on the level of a project evaluation, and an evaluation linked with programs and policies becomes necessary.

The Administrative Reform Conference submitted a final report in December 1997 in which the following proposals were made on evaluations of the Board of Audit:

"The function of the Board of Audit has been performed mainly in respect to the audit of revenue and expenditure of the Government and the accuracy of accounting. However, from now on, effect, efficiency and rationality of the programs and projects of the Government should also be emphasized. For this purpose, the function of the Board of Audit should be improved and strengthened."

This report was reflected in the Law on the Administrative Reform of Central Government and showed that policy evaluation is legally required. The Board of Audit is an independent organization, constitutionally founded and is responsible for monitoring national administrative and financial activities. The departmental evaluation of policies programs in ministries has begun to improve, and related information among ministries started to be controlled. This tells us that third party evaluations are needed, together with the ministries' self-evaluation on the policies programs, and the appropriate environment to bring this about is now being arranged. It is becoming important to review what role the Board of Audit should play in the evaluation of policies programs in such circumstances.

2. Viewpoint and framework for the design of an evaluation system for policies programs

2-1 The "6W2H1E" framework for evaluating policies programs and evaluation system requirements

This section reviews the method of evaluating policies programs from systematic viewpoints.

Policies programs attempt to achieve their objectives and purposes by investing resources and funds in "who (what)". For this purpose, the evaluation of policies programs requires the so-called "6W2H1E" system viewpoint: Who is the subject of policies programs? (Who); Whom do the policies programs target? (Whom); What is the target of policies programs? (What); Why are the policies programs needed? (Why); When and where does it target? (When / Where); How is it done? (How); How much financial resources and fund are being invested? (How much); and How are they evaluated? (Evaluation). Unless these "6W2H1E" are clear in the evaluation of policies programs, there is danger that an inaccurate evaluation and misunderstandings will occur. The system to which policies programs are applied needs the following conditions:

(1) The target system to which policies programs are applied and its border are clarified.
(2) Those that comprise the system are clarified.

(3) The system has functions and information to reflect application effects of policies programs.

The condition (1) clarifies the targeted area of policies programs by clearly showing the targeted system and system boundary. The condition (2) clarifies those who are influenced by the policies programs by clarifying who constitute the system. The condition (3) requires the improvement of functions to measure the effect of policies programs and to control the evaluating information systematically. It is impossible to evaluate the reasonableness of policies programs based on "6W2H1E" unless these systematic conditions are satisfied.

For example, let us consider the case in which the policy of increasing the beneficiaries' burden to the old aged expenses is introduced, aiming at controlling the increase of national medical expenses and for improving medical services. In this case, the elderly health care insurance system and the medical insurance system are considered as the targeted systems. Assuming the elderly health care insurance system is the main targeted system, the possible system components are the beneficiaries of elderly health care insurance, the contributing insurers to the elderly health care insurance, national government, providers of medical services (organizations), elderly patients (elderly health care insurance applicants) and patients other than the elderly persons. In order to evaluate the applied effect of the policy, the function of controlling relative data is requested for policy evaluation and therefore it is necessary to collect the information regarding the influences on the system components and the measurement of expected effects etc.

2-2 Function of assessment, process evaluation, and post-evaluation

In view of the evaluation of policies programs as a function of the evaluation system, the evaluation consists of assessment, process evaluation (inter-evaluation), and post-evaluation. Assessment is the evaluating function to show the significance of and reasons for introducing policies programs, and it contributes to the decision-making on the investment of financial resources. The function of process evaluation is to evaluate the achievement degree whether or not the policies programs are executed as planned, and whether or not expected effects are being produced, or whether or not the conditions to produce them are met. The post-evaluation function evaluates whether the purposes and objectives of the policies programs have been achieved or not.

Even if assessment of policies programs are superior, it cannot be claimed that the policies programs succeeded if the post-evaluation is poor. Most evaluations of the policies programs that are currently conducted are assessment. It is rarely seen that evaluations are executed up to the post-evaluation via process evaluation. For this reason, there is a tendency to overuse the assessment, while proper evaluation is not available in some cases because post-evaluation is not related to assessment. Take the long-term energy saving policies programs, for example. Assessment by itself cannot respond to change in the energy environment. It becomes difficult to count on atomic energy if the opposition to atomic energy becomes stronger. That is to say, accurate and reasonable evaluation is available with assessment, process evaluation, and post-evaluation, with a degree of achievement, and clear efficiency effectiveness.

Regarding the aspect of the function of assessment and post-evaluation, various kind of evaluation methods are used: cost effectiveness analysis, cost utility analysis, cost benefit analysis, operations research distribution function analysis, etc. If assessment is close to post-evaluation, it can be said that predictability of assessment is superior. If the result of post-evaluation exceeds that of assessment, the predictability of assessment decreases, but the efficiency and effectiveness of post-evaluation increase relatively.

In the process evaluation function, the achievement degree of the process is mainly evaluated because the invested financial resources and capital are given. The achievement degree in policies, programs, projects, targeted value etc. can also be evaluated. In this evaluation method, the indicators of evaluating function of policies programs are determined, and the achievement of objective values is evaluated. There are the evaluations of results measurement and benchmark indicators, and the achievement degree of objective value of policies programs indexes is evaluated. The former are the indicators of policy evaluation on the side of administration, and the latter are used as joint indicators of residents (the people) and the administration. It also has an important role as a communication tool bridging between administrations and residents (the people) as an evaluation method of the policies programs by residents (the people).

In process evaluation, a more detailed evaluation is made than in the assessment and post-evaluation mainly with

effectiveness analysis and cost analysis. The indicators of the targeted evaluation are linked with executed results of policies programs, and the stronger the relation is the higher the index's sensitivity to the policies programs is. The actual results of projects and programs related to more sensitive indexes influence strongly the evaluation of policies programs. In other word, the indicators of process evaluation or the achievement degree of objective value become the controlling means to raise the evaluation of the policies programs. In assessment and post-evaluation, the effect and efficiency related to the achievement degree of major achievement indicators are investigated because it is difficult to set up these detailed indexes and evaluate them on a multi-dimension basis. In cost effectiveness analysis etc., many objective indicators are used under the same financial resources, and it is possible to define the minor indicators or define new indicators as a linear connection because of the mutual relationship among the indicators.

2-3 Evaluation criteria for evaluating function of policies programs

The following criteria are available for the evaluating function of policies programs:
(1) stability, (2) reliability, (3) significance, (4) effectiveness, (5) efficiency, (6) ethics

The stability shows whether or not the results are different depending on evaluator, time and place. The selection bias of evaluators or the evaluation at a special time loses stability. This evaluation criterion not only serves for stable evaluation but also help us to choose targets and time of evaluation.

The reliability shows whether the evaluation result can be relied upon or not. Reliability is lost if the data used in the evaluation is not suitable or if the measuring method is inappropriate.

The evaluation criterion of significance shows the degree of the importance of policies programs and is used for the choice or comparison of policies programs.

The effectiveness is a criterion to measure the degree of effects of policies programs. This criterion is used because policies programs are planned with expectation to produce good effects.

The degree of efficiency shows how much effectiveness is obtained from the invested fund and resources for these policies programs. It is also measured based on how much financial resources were invested for effect per unit.

The criterion of ethics shows whether the policies programs can be or are executed without problems with regard to contents, laws and ethics. Those policies programs, which infringe laws and ethics, such as the invasion of privacy, violation of laws, bad influences on the human body and environment and other disadvantages, should be avoided.

These evaluation criteria are based on the E of the "6W2H1E" and are applied to assessment, process evaluation and post-evaluation.

2-4 Feed back controls and feed-forward controls

It is necessary that evaluation of policies programs is continuously undertaken during the evaluation period, and that past results are reflected. For this purpose, the function of feedback control and feed-forward control are required during policies programs evaluation. The function of feedback control is to improve the evaluation by analyzing the evaluation results, identifying any problems and solving them. The feed-forward control function influences evaluations over the middle and long-term period by identifying problems or points for execution of policies programs and solving them. Without this two-control function, it is difficult to improve the evaluations of policies programs. The former is a function in case the controlling effect can be directly expected, and the latter is a function in case it can be indirectly expected. For instance, the medical function whereby an ambulance responds (control) after a traffic accident has occurred belongs to the former one, and preventive function which keeps traffic accidents at a lower risk through overhead crossings etc. belongs to latter one.

In order to add the function of feedback control and feed-forward control to policies programs, an evaluation system that includes information collection is necessary. This system is, in this paper, called as policies programs evaluating monitoring information system. By using this information system, it is possible that the indicators etc. related to the policies programs are measured and evaluated, and the policies programs and projects to be improved are clarified, and concrete reviews are undertaken.

2-5 Evaluators of policies programs and coordinating functions

The evaluators of policies programs are the executors departments of policies programs, the targeted persons of policies programs, and third party evaluating organizations. The executors departments of policies programs evaluate themselves. The targeted persons of policies programs evaluate services they receive from the viewpoint of user and taxpayer. The third party evaluating organizations evaluate whether or not the invested resources or funds have been used effectively, efficiently, and properly. The evaluating methods used by these evaluators are not yet systematized. Above all, the evaluations by users, taxpayers and third party organizations are important problems to be resolved.

Ordinarily, there is non-symmetry of information between the executors of policies programs and residents (the people) who receive the services. Generally, there is not an adequate knowledge of policies programs on the beneficiary side. Therefore, information disclosure concerning the policies programs becomes necessary, and accountability to the taxpayers is demanded.

The administrative side should emphasize informed consent (providing information and understanding by residents (people)) on the policies programs.

As the ways to support accountability and information disclosure among asymmetric allocation of information, participation in the committees related to the policies programs by residents (the people), survey of residents (the people) and information disclosure through Web sites are being utilized. In these ways, two-way communications are aimed to be made between the executors of policies programs and residents in order to remove the difference in asymmetric information. These steps can be understood as a coordinating function to help remove the information gap between them. In this paper, we define the coordinating function of evaluation system of policies programs, as the "coordinating function to give and take information or to jointly possess it so that residents (the people), users, and beneficiaries of the services related to the policies programs and third party organizations can properly evaluate the policies programs, and so that the residents (the people) can be assisted in receiving effectively and efficiently the policies programs that meet users' or beneficiaries' needs."

3. Design of an evaluating system for policies programs

Here, let us try to design an evaluating system of policies programs after having clarified the designing viewpoints of "6W2H1E." The designs to be attempted are a monitoring information system for the evaluation of policies programs, assessment function, process evaluation function, post-evaluation function, coordinating function, indicators for evaluation of policies programs, analysis for satisfactory degree distribution function for significance/satisfaction and so on.

3-1 Designing the viewpoint based on "6W2H1E"

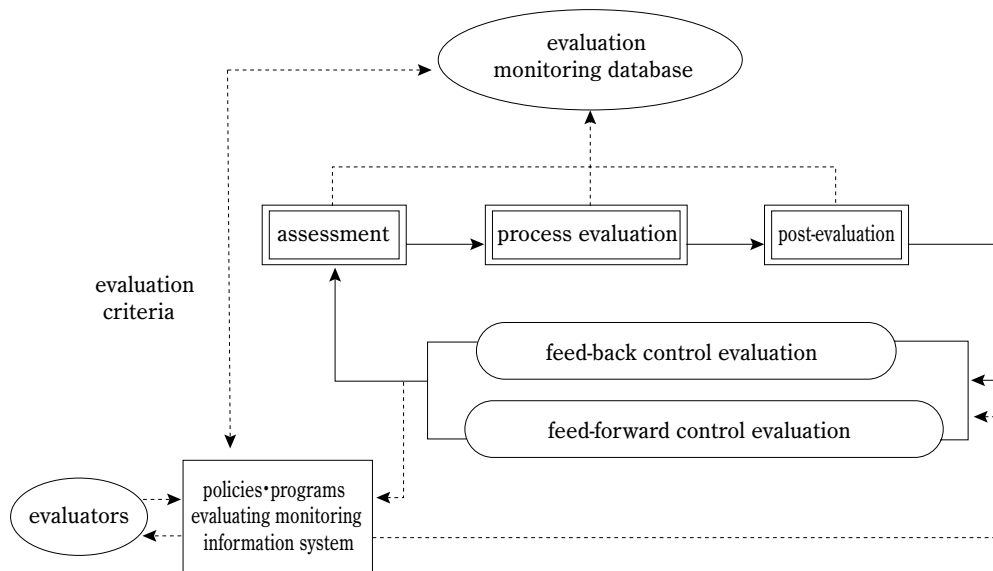From the standpoint of "6W2H1E," the evaluation system for policies programs can be considered as follows:
(1) Subject of policies programs (who?): nation, prefectures, municipalities
(2) Target of policies programs (whom?): people, residents etc.
(3) Objectives of policies programs (what?): medicine, welfare, environment, information, fostering industries, etc.
(4) Necessity of policies programs (why?): ground for policies programs, information on importance, satisfaction, evaluation and so on for residents (the people)
(5) Time and period of introducing policies programs (when?): point of time at which the introducing effect can be expected, emergency response, single year or span of plural years, before or during or after
(6) Place where policies programs were introduced (where?): nationwide, local block such as Hokkaido, Tohoku, prefectures, municipalities etc.
(7) Points of evaluation (how?): evaluating points: stability, reliability, significance , efficiency, effectiveness, ethics
(8) How much financial resources or fund are invested (how much?): amount of investment, number of person.
(9) Evaluation method (evaluation): evaluating method: cost analysis, effectiveness analysis, utility analysis, cost effectiveness analysis, cost utility analysis, cost benefit analysis, various methods such as operations research,

distribution function analysis, residents' satisfaction survey (questionnaire, hearing, Internet Web site) Evaluating indicator: business results evaluating indicators, benchmark evaluating indicators

3-2 Outlook of design for evaluating system of policies programs and evaluation monitoring information system

The outline of a design for an evaluating system for policies programs and evaluating monitoring information system can be seen in Figure 1. The evaluation system of policies programs consists of an evaluation system and an evaluation monitoring information system, which are designed to support each other. The solid line shows the evaluation process, and the broken line shows the flow of information, which has been evaluated (Figure 1).

Figure 1 Evaluating system for policies programs and monitoring information system of policies programs


In the policies programs evaluation system, assessment, process evaluation and post-evaluation are made. This time-trend evaluation information is compiled in an evaluation-monitoring database and controlled by policies programs evaluation monitoring information system. An evaluator can obtain the information about the evaluation by using this information system. Thanks to the network of the monitoring information system, the exchange of information on policies programs becomes possible, and an accurate evaluation over a larger area becomes easier.

3-3 Design of assessment function

Alternative proposals are compared in the assessment function. (Figure 2)

The selection of evaluation method is made by comparing the invested financial resources needed in the case the effect is almost the same level, and if the financial resources are given, comparison analysis of effect and utility is applied. If the invested financial resources are selective, cost effectiveness analysis and cost benefit analysis can be applied. The cost utility analysis can be used in the case of the limited evaluators because it is necessary to measure the utility of evaluators. The method of measuring utility includes scale methods, standard stake methods, time merit and demerit methods, and in the case of multiple evaluators, scale method can be regarded as the real option. However, the reliability of this method is somewhat problematic.

Figure 2 Choice of alternative proposals for cost effectiveness and cost benefit analysis
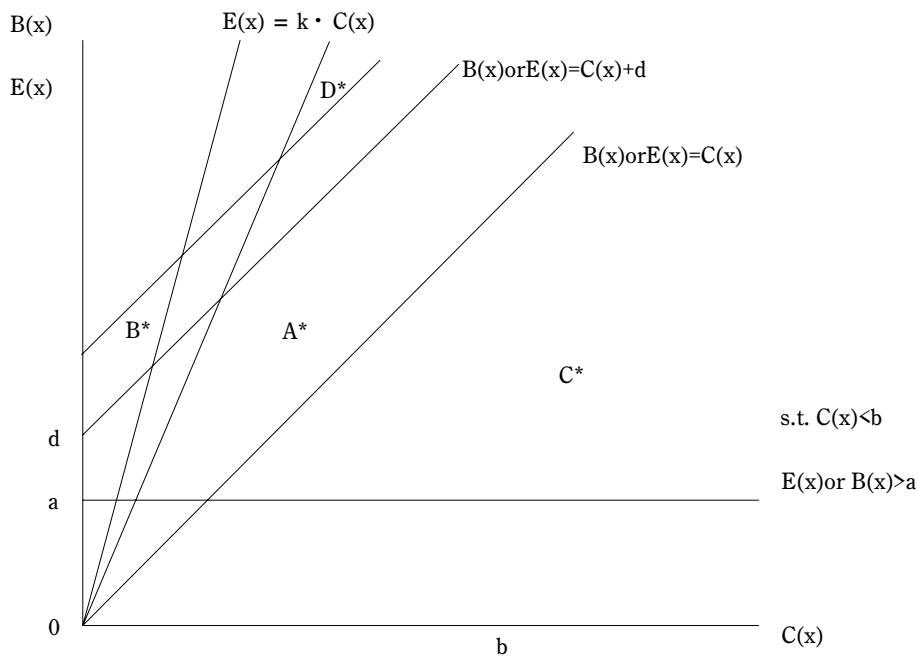
Assuming the effect of alternative proposals A, B, C, D as E (A), E (B), E(C), E (D) and the invested financial resources as I (A), I (B), I(C), I (D), the following alternative proposal is selected.

$$\text{Max}_x (E(x)/I(x)) \ (x=A, B, C, D) \qquad s.t. \quad E(x) > a, I(x) < b$$

Ordinarily, restricted conditions of more than minimum level 'a' of the effect and less than 'b' of the invested financial resources are given, and an alternative proposal is selected under these conditions.

If the effect is represented with multi-dimensional vectors $(E_1, E_2, \quad , E_m)$, an alternative proposal which the evaluator prefers most among (x=A,B,C,D) is selected.

If the plural effects are transferred to the 1st dimension through the formula

$$\bar{E}(x) = \sum_i u_i(x) \quad E_i(x), \quad (x=A,B,C,D),$$

an alternative proposal 'x', which satisfies the following formula under the conditions of $E_i(x) > a_i$, $I(x) < b$, is selected. Here, u (x) is significance of an alternative X.

$$\text{Max}_x (\bar{E}(x)/I(x)) \ (x=A, B, C, D)$$

$$s.t. \quad \bar{E}(x) > a, I(x) < b$$

If cost benefit analysis is applied, the following alternative is usually selected.

$$\text{Max}_x (B(x) \quad C(x)), \ (x=A, B, C, D)$$

$$s.t. \quad B(x) > a, C(x) < b$$

That is to say, an alternative 'x', which maximizes B (x)-C (x) under the conditions that benefit B (x) is over the level 'a', and the invested resources are under 'c', is selected.

When regarding the investment efficiency as the selection standard, one alternative which maximizes the benefit per unit cost (or minimizes the cost per unit benefit) under the limited conditions of

$$\text{Max}_x (B(x)/C(x)), \ (x=A, B, C, D) \qquad s.t. \quad B(x) > a, C(x) < b$$

is selected.

$$\text{Max}_x (B(x) \quad C(x))/C(x) \text{ is similar to } \text{Max}_X (B(x)/C(x)).$$

The same result is obtained as the alternative selection from both maximization of the net benefit (B (x) C (X))

per the invested resources C (x) and the maximization of benefit per the invested resources.

Figure 2 shows the alternative selection on cost effectiveness analysis and cost benefit analysis.

A*=(C (A), E (A) or B (A)), B*= (C (B), E (B) or B (B)) and

C*=(C(C), E(C) or B(C), D*=(C (D), E (D) or B (D)) are shown.

In the case of Figure 2, an alternative C* is not selected because of C(C)>b.

In case of maximizing utilizing efficiency of invested resources, an alternative B* is selected, but in case of maximizing B (x)-C (x), an alternative D is selected.

The measured targets of effect or benefit in assessment and post-evaluation are different depending on which level is targeted among the policies, programs and projects. The measured range of effect and benefit is enlarged in order of policies, programs and projects. For this reason, the evaluation of programs and projects are integrated in the case of evaluating level of policies and programs. In cases where there are many evaluating indicators, these indicators are integrated or the major indicators such as significance or satisfaction for residents (people) are maximized, with other indicators functioning as given conditions.

It is generally true that the results of the post-evaluation should be used for reference in the assessment if a post-evaluation has been done. In this case, the results, which the post-evaluation has feed-back or feed-forward, are used in an assessment for reference.

3-4 Design of process evaluation function

In the process evaluation function, evaluations are performed by establishing evaluating indicators in each area, deciding the objective targeted value, and measuring the degree of achievement (Figure 3).

Figure 3 Design of process evaluation

feed-back control/feed-forward control
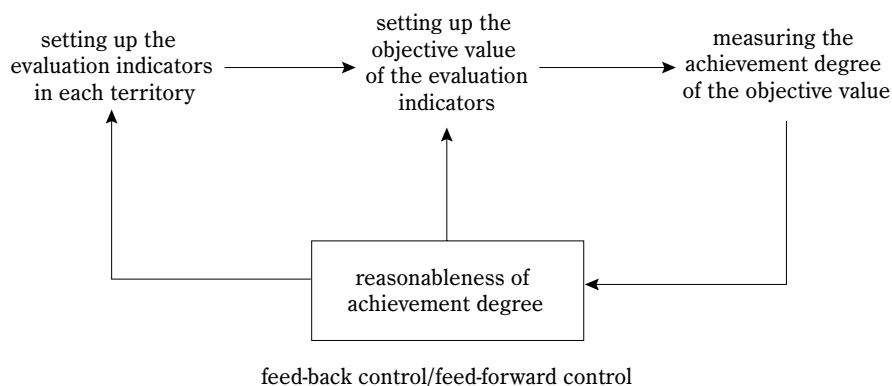
When the objective value g (t) of the objective indicator at time point t has been set up, and the achievement value was h (t), the evaluation of achievement degree can be defined as follows:

Evaluation of achievement degree

1) index of achievement degree at time point t: (A (t))

objective values at time point t: g (t)

achievement value at time point t: h(t)

A(t)=h(t)/g(t)x100

at the time of A(t)>100 : achievement degree exceeding the objective value

at the time of A(t)=100 : achieves the objective value

at the time of A(t)<100 : achievement degree below the objective value

2) marginal achievement degree index at time point t: (MA(t))

MA(t)=(h(t) h(t 1))/(g(t) g(t 1))× 100

at the time of MA(t)>100 : increasing rate in achievement degree is larger than the increasing rate in objective value

at the time of MA(t)=100 : increasing rate in objective value is equal to the increasing rate in achievement degree

at the time of MA(t)<100 : increasing rate in objective value is larger than the increasing rate in achievement value

The comparison of achievement degree to objective level is shown in Figures 4 and 5. Figure 4 shows the objective value and achievement value over time. Whether the achievement value is coming near to the objective value or not can be deduced. Figure 5 shows that the objective value is not reached if a(t) is positioned above the straight line l (45 degree line), and the achievement value exceeds the objective value if it is positioned below the straight line l.

Figure 4 Time change and objective achievement values

g(t): objective value at time point t   t
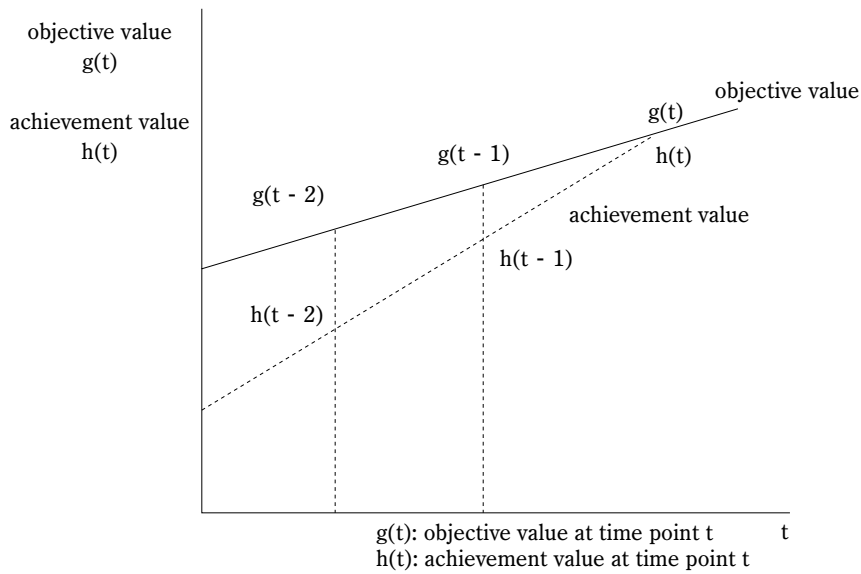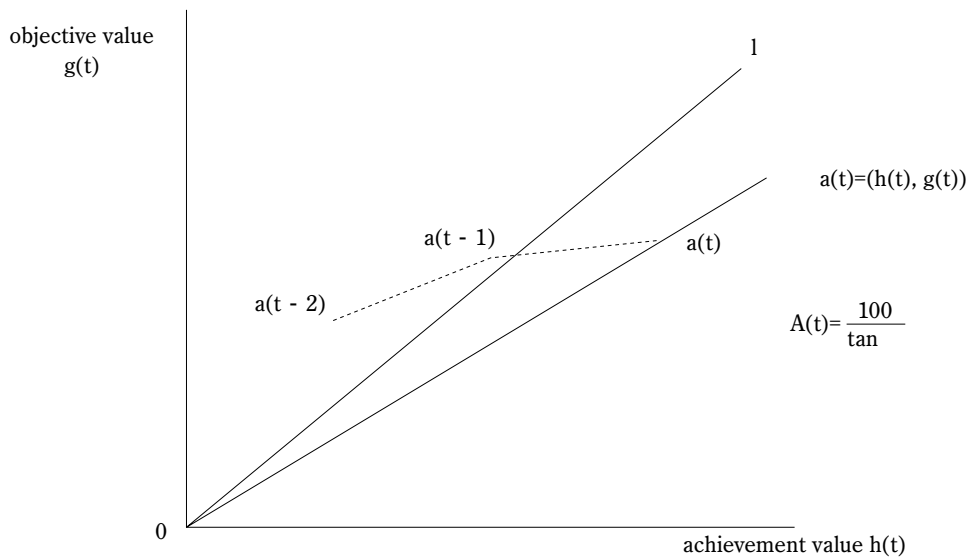h(t): achievement value at time point t

Figure 5 Objective value and achievement value

The achievement degree against the objective value can be evaluated with (A(t),MA(t)) by combining the index of achieved degree A(t) and marginal achievement degree index MA (t).

A problem in setting up a targeted value and evaluating an achievement degree is that , if a targeted value is set lower or increase of the targeted value is smaller, achievement of the targeted value becomes easier. Therefore, in order to make this evaluation method valid, the degree of difficulty of the established objective value and difficulty degree of leveled-up range of the objective value should be presented. Note the difficulty degree of A,B,C (A: easy B: ordinary C: difficult etc.) based on particular criteria.

3-5 Coordinating function for policies programs evaluation and reflection of residents (people's) opinions

It is essential to review and improve the policies programs by continuous evaluation. The evaluation system for policies programs consists of four factors:

(1) residents (the people); (2) executors of policies programs ; (3) third parties; (4) information necessary for the evaluation of policies programs (hereinafter called "evaluation information")

The evaluation system for policies programs should be arranged so that residents (the people) and the executors of policies programs can obtain adequate evaluation information and can make proper evaluations and also function to ensure the principle of informed consent.

The coordinating function consists of the following three factors:

(1) The subject, which utilizes the coordinating function

(2) Target of the coordinating function (coordinated target)

(3) Information needed to adjust the coordinated target (coordinating information)

As a means of obtaining coordinating information, we can utilize communication surveys, Web sites, and so forth. The communication survey can be defined as "a survey method that provides information on policies programs to residents (the people) and requests them to evaluate policies programs, based on their informed consent of such policies programs by regarding the survey as communication tool." Thus such surveys have a coordinating function and can serve to reduce the distance between residents (the people) and decision makers regarding policies programs.

Unless the coordinating function is operated within the evaluation system of policies programs, there is the possibility that both residents (the people) and executors of policies programs cannot obtain sufficient evaluation information, resulting in decreasing satisfaction of residents and taking the execution of policies programs away from those that are affected by them. Applying the coordinating function in the evaluation system of policies programs enables us to review and improve the policies programs to meet the needs of inhabitants and contributes to the effective and efficient execution of such policies programs. A further effect is that inhabitants can obtain knowledge about policies programs through the evaluation of the said policies programs.

In applying a communication survey to the evaluation system of policies programs, the method described in processes (1) – (3) below, is considered. According to this method, the evaluation system of policies programs(in the survey-participation phase) itself is the coordinating function, and the evaluation sheet—in the form of the survey slip that is used in the evaluation—becomes a tool of the coordinating function.

(1) To design an inhabitants' participating policy evaluation system through their participating in a survey and to execute the evaluation (survey) periodically and continuously in order to measure how the inhabitants evaluate the policies programs.

(2) To build up a database based on the evaluation (survey) results and accumulate the data periodically and continuously.

(3) To prepare the basic data for serving the decision-making of the policies by reviewing and improving the policies programs in line with the residents' needs based on results of analysis such as data analysis using database.

The residents (the people) can obtain information about the policies programs through an evaluation sheet (survey slip) and at the same time, can provide the executors with results of evaluation of the policies programs in the form of evaluation information based on the obtained information and their own experiences.

The policy executors can convey the information on the policies programs to residents (the people) by executing the policy evaluation by encouraging residents' participation. Also this information transmission has an enlightening effect on knowledge and ideas about policies programs. Further, it is possible to appropriately reflect the residents' needs on the decision-making of the policies based on the evaluation information obtained from the inhabitants. And it is also possible to check whether the information on the policies programs is properly transmitted to residents through the analysis of such evaluation information.

The residents' participation-style policy evaluation is a system utilizing the communication tool function by which

the policies programs are evaluated by both residents and policy executors. The satisfaction degree and social welfare itself can be improved by properly administering the residents' participation in the policy evaluation system.

3-6 Evaluation indicators of policies programs by residents (people) and their utilization

By conducting a residents (people) participation style communication survey, it is possible that information on policies programs is provided to residents and at the same time, the information evaluated by the residents on the policies programs is obtained.
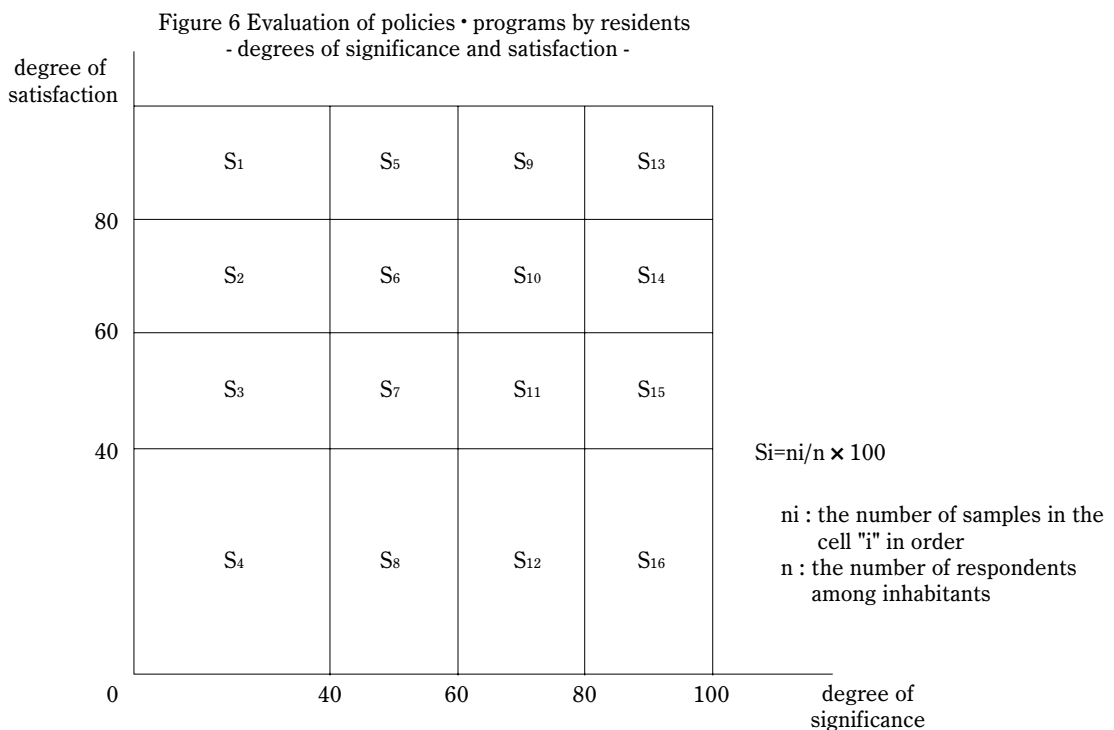
The possible indicators on the residents' side are significance, satisfaction, understanding, concern and so on, related to the policies programs. Significance degree evaluated by residents is interpreted differently depending on how deeply residents understand the policies programs. And the degree of satisfaction must be interpreted in relation to the degree of concern. If people have much concern for a policy program, they are likely to strictly evaluate satisfaction to the policy program.

It is desirable that the significance and satisfactory degree are measured on an interval scale. The diversified analysis becomes possible by using an interval scale. For instance, linear analog scale is expressed in point with 100 points maximum. In addition to, degree of significance or satisfaction is shown at each interval by setting the evaluation segmentation points at 40 points, 60 points, and 80 points so that the evaluation standard can be clarified. The degree is evaluated in point with 100 points in maximum by defining less than 40 points as "unimportant," more than 40 points and less than 60 points as "not so important," more than 60 points and less than 80 points as "rather important", and more than 80 points as "important."

If the indicators of significance and satisfaction degree are introduced in evaluation of policies programs, the residents' evaluation tendency will be clarified and at the same time, executors of policies programs can judge to which policies programs should be attached weight.

In Figure 6, significance degree of the policies programs for residents (people) is shown on the horizontal axis, and satisfaction degree on the vertical axis. Assuming the ratio of cell "i" in order as S_i, $S_i = n_i/n \times 100$ is available. Here, "n_i" represents the number of samples in cell "i" in order, and "n" represents the number of respondents among the inhabitants.

If the number of samples is large in S_{12} and S_{16} where the degree of satisfaction is low despite a high degree of significance, the policies programs should be regarded as important, and given priority in future. If the degree of understanding of the respondents in S_{12} and S_{16} is found low, information on the policies programs must be continuously provided.

Figure 6 Evaluation of policies   programs by residents
- degrees of significance and satisfaction -

$S_i = n_i/n \times 100$

n_i : the number of samples in the cell "i" in order
n : the number of respondents among inhabitants

If the number of respondents is large in S_9, S_{10}, S_{13}, and S_{14}, it means that the residents are satisfied with the policies programs that they consider important. This shows that the policies programs have produced substantially good results.

In a similar way, the reasonableness of the objective value of policies programs can be reviewed using the figure with the achievement degree index of A (t) and MA (t) on the horizontal axis, and the satisfaction or significance degree on the vertical axis.

3-7 Analysis of significance and satisfaction using a distribution function

A distribution function is shown in a curve from 0 to 100% in accumulative number of respondents with the reviewed variables placed on the horizontal axis. Ordinarily, assuming the random variables on the horizontal axis as x, the distribution function is shown as follows.

$F(x) = P(X \le x), 0 \le F(x) \le 1$

But here $100 \cdot F(x)$ is used as a distribution function(Figure 7).

Figure 7 Distribution function of significance and satisfaction for residents concerning the policies programs
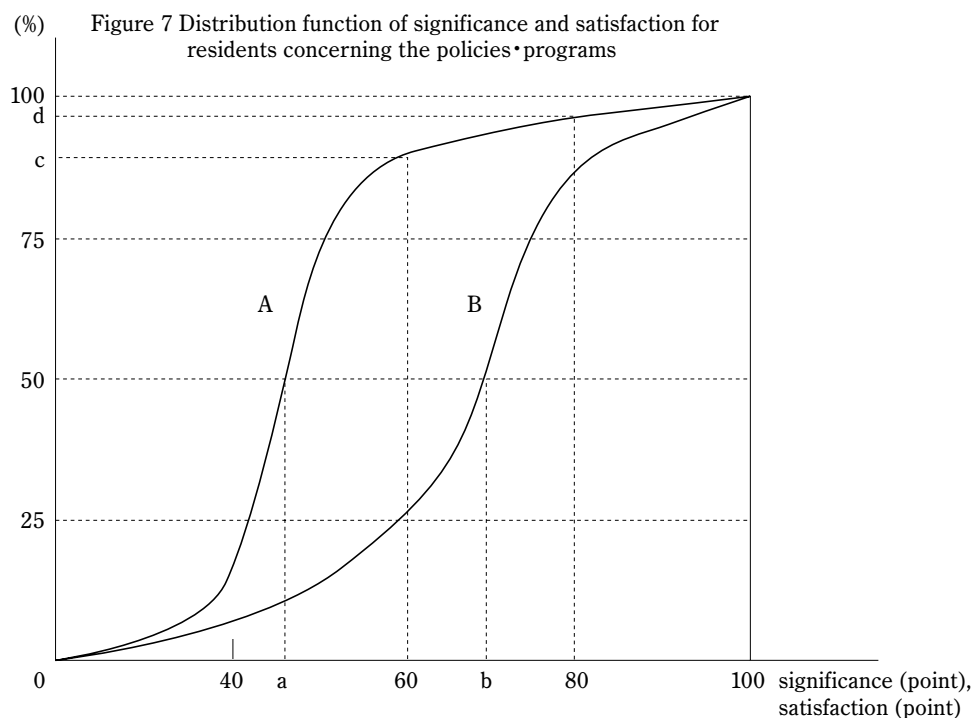
The average (median) point of significance and satisfaction and the ratio of residents who evaluate exceeding 60 points or 80 points can be obtained from a distribution function that shows the significance and satisfaction of the policies programs for residents.

If curve A is defined as the distribution function of the satisfaction for residents (people), the average point of significance (median statistics value) can be obtained at "a" in Figure 7. The ratio of residents who evaluated as less than 60 points is c%. The dispersed degree of the significance and satisfaction can be obtained using quartile deviation statistics value. The ratio of the residents evaluated as above 60 points and below 80 points is (d − c)%.

It is possible to compare satisfaction or significance degree among residents with different attributes by plotting plural distribution function curves. In comparing the various attributes, assuming that the distribution function curve on satisfaction for residents over 65 years of age is A, and that of those under 65 years of age is B, the difference of the ratio of residents who evaluate as below 60 points is (c − 25)%.

Assuming the distribution function curve of satisfaction is represented as curve A and that of significance as curve B, the fact that curve B is to the right of curve A means that the evaluation points on curve B are higher than those on curve A. The residents who made evaluations of below 60 points account for 25% in significance and c% in satisfaction with a gap of (c − 25)%. This shows that the larger (c − 25) becomes, the lower level of satisfaction

becomes, although the higher the significance is evaluated. If the distribution functions A and B are away from each other, it is necessary to lay weight on the policy program.

4. Verification of the evaluation system of policies programs applied to Miyagi Prefecture

Here, verification is attempted on a part of the policies programs system of Miyagi Prefecture based on the design of the evaluation system for policies programs.

4-1 Outline of evaluation of policies programs in Miyagi Prefecture using "6W2H1E"

Administrative reform has been promoted in Miyagi Prefecture since October 2000. The administrative evaluation system has been introduced and its accomplishment is being sought. The administrative evaluation system is composed of the following evaluations etc.

(1) policy evaluation

(2) execution evaluation

(3) evaluation of large-scale business

(4) re-evaluation of public works

(5) evaluation of business location

(6) evaluation of overall inspections of office work businesses

In this chapter, the actual status, mainly on the policy evaluation and the execution evaluation in Miyagi Prefecture, are verified based on the framework and method of policies programs evaluation as already stated.

The objectives of administrative evaluation in Miyagi Prefecture are as follows.

(1) Direct objectives

a to maintain adequate accountability

b to secure transparency of the planning and designing process etc.

c to improve the efficiency and quality of administrative performance

(2) Interim objectives

Transition to an administration in which the results are weighted with the viewpoints of the inhabitants of the prefecture.

(3) Final objectives

Tackling together with the prefectural inhabitants the execution of autonomy in a new area.

As a result of reviewing the objectives and executions of the policies programs evaluation in Miyagi Prefecture from the criterion of "6W2H1E," the following summaries can be made (the evaluation of programs is called Evaluation of Execution in Miyagi Prefecture).

(1) The subject of the policies programs evaluation is Miyagi Prefecture, administrative evaluation committee, and the inhabitants of the prefecture

(2) Execution of the evaluation of policies programs for the inhabitants of the prefecture and for the administration of Miyagi Prefecture

(3) The target of the evaluation is in case of policies evaluation: each program, and in case of programs: each project

(4) The reasons for policies programs evaluation are to ensure adequate promotion of accountability, transparency in the planning designing process, and improvements in the effectiveness and quality of administrative performance and result oriented concept in view of the inhabitants of the prefecture.

(5) Evaluation period is per year (a single year evaluation).

(6) The targeted area of evaluation is the whole of Miyagi Prefecture.

(7) The evaluation is made by using basic data sheets (a sheet for policy evaluation, a sheet for execution evaluation, a card for cause vs. result, and a sheet for business development). A card for cause vs. result is used as the material to judge the execution evaluation and the business development after the next fiscal year through the feedback function.

(8) Necessity and validity for the policies programs are taken up as the evaluation viewpoint, and the following are

applied as these judging criteria.

a. achievement degree of objectives

b. satisfaction of the inhabitants of the prefecture

c. reasonableness of objectives

d. consistency of policies and programs

e. effectiveness

f. efficiency

g. reasonableness of the prefecture's involvement

(9) The evaluation of the amount of resources invested is reviewed by referring to the results of policies programs evaluation.

(10) The evaluation is made in combination with the achievement degree of policies programs, self-evaluation, evaluation by the inhabitants of the prefecture (significance, satisfaction, publicity and concern) and evaluation by third parties (the administrative evaluation committee and its subcommittees).

From the above outline, this report reflects the major part of the viewpoint of "6W2H1E." The problem of how much should be invested in the fund resources is reflected on the budget indirectly by referring to the achievement degree of the evaluation indicator. And the evaluation viewpoints related to stability and ethics are not clarified, but they are reflected in the evaluation by the inhabitants of the prefecture.

4-2 Assessment, process evaluation and post-evaluation for Miyagi Prefecture

The assessment method of the policies programs of Miyagi Prefecture is different from that stated in this report. The future vision of Miyagi Prefecture is reviewed at a council, and 38 policy territories are decided. Several measures are taken up per policy, but the alternative evaluation and assessment, such as cost effectiveness analysis on the mutual preference are not made. The budget allocation is decided on the level of administration and politics, and the process evaluation results are reflected in this process. Therefore, it is construed that a loose pre-assessment is made by utilizing the process evaluation information.

The property of the evaluation of Miyagi Prefecture is process evaluation. The evaluation consists of the achievement degree of the evaluation indicator of the policies programs, the evaluations by the inhabitants of the prefecture (significance, satisfaction, publicity, and concern), and that of experts. The systematization of the evaluation indicators is designed to be arranged through the evaluation cycle.

The achievement evaluation of the evaluation indicator is made by the administration themselves and the third party composed of the experts of each subcommittee of the administrative evaluation committee. Evaluations by the third party are reflected in next fiscal year's budget through the feedback and feed-forward function.

The results of the process evaluation are used as post-evaluation because the single year evaluation is made in line with the budget year. If plural years of policy performance period such as a three-year period are used, a post-evaluation combined with an achievement degree evaluation and resources invested can be made after the said policy execution period.

4-3 Analysis of achievement degree of the evaluation indicator for policies programs of Miyagi Prefecture

The achievement degree is calculated as the ratio of current actual value in the evaluated year to the tentative objective value in the evaluated year, which is estimated from the objective values in the years 2005 and 2010. Figure 8 shows the degree to which the current actual value compares with the value to be achieved, which the objective value demands, and the indicator k represents the achievement degree indicator. The level of achievement such as A (in good condition) or B (attention) is given corresponding to each achievement degree indicator as shown in Table 1 (Figure 9). The provisional objective value in every evaluated year is calculated as follows.

Table 1 Relationship between achievement degree and achievement level

value K		achievement level		achievement status in the evaluation year
1.0 ≦ K	A	in good condition		current value of indicator is achieved as planned or more than planned, aiming at the objectives
0 ≦ K ＜ 1.0	B	attention		current value is improving the objectives, but not yet reaching them
K ＜ 0	C	special attention		current indicator value is in lower than that at the time of setting
	D	impossible to judge		the status in which the achievement degree cannot be obtained due to the reason that the current indicator value is impossible to get

*value K : ratio of current value of indicator to temporary objectives

source: Guideline on policy evaluation execution in Miyagi Prefecture (p.54)
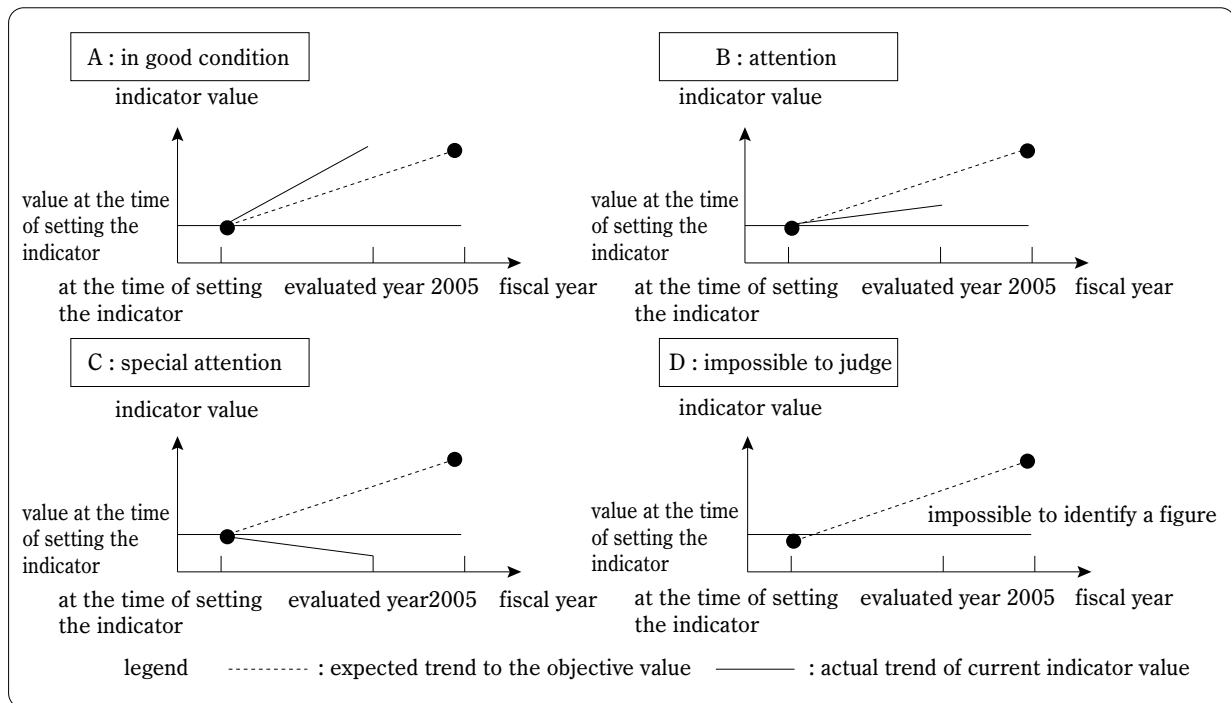
Figure 8 Trend of achievement indicator
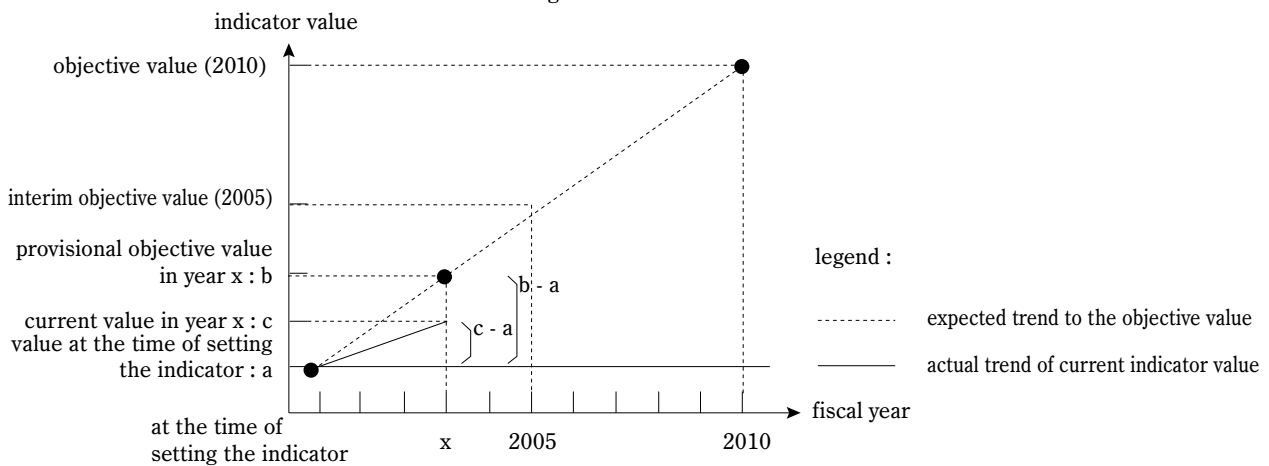
$$K = \frac{\text{current indicator value in the evaluated year} - \text{value at the time of setting the indicator}}{\text{provisional objective indicator value in the evaluated year} - \text{value at the time of setting the indicator}} = \frac{c - a}{b - a}$$

source: Guideline on the policy evaluation execution in Miyagi Prefecture (p.54)

Figure 9 Trend by achievement level

source: Guideline on the policy evaluation execution in Miyagi Prefecture (p.55)

provisional objective value in the evaluated year

（objective value in 2005 value at the time of setting the indicator)（lapsed year）／
(year 2005 – the year when the indicator was set up)   value at the time of setting the indicator

4-4 Communication survey by participation of the inhabitants of the prefecture

A communication survey with the participation of inhabitants was conducted by Miyagi Prefecture in order to reflect the evaluation of the policies programs by the inhabitants of the prefecture. The target of the survey consists of the residents, users of the services related to the said policies programs, and experts. Here, we review part of the results of the overall pilot survey and the detailed survey, conducted in April 2001, in advance of the communication survey.

The followings are an outline of the design and the results of the survey.

(1) Target of the survey

The number of person who are targeted in the overall survey is 600, and that in the detailed survey is 1,800, including municipal employees (over the age of 20) in 71 communities in Miyagi Prefecture and the people selected by the municipal employees in accordance with selection protocols such as male/female, age etc.

(2) Method of survey

The prefecture requests that municipal government should survey based on protocols considering age, sex, seven areas, and so on. The municipal governments distribute the survey slips to their employees in accordance with the protocols. The employees distribute them to the ordinary inhabitants of the prefecture in accordance with the protocols.

The survey slips are collected to the prefecture via the municipal employees and the municipal governments.

(3) Contents of survey

The survey questions respondents on significance, satisfaction, publicity and concern for 38 policies, indicating the related programs. Significance and satisfaction are measured on a linear analog scale of 100 points in maximum and also on an ordinal scale. The interval scale and ordinal scale correspond to each other and are integrated. For example, defining less than 40 points as "unimportant," above 40 points and less than 60 points as "not so important," above 60 points and less than 80 points as "relatively important" and over 80 points as "important" for

significance of 0-100 points. The publicity and concern are evaluated on Likert scale of four or five steps.

In addition to the survey on policies programs evaluation, the communication survey of Miyagi Prefecture also checks the evaluation as to whether or not the survey itself is performing the coordinating function as a communication tool. The survey covers the time for the communication survey, the change of knowledge volume by answering the survey, legibility of the slip, the change of concern toward the government of the prefecture, the validity of reflecting opinions on the government of the prefecture through the communication survey, and so on. The response rates in this communication survey are 90.3% in the overall survey and 93.8% in the detailed survey. As shown in Figure 10, 43.4% spent 0.5–1.0 hr. and 25.8% spent 1.0–1.5 hrs out of the total respondents. Relatively long hours have been spent on the response. As a result, 28.4% of the respondents increased their knowledge of the policies programs of the prefecture by responding to the survey (Figure 11).
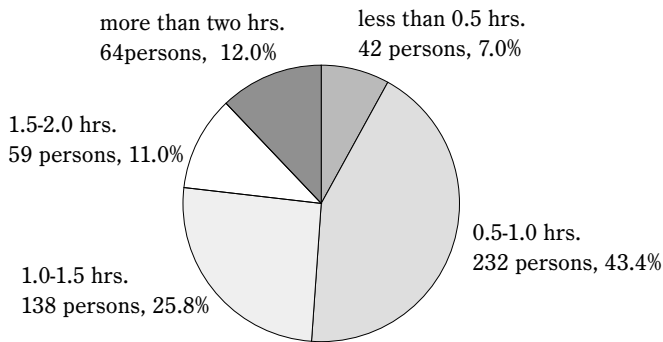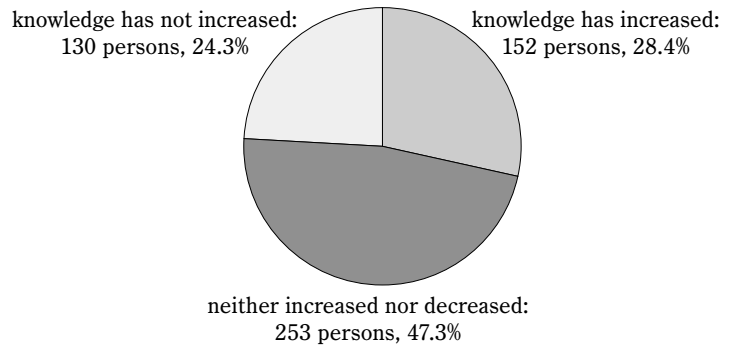
Figure 10 Time needed for response (n=535)

more than two hrs.
64persons, 12.0%

less than 0.5 hrs.
42 persons, 7.0%

1.5-2.0 hrs.
59 persons, 11.0%

1.0-1.5 hrs.
138 persons, 25.8%

0.5-1.0 hrs.
232 persons, 43.4%

Data for policy evaluation subcommittee of Miyagi Prefecture (2001)

Figure 11 Change of knowledge through responses (n=535)

knowledge has not increased:
130 persons, 24.3%

knowledge has increased:
152 persons, 28.4%

neither increased nor decreased:
253 persons, 47.3%

Data for policy evaluation subcommittee of Miyagi Prefecture (2001)

Figure 12 Distribution functions for high and low policies in significance evaluated by the inhabitants

median
policy 8   81.0 policy 28   80.0 policy17   68.5 policy 14   70.0
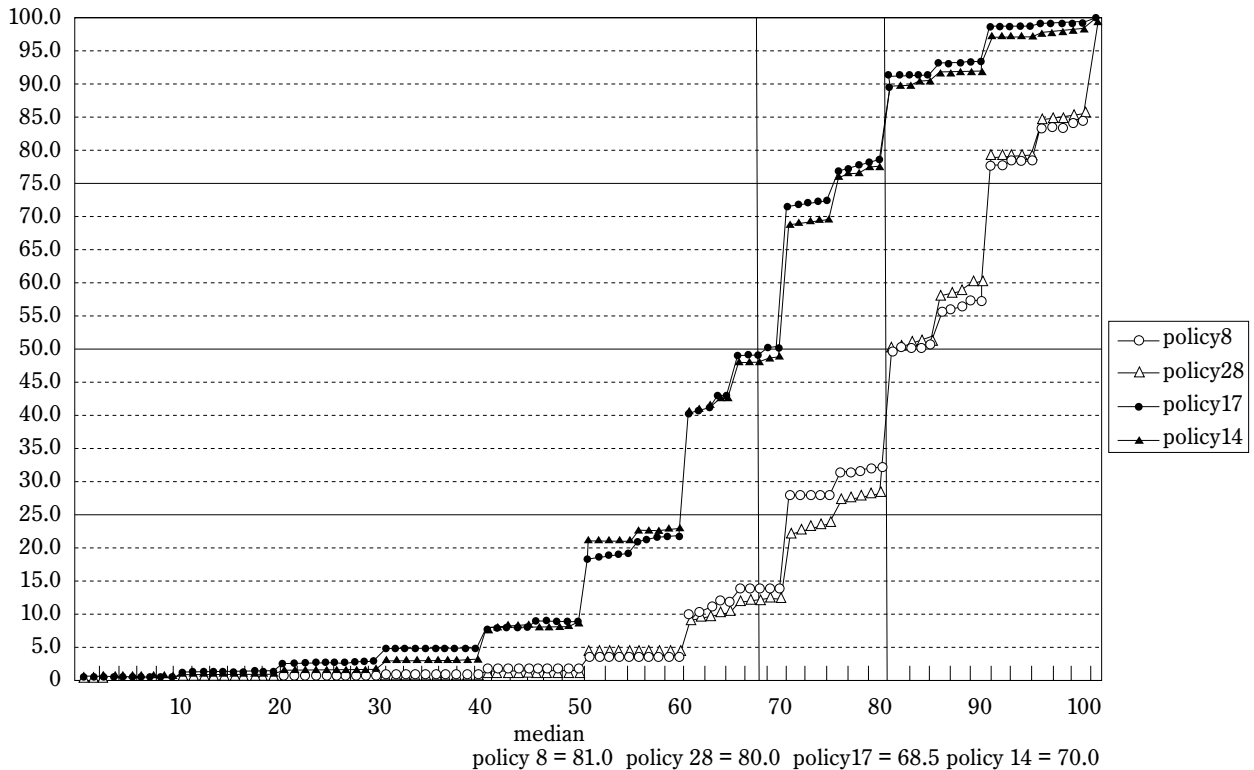
The Figure 12 shows distribution functions for high and low policies in significance evaluated by the residents. The significance degree is higher for policies on the right side (policy 8 and policy 28) than those on the left side (policy 17 and policy 14). There is a difference of 11 points in the median value between high significance policies and low significance policies. The evaluators under 60 points in the significance account for 5% in the high significance group and 25% in the low group. The reason the distribution functions are not smooth is due to the fact that many respondents evaluated by rounding the point up to a unit of tens, such as 70 points or 80 points.

More than 60% of the respondents replied "reasonable" to the question on whether the evaluation method by the communication survey was reasonable or not in reflecting the opinions on the policies of government of the prefecture (Figure 13).

Figure 13 Reasonableness of reflecting the opinions via communication evaluation
method on the policies of government of the prefecture (n=516)

not reasonable:
200 persons, 38.8%

reasonable:
316 persons, 61.2%
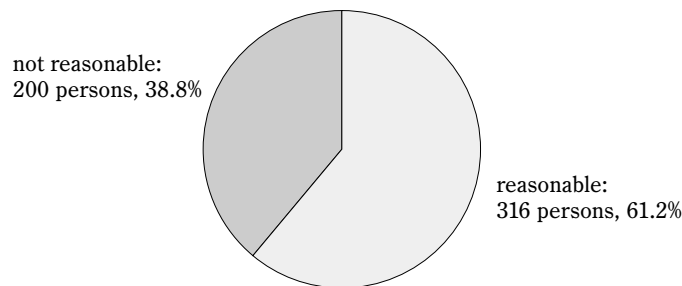
4-5 Analysis by significance and satisfaction of policies programs with overriding priority

In order to judge to which policies programs should priority be given, Miyagi Prefecture is using significance and satisfaction evaluated by the inhabitant (Figure 14). The policies programs which belong to the C zone are high in the significance, but low in satisfaction. Therefore, these policies programs should be given priority in future. The policies programs that belong to the D zone are high in both significance and satisfaction, that is they are providing good results. This analysis method is same as that shown at Figure 6 in this report, which selects the policies programs of high priority through the cells divided on the breaking point of 60 points.

Figure 14 Significance and satisfaction evaluated by inhabitants
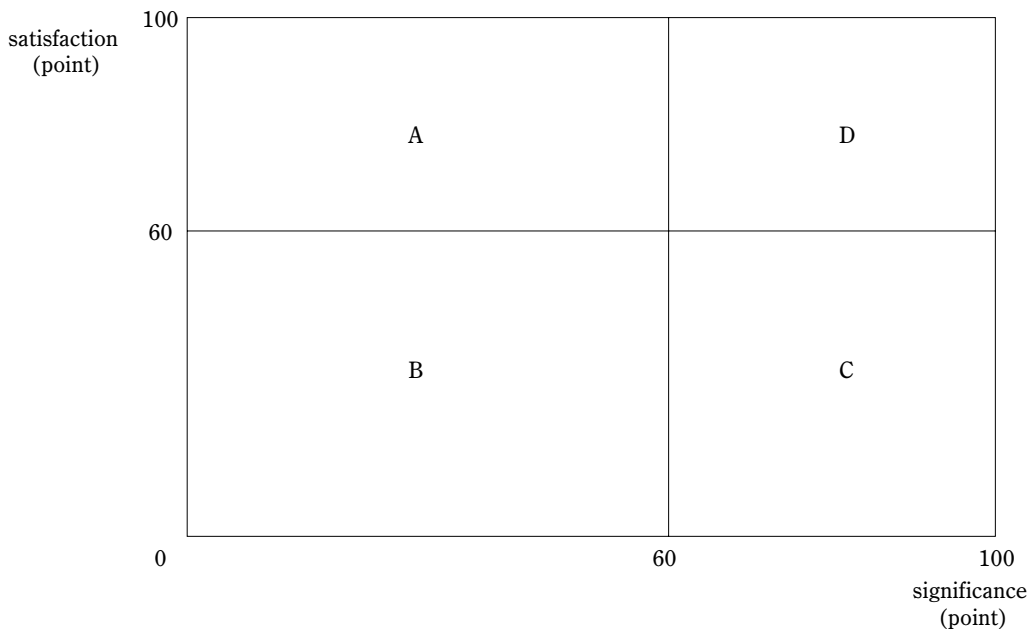
5. Consideration

The evaluation of policies programs is an evaluation method on whether policies programs have achieved their expected purpose or objectives or not, and the analysis of cost and effect, analysis of cost benefit, benchmarks evaluation, achievement evaluation etc. are applied. The policy evaluation system recently seen in Japan is based on the NPM (New Public Management) type of evaluation. The NPM style of evaluation consists basically of competitive evaluation, customer-oriented principle, outcome (output) evaluation, compact evaluation, self-evaluation, third party evaluation, and information disclosure on the process and results of evaluation. This evaluation method or reformed methods are used in Mie Prefecture, Government Performance and Results Act (GPRA) of U.S. Government, Oregon State in the USA, and in the UK. This evaluation method makes it easy to apply to a real society, at the expense of the individuality and rigidity of policies programs evaluation. Miyagi Prefecture has adopted a new evaluation method that is a combination of the NPM type of policy evaluation and the communication survey with feedback, feed-forward and coordinating functions.

In this paper, methods of policies programs evaluation have been reviewed and systematized from a systems theory's viewpoint by using the concepts of "6W2H1E," assessment, process evaluation, post-evaluation, communication survey which has feedback, feed-forward and coordinating functions. Policy evaluation is clarified by evaluating the programs to achieve the policy, and the program evaluation is clarified by evaluating the operations to achieve the programs. In fact, because it is difficult to evaluate projects at the stage of assessment, an alternative method is selected among the inhabitants' satisfaction with the policies programs, their significance for them, their Willingness To Pay (WTP), and cost vs. effect (benefits) analysis which reveals the relationship of the achievement of major objective indicators and invested resources. In this way, an assessment determines the priorities on alternative policies programs, and a process evaluation provides detailed information on evaluation indicators of achievement of objectives. Finally a post-evaluation is made to evaluate achievement degree of objectives shown in the assessment and the process evaluation. The above-mentioned assessment and post-evaluation are given by re-examining the conventional program evaluation and arranging it so to be easily used. That is, the most effective and efficient alternative on policies programs is selected by setting important evaluation indicators as objective functions under conditions for other evaluation indicators restricted within the minimum level. In the assessment, a certain degree of detailed reviews is possible on the major indicators or constraint conditions on the effect of the assessment since in many cases the post-evaluation information can be used for the assessment.

In the process evaluation, invested resources are not reviewed except for the case of a change in invested resources during the period, because the invested resources have usually been determined. In the process evaluation, however, effect or result indicators are examined in detail since effects or results from the given invested resources come into the picture. For this reason, the relationship among the indicators of assessment, process evaluation and post-evaluation becomes important. The process evaluation indicators consist of indicators related to assessment indicators and therefore can be examined using statistical methods, the relevance tree method like the PATTERN method, fuzzy relation method, and so on. The post-evaluation can be made by judging achievement degree of the assessment indicators and the process evaluation indicator. When assessment indicators are used as post-evaluation indicators, the process evaluation are derived by subdividing the indicators. In this case, the integration of the effect and the results of the process evaluation indicators have to maintain the relationship with the assessment and the post-evaluation.

As to the criteria of policies programs evaluation, this report picked up six evaluation criteria: stability, reliability, significance, effectiveness, efficiency, and ethics, but many other criteria such as achievement degree, consistency of policies programs, appropriateness, necessity, urgency, economy, validity, preference, fairness, justice, substitutability, etc. are also being discussed. However, they are almost all included in the six criteria stated in this report. Achievement degree and validity are almost the same as effectiveness, and necessity, preference and urgency can be substituted with the combination of significance and effectiveness. Economy is equivalent to efficiency and effectiveness, and substitutability is equivalent to stability. And fairness and justice can be examined based on "6W2H1E."

This paper has presented a part of the results of designing and experimentation of a communication survey which intended to network the executors of policies programs and the inhabitants in two ways, by giving information on the policies programs to the inhabitants and evaluating the policies programs by the inhabitants. The beneficiaries of policies programs are the inhabitants (people). Therefore, their satisfaction and significance for them are the evaluation information on policies programs that can be utilized as feedback and feed-forward information. Needless to say, it is necessary to provide easy-to-understand information and disclosure on the policies programs in order to ask the inhabitants for their evaluation. Diffusion of informed-consent is demanded to the executors of policies programs.

A scale produced by mixing an interval scale and an order scale is used in the measurement of satisfaction and significance for the inhabitants. This was produced as a relatively objective interval scale for evaluation and inhabitants because the judgment standard on a linear analog scale varies depending on an evaluator. In this way, an evaluation value such as satisfaction and significance for the inhabitants, which are measured on this scale can be expressed in a distribution function. The distribution function is not influenced much by the fluctuation of data. It does not change much if a different evaluator participates in the survey or evaluation value of each inhabitant changes. For this reason, the comparison of the distribution functions by attribute of the inhabitants is possible while maintaining reliability.

The evaluation data of the policies programs by the inhabitants can be stored as a database, and represented in a distribution function to be analyzed by evaluators' attributes (sex, age, residential area and so on) and by the survey time (before, process, after, or year etc.). In order to improve these analyses, it is important that the survey targeted at the inhabitants is conducted periodically to deepen people's understanding of the policies programs. Respondents are selected through random sampling (simple, rank etc.) for the ordinary inhabitants and service users, and purposive sampling for service users. This type of survey is a communication tool connecting the inhabitants with policies programs executors to reciprocally exchange information. Namely, the inhabitants transmit the information to the policies programs executors through evaluating policies programs, and the policies programs executors can provide the necessary information to the inhabitants by referring to these analysis results.

Under the current circumstances where the evaluation system of policies programs are built by positioning the evaluation of policies programs as a paradigm pursuing the effective and efficient utilization of resources, how the Board of Audit should deal with the policies programs becomes a subject of discussion. The role of the Board of Audit is to make the process evaluation and the post evaluation of budgets or businesses according to evaluation criteria such as accuracy, rationality, efficiency, validity etc. However, it should be involved also with the assessment to make these evaluation criteria meaningful. And post-evaluation should aim at outcome evaluation.

The General Accounting Office (GAO) in the U.S. introduced a program evaluation which had been developed because of limited validity of PPBS in the latter part of the 1960s and has been responsible for evaluation of the program. The outcome evaluation is laid weight to secure accountability to the people.

When it comes to the current status in Japan, Article 4 of the Law on Establishment of Ministry of General Affairs (1999) prescribes that "to evaluate policies of each ministry in a uniform or integrated way, or to make an evaluation to ensure the objective and rigorous execution of the policy evaluation." In other words, Article 4 indicates that the Administrative Evaluation Bureau of Ministry of General Affairs has the function of securing a rigorous execution of the self-evaluation(internal evaluation) of each ministry by objectively evaluating the self-evaluation that is obliged to each ministry. Further, in the Law on the Policy Evaluations Undertaken by Administrative Agencies (June 2001), Article 12 states that "to make an evaluation in order to secure uniformity or unity" of the policy common to more than two administrative agencies. These articles mean that the Administrative Evaluation Bureau of the Ministry of General Affairs has a function to evaluate and coordinate the self-evaluation by all ministries.

However, the evaluation by the Administrative Evaluation Bureau of Ministry of General Affairs is only a semi-external evaluation within the ministries. Hence, the function of a genuine outside evaluation is also sought for. The Board of Audit is independent from ministerial administrative organizations and is, as already pointed out, in a position to be involved with the evaluation of policies programs. It can pursue the function of an outside

evaluation. The role of the Board of Audit from now on will be to pursue the function of outside evaluations and to improve the function of the administrative evaluation of the Ministry of General Affairs by using the research function such as universities.

The important thing for the evaluation of policies programs is the viewpoint of "6W2H1E." Particularly, the evaluation from the viewpoints of the inhabitants, who are taxpayers and the beneficiaries of services is important, and the quantification of this evaluation is demanded. The significance of surveys as communication tools that target inhabitants, how to utilize surveys, the quantification of the evaluation and analysis by distribution functions, is proposed in this report. Also, the methods and systematization of the assessment, process evaluation and post-evaluation have been reviewed together with how the Board of Audit should operate ideally. It is expected that policies programs evaluation will be further systematized through practical application, and an information system will be designed and built up to operate them.

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