

ISSUES AND IMPROVEMENT OF LAND ACQUISITION SYSTEM FOR PUBLIC WORKS IN JAPAN

Masayoshi Tanishita
Lecturer
Department of Civil Engineering
University of Tokyo
7-3-1 Hongo, Bunkyo-ku, Tokyo,
113 Japan
Fax: +81-3-3812-4977

This paper aims to analyze the interests conflict structure in the process of land acquisition for public works and to propose improvement the process. At first, I show the "prisoners' dilemma" in the conflict structure based on case analysis. Then, I arrange the way to solve the dilemma and interpret interests adjustment system of Japan, UK, Germany and U.S. from the view point of settlement of prisoners' dilemma. Finally, I suggest some proposals about the process of public works.

1. INTRODUCTION

The process involved in public work such as road or railway construction, is Planning - Design - Land Acquisition - Construction - Maintenance. Of these, land acquisition is the most difficult in Japan. It is said that if land acquisition is finished, the public works project is also almost finished. Delays of land acquisition lead to an increase of infrastructure cost and a decrease in benefits from the infrastructure service. It is obviously very important that land acquisition should be carried out smoothly, but until now there have been few studies, apart from the interpretation of leading cases by lawyers. Problems of land acquisition usually result from a conflict of interests between the enterpriser, in this paper mainly public sector, and those who have rights in the land concerned. Thus, we should improve conflict adjustment system. This paper will discuss the present condition of conflict structure in city planning project by case analysis and suggest that prisoners' dilemma exists in the process. Then, interests adjustment system of Japan, U. K, Germany and U. S will be introduced and problems of Japanese system from the view point of settlement of prisoners' dilemma will be pointed out. Finally, improvements in the conflict adjustment system will be suggested.

2. INTEREST CONFLICT CONDITION AND PROBLEMS IN LAND ACQUISITION FOR PUBLIC WORKS - CASE ANALYSIS

We have investigated the actual process of land acquisition and abstracted issues of interests conflicts (Tanishita(1994)). One typical example is given in fig.-1. In this negotiation, at first the landowner asked for substitute land, but the enterpriser couldn't supply it because of a lack of suitable land. Next the landowner requested an increase in the amount of compensation, but this was refused because the amount of exceeded the standard of compensation. He held out and pressed home his demand for changing the site so as not to include his land. However, the negotiation process had no planning or design discussion stage, so his request was refused. Finally the enterpriser applied eminent domain and the negotiation was finished⁽¹⁾.

(1) We of course have the eminent domain system, but this system is not applied very often. The reasons are as follows.

- 1) It takes too much time and labor for application procedure.
- 2) A trial in eminent domain committee takes a lot of time because a landowner ask to start from objections to the project, the attitude of a enterpriser and so on which are matters foreign to the amount of compensation.

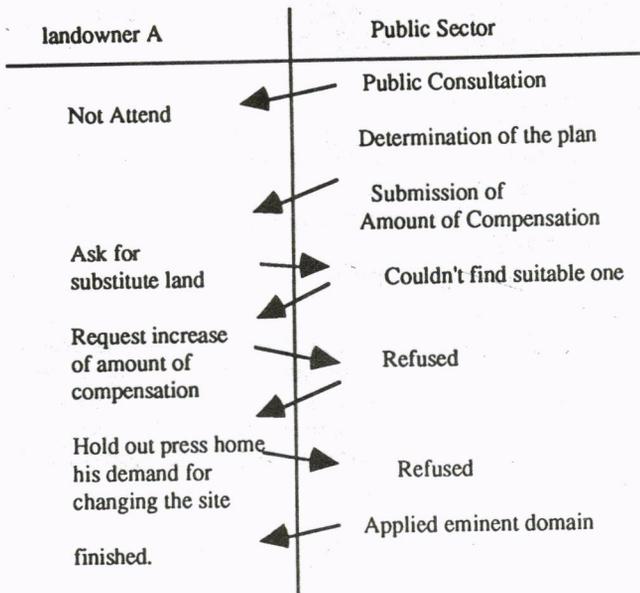


Fig.-1 An example of negotiation process

From these investigations, issues on interest conflict are abstracted as follows.

1. Objectives of the project
Ex.) Why is this road needed?
2. Methods to achieve objectives
Ex.) Why this route? Why adopt this land acquisition method?
3. Planning Procedure
Ex.) You should not decide without hearing our opinion.
You should adopt our proposal.
4. Interests about contents of compensation
Ex.) You should pay more compensation.

In these issues, it is natural that the amount of compensation becomes an issue, but objectives, methods and procedure are not appropriate issues in negotiation of land acquisition because these issues are covered at the stage of planning decision. Negotiation of land acquisition has limited stage to discuss issues. This affects this negotiation stage. In this negotiation, interests of compensation enlarges conflicts regarding issues at the planning decision stage, and vice versa. These conflicts interact with each other. So issues of negotiation are not only interest conflicts but also included conflicts of relationship between enterpriser and landowners.

We can find "prisoners' dilemma" structure in negotiation. Fig.-2 shows the interests conflict structure. The enterpriser has two strategies. One is to invest many resources such as money, time or labor in land acquisition, and the other is to invest fewer resources. Less investment is the dominant strategy. A landowner also has two strategies. One is to deliver his land, and the other is not to deliver his land. The second strategy is the

3) If a landowner disagrees with the decision of the committee of eminent domain, he will go to court. The judge takes more three or more years.

4) Japanese people have a negative image of eminent domain. Before the introduction of democratic procedures in this area, eminent domain was applied frequently.

dominant one. In addition to this structure, relationship conflict changes the payoff matrix. They have different image of conflict each other. This structure makes land acquisition very hard.

		Enterpriser	
		Resource such as money, labor and so on investment for land acquisition	
		many	little
Landowner	Supply his land	3, 3	1, 4
	Don't	4, 1	2, 2

There are the pair of payoffs in each cells, first the payoff to landowner and then the payoff to enterpriser.

Fig.-2 Prisoners' dilemma structure in negotiation of land acquisition

Why do issues occur at the planning decision stage and how does the enterpriser adjust these interest conflicts? To answer these questions, the Japanese planning decision system is described.

3. JAPANESE PLANNING PROCEDURE AND CONFLICTS ADJUSTMENT SYSTEM

The procedure of an city planning project is shown in the City Planning Act(Fig.-3). In this procedure, any person who has interests can participate at the public hearing and submit his written opinion to the governor of the prefecture. Then the essential points of written opinions are sent to the local city planning council. After discussion in the council, the project is decided whether carried out, or stop the project. Then land acquisition backed by eminent domain is effected.

In this procedure, the City Planning Act(1968) and Eminent Domain Act(1951) both play important roles in solving interest conflicts. There are two types of conflicts adjustment system in the provisions of these acts.

- 1)introduction to procedure
 - 2)improvement of interest to person who will suffer a loss
- The provision of each act are discussed below.

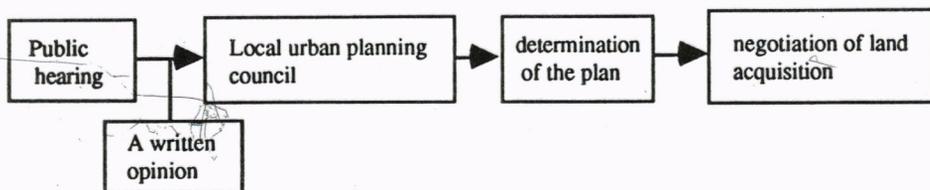


Fig.-3 A draft of decision procedure of city planning in prefecture

1. City Planning Act

1-1) introduction to procedure

Public hearing(article 16) ; This hearing is only held when the governor of the prefecture recognizes the need. In addition to the discretion of the governor, residents' opinions of are not always discussed in the hearing.

Submission of one's written opinion(article 17) ; A person who has an opinion on the project can submit his written opinion, but this written opinion is not always discussed in local city planning council, and if it is not discussed, the reason is not indicated.

Local city planning council (article 77) ; this council consists of men of learning and experience, representatives of government and assembly men. Anyone with interests in the project can not participate in the discussion and decision making.

1-2) improvement of interest to person who will suffer a loss

A burden upon beneficiary(article 75) ; When a new road is constructed, the land price along the road usually increases and what is called development gain occurs. In this article, people who get this gain should pay some amount. This burden is useful for keeping equity between landowners and for meeting the cost. However, until now except for sewerage project, this is not applied.

In short, the interest conflict adjustment system does not work well. As a symbol of this, in Article 3 of this act that provide the duty of the nation, a member of the nation has a duty to cooperate planning, are not the subject to planning.

2. Eminent Domain Act

2-1)introduction to procedure

Committee of eminent domain(article 59) ; The role of this committee is to decide the contents of compensation, not to deal with conflicts regarding objectives, methods and procedure of the project. So, the committee has a limited role.

2-2)improvement of interest to person who will suffer a loss

Compensation(article 69-86) ; There are mainly four principles of compensation. 1) The amount of compensation should be set before the start of the project. 2) Special emotional or other value assigned to the land by the landowner should not be considered in calculating the amount of compensation. 3) Nobody gets any loss or gain. 4) The boundary of the project should be minimum sufficient for the project. These principles are on the premise that 1) there is a pure land market, 2) land is a simple good, 3) the burden to beneficiary is done appropriately. However, these premises are usually not satisfied, and the compensation principle has limited interest adjustment.

We can not always expect these acts to settle conflicts of interest. In some cases, it might ever increase the interest conflict. Next, we will discuss how to settle interest conflicts.

4. SETTLEMENTS OF PRISONERS' DILEMMA AND APPRAISAL JAPANESE SYSTEM

In section 2, I showed the prisoners' dilemma structure. This dilemma does not exist in only land acquisition but also usual activities such as possession of nuclear bomb, price competition and so on. In this dilemma, the most important point is that individual rational activity does not ensure the whole rationality. Non-cooperative strategies are dominant, but on the whole they get low satisfaction. To solve this dilemma is a very important topic in economics, sociology, psychology and so on. Taking into account this research, we have to make the following efforts to settle this prisoner's dilemma (Katsuragi(1991)).

1. Efforts to cover the variance of information or ability

Ex.) Akalof's lemon(Rusmussen(1989))

2. Efforts to hold long term vision, or to repeat this game many times

cf.) Axelrod's Research(1984)

3. Change the image of conflict structure

If this game changes to a chicken game which is a competition to see who will back down first, we tend to cooperative behavior more.

In case of recognition to prisoner's dilemma,

4. Trust a decision to a third person or introduction of compulsory rule

From the view point of process to dissolve conflicts, these efforts are interpreted as follows.

Step.1) To hold the interest conflict structure in common.

Efforts to cover the variance of information or ability or efforts to hold long term vision, or to repeat this game many times play this role.

Then there are two ways to dissolve this dilemma.

Step.2-1) Improvement of interest to person who will suffer a loss. Repeated game will be also useful.

Step.2-2) Trust the decision to a third person or introduction of compulsory rule.

According to this arrangement, we can apprise Japanese interests adjustment system (Fig.-4). The characteristics of the system are as follows (Abe(1992)).

1) There is little effort made to hold the interest conflict structure in common. In other words, the enterpriser acts as leader of this game and landowners act as followers at the planning decision stage. Communication between them is not always smooth. In difficult cases, interest conflict at the planning decision stage doesn't dissolve. Such conflicts increase an interest conflict at the compensation stage.

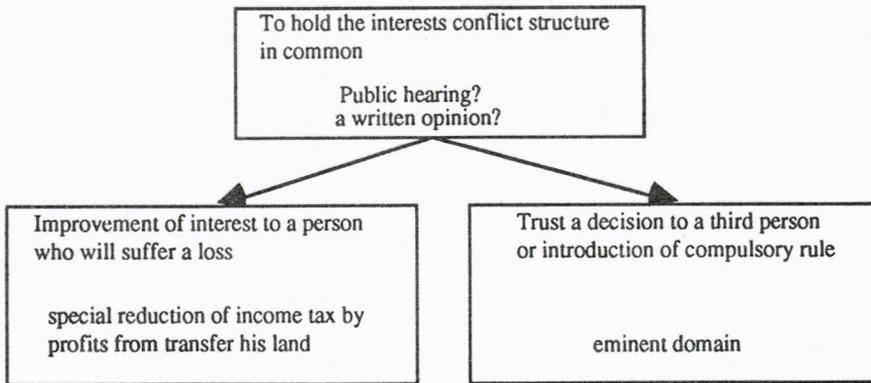


Fig.-4 Japanese interest adjustment system

2) The improvement of interest to person who will suffer a loss does not work well. There is a special reduction of income tax on profits from transfer. However, this benefit is seen to be no value for a person who has a conflict point about the planning decision.

3) Decision by a third person and introduction of compulsory rule have a limited role or take too much time for dissolution. Utilizing these alternative is premised on a common view of the interest conflicts. If there is no common interest conflict view, third person or compulsory rule have to start by creating that common view. Accordingly, committees play a limited role and compulsory rule does not work well.

How do we improve our interest conflicts adjustment system? Ideas from European countries and the U.S. are given below.

5. INTEREST ADJUSTMENT SYSTEM IN U.K, GERMANY AND U.S.

In the U. K, Germany and the U. S, it seems very difficult to acquire land for public works because of a strong sense of right. It is very useful for East Asian countries to know the interest adjustment system in these countries. However, each country has an original interests adjustment system.

1.U.K.(2)

i) Public Inquiry ; A public inquiry in which enterpriser and people who have interests in the project directly discuss the plan through a public consultation is held between them in front of an inspector. Both the enterpriser and the interested party with their lawyer or a chartered surveyor present their opinions and objections. The inspector plays the role of judge and makes a report on the plan. The enterpriser must improve their plan with reference to this report. This inquiry is useful for evasion of disadvantage and needless interest conflict.

ii) Chartered surveyors ; A surveyor, as the representative of a person who has a right in the project, consults with an enterpriser to amend the plan at the planning stage and negotiate the amount of compensation with a surveyor who represents the enterpriser. In short, in compensation negotiation, persons who are concerned do not directly meet. Therefore, they can refrain from emotional negotiation. The cost of surveyors is a burden on the enterpriser.

iii) Home Loss Payment ; In compensation, a person who loses his/her home can get additional payment. This payment helps negotiation to run smoothly.

2.Germany (3)

i) Rigid planning decision procedure (Planfeststellungsverfahren) ; A hearing is opened before decision of project adoption. This hearing is almost the same as a public inquiry in England. Then a report is made and sent to a government body of planning decision. This body decides weather to go ahead or stop. In case of execution, methods for eliminating disadvantage and for going to court are shown. Once execution of the project is decided, no body can institute a suit to stop the project or change the contents of the plan.

ii) Social plan (Sozialplan) ; When a renewal project or district plan is decided, a social plan that improve the situation of the social weak is also considered. Financial aid or advice is given to them. Japan also has the similar system, but it is at the discretion of the enterpriser. In contrast to Japan, the German system is fixed by law and transparent (Ohashi(1994)).

3.U.S.(4)

i) Public hearing, inquiry ; Citizens Groups have a lot of power. They request alternatives to the enterprise's plan and the discussion is carried out. Public hearings are held many times. The final plan is decided after opening the issue to the public and argumentation.

ii) Principle for moving house by public works ; A decent, safety, sanitary house is guaranteed. These three are the so-called the DSS principles. If a person can not find suitable house, the enterpriser has to supply one.

iii) Additional Payment ; Like a home loss payment, a person who loses his house can get payment for his house's value in market plus additional payment.

In addition to this, total payment to a title holder is amount of compensation minus development gains. It is called set-off. This system keeps equity of a burden between landowners.

(2) Town and Country Planning Act 1971
Compulsory Purchase Act 1981
Land Compensation Act 1973

(3) Gesetz über städtebauliche Sanierungsund Entwicklungsmaßnahmen
in der Gemeinde (Städtebauförderungsgesetz) 1971
Bundesbaugesetz 1976
Verwaltungsverfahrensgesetz 1976

(4) Administrative Procedure Act 1946
Amendments of Relocation Act 1971

From the view point of procedure for settlement of prisoner's dilemma, these interest adjustment systems are arranged as Fig.-5. In contrast to Japanese system,

1) there are many efforts to hold the interest conflict structure in common. The enterpriser bears the expense for interest conflict adjustment at the planning decision stage. Methods to present disadvantage are mainly in the form of inquiry. As a result, in compensation negotiations, the topic of issues is limited only to the amount of compensation, excluding objectives or procedures of the project.

2) Home loss payment or additional payment is useful for a person who will suffer a loss to improve interest. Because conflict structure is in common at the planning stage, few people assume a critical attitude toward the special payment.

3) The surveyor system in the U.K. is very rational for preventing emotional negotiation. And compulsory acquisition, eminent domain works effectively as the issue has already been discussed at the planning stage is and only the amount of compensation is inquired.

We have to keep in mind that in European countries and the U.S, it takes a lot of time and money to dissolve interest conflicts. For example, for a by-pass project in England of only 10 km, it takes more than 10 years up to the public inquiry. It costs about 30 % of the total project cost.

On the basis of these systems, improvements to the Japanese interest adjustment system are suggested below.

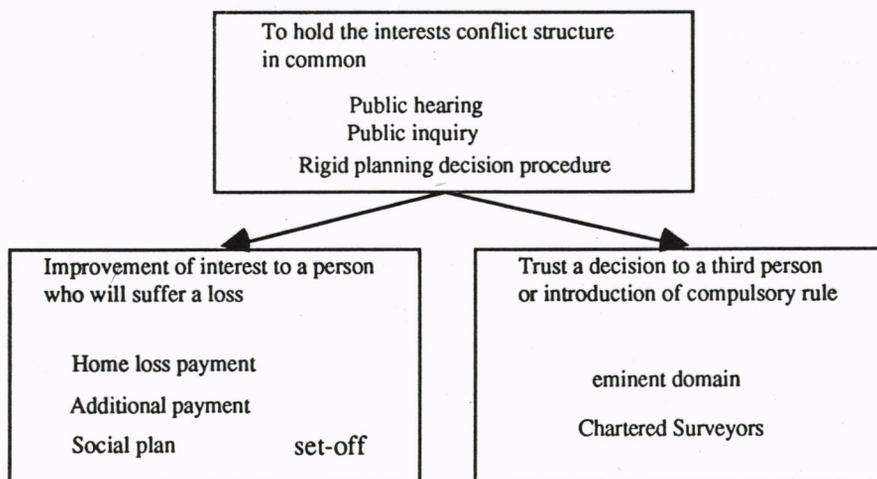


Fig.-5 Interest adjustment system in U.K, Germany and U.S.

6. IMPROVEMENT OF JAPANESE INTEREST ADJUSTMENT SYSTEM

i) Introduction of planning decision system in Germany

From case analysis, we can see that issues in negotiation of land acquisition in Japan mix planning issues with objectives, methods or procedure and compensation issues. This mixture enlarge interest conflicts. First of all, we should introduce an inquiry system as the Germany or the U.K. The inquiry separates the two kinds of issues and at the negotiation of land acquisition, dissolves enlargement structure. But, it is very difficult to create a common attitude or a sense of value for the project; we need a sense of democracy. Sensitivity to others, self-insight, and recognition of agreement to disagree are necessary. As we need to compromise, all we can do is to avoid violence and emotional conflict. So,

we need an inspector in the inquiry. Then we can hold same interests conflicts structure in common. For this inquiry to work effectively, we need compulsory system such as application of eminent domain or exclusion of judge to change or stop the plan, after decision making to execute the project. In Japan the local city planning council plays the role of public inquiry.

ii)Improvement of compensation rule

After the conflicts structure of prisoner's dilemma is clear, the easiest method to dissolve this dilemma is to change the payoff matrix. In other words, additional payment for a person who lose his life base. Landowners along the new route can get development gain, but landowners who lose their lands can get compensation excluding this gain. So inequity exists. By special fee for development gain or additional payment, we need a system for keeping equity on the project. Concerning about this point, we have land readjustment project in Japan. Landowners supply a part of their lands and construct new road or park is constructed gathering these parcels. In this project, equity between landowners is hold. However, land is decreased not only for district roads or small parks which is used by landowners, but also for trunk road or a station plaza that people without a burden mainly use. There is an inequity between people delivered his/her land and users. People who object this project always complain about it and some jurists point out that there is a repugnance between the land purchase method and this method (Fujita(1989)). The treatment of development gain is different. From this view point, compensation rules have to be reconsidered. It seems that a mixed system of land purchase method and method of land readjustment project is required. We can settle conflict between a person who wishes to sell his land because of a change of environment due to the project and the enterpriser, and conflict between a person who doesn't want to leave and the enterpriser. The option to sell his lands and leave the project site, or to remain and decrease his lands, will improve his utility and a landowner will feel his own importance. This is also useful for dissolving relationship conflict by early participation to the project.

A third person, like the surveyor in the U.K, is useful when issue is only the amount of compensation. These improvements are not so new and natural. However, our system does not guarantee them. The reason is that until the takeoff stage of the Japanese economy, to some degree, compulsory rules excluding public participation were necessary. However, now, after takeoff, we have a good chance to change this system. Until takeoff, passengers hope only to be safe, so they need safety belts. After that, they need no more safety belt, and each passenger asks to do what he/she wants. A crew chief should adjust their interests and continue a safe and comfortable flight. Of course, it takes a lot of money, but we get many benefits from takeoff, in other words, democracy.

7. CONCLUSION

This paper has examined the enlargement structure and prisoners' dilemma structure in the negotiation of land acquisition through case analysis. Then interest adjustment systems of Japan, the U.K, Germany and U.S. have been described. There are big differences between Japanese system and other countries' system. An attempt has been made to arrange the settlement of the prisoners' dilemma. We have few ways to dissolve this dilemma. Finally, I have suggested the improvements in the Japanese system, but they are not so new.

Last year, the Administrative Procedure Act was enforced in Japan. However, this act does not include the procedure of public works. At present in Japan and near future in East Asian countries, it is very hard to get consensus about public welfare. Economic growth is on one side, and environment protection is on the other. They are not always compatible. Using our intelligence and knowledge, we have to overcome this. One solution is decided by a person in power, but in democratic country, it is very hard. Then, the procedural justice replace. Wade(1988) said " Justice should not be only done, but should manifestly

and undoubtedly be seen to be done." Interest conflict is unlikely to suddenly vanish from our world, so we must continue to study systems for its amelioration.

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