1

Effect of Local Government Policies and Budgets on Environmental Issues and Their Relation with the Local Assembly

— Case Study of Toyama Prefecture —

Takashi AOKI

1. Introduction

Local government policies are becoming increasingly important every year in Japan because of the promotion of decentralization and increase of awareness regarding autonomy. Local government policies increasingly have greater influence today although some issues, such as the tendency to be financially dependent on the national government, still remain.

Because environmental policies of local governments are connected directly to the community, they are considered important policies by both local governments and inhabitants. Environmental problems can influence wide geographic areas to various degrees, and many problems cannot be wholly supported by local administrative authorities acting in an isolated manner. However, it is possible for the accumulation of such policies by a local government to have important effects on an area consequently, and that is why environmental policies are expected to continue. From such a perspective, one of the important indexes of the policies is the local budget for environmental programs. The budget for a local government's policy-practice ensures financial security for the continuation of policies.

In government policies, the views of the local administrative chiefs (governors and mayors) and the administrative authorities are generally important. However, in the local government administration system of Japan, the position of the local assembly is also equally important. Because both local administrative chiefs and assembly members are elected by their area's inhabitants, the local government system constitutes "a binary representation system," whereas the national government is a "parliamentary system." Experts say that the political power of the chief and the administrative authorities is generally greater than that of the assembly (Masuda [6]); however, the assembly also has rights to decide on policies such as "setting budgets," "approving ordinances," and so on (Local Autonomy Act Article 96, 1 and 2). The administrative authorities have the role of putting into practice policies, and the assembly has the role of judging whether such policies are appropriate for its inhabitants. Therefore, because both the authorities and the assembly are independent institutions, they need to cooperate as equals to ensure that practices are followed for the inhabitants. In this way, they are sometimes called "two wheels of a car" (e.g., Toyama Prefectural Assembly [9]).

This point indicates that the analysis of a local government's policies should be considered not only from the

perspective of the administrative authorities but also from that of the assembly. Accordingly, this paper provides a basic analysis of the "policies and budgets" and "interpellations" of the relationship between the budgets and policies and looks at the relation between the administrative authorities and the assembly. In a case study, environmental policies, such as the policy on global warming and the policy on resources and energy of Toyama Prefectural Government are analyzed.

With regard to environmental policies, Aoki [2] analyzes the carbon dioxide emissions owing to the activities of the foreign tourists visiting Toyama. Some roles of the assemblies of Toyama Prefecture and Hokuriku District (which includes Toyama Prefecture) are evaluated, through an analysis of the environmental consciousness of municipal assembly members by Kawamura et al [5] and an analysis of municipal assembly members' roles in the framing and practice of municipal policies in Ishikawa Prefecture by Sakai [8]. However, little research regarding the relation between the administrative authorities and the assembly and regarding the analysis of budgets are found, especially in the area of environmental policies of Toyama Prefecture. Such an analysis is important as a method of policy analysis.

2. The Present Situation of Environmental Policies and Budgets of Toyama Prefecture

Recent key environmental policies in Toyama Prefecture include the introduction of a "Forest Environment Tax (2007–2011)¹, the discontinuation of free shopping bags (2008), and the regulation of exhaust gases from buses in the Tateyama Mountain area (2015), among others. Such environmental policies have shown good results. For example, 95% of people now carry their own shopping bags to stores and supermarkets (2014), many inhabitants in Toyama Prefecture agreed to the continuation of the Forest Environment Tax from 2012 to 2016, and the environmental regulation of exhaust gases of buses is without precedent in the country. The successful introduction of such policies is attributed to inhabitants' awareness of environment protection. Such awareness has even led to a G7 environment ministers' meeting in Toyama in May 2016.

Conversely, policies to curb greenhouse gas emissions (CO₂ conversion) in Toyama Prefecture have had almost no effect², which means that there are both successes and failures of environmental policies in Toyama.

Among environmental policies, some have achieved good results and some have not, as stated above. These are reported by various media, so it is important to analyze how such environmental problems are understood by inhabitants.

¹ On Local Tax Act, it is the excess taxation of the inhabitant tax (individual and corporate).

² The greenhouse gas emissions in 2012 in Toyama Prefecture was 13,504 thousand t-CO₂, a 20.8% (2,320 thousand t-CO₂) increase in comparison with the emissions in 1990 (11,181 thousand t-CO₂), the benchmark year (Environmental Policy Division, Civic Affairs, Environment & Culture Department, Toyama Prefectural Government [4]). Originally, the target of greenhouse gas reduction in Toyama Prefecture was -6% of the benchmark year, but in reality, only in 2009 it was less than the targeted amount, and the greenhouse gas emissions have increased since 2011. The target of the greenhouse gas reduction in the present "Toyama Plan to Stop Global Warning," which was executed in March 2015, is an 8% reduction by 2020 in comparison with the benchmark year of 2005. However, the original target of -6% compared with the former benchmark year (1990) was not achieved in 2005 (cf. Attached Table 1).

Then, let's first examine the environmental budget of Toyama Prefecture. It is led by Toyama Prefecture's "bills and budget descriptive books," which are submitted to the assembly in the February assembly session when the budget at the beginning of the fiscal year is submitted. More precisely, it is submitted as follows. "Kan" and "Ko" in Japanese, which constitute the breakdown of the budget expenses (each of them is the financial subsection and the volume of "Kan" is bigger than that of "Ko"), are shown in the bills and books. In general, these are also the parts of the budget that are voted on by the assembly³. From this, the environmental budgets are distilled, but there is no specific definition of environment budget expenses. It is also possible that an environment-related budget expenses might be included in, for example, the agricultural budget expenses. However, it is necessary to decide the range of the environmental policies, so in this paper, the analysis is limited to expenses that are explicitly stated as environment-related budget expenses.

Million Yen
3,500
2,500
2,000
1,500
0
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
The Natural Conservation Budget Expenses The Poluution Control Budget Expenses

The Poluution Control Budget Expenses

Figure 1: Environment-Related Budget

Source: Toyama Prefecture [10]

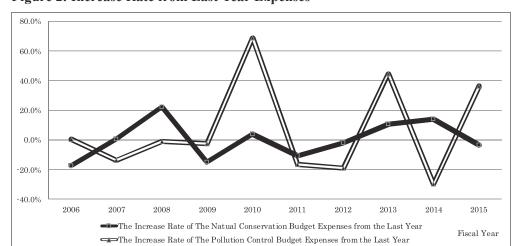


Figure 2: Increase Rate from Last Year Expenses

Source: Toyama Prefecture [10]

³ In the budget expenses, as the annual budget for the assembly resolve, only "Kan" and "Ko" are shown (Mochida [7]).

Considering the above, "expenses for natural conservation" and "expenses for pollution control" are considered the basic environment-related budget expenses.

Figure 1 indicates the quantum of environment-related budget expenses from 2006 to 2015. The natural conservation budget expenses in 2015 were about 1,192 million yen, and the pollution control budget expenses in 2015 were about 1,962 million yen. The amount in each budget has fluctuated up and down for the 10 years (Figure 2); however, the former has been around 1,000 million yen, and the latter has been around 1,500 million yen. In scale, environment-related budget expenses are not a large portion of the budget when compared with, for example, public construction budget expenses. In fact, the portion of each set of expenses in the total budget is only about 0.2% and 0.4%, respectively.

Table 1 The Environment-Related Budget of Toyama Prefecture (2015 fiscal year: million yen)

Total	(Kan)	(Ko)
560,616	General Administration Expenses (24,817)	Natural Conservation Expenses (1,192) (others: 10 including Planning, Taxation)
	Sanitation Expenses (30,810)	Pollution Control Expenses (1,962) (others: 6 including Public Health, Medical Service)
	(others: 14 including Civil Engineering Work, Education)	

Source: Toyama Prefecture [10]

It is not always true that the more important the government policy, the higher the budget. However, it could be indirectly inferred that the greater (the less) the amount of money allocated to a budget, the more (less) the importance of the corresponding issues outside of obligatory expenses (e.g., personnel expenses and public loan costs). Therefore, considering that the natural conservation budget expenses and the pollution control budget expenses have been secured stably to some extent, it could be inferred that governmental attention to environmental policies is continually necessary.

Improvement in the (local) environment cannot be fully achieved by the work of only (local) government policies, but the policy direction taken by Toyama Prefecture is denoted by its budget. Therefore, the budget's effects can be discussed in the assembly. Since it is highly conscious of its area's environment, there is high concern for Toyama Prefecture's environmental policies, which makes it necessary for the assembly to consider them. This importance can been deduced by looking at the number of inquiries made in the assembly sessions regarding environmental matters. Attending assembly sessions is an important responsibility of the assembly members. When assembly members think that environmental policies are very important, they ask questions regarding them in the sessions. Therefore, the next step is to view the number of inquiries made by the assembly members.

3. Policies and the Relation with the Assembly

The Toyama Prefectural Assembly has 40 members as of April 2015⁴. Ordinal assembly sessions last for three to four weeks and are usually held four times a year, in February or March, June, September, and November. The February 2015 session was opened on February 25 and closed on March 16, for example⁵. There are two main styles of inquires at the plenary sessions, which have party-representative inquiries, general inquires, and summation inquires (the summation inquiries are only made at the February/March session⁶) and at the special committee meetings for the budget. Respondents to the inquiries are the governor, the superintendent of education, and director generals of all departments and bureaus, and so on. Generally, the governor responds to questions regarding the perspective and direction of the prefectural government, and the others respond to the queries on the content of the business practices.

Generally, assembly members ask how the administrative authorities regard the policies and what actions they should take regarding the issues that inhabitants or the member (as a representative of the inhabitants) considers to be important. Therefore, an analysis of the contents of the inquiries could lead to a better and objective understanding of the issues that inhabitants of an area consider to be important.

The outlines of inquiries by assembly members are sent to the administrative authorities in advance?. Inquiries and answers in practice are usually very detailed, so the outline of inquiries serves the purpose of a "lead" in newspapers. Just as an attractive lead of a newspaper article makes people want to read that article, the outline of an inquiry highlights what inhabitants think as being important. In that sense, it is important to recognize how an inquiry is presented and what policies are discussed in the assembly sessions. Considering the above, an objective analysis of the relation between the administrative authorities and the assembly could be made by analyzing the outline of inquiries as an index of importance by the assembly. The Toyama Prefectural Assembly website publishes the outlines of the inquiries, which were used in this analysis.

The Toyama Prefectural Assembly held 42 assembly sessions for the 10 years from February 2006 to November 2015, consisting of 40 regular sessions and two extraordinary sessions (January 2009 and February 2013). The number of interpellants in each regular assembly session in 2015 as an example is shown in Table 2. Additionally, the number of interpellants from 2006 to 2015 is shown in Figure 3. The total number of inquiries by assembly members, including those in the special committees for the budget, is around 100 for each of the 10 years. The total number of inquiries is 400 or more at a February or March assembly session and about 250 to 300 at other assembly sessions. Note that the administrative side often gives several answers to one inquiry, so the number of

⁴ There are 30 members from the Liberal Democratic Party and 10 members from other parties, including independents.

⁵ In the case of the regular assembly session in February 2015, there was the election of Toyama Prefectural Assembly members in April 2015, so the session schedule was slightly shorter than usual. For example, in the case of 2014, the session was opened on February 26 and closed on March 24.

⁶ The frequency and number of inquiries may vary according to the number of members belonging to each party. For example, in the case of a regular session in June 2013, two assembly members made inquiries to the administrative authorities, each as a representative inquirer for their party.

⁷ The administrative authorities often confirm the details of inquiries to make the answers more appropriate.

answers is not the same as the number of inquiries.

The number of whole inquiries in each year was approximately 1,200 before 2008; however, recently, there have been over 1,400 inquiries (Figure 4). Figure 5 shows inquiries per assembly member in chronological order, meaning that the number of inquiries per assembly member has tended to increase. Considering the above, to analyze how many environmental inquiries were made, "global warming-related inquiries" and "resources and energy-related inquiries" are distilled from all the inquiries at all assembly sessions for 10 years. These two inquiries are relatively understandable as typical environmental issues. The conditions to be distilled are as follows:

(Global Warming Policies, Greenhouse Gas/CO2 Reduction Policies and Related Inquiries)

- 1) These inquiries have "(global) warming," "greenhouse gases," "CO2" and so on as keywords in their content.
- 2) An inquiry that does not have one of the above keywords but that seems to be a related inquiry, for example, among the inquiry orders from No.1 to No.5, when No.1 and No.2, No.4, and No.5 have the above specific keywords, but No.3 does not have one, and if No.3 inquiry is apparently the related one, it is distilled as the applicable one.
- 3) Therefore, even if there is a possibility of a related question regarding an effect of global warming in a different inquiry, it is not distilled if it is not explicit because it may not necessarily be a direct inquiry specifically on global warming.

(Natural Resources, Energy, Energy Saving, and Related Inquiries)

- These inquiries have "natural resources," "energy/new energy," "energy saving" and so on as keywords in their content.
- 2) This is the same as 2) of the preceding conditions to be distilled.
- 3) Therefore, even if there is a possibility of a related question regarding resources and energy in a different inquiry, it is not distilled if it is not explicit because it may not necessarily be a direct inquiry specifically on resources and energy.

Other typical inquiries, such as those on the discontinuation of free shopping bags, are also included. When the outline of an inquiry includes two keywords, such as "global warming and new energy," it is counted twice. The list of distilled conditions does not include inquiries about typical pollution policies, such as dioxin prevention measures, because they are not necessarily related to the environmental consciousness of inhabitants but are often related to the management of certain industries.

In addition, to draw a comparison between environmental policies and other policies, the following three inquiries have also been analyzed: the inquiries on 1) "Forestry policies," which have Forest Environment Tax as one of the environmental policies, 2) "Tourism policies," which continually receive many inquiries in the assembly

sessions, and 3) "Shinkansen (bullet train) and new local lines transferred from JR West," the latter two of which were launched in 2015 and were recognized as significant events for Toyama inhabitants.

The results are as follows:

Between 2006 and 2015, more than 10 inquiries on "global warming" were made in 2008 and in 2009 as the target year (2012) of the "Toyama Plan to Stop Global Warming" approached. There were some inquiries in 2012, but direct inquiries on global warming decreased. It could be inferred that there were some shifts to resource- and energy-related inquiries following 2008 because of the negative effects of the Great East Japan Earthquake. Additionally, the number of resource- and energy-related inquiries was the highest in 2009 ever since the study period's commencement in 2006, but from 2011 to 2013, there were more inquiries (around 30), meaning that the assembly had recognized them as important (Figure 6). (Inquiries on nuclear power plants were not included in this research.)

It can be inferred that attention to the importance of exhaustible resources such as crude oil or petroleum increased because the promotion of the "Feed-in Tariff" regarding renewable resources started in July 2012 (Agency for Natural Resources and Energy [1]). Because Toyama Prefecture is famous for its waterpower and has positively promoted the introduction of small waterpower plants, some inquiries were regarding this area.

The relation between the amount of the budget and the number of inquiries is not necessarily clear. Subsidies are sometimes conferred by the national government, which means that the total budget could fluctuate, and sometimes the subsidy volumes are so large that the relation between them might be difficult to infer⁹.

Looking at the inquiries regarding the environment compared with other inquiries—for instance, the forestry policy—it is observed that the number of inquiries became high on the eve of its introduction (2007) and its proportion was 2.8% of all the other inquiries. Also, on the eve of its continuation (2012), it exceeded 2%. In addition, the number of inquiries regarding

Table 2 The Inquiries at Regular Sessions in 2015

Session Months	Session	The Number of Interpellators
	Plenary Session (Party Representative Inquiries)	1
February	Plenary Session (General Inquiries)	12
r eor dar y	Special Committee for the Budget Check	13
	Plenary Session (Summation Inquiries)	1
	Plenary Session (Party Representative Inquiries)	1
June	Plenary Session (General Inquiries)	10
	Special Committee for the Budget Check	10
	Plenary Session (Party Representative Inquiries)	1
September	Plenary Session (General Inquiries)	10
	Special Committee for the Budget Check	10
	Plenary Session (Party Representative Inquiries)	1
December	Plenary Session (General Inquiries)	10
	Special Committee for the Budget Check	1
Total		90

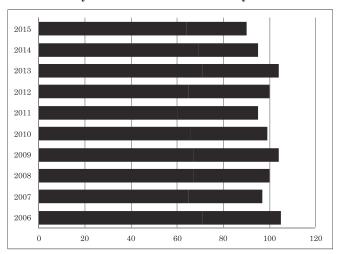
Source: Toyama Prefectural Assembly [9]

⁸ The New GENKI (Spirits) Toyama Creation Plan devised in 2012 describes the active introduction of small hydroelectric power generation. As of March 2015, there were 26 small hydroelectric power plants, and more than 45 plants were planned by 2021 (Electric Power Division, Public Enterprises Bureau, Toyama Prefectural Government [3]).

⁹ For example, in the case of Toyama Prefecture, a total of approximately 1,300 million yen was appropriated as a subsidy for "The Local Green New Deal Fund" from the national government between 2009 and 2011.

the Shinkansen and the new railroad line that was being transferred from JR West and run by a local company had one of the highest interest levels among inhabitants and became sharply higher from around 2011, when discussions seems to have begun on concrete actions, such as managing the new railroad line, renewal of the stations, and so on. Its highest proportion of the total number of inquiries was over 12% in 2012, and its proportion of the total number of inquiries from 2011 through 2013 was also over 8%. Compared with environmental issues, it had a more timely influence. The inquiries for tourism, which

Figure 3 The Total Numbers of Interpellators at Toyama Prefectural Assembly

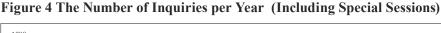


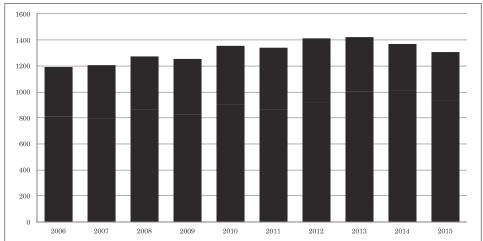
Source: Toyama Prefectural Assembly [9]

contributes to regional economies, have remained stable at around 4% of the total inquiries through the applicable years (Figure 7). One of the reasons behind this might be the fact that tourism is related to the Shinkansen issues.

Considering the above features, the following phenomena are observed:

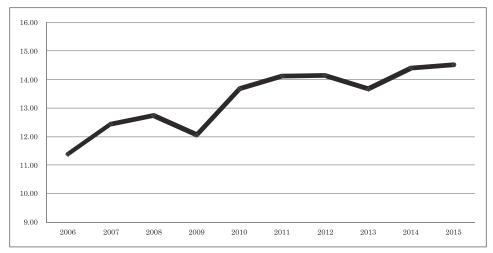
- 1) When an important policy is promoted or changed, inquiries on it tend to increase as the policy introduction comes closer.
- 2) The inquiries on issues at the whole country level that also affect the prefecture level tend to be asked in the prefecture's assembly.
- On-going issues and policies, such as those regarding tourism, are continuously inquired into by the assembly.





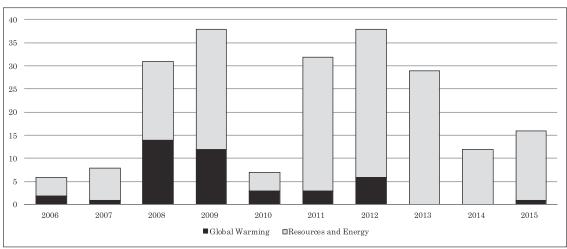
Source: Toyama Prefectural Assembly [9]

Figure 5 The Number of Inquiries per Assembly Member



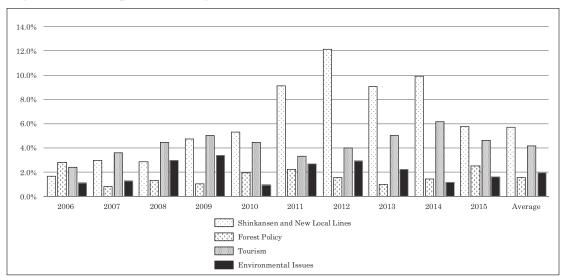
Source: Toyama Prefectural Assembly [9]

Figure 6 The Rate of Inquiries on Global Warming and Energy-Related Issues with Respect to Total Inquiries



Source: Toyama Prefectural Assembly [9]

Figure 7 The Comparison among Environment-Related Policies and Other Policies



Source: Toyama Prefectural Assembly [9]

Consequent to this basic research, the number of the inquiries by the assembly indicates that global warming and energy-related policies seem to be important from the perspective of the assembly members and therefore the prefecture's inhabitants. However, some policies garner higher interest levels and more inquiries in Toyama Prefecture, especially in specific years.

4. Conclusions

Using environmental issues as an example, this report fundamentally analyzes budgets and local assemblies. The study looks at the relation between 1) a local government's policies and its budget and 2) the administrative authorities and the assembly. The results of this analysis indicate that environmental policies are important and need continuance as prefectural issues. It can be inferred by noting the consistent amounts devoted to the environmental budget. In addition, because environmental policies are important, assembly members tend to ask many questions regarding related issues. This demonstrates the inhabitants' interest in the policies and the assembly members' desire to make the policies better. However, the analysis showed that other policies, such as tourism policies, garner a high level of interest from the assembly members. In addition, when a big project, such as the launch of the Shinkansen rail approaches, the number of inquiries on it tends to increase. Subsequently checking the interest in environmental policies through the inquiries from a broader perspective might lead to increased communication with inhabitants on global warming as an important issue of daily life.

There are two approaches to further analyze the basis of this research. The first one is to pursue a detailed analysis of the answers to the inquiries by the authorities. For example, it might be possible to learn more regarding the details of the policies by analyzing how the answers by the authorities have been presented or changed. Another area for analysis is the manner in which the inquiries are made by the assembly members. As the outline of an inquiry is akin to a "lead" for a newspaper article, their content might be different even if the leads look similar. The second suggestion is conducting a detailed time-series analysis of the trends in inquiring of each political party. It is also important to widen the policy areas beyond environmental concerns. To conclude, as only a limited result is obtained through this research, it is important to continue further analyses.

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Attached Table 1 The Target Value and Realistic Value of Greenhouse Gas Emissions (Thousand t-CO₂)

Benchmark	Target Value	2005 (Benchmark Year)		2020 (Target Value)		
Year		Target Value	Rate to Target	Present	Rate to Target	Rate to Target
(1990)			Value in 1990		Value in 2005	Value in 1990
11,181	10,510	11,847	+12.7%	13,721	+15.8%	+30.6%

Note 1: The Target Value of 1990 means simply a deduction of 6% from the realistic value in 1990.

Note 2: It does not include the amount of absorption by forests.

Source: Environmental Policy Division, Civic Affairs, Environment & Culture Department, Toyama Prefectural Government [4].