1. Land Readjustment Development in the World

It later mentioned that Japanese land readjustment system referred German administrative law. In Britain and the United States, there is no concept of division of public and private law, and all the exchange of rights is taken action as contract manner.

In Thailand, Nepal and Bhutan, land readjustment needs consensus building, replotting planning, issue of land title registry. This process refers to the system to issue new land title registry by collecting and redistributing all rights under the land pooling method. This system allows taking measures of land expropriation for the opponents based on the land-expropriation law. Formally, it may be similar to Japanese system but it is notable that legal grounds are different. At present, land readjustment supports equipping public facilities in suburbs, and proceeding planned urbanization in each country.

Colombia sets strict urban plan in slums, and makes citizens follow land use plan. And private law permits right exchange. Act of contract adopts trust based right exchange. This system allows squatter having legal right of possession, participating in the project, giving bonus based on the size of area, equipping better social housings. Incentive of transfer is increased through such measures. Brazil also has advanced to legalize same system.

Finally let it introduce German land readjustment which is most consistent to city planning. German city planning system is basically composed of F plan and B plan, called building management plan, which is regulated by local authority. B plan regulates systematic city planning having legal binding. It includes all public facilities including traffic land for parking lot and pedestrian space, supply and disposal facilities, parks and green space. B plan is a detailed land use plan of suburbs as well as concrete building execution plan, and umlegungverfahren (land readjustment) is located as a means to realize these plans. German land readjustment is roots of designation of replotting system. In Germany, only development benefit by facility equipment is
subject of land decrease, and planning benefit is not returned to the landowners. In the period of land bubble in western in the beginning of 21st century, it is told that damage in Germany was relatively smaller by decline of value of real property after bubble burst, due to the system above.

Land registration system is a legislative system to be founded origin of state. Concept of land replotting is simple. To grant enforcement against opponent and registry of replotting land = issue of new right are the matters related to origin of legislative matter, rather than city planning matter, and it is most important for institutionalization to adjust opinions and reach consensus between judicial authorities.

2. **History of Land Tenure(Ownership) in Japan**

Japan (approx. 370,000 km²) is isolated from the continent and had never been conquered by any other races (Japanese government existed and it functioned even in the period of occupation by the allies from Sept. 1945 – Apr. 1952). However, 70% of the land is mountainous and only 20% is suited to farming and urban land use.

History of farming development has more than 2000 years. Consequently, land owners had strongly emphasized rights of landownership, and land had belonged to farmers, not suzerain, although they had authority of tax collection. Productivity of Rice farming was high enough to provide for a family in 1 ha rice field. Therefore, most farms were family-run in small scale, and more than one hundred million (except Hokkaido and Okinawa) lots of farm were registered in the latter part of the 19th century. Currently, the number increased to more than two million (except Hokkaido and Okinawa). Dividing of land is linked to petty land ownership, and number of land owners including urban and mountainous land increased to 30% of all the population of Japan.

From the late 19th century to mid of 20th century, there used to a movement that farm land concentrated to some large scale land owners. However, tenant-farmers received right of land ownership, and most of them owned 1ha-scale farm due to land reform during the period of occupation by the allies, and now, the situation has been continued. Burden of land tax levied in 1880s was heavy and inheritance tax revised after WWII was 70% as highest until 2003 (it is 50% as of now). As a result of such tax system and land reform, Japan realized relatively equal society which land and other assets are not concentrated to some large-scale land owners.

On the other hand, protection of small scale land title owners leads difficult enforcement of public works, Urbanization in Japan accelerated faster than in western countries from mid of 19th century on, and land values in metropolitan area kept rising.
except temporary economic depression such as the Great Depression in 1929, defeat in 1945, and the oil crisis in 1973, and reached to highest point in bubble economy in 1990. As a result, people have believed the myth that real assets ownership led economic success. Recently however, people recognize real assets are just one of economic assets whose value depends on economic trend.

The number of land title owners will be one thousand if 100 ha land is developed in suburbs of Tokyo (urban sprawl permits small-scale land title ownership as100 m²). Under such social and economic condition, system including exchange of land title such as land readjustment is more preferable than large-scale land purchase for development area. However, in high economic growth period in around 1970, a law supported by Compulsory Purchase of Land Act was executed to permit large-scale urban development as housing shortage became serious due to concentration of population in metropolitan area. 2,000 to 3,000 ha scale new town was developed as Senri New Town in Osaka, Tama New Town, and Chiba New Town. At the same time, land readjustment of much large area than urban development was executed. Tsukuba Science City was a project which applied two development methods of large-scale land purchase and land readjustment.

3. History of Land Readjustment development/reconstruction in Japan

1) History of land readjustment

Land readjustment started from mid of 19th century for the purpose of redistribution of farm land. It was for equipment of farm road and irrigation canal, and concentration of farm land for same farmers, and in the beginning, it was a project for land title exchange and construction by voluntary base. At that time, industrialization had just started in Japan and agriculture occupied most portions in Japanese industry. In such historical backdrop, the government positively supported and participated in projects for improving agricultural productivity, and The Readjustment of Arable Land Act was executed in 1899. This law refereed the legislative system of Bayern and Prussia of Germany who formed a unified nation in the latter 19th century.

It features that The Readjustment of Arable Land Act gave land-owner organization independent authority to readjust farmland. On the system before legalization, landowners often changed by inheritance and trade and its situation led that not all landowners supported the project. The project could not be conducted by only one opponent. To prevent such situation, it legalized as follows: opponents needed to participate in the project which had more than two thirds supporter of landowners (who also owned more than two thirds of land). All the landowners needed to follow the
design of farm road and irrigation canal, and readjustment, which passed legal procedure. Project executors had right of investigation to land for survey and free reading and copy of registration documents.

The Readjustment of Arable Land Act also legalized that public facilities such as roads and waterway in the project area were reverted to the original owners after the project.

Real Property Registration Act made an exception that the project executors entrusted the land registry to registrars to correspond to the change of land borders after the readjustment of land. Originally, the person concerned need to apply to the land registry, but the readjustment is almost done automatically without his/her will. So the exception was legalized on the Real Property Registration Act. The gap between the estimated land area and real one could be filled up by money.

Legal grounds are important for the system design: to register the land after the readjustment and handle project opponents.

There are general concept of public law and private law in Japanese and German law. Both countries’ system executes the project based on the Readjustment of Arable Land Act, one of public law. As a result, change of landownership is treated as an act of executors (administrative measure). Legal steps are as follows: first, the administrative measure named designation of replotting is notified publicly. At the next, all the change of landownership in the project area is occurred simultaneously on the following day. and its measure’s effectiveness is secured by the registry act. As it is recognized that administrative act based on the public law has strong legal stability, opponents to the project are also able to receive the readjustment land, and the project can be executed (the one who have objection to the administrative measure is guaranteed to appeal to Administrative Appeal Act and lawsuit by a trial for protection of property rights).

2) History of land readjustment (2)

The Readjustment of Arable Land Act was amended in 1909 and landowners’ organization granted juridical personality. This made the organization easily get loans from banks for project. The system to return profits for development which is called reserve land later on was also established. It is system that project executors can allot the income from the sale of the reserve land to project fund. In this case, project executors need to register preservation of ownership as no land exists before the project.

Through process above, it became common that the land area reduced after the readjustment. It is interpreted under the law that there is no infringement of property
rights as the value of the land will rise reflecting equipment of public facilities and productivity improvement to land price.

In 20th century, housing development became more active in metropolitan area. Although there was no sufficient urban planning system in Japan, urban infrastructures were equipped in suburb where urbanization accelerated, which were taken advantage for administrative bodies. Major cities, such as Kobe, Nagoya subsidized to development projects. The standard of city planning and design gradually improved.

The City Planning Act and Urban Building Act (prior building standard act) was established in 1919, which was not so late compared to western countries. It is worthy of note that land readjustment system was included in the City Planning Act as follows: land readjustment is to be executed to promote housing development in city planning area. The Act showed two types of land readjustment: one was conducted by association or group for housing supply, and the other was conducted by local authorities under city planning. Both types applied same procedure as the Readjustment of Arable Land Act.

From 1919 on, land readjustment provided two types of project. One was a project of housing development conducted by associations. A lot of upmarket residential areas in metropolitan area were developed by this type in early 20th century.

On the other hand, land readjustment was executed in Tokyo-shi, Yokohama-shi, etc as a reconstruction project after the Great Kanto Earthquake in 1923. And the Special City Planning Act was established (abolished in 1940) as only regulations of the City Planning Act could not cover for reconstruction project. The Special City Planning Act showed that ‘residential area with buildings’ can be transferred to the city planning area, and ‘10% of free land reduction’ was set, regardless the regulations of Readjustment of Arable Land Act. The latter requests landowners burden of 10% of land reduction, and it was set after estimated 10% rise of land price by the project execution in its backdrop. Land reduction more than 10% would be compensated. Estimation of compensation was set at examination board of compensation (member of evaluation at present). As executors were not landowners’ voluntary base organization, land readjustment committee (land readjustment council at present) composed by landowners and leaseholders was established for opinion exchange about design, designation of replotting and compensation. Designation of planned area of designation replotting was also established. By this system, land could be used not waiting for designation of replotting as one off administrative measures conducted at last stage of the project. It was almost impossible to execute land readjustment in already developed suburbs without system to proceed building and equip roads and land transfer
simultaneously. Burden of local authorities was within one half for road and one fourth for park, and it was regulated that owner of public facilities such as road, park, canal needed to bear the execution cost.

3) History of land readjustment (3)

Damage of air raids by August 1945 extended to 215 cities covering 64,500 ha. It is no exaggeration to say that most cities became burnt-out by attack of United States Army. In 1946, 115 cities covering 64,153 ha were designated as war-damaged city. It was an unprecedented in the number of deaths and devastating damage in Hiroshima, Nagasaki where hit by atomic bomb, and Tokyo where were center of industry and received repeated air raids.

Japanese Government established War-damage Reconstruction Agency (Ministry of Land, Infrastructure and Transport, as now) in November 1945, and ‘Basic Policy of Reconstruction Plan for War-damaged Area’ was approved at late of December. In September 1946, the Special City Planning Act was established and promulgated again (abolished in 1956). The content was equivalent to old act, but election of representative from landowners, dismissal process, protection of lease right holders, relief measures for small-scale landowners, and some practical matters were added reflecting democratization and past experience.

In ‘Basic Policy of Reconstruction Plan for War-damaged Area’, better standard for public facilities was designated. Therefore, width of major trunk road expanded to more than 50m in metropolitan area, and 36m in small and medium size cities, respectively. Green space needed to be more than 10% of suburb area. 50 – 100m width road and square could be even prepared depending on its necessity. As a result, symbol roads and tree-lined roads were equipped under the war-reconstruction project except in Nagoya, Hiroshima, Sendai. In Tokyo (mergerd Tokyo-shi and Tokyo-fu in 1943), some residential areas were left as inferior in quality due to restriction, which is still left as negative legacy.

The Land Readjustment Act, as independent business act was established in 1954. This act aimed to cope with war-reconstruction project which was about settled gradually, to cope with development of residential area and the needy left behind the war-reconstruction project, and to develop housing in suburbs where sprawling accelerated (in its background, the Readjustment of Arable Land Act was abolished in 1949 and revised as Land Improvement Act).

Major revised points were as follows:
(a) Project purpose and plan

The project purpose was changed from ‘to promote land use as residential quarter’ in
Article 12 of old Urban Planning Act to ‘equip public facilities and promote residential quarter’. In project planning, it was stipulated that ‘the plans of public facilities and residential quarters have to be reasonably prepared to measure environmental improvement, to secure traffic safety, and to develop sound suburbs’. Inspection procedure of project plan, and submission, inspection and procedure of opinion were also regulated.

(b) Decision of Executor and areas

It is important that project execution by ministry made permanent which was temporarily granted as war-reconstruction project. Minister of Construction can execute by him/herself not only ordering governor and mayor to execute in case of emergency. Period and dismissal system of board members of land readjustment association, delegation, and committee members of land readjustment assembly were also regulated.

(c) Allocation of cost

‘Depreciated compensation’ was regulated taking over the regulation of the Special City Planning Act. This regulation defined the basis to secure land for public facilities necessary for land readjustment for reconstruction project after disaster. Allocation of public cost by local authorities and administrative agencies was also defined, and state liability and financial contribution by local authorities were regulated. Reserve land, important for cost allocation system for land readjustment was institutionalized which is still valid at present.

(d) Regulation for designation of reploting

It is worth of note that approval process for designation of reploting including inspection was regulated. As planned reploting changed to ‘temporary reploting’, and this change made temporary reploting even designated for construction work, it became more flexible to conduct public facility construction work and building transfer construction work at existing urban area.

Spatial reploting system was established: floors and site of building was distributed instead of land in case of underestimated housing and leased land under a certain size. This system was developed to Urban Renewal Act which was regulated in 1969.

(e) Procedure

Land readjustment committee at Special City Planning Act changed to ‘land readjustment council’ and each procedure became more detailed as Public Offices Election Act was referred for selection.

One of notable point is that ‘direct execution’ was regulated which made executors directly conduct building transfer and elimination. This regulation deserves recognition
as applicability of land readjustment expanded in case of emergency. Executor was only permitted to order transfer of buildings within three months (eviction to occupant) under the Special City Planning Act, and to transfer, eliminate, and tear down buildings and stones under the Readjustment of Arable Land Act.

(f) Legislative system of land readjustment

Land readjustment adopted ‘method of transfer of right by administrative measure’ at the stage of constituting the old Readjustment of Arable Land Act, and this was different from ‘rules of private law’ which transfer each right among parties under the contract. Transfer, inheritance, and settlement of right were necessarily regulated as special regulation (article 113 – 117 of the Act) on the Land Readjustment Act, as the system was developed mainly for designation of replotting as urban areas development. Special rules were regulated in detail such as compensation for loss instead of compensation for damages in case of giving damage to person, which were different from private law. As a result, the Land Readjustment Act became quite complicated.

4) History of land readjustment

Land readjustment has been considered as an important tool to conduct urban development project under Japan’s urban development system after the City Planning Act was amended in 1968. ‘The Act on Special Measures Concerning the Promotion of Housing and Residential Land Supply in Major Urban Areas (hereinafter, Special development act for major cities)’ established in 1975 based on experience of large scale land readjustment execution especially gave large influence on the system of land readjustment. The Special development act for major cities defined ‘apartment housing district’ and ‘assembled agricultural district’, and it was regulated that the applicant applied transfer to one of these districts. This system legislated the replotting not based on the principle of correspondence. Law officials call this system ‘apply-based replotting’ or ‘request-based replotting’.

Apply based replotting system has been gradually utilized for large-scale land use corresponding transition of social and economic condition. ‘The Act on Special Measures concerning Comprehensive Advancement of Housing Development and Railway Construction in Metropolitan Areas’ established in 1989 regulated to collect preempted land of local authorities to ‘railway facility area’. Secure for railway land by this regulation led to success of the project for Tsukuba Express of Metropolitan Intercity Railway.

‘The Act on Special Measures concerning Reconstruction of Urban Districts Damaged by Disaster (hereinafter Reconstruction Act)’ was established in 1995 for
reconstruction from the Great Hanshin Earthquake and ‘reconstruction apartment area’ was regulated. It can be said that setting and apply for reploting to the ‘reconstruction apartment area’ applied past system of apply-based reploting for emergency reconstruction, which had passed transition since establishment of apartment housing district on Special development act for major cities. ‘System of land purchase ’ within urban disaster recovery promotion areas is integrally with restriction of building construction, and has similar effect as system to protect liberty and rights of leave from project area for the person who is opposed to the city planning project. System of ‘housing benefit instead of compensation’ is to grant housing instead of compensation expense and not grant reploting land. This system supports disaster victims whose asset is only land but not housing, to return home from temporary housings without cost burden. Reconstruction Act has carried out important role on the Great East Japan Earthquake in 2011.

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