Comparative Analysis on Land Consolidation Projects between Indonesia and Japan

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Abstract

City planning in Indonesia is currently facing some difficulties in using land consolidation project (L/C) to develop urban areas. In this study, we analyze the differences of implementation process of L/C projects in the Republic of Indonesia and compare it with Land Readjustment (LR) projects in Japan.

The L/C project in Indonesia needs to resolve the issue of how to promote non-subsidized projects in districts having high potential for land price increase in such an urbanized area of big city as Jakarta. When promoting it, two factors of implementation should be reconsidered based on analysis in this paper. Firstly, high consent rate of landowners to start projects. Secondly, large area size per district.

Keywords: land consolidation, implementation, Indonesia, housing land development

1. Introduction

Given the present circumstances in Indonesia where civic problems have been brought about by rapid urbanization and a delay in the land registration system, to name a few, the Badan Pertanahan Nasional (BPN), the country’s competent central government land agency, is currently promoting the Urban/Rural Land Consolidation (L/C) 1 Project with the aim of solving these problems. BPN, which used to be an organ under the Ministry of Home Affairs and Regional Autonomy (MOHARA), became independent from MOHARA in 1994 to perform such activities as adjustment between land tenure and land use, land survey, land registration, and other related works, in conformity to Presidential Decree Number 26 of 1988 2. Japan International Cooperation Agency (JICA), in support of this development, has been receiving trainees and conducting development study projects, among others (e.g. see Ref. 6)).

Yanase (1994), based on his experiences in taking part as an expert in the above-mentioned projects, points out the following three conditions for other countries to introduce the L/C system. First, the lots that were exchanged can be registered in a method other than subdivision/merging of the lots. Second, the implementing body is authorized to enforce subdivision/merging of lots on those who oppose the project. Third, development benefits can be appropriately utilized through reserved lots for sale, etc. It is considered particularly desirable that the first and third conditions be already incorporated in the land system of the country concerned. This indicates the importance of properly considering the conditions of the land system of each country. Relocation seems to be rather smoothly carried out in Indonesia, Thailand, and Malaysia because those countries are relatively free of such problems (e.g. see Ref. 2, 5)).

In this study, we aim to analyze the differences of projects between Indonesia and Japan, as shown in those of articles of laws, areas per district, speeds of consolidation, contribution ratio etc, and to clearly define obstacles to promotion of the projects in Indonesia in comparison with the case in Japan. It will make it easier to improve international cooperation activities of Japan such as training courses for foreign engineers working on land developments. The Urban/Rural L/C Project of Indonesia is categorized into two types, suburban and urban. In this paper, we focus not on the former but on the latter.

2. Legal Background of Land Consolidation Projects in Indonesia and Japan

2.1 Outline of Implementation Process

Indonesia’s first L/C project was conducted in 1982 in Renon District in the city of Denpasar, Bali. Since then, for approximately 20 years until December 2000, the number of projects covered rose to 274 with a total land area of 16,643 ha. The average implementation area was 60.7 ha, the average number of owners with territorial rights was 363, and the average number of lots prior to L/C was 403 (Table 1).
It should be noted that the average area per lot of 1,505 m² reflects agricultural land development for registration rather than urban area development that is understood in Japan (Table 2). The project categories consist of four types: APBN (subsidized by the national budget), APBD I (subsidized by the regional budget), APBD II (subsidized by prefectural and city budgets), and SWADA Y A (self-financed by an association) plus their combinations. The first three are similar to public works implementation in Japan, whereas SWADA Y A is quite close in nature to implementation by an association in Japan. As described later, because all projects are implemented by BPN, dividing them into “with subsidy” and “without subsidy” would be more accurate (Table 3). Although we have not fully confirmed the details, the decree of the Minister of Finance Number 3-487/ MK.01/1991 on adjustment of expenses for L/C through self-financing by private sectors, which was issued on May 15, 1991, should have facilitated project implementation.

There has been no case example of implementation of an L/C project in Jakarta, the capital city of Indonesia. This is probably because of following two reasons. Firstly, some parts of the urban area are improved by Kampong Improvement Program (KIP: About KIP, see Ref. 1)) in terms of residential environment. Secondly, most of lots in urbanized area are already registered as land title. A feasibility study was conducted in Jatiasih District of Jakarta as part of JICA’s project (see Ref. 4)); however, the actual implementation remains to be seen. Through subsequent adjustments, implementation of the L/C project in two pilot projects is in progress in the suburbs of Jakarta. They are the Tigaraksa and Rawakalong districts, both of which are located southwest of Jakarta and, according to the latest information, BPN officials are now persuading owners with territorial rights for the project’s implementation4. As a recent tendency, there have been more cases of implementation by regional governments rather than by the national government in furtherance of decentralization of authority.

In Indonesia, L/C tends to focus only on the development of residential lots and land registration, and is oftentimes not accompanied by the development of infrastructure. Resultant delays are therefore observed in public facilities and road development. Onishi(1999) pointed out that, due to the fact that BPN’s main jurisdiction lies in the promotion of land registration, “L/C for the purpose of land registration” naturally has its own limitations, thereby impeding collaboration with other agencies. Therefore, before going into the analysis of statistical data, it is first necessary for us to understand the above-mentioned background.

2-2. Laws and Regulations Governing L/C

One of the major regulations concerning L/C is the Regulation of the Head of National Land Agency Number 4 of the Year 1991 Concerning Land Consolidation. According to the list of implemented L/C

| Table 1. Basic Situation of Projects Subject to L/C (1) |
|--------------------------------------------------------|
| No. of districts covered | Total | Average per district |
|--------------------------|-------|----------------------|
|                          | 274   |                      |
| Total area covered (ha)  | 16,643| 60.7                 |
| No. of persons with territorial rights (No. of householders) | 99,366 | 363 |
| No. of lots prior to L/C | 110,555 | 403 |
| Percentage of land contribution (%) | 19.1 |

| Table 2. Basic Situation of Projects Subject to L/C (2) |
|--------------------------------------------------------|
| Average no. of lots per owner with territorial rights | 1.11 |
| Average area per owner with territorial rights (m²) | 1.675 |
| Average area per lot (m²) | 1,505 |

| Table 3. Number of Projects by Project Type |
|----------------------------------------------|
| Project type | No. of districts | Ratio(%) |
|--------------|------------------|---------|
| APBN: National Budget | 129 | 47.1 |
| APBD I : Regional Budget | 53 | 19.3 |
| APBD II : Pref. and City Budget | 28 | 10.2 |
| Self-financed project | 51 | 18.6 |
| Others: Mixed | 13 | 4.7 |
| Total | 274 | 100.0 |

| Table 4. Comparison of Basic Articles in the Two Laws |
|-------------------------------------------------------|
| Implementing body | Individual, association, administration, government body, etc. (3) | BPN (5) |
| Cost burden | Implementing body (118) | Land contribution by participating persons with territorial rights (7) |
| Persons qualified to participate in project | Owner or leaseholder of housing land, or persons with the approval of owner or leaseholder thereof (3) | Land right holders consenting to the implementation or cultivators of public land (1) |
| Compensation | Settlement amount (94) | Settlement amount (7) |
| Establishment of association or implementation of project | 2/3 or more of the total number of owners and leaseholders and 2/3 or more of the total acreage concerned (18). For public implementation, etc., subject to the decision by the council meeting attended by a majority of the members. (62) | 85% or more of the owners and 85% or more of the acreage concerned (4) |

Note) Prepared based on Reference 10. Number in Parentheses indicates the article number.
projects, L/C was first implemented in 1982 before the issuance of this regulation, suggesting the existence of other relevant laws/regulations, including: Basic Agrarian Law Number 5 of 1960, Law Number 56 of 1960 concerning Determination of Agricultural Land Size, Government Regulation Number 224 of 1961 concerning Implementation of Land Distribution and Compensation and an amendment thereto, Presidential Decree Number 55 of 1980 concerning the Organization and Working Mechanism of Land Reform, and Government Regulation Number 24 of 1997 concerning Land Registration.

The Head of National Land Agency Regulation 1991 consists of the following: matters to be considered, relevant laws and regulations, related matters, Chapter 1: General rules, Chapter 2: Objectives and goals, implementation, land contribution for development and cost burden, etc. for development, determination of land rights, and final provisions. The composition of the provisions is simpler than that of the Land Readjustment Law of Japan and the number of articles is less. The major differences between the laws of the two countries are summarized in Table 4.

Based on the above table, the major difference lies in the implementing body, which is only BPN in the case of Indonesia. In both countries, costs are substantially borne by way of land contribution. In Indonesia, excepting cultivators of public land who are eligible to participate, persons qualified to participate in a project basically consist of landowners. This is different from the case of Japan where consent from leaseholders is needed. In both countries, the settlement amount is adopted as the means of compensation. Consent from 85% of the owners with territorial rights is required in decision making for project implementation, which is high and suggests a consensus-oriented system in comparison with that required for approval by an association or a foundation, or resolutions of a council meeting in Japan. The consensus level has been set high, probably because BPN is the only implementing body under this system. Furthermore, in the actual implementation of L/C, it has been specified that relevant agencies of BPN should maintain coordination with prefectural governors, heads of prefectural authorities, city mayors, etc.

2.3 Comparison of Implementation Size, Etc., between Indonesia and Japan

In this section, we aim to disclose the characteristics of Indonesia’s L/C projects by comparison with those of Japan. As the target for comparison, three Japanese project types, including Arable Land Readjustment (ALR: Kochi Seiri), Land Readjustment (LR: Kukaku Seiri) under the old law, and LR under the new law, are referred to. In consideration of the relatively short history of relevant Indonesian projects, the target period for the corresponding Japanese projects was limited to approximately 10 to 15 years in the early stage of each project type. Also, in consideration of the availability of statistical data, the periods for comparison of the project types were set to nine years from 1900 to 1908 for ALR, 15 years from 1923 to 1937 for LR under the old law, and 15 years from 1955 to 1969 for LR under the new law (Table 5).

Table 7. Cumulative Totals by Project Type

| Project Type | Private implementation (ha) | Public implementation (ha) | Total (ha) |
|--------------|----------------------------|----------------------------|-----------|
| ALR (Japan)  | -                          | -                          | 119,752.2 |
| Old law      | 23,189                     | 1,190                      | 24,378.8  |
| (Japan)      | 95.1%                      | 4.9%                       | 100.0%    |
| New law      | 21,852                     | 52,866                     | 74,718.5  |
| (Japan)      | 29.2%                      | 70.8%                      | 100.0%    |
| L/C (Indonesia) | 2,977                      | 13,409                     | 16,386.1  |
| (Indonesia)  | 18.2%                      | 81.8%                      | 100.0%    |

Note
1) Although all projects are substantially government-initiated in Indonesia, they are divided here for comparison.
2) The sum total differs from that of Part 1 (Table 1) because the figure was taken from Reference 3) without any change.
When average implementation areas per district are compared, the largest figures are naturally seen for ALR projects outside urban planning areas (Table 6). One characteristic of the L/C of Indonesia is that the implementation area per district is larger than any of the infrastructure projects of Japan. Whereas the average implementation areas are almost the same in the LR under the old law and the new law, the average implementation area of Indonesia’s L/C projects is almost twice as large as that under the old law of Japan.

Although it should be noted that the years in which the statistics were taken vary in each case, the cumulative totals by project type, either subsidized or non-subsidized, are summarized in Table 7. LR under the old law in Japan is said to have been promoted by private landowner associations. Meanwhile, the initial 15 years under the new law are said to be characterized by public works implementation. It can be said that Indonesian cases are similar to the latter, and are government-initiated.

The cumulative totals of implementation areas are shown in Fig. 1. The slope of the graph may indicate the speed of implementation: a high implementation speed is observed for ALR in Japan. The implementation speed of land adjustment under the new law is the highest, followed by those under the old law and of Indonesia. This indicates that the Indonesian projects are implemented at a speed similar to that of the old law.

Fig.2 shows changes in the average implementation area per district by year, and indicates that L/C in Indonesia has always dealt with a large implementation size. Tsuruta (1995) says that, in Japan, the fact that the average implementation area per district for LR under the old law is small from approximately the seventh year is probably due to the diffusion of association-led LR under the old law in urban areas, which has contributed to the general decrease in size. It is worth noting that the average implementation area varies greatly from year to year in Indonesia.

Fig.3 shows percentages of the number of projects by implementation area for each project type. In Japan, the target districts are mostly around 50 ha in size when ALR is also included. Although a precise comparison is difficult because of a slight difference in ranking of implementation area, Fig.3 shows each of the cases side by side, where “chobu” (Japanese unit of area) can be considered equivalent to almost 1 ha. These figures disclose one clear characteristic: the large variation in implementation area observed in Indonesia’s L/C for district sizes of up to 100 ha. Among the project types, Indonesia’s L/C shows the smallest number of districts of which size is not larger than 10 ha. This tendency is noteworthy as the percentages of districts that are larger than 100 ha are almost similar among the four cases.

Fig.4 shows changes in the percentage of land contribution by year. Due to unavailability of data, comparison data are limited to those from LR under the old law. Although there exist some fluctuations, the

Note) “chobu” is approximately same as “hectare”.
percentage of land contribution for Indonesia shows a consistent value of approximately 20%. The percentage of LR under the old law, after showing an increase during the initial few years, dropped. Generally speaking, the percentage of land contribution tended to become small for subsidized projects. The percentage of land contribution in domestic LR projects under the new law which were approved during the period from 1970 to 1979 was 25.5% for subsidized projects and 31.3% for non-subsidized projects. This clearly shows that the percentage of land contribution was approximately 6% smaller for the subsidized projects than for the non-subsidized ones. On the other hand, with regard to the average percentage of land contribution per district by project type in Indonesia, it is 18.3% for subsidized projects and 22.9% for non-subsidized projects, also indicating a similar tendency, although not as clear as the cases under the Japanese new law, namely, subsidized projects require less land contribution. According to References 12), the average percentage of land contribution is 16.6% for LR under the old law, 29.6% for that under the new law (1970 to 1979), and 19.1% for that of Indonesia, indicating that land contribution under the new law is largest, followed by those of Indonesia and under the old law.

3. Implementation Process by Project Type with/without Subsidy

Whether or not a project is subsidized is an important factor when we discuss differences between public and private implementation in Japan. Figs. 5, 6 and 7 regrouped some of the indexes based on this categorization. We summarize our findings as follows.

The detailed distribution of the large variation in implementation size mentioned in the preceding section is shown in Fig. 5. Subsidized projects are characterized by their small size. Fig. 6 indicates that the number of non-subsidized projects has been increasing in recent years.

It is understood from Fig. 7 that a large number of non-subsidized projects are seen in Java. In terms of the number of households of persons with territorial rights,
the number of non-subsidized projects is polarized into “below 100” and “500 or more.” The number of lots per district also reflects this polarization, which is either small or large. The percentage of land contribution can sometimes be quite large in non-subsidized projects, where certain situations that require a large percentage of land contribution are presumed to exist.

With regard to the number of lots per person with territorial rights for each district, there are many persons with territorial rights who own two or more lots in subsidized projects, whereas many persons with territorial rights in non-subsidized projects only own one lot. In terms of implementation areas per person with territorial rights, 47.1% have an implementation area of 500 m² or below in non-subsidized projects, which is markedly high in comparison with 6.9% in subsidized projects. To put it briefly, the smallness of the ownership in terms of land size is more conspicuous in non-subsidized projects.

4. Conclusion

Based on the analysis of this paper, findings are summarized as follows.

A high consent rate (85%) from the landowners is set when implementing a project compared to two third (67%) in the case of Japan. This is one of remarkable differences between two countries. As Yanase and Hayashi (1994) pointed out the necessity of a compulsory procedure to promote landowners’ participation in projects, it can be considered that the lower consent rate may enable L/C projects to be more compulsorily implemented in Indonesia. In order to realize it, types of implementation body should be more diversified at the same time as I mentioned the reason of high consent rate in Chapter 2-2.

The implementing body of Indonesia’s L/C is only BPN reduces diversity that is seen in Japanese projects. In Indonesia, a greater portion of L/C falls under the subsidized projects by public, similar to the cases of initial LR projects under the new law in Japan.

From a comparison of implementation size, it is revealed that the implementation area per district in Indonesia’s L/C project is very large and varies widely. Many projects concerned have the primary objective of promoting land registration and, accordingly, have often been carried out in rural areas of local cities.

The L/C project in Indonesia needs to resolve the issue of how to promote non-subsidized projects in districts having high potential for land price increase in urbanized area of big cities. When promoting it, some remarkable differences of implementation such as the consent rate and the area size per district will favorably be reconsidered based on above-mentioned analysis.

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Notes

1. In Indonesia, “L/C” is a popular description of Land Consolidation projects. To define a difference from a case of Japan, we describe a case of Japan as “LR” without “/”.
2. From an interview with an official at BPN office in Jakarta, March 2002.
3. Data source of each table and figure is from following reference. From Table 1 to Table 3 and from Fig.5 to Fig.7, Ref. 3). From Fig.1 to Fig.4, Ref. 3, 7, 8, 9, 12.
4. From an interview with an official at BPN office in Jakarta, March 2002.

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