The public constructions by Donburi-Kanjyo (rough accounting)
[From the second half of 20th century to the beginning of 21st century, Japan]

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Quality, process, and cost are the essential ingredients in any construction production and management system. However, quality, construction period observance (it is not a process) and the settlement according to planned budget in every single year have been emphasized in the public constructions of our country; That is to say, the high quality by the new technology, the strict construction period observance and the budget digestion in every single year were emphasized regardless of money and cost, which became the characteristics of the public construction. Around 1990, the Japanese construction industry became enriched because of the bubble economy. Because of this, the public constructions of our country developed me a kind of malignant chronic illness called Donburi-Kanjyo (rough accounting). As the result, the public construction cannot remove the distrust from the nation, the public investment decreases, and a market economy, which made a point of free competition, was introduced from the beginning of 21st century. Many problems such as the unreasonable pressure on the subcontractor companies because of the cost reduction without cost management, the spread of promissory notes on sites over the long term, the bad quality because of the construction work done with some corner-cutting, and the fact that bad companies act high-handedly have become tangible.

1. Event
Public offices and private companies have made various efforts together, in order to remove the distrust towards public construction which began following the scandal in 1993, and to maintain the environment for people who are engaged in infrastructure management and want it to be active throughout the future. Also, “the law of promoting the proper contract and bidding for the public construction” was promulgated on 27th, November, 2000. However, the distrust for the public construction and the blockade sensation of the concerned parties are not removed in the least, at the present time of 2005. In addition, because the public investment decreases and a market economy based on free competition was introduced from the beginning of the 21st century, many problems such as the unreasonable pressure on the subcontractor companies because of the cost reduction without cost management, the spread of promissory notes on sites over the long term, the bad quality because of the construction work done with some corner-cutting, and the f
act that bad companies act high-handedly are not solved yet.

2. Course
In 1992, the Fair Trade Commission admonished that the Saitama Saturday association be excluded because of the doubt over “Damage”. And, in 1993, for only one year later, twenty six persons including the prefectural governors at Miyagi and Ibaraki, the Mayor of Sendai, and the management executives of a big construction company were arrested under the suspicion of requesting to ensure the nomination of nominative bids for public constructions. As a result, the distrust for public constructions was heightened remarkably. From 1994, the Ministry of Land, Transport, Infrastructure (the Ministry of construction and Ministry of Transport in those days) has made “transparency, objectivity and competition” as the keynote. It has introduced the open bid instead of the nominative bid. It has been trying to decrease the cost by reviewing the ceiling price and the cost estimation. It has executed the pilot project such as the total technology proposal system, VE (Value Engineering), DB (Design Build), CM (Construction Management) and PFI (Private Finance Initiative) etc as the new system of bid and contract. In order to make understood the “the law of promoting the proper contract and bidding for the public construction” (which was promulgated on 27th, November, 2000) completely, the transparency and the competition of the bid and contract have been increased. The dishonesty has been excluded. The public constructions have been enforced properly. Various improvements have been introduced to create the construction market where the companies which have good technology and management can grow.

However, the distrust for the public construction and the blockade sensation of the concerned parties are not removed in the least at the present time of 2005.

3. Cause
The way of payments of public constructions in our country is remarkably different from that of the payment of the international standard of foreign countries (Figure-1 reference). That is to say, not only in European countries and America but also in the developing countries of Asia and Africa, it is common sense that the payment of public constructions from the public owner to the contractor (main contractor) is paid by cash (including checks) according to monthly progress. (Figure-1 (b) reference)

However, in Japan after agreeing on the contract the way of the payment from the public owner to the contractor is that 40% of the yearly contract payment is always paid into the bank account of the contractor within 2 weeks though the r
Real construction is not done. The public owner reserves the remaining 60% until the time of completion (the end of construction) regardless of the type of the service (the construction contract or the design commission service). And the remaining 60% is adjusted and paid so as to correspond with the planned budget of the beginning of the year and the additional correction by considering the design change.

Through the progress of payments to the subcontractors (the special construction company) and the maker of machinery and materials, in order to cope with the situation the public owner does not pay by cash according to the progress. The main contractors always pay partly by cash and by many promissory notes (like bonds of debt) in order to prevent a stream of substantial money from them. The promissory note will be just a waste paper if the main contractors go bankrupt. The subcontractor (the special construction company) and the maker of machinery and materials which received the promissory note, which may be extended beyond six months, cannot help going to the monetary facilities discounting in order to change the promissory note into cash. By being deducted commission rate and confidence risk burden charge, the promissory note of 1 million yen can end up being 900,000 yen or less in real cash terms.

For public constructions, it is the world commonness to expect “the flow effect” such as regional development and reflation countermeasure by the public funds (tax) redistribution. However, only main contractors and financial institutions can get benefit by the way of payment of the public constructions in Japan. Even if the investment of public construction is increased, the level of consumption of the majority (nation) who are related to the construction industry cannot be activated. If the payment is not paid according to the progress, the price of construction cannot be calculated exactly. The situation where the balance between cost and process is good is not secured.

So, the way of payment of public constructions of our country is Donburi-Kanjyo.
The way of payment of public constructions in our country
(Source: Author made)

The way of payment of public constructions of foreign countries (it is international standard)
(Source: Author made)
The meaning of Donburi-Kanjyo is using money haphazardly without calculating a balance (from Daijirin dictionary second edition). Donburi-Kanjyo derives from the episode where money was put in “Donburi” of a craftsman’s abdomen and could be taken in and out easily (Donburi is not the “bowl” of Chinese noodles soup or the eel bowl).

When those concerned with the public constructions in our country are told that they have been troubled with a malignant chronic illness saying Donburi-Kanjyo syndrome, many of them say “it is nonsense” and get angry. Though the public constructions are exposed to many credibility gaps and much infamy in 2005, the persons concerned do not have the subjective symptoms, which is the reason for it to be called a “chronic illness”. It is like the lifestyle habit illness such as hypertension or diabetes of the people who are fat because of intemperance and inactivity.

The way of payment of construction is one of the basic aspects of the contracts of public constructions. The symptoms of a malignant chronic illness saying Donburi-Kanjyo syndrome are shown as followings.

(1) In our country, progress payments which are the contract of international standard according to the progress of constructions and monthly payments do not exist.

(2) In the public constructions of foreign countries, it is essential for the
engineers of the public owner and the contractors to discuss daily a series of processes which are inspections, acceptances, assessment, design changes, and monthly fare adjustments. In our country, the public constructions have a series of processes which are inspections, acceptances (always), assessments, design changes, and the fare adjustment of a year budget by the way of Donburi-Kanjyo. This happens only once when the construction begins. So, the public owner and the contractor have little influence as an engineer. It is natural that the social standing of civil engineers in our country is remarkably lower than in foreign countries.

(3) Public constructions in Japan are made of lump-sum contracts. Regardless of the type and the classification of the construction, the units of specification etc., in short, money and cost, the public owner contracts with the contractors. The unit price contract (the lump-sum contracts) is the mainstream contract on public constructions in foreign countries (the international standard). The public owner contracts with the contractors with considering the type and the classification of the construction, the units of specification etc., in short, cost. Between the public owner and the contractors in our country, the "Public" unit price which is agreed does not exist.

(4) In the public constructions of our country, the public owner pays 30%-40% prepaid money of the cost of construction immediately to the construction company which concluded the contract of construction.

(5) The remaining 60-70% of construction payments is paid in order to make the fiscal result which coincides with the budget which the public owner planned at the beginning of the year (including the additional supplementary budget) in order to adjust the increase and the decrease of construction costs by design change after the inspection of the completion of the construction.

(6) It is necessary for the public owner to use up the yearly planned budget (including the additional supplementary budget). When the surplus of payments of constructions is expected, the urgent (in case, imaginary) constructions are created. And the owner uses up the budget. When the loss of the payments of constructions is expected, the owner makes the contractors cover it and afterwards will take care of them.

(7) In the public constructions of our country, the public owner "actually" does not worry that the planned budget can be sufficient for the construction cost. (The owner does not need to worry.)

(8) In the public constructions of our country, the contractors (the construction contractors) pay the subcontractors, who are the special construction companies and the makers of machinery and materials, by not only cash but also the promissory notes (Recently, 210 days was extended in some
Japan is the only country where the promissory note which is equal to the amount of the debt is allowed as a method of payments among companies concerned with the public constructions. The payments in the construction industry of foreign countries are paid by only cash (including a check).

(9) In the public constructions of our country, the price of payments of constructions are higher because of the additional various financial costs caused by the distribution of the promissory note.

(10) The public constructions of our country have the characteristics which mean cost management cannot be done though cost finance budget management, price management and profit management can be done well because of the Donburi-Kanjyo syndrome. It becomes remarkably difficult for the cost reduction to be scientifically and rationally practiced, if the cost management cannot be done.

4. Immediate Action

The indication that public works in Japan had become ill because of Donburi-Kanjyo syndromes and the discussion concerning it began in April 2000. In March 2001, the Ministry of Land, Infrastructure and Transport started the trial of "Progress Payments" in 2 constructions that Chugoku Regional Department Bureau and Tohoku Regional Department Bureau ordered. Mie Prefectural Land Development Department, which had carried out the advanced administrative reform under the directions of Masayasu Kitagawa, Governor of Mie Prefecture, decided to try "Every Month Progress Payments" of public works from fiscal 2002 and began to use it in 34 constructions in fiscal 2002.

It was decided that the system which changes the price for public works to completed amount payment every month from fiscal 2002 was tried in the prefectural land improvement division by the advanced administrative reform under the supervision of the Masayasu Kitagawa, Governor of Mie Prefecture, and it started in fiscal 2002 in 34 constructions.

5. Countermeasure

The verification of the effects and the extraction of the problems caused by the introduction of the "Progress Payments System" were carried out through the monitoring of the trial construction, the examination of the implementational method, the survey on the actual situation of the construction price payment method in the foreign countries, and so on by Ministry of Land, Infrastructure and Transport and Mie Prefecture.

As a result, the public owners from the Ministry of Land, Infrastructure and Transport and Mie Prefecture confirmed the effects of the "Progress Payments
System" introduction, while they clarified many problems. The problems consisted of the decision of the inspection technique standard, the treatment method of construction progress, the method of the inspection and the office work, the efficiency improvement of the payment desk work, and so on. At last they expanded its trial and they attempted to introduce it seriously after fiscal 2005.

In the meantime, the (super) major construction companies have disagreed with it and have been negative, and the regional small and medium-sized construction companies have agreed with it and have been aggressive concerning the stance of the contractors (construction companies) involved in public works in Japan.

It seems that there are about 600,000 companies in Japan, but Sa dao Ueda (the president of KAJIMA CORPORATION) CEO of Japan Civil Engineering Contractors Association, which consists of the top one hundred and several companies, stated that the usefulness of "Progress Payments" was doubtful at the press conference in June of 2002. In September of 2002 Yasuharu Maeda (the president of MAEDA CORPORATION) CEO of All Japan Constructors Association, which consists of the top several thousand companies, announced to the Ministry of Land, Infrastructure and Transport that he wanted to protect the then current payments system and disagreed with the introduction of "Progress Payments System".

But in 2003 it was written that "Progress Payments System is effective" in the editorial of the house organ of Japan Civil Engineering Contractors Association. Some companies, which were related to the construction industry, abolished the settlement by promissory notes and aimed to drastically reduce their publication. Also the scientific and rational problems on the design change procedure happened, and the actual situation of the nonpayment and the late payment to the subcontractors became tangible. Then, the effects which improved the finance condition of each private party concerned with public works have been recognized thanks to "Progress Payments System".

In December 2004, the Ministry of Land, Infrastructure and Transport announced that they had seven new pavement constructions, which were directly controlled by them, targets and would begin the trials in the whole country in order to switch to the unit price type cost estimation system. The unit price type cost estimation system means that public owners use the unit price and estimate cost. Then in case of this system, after public owner and contractors conclude the "contract" at the total contract price, they each other agree with the unit price in the every unit division. Therefore, it seems that they can attempt to make not only the contracted office work procedure smooth but also the cost estimation efficient.

"Public owners and contractors agree with each other over the unit price in the
Failure Knowledge Database / 100 Selected Cases

every unit division" which can make the contracted office work procedure of "Every Month Progress Payments" smooth. This is the contract system of the international standard.

We can say that Japanese contract system of public works approached the dawn of the restoration at last.

6. Knowledge

"Progress Payments" on public works is the tool that makes come true the following things as a kind of contract system. It can keep the relationship between owners and contractors being equal even with their strains. It can achieve accountability against taxpayers. Thanks to it engineers can exert their skill to construct high quality infrastructures. It can make the parties concerned attempt the technology improvement with each other. On the sound company management it can return tangible and intangible profits to society. We should introduce "Progress Payments" into public works in Japan as soon as possible and make effort to cure the malignant chronic disease called Donburi-Kanjo syndromes.

7. Background

The construction payment method (Fig.-1), that is to say, the contract system of public works of in Japan, was Donburi-Kanjo (rough accounting). We should recognize that we could rapidly achieve the infrastructure facilities' development and improvement what became the foundation of today's rich economic society, as it suited the Japanese society in recovery age after the World War II. This is why, it can be said that Donburi-Kanjo was the system which suited the past society. In the past Japanese society, the budget scale of public works was small, and the plan designs and constructions were carried out by the direct control of the public owner. The mission of the employment measures and the economic improvement countermeasures were remarkably enforced on public works as it was the poor age. In addition, it can be said that people strongly required that the public owners, from the viewpoint of the government, should protect and train the private contractors (builders). The modern Japanese society after 1990's has been the rich age, and the budget scale of public works rapidly increased, and the public owners came to be in the position of procuring constructions. During This time, public works which were not used in the principle as the economic improvement countermeasures began to grow up, and the construction industry matured. It has become unreasonable for the government to protect and train people by public works. We can say that it is natural to need to change the contract system, which suited the past society, in order to suit
the modern society under the present finance condition when the country and local government, which should cover government funds for investments and loans of public works, have been tight.

When the finance condition becomes tight, that is to say, the money which the private companies involved in public works receive, in a society which keeps Donburi-Kanjo, the parties concerned in weak positions will have a hard time. That present state is left will do retain the hard bully in the public works system.

8. Sequel
In a trial construction which the Ministry of Land, Infrastructure and Transport carried out in 2001, the construction manager of the contractor seemed to really have trouble. Every month he had submitted the bill to the staffs of the construction work office in the Ministry of Land, Infrastructure and Transport, and had frequently negotiated the withdrawal amount of money in the atmosphere that is the biased view of the remarkable official power, which gave him too big a stress, so he was very timid at first. But he seemed to feel “Progress Payments” were reasonable by reason of the method that public orders accurately assessed the construction progress and aggressively paid the construction price even if the advanced payment was zero.

At the beginning the public owners have expressed the strong fear over increasing the quantity of office work because of inspections, acceptances, and assessments, and on the division supervision business and inspection business. But “Progress Payments” contributes to highlight many problems, and provides many solution measures in order to carry out businesses without any serious errors and in order to introduce it earnestly within the range of the operation of the current laws and rules.

9. On the Side
The improvement and innovation of tender contract system in Japan was carefully planned by using the scandal about the public work in 1993 as an opportunity. And the active scientific research in Japan and the survey on actual situation of the supply system of public works in European and American countries and Asian countries has been carried out, and many research reports have been published. But the very important matters (that the contract system of public works in European and American countries and Asian countries was based on “Progress Payments” and it is ordinary that there was not previous payment) were not mentioned in any report at all. It is a mystery.
It is possible that, sometimes, things which are too taken-for-granted are failed to be reported.

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