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Conflict, consensus or consent: implications of Japanese land readjustment practice for developing countries

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Abstract

This paper is relevant to the international effort to transfer an urban land development technique, land readjustment (LR), to several developing countries in South East Asia. The paper examines the model of the Japanese LR method presented by Japanese scholars and development experts to the international audience, and argues that in the context of attempts by several developing countries to adopt the method, there are several crucial shortcomings of the description of Japanese LR in the existing literature. Most important is that the history of opposition to LR in Japan is virtually ignored, and there is very little mention of the enormous commitments of local planning resources necessary to organise consent to projects. These issues are important for an understanding of the use of LR in Japan, and may also have implications for those attempting to make use of LR techniques in other countries. The paper briefly outlines the LR method and the project to export the method to South East Asia, examines the existing literature, and draws on case studies of project organising in three suburban cities in the Tokyo area. © 2000 Elsevier Science Ltd. All rights reserved.

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Introduction

The project to introduce the land readjustment (LR) technique for urban land development to a number of Asian developing countries has been one of the most significant international collaborations in urban planning this century. This paper suggests that while LR undoubtedly has

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a number of useful qualities that may contribute to urban land development practice in developing countries, the practice of LR in the most important donor country, Japan, is not yet well understood. The paper derives from a larger research project concerned with the role of LR in Japanese urban planning and urban development (Sorensen, 1998, 1999a, b). One unexpected finding was that in several key respects the practice of LR found in case study research in Japan varied from the model commonly presented in the English language literature. It seems useful to explore those differences in the expectation that a better understanding of current LR practice in Japan will be useful for those now involved in implementing LR projects in the recipient countries.

The paper includes four main parts. Section 1 briefly introduces the LR method, its history in Japan, and the main qualities attributed to it. The second section outlines the context of international interest in LR and the project, now 20 yr old, of transferring it to several developing countries in Asia. Section 3 reviews the arguments in favour of LR put forward by the leading Japanese contributors to the international conferences. Sections 4 and 5 describe how LR actually works in Japan, focusing particularly on how projects are organised and managed.

1. Land readjustment in Japan — a brief outline

Land readjustment is a method whereby the ownership of scattered and irregular plots of agricultural land is pooled, roads and main infrastructure are built, and the land is then subdivided into urban plots. Each landowner must contribute a portion of their previous land holding (commonly about 30% of the total) to provide space for roads, parks and other public space, and for reserve land. The reserve land is sold at the end of the project to pay the costs of planning, administration and construction. The attractiveness of the method for landowners is based on the fact that substantial increases in the value of land may be achieved by the process, so that the value of the individual land holdings can be greatly increased, even though the remaining area is smaller. The attraction for planning authorities is that projects provide land for public facilities, rationalise patterns of property division, and build needed urban infrastructure.

There is no space here to go into the history of LR in Japan in great detail, but it is worth noting a few relevant aspects. LR was imported to Japan at the turn of the century, and initially followed a German model (Ishida, 1986). At first it was used primarily for agricultural land consolidation and irrigation improvement projects, although it was soon put to use for suburban expansion projects as well (Hayashi, 1982; Latz, 1989). In the early stages only individuals were legally authorised to start projects. However after the Great Kanto Earthquake of 1923, a modified form of LR was used to rebuild large areas of downtown Tokyo and Yokohama. A special government agency was set up to carry out these works. During the 1930s LR was widely used by the central government to establish military facilities (Ishida, 1987, p. 57). Again in the aftermath of World War Two LR projects were extensively used in the postwar urban reconstruction projects.

In 1954 a comprehensive revision of the LR law was passed. Lease holders of land were given formal rights for the first time to participate in the project implementing body, local public corporations were allowed wider scope to implement LR projects and increased processes for review of the project program and replanning plans and participation by those affected by projects were included. This act remains in force to the present day as the basic LR law. The method has been widely used, and in an extraordinary variety of circumstances, for urban expansion into

agricultural areas primarily, but also for downtown redevelopment, new town building, public housing projects, railway and mass transit development, and others (Nishiyama, 1986). One important feature of the new law was that it empowered the national government to subsidise local government initiated projects. The money was drawn from the Road Improvement Special Account which collected the revenues of the gasoline tax (Ishida, 1986, p. 83). The reasoning was that where arterial roads are constructed by LR projects it is unfair that local landowners bear the whole burden, as the roads primarily benefit others outside the project area. Therefore national subsidies are used to subsidise road construction at the same rate as though the land was purchased. This quickly became a major source of funds for local government led LR projects and allowed a significant expansion in the total area of new projects during the second half of the 1950s from less than 1000 ha/yr of new projects nationally in 1955 to over 3000 ha/yr by 1960 (Kishii, 1993b, p. 13). A variety of other sources of subsidy are available in Japan, ranging from low interest loans to various grants, as explained by Miyazawa (1982, p. 98), who also shows that the share of costs covered by the sale of reserve land varies greatly between different initiators.

In the literature on Japanese LR a strong distinction is generally drawn between privately initiated projects and publicly initiated projects (e.g. Kishii, 1993a). In fact there are five types of project executor: individuals, associations, local governments (municipal and prefectural), administrative agencies (of the Ministry of Construction or prefectural governments), and public corporations (such as the Japan Housing and Urban Development Corporation) (Miyazawa, 1982, p. 92). The first two above are considered private executors, while the latter three are considered to be public executors. As of March 31, 1994, there were 207 km² of projects completed or in progress executed by individuals, 1072 km² by associations, 1205 km² by local governments, and 548 km² by administrative agencies and public corporations (City Planning Association of Japan, 1995, p. 114). Thus private executors are responsible for some 42% of the project area, and public executors for 58%.

Individuals may only execute projects when all landowners and leaseholders within the project area are in agreement on the project. Because all those affected have agreed, this type of project has the least formal legal procedure that must be followed.

An association is a corporation including all owners and lessees of land in the project area. Agreement of at least two thirds of all owners and lessees of land (controlling at least two-thirds of the land) is necessary before the association can be incorporated. The goal of organisers is 100% consent, although projects are commonly started after 80% agreement is achieved. Because it is possible legally to carry out an association LR project over the objections of up to one-third of the landowners in the project area, legal safeguards are built into the process. To establish the association seven or more individuals must prepare the project program and articles of association. The project program will generally include a plan of the project area indicating road layout, public facilities, etc., and a rough schedule. Precise estimates of land reduction for each landowner are not normally calculated at this stage. When consent of two thirds of the landowners in the project area is secured they can apply for the approval of the prefectural governor. The governor is responsible for exhibiting the program publicly for two weeks. People affected by the project can submit written complaints within two weeks of the public exhibition. After review, the governor can either order changes to the program to satisfy the complaints or allow the program to proceed as is. In either case the complainants are informed. Approval is then given and the association is legally established (Miyazawa, 1982, p. 94).

Associations have an executive of five or more directors and two or more auditors elected from the membership at a general meeting. The decision making body of the association is the general meeting of all members, who must be landowners and lessees in the project area. According to Miyazawa (1982, p. 94) the general meeting can decide on “amendment of the articles, the project program, interim financing, budgeting, replotting plan, designation of tentative replotting, method of sale of cost-equivalent land, and so forth.” Where the membership is over a hundred, representatives may be elected to carry out the business of the general meeting. Quorum is more than 50% of the total membership, and decisions are by simple majority, except for some major decisions such as the replotting plan which require two thirds majority and a two thirds quorum.

The three kinds of public initiators all follow a similar procedure. The project program is passed in the form of an ordinance, which in the case of municipalities must be approved by the prefectural governor, and with public corporations by the Minister of Construction. Public exhibition of plans are required, with provision for comment and complaint. In the case of municipalities, the governor refers complaints to the local city planning council which has power to recommend or deny action on a complaint. In the case of public corporations, the minister is responsible for complaints, after getting the advice of the city planning council. A critical feature not often explicitly pointed out in the literature is that agreement of landowners is not a legal requirement for initiation of public projects, although initiators try to gain landowner consent in order to enable a smoothly run project. In the case of projects by public sector initiators, a land readjustment council of elected representatives of the landowners and land lessees is established to represent landowners. The council is invited to give its advice on the selection of evaluators and decisions on the disposal of land (Minerbi, 1986, p. 197), but is not required to follow any advice offered. Municipalities can only execute projects on land within a designated LR area in the city plan, however it is not difficult for local governments to designate such areas. Administrative agencies can execute projects under the same conditions as public bodies when the project has national importance and must be completed quickly (Miyazawa, 1982, p. 93).

There is broad agreement on the main advantages of LR for urban land development. First, LR has the potential to be a self-financing technique for urban land and infrastructure development, and is almost certain to be cheaper than to gather all project land into a single ownership, whether on the open market or by expropriation. This is because most land remains in the possession of the original land owners, who must contribute portions of their land holding for roads and for land to sell to pay the main costs of the project. The possibility that LR projects might pay their own way is considered an important attraction for developing countries, where shortage of investment capital is a major constraint on urban infrastructure provision. Even though such infrastructure commonly results in increases in the value of land affected which are far greater than the cost of provision, there are frequently great difficulties in recouping the costs from the land owners who have benefited (Doebele, 1987b). Second, the pattern of property divisions (cadastral) is reformed and new infrastructure and public space, particularly for roads and parks, is acquired. This feature is particularly important in locations where rural property divisions were irregular and fragmented into many small parcels with little or no road space as is common in rice paddy areas. Third, the original land owners retain title to the majority of their land. This results in less land owner opposition to projects than in the case of large-scale land expropriation and development, and is less disruptive of the existing community (see Miyazawa, 1982; Doebele, 1982, p. 15; Larsson, 1993, p. 142).

In Japan the main reason for the widespread use of LR is the fact that in urban fringe areas most farmland is extremely fragmented into small, irregularly shaped plots, and it is almost impossible for a prospective developer to assemble such farm plots into larger blocks for development because many land owners refuse to sell their land (Miyazawa, 1982, p. 91). Equally, all levels of government are wary of land expropriation, which can be expensive, time consuming, and commonly provokes heated opposition, of which the Narita Airport debacle is only the most prominent example (see Apter & Sawa, 1984). This situation, combined with Japan's extremely high land prices, has meant that governments have found it difficult and expensive to build space intensive public goods such as roads and parks. Planned networks of expressways and arterial roads are far from complete, and in suburban areas sewers, parks and improved local roads are primarily found in LR areas. LR is thus widely and justifiably considered to have been an essential planning tool in Japan.

2. International interest in LR

International interest in the Land Readjustment technique has resulted largely from the problems associated with the rapid growth of cities in the developing world. While the growth of urban population of developing countries has been identified as a problem for many years, over the last twenty years there has been an increasing sense of urgency about the extent of urbanisation that is occurring. Between 1950 and 1990 the world's urban population more than trebled, from 730 million to 2.3 billion. From 1990 to 2020 it is projected to double again, to over 4.6 billion. Of that increase in urban population 93% is expected to occur in the developing world (Devas & Rakodi, 1993, p. 2).

Concerns which emerged during the 1970s and 1980s about current patterns of urbanisation were motivated particularly by the realisation that the vast scale of urbanisation meant that long-term problems were being created. It was projected that over the 50 yr from 1980 to 2030 2.5 times the equivalent of all cities then in existence would be built. At the same time, the urbanisation of the world's population would be essentially completed by the year 2080. Urban patterns created during this extraordinary period of urbanisation seem certain to have long-term impacts (Peñalosa, 1980, p. 15). Thus apart from the immediate needs of the populations of the growing cities, and the desire to ensure the efficient use of current resources, there are concerns that the patterns built into cities in the next 20–50 yr will constrain the social and economic possibilities of those cities well into the future.

From the 1970s, and particularly following the UN Habitat Conference in Vancouver in 1976, new urban development policies were pursued which stressed making land available to the poor. Instead of expensive public infrastructure and housing projects which could only be provided in such limited quantities that they benefited only a few, simpler and less expensive approaches to enable the upgrading of larger areas were attempted. Thus sites-and-services schemes, slum upgrading projects, and methods to allow cost-recovery of infrastructure provision were pursued (Hardoy & Satterthwaite, 1981; Payne, 1984). In particular land and housing development methods which mobilised local people and resources in self-help approaches to building their own neighbourhoods were sought (Pugh, 1997). It was in this context that land readjustment was first put forward as a possible technique for land development in developing countries. Since the early 1980s

the debate about LR has continued as a largely independent subset of the larger debate on urban policy in developing countries.

International discussion about LR as a land development technique for developing countries has centred on a series of conferences organised to explore the possibilities of using the technique in Asian developing countries. The first, titled “Land Consolidation: its Potential for New Urbanisation at the Rural Fringe” was held in Taoyuan, Taiwan in 1979. Selected contributions to that conference, including reports on the method as practised in West Germany, Japan, Australia, South Korea and Taiwan were published in a book edited by Doebele (1982). That meeting sparked a great deal of interest in the technique, particularly among Japanese planners who realised that they had a potentially important contribution to make to urban development practice in developing countries. Since the first conference held in Taiwan in 1979 a series of eight international conferences has been held to discuss the transfer of the LR technique to developing countries, especially those in Southeast Asia. Subsequent conferences were held in 1982 in Nagoya, Japan (Honjo, 1984; Nagamine 1986a), in 1985 in Nagoya and Tokyo (Japan Ministry of Construction (MOC), 1985), in Manila, Philippines in 1987, in Kuala Lumpur, Malaysia in 1989, in Bangkok, Thailand in 1991, in Bali, Indonesia in 1993, in Kobe, Japan in 1995, and most recently in Bangkok in 1997.

It is worth noting that since the early 1980s the project to transfer the LR method to developing countries has been an important international aid policy of Japan. Generous Japanese government financial and administrative support has been a key factor in the success of the conferences, and has primarily been contributed through the Japanese International Co-operation Agency (JICA), the Japanese MOC and the Japanese Overseas Economic Co-operation Fund (OECF). Grants for the preparation of LR feasibility studies and pre-project planning are available from JICA, and very low interest loans are available from OECF for the project implementation phase (MOC, 1991, pp. 4–19). Further, the MOC and JHUUDC have since 1987 had an ongoing programme of staff secondment to help in the initiation of projects in Thailand, Malaysia and Indonesia among others (Nakano, 1993, p. 56). This has been complemented by an active training programme by the MOC and JICA of foreign students in Japanese urban planning techniques generally, and LR specifically (Nakano, 1993, p. 58).¹

A tribute to the success of Japanese efforts to share their techniques of land development has been the interest paid by the developing countries which have been actively involved and represented in the series of international LR conferences, but more importantly, several countries have actually started to use LR for urban land development. Several examinations of individual recipient country experiences have been published (see Acharya, 1989; Archer, 1986, 1992, 1994; Misra, 1986).

¹ Japanese foreign and trade policy and the role of development assistance is not addressed in this paper, but it should be noted that the interest of the Japanese government and major Japanese construction companies in LR may be connected to the fact that the developing countries of South East Asia are an important Japanese market. Japan has followed the practice of other developed countries in using development assistance to further domestic export industries, although more deliberately and effectively than some (Rix, 1980), and during the 1980s Japan became the world's largest foreign aid donor. On the overseas involvement of Japanese construction companies see Rimmer (1989). On strategic use of Japanese Official Development Assistance to foster export contracts, see Rix (1980), Yasutomo (1986).

The greatest use of the technique has been in Indonesia, where some 132 projects totalling 8309 ha in 70 cities have been carried out (Talkurputra, 1995). The technique has been actively used since 1982, and was first initiated under existing town planning laws, with more specific LR legislation and procedures following in the late 1980s (Archer, 1994). Also rather successful has been Nepal, where six projects covering about 120 ha had been started as of 1995. As of September 1995, Malaysia had completed a feasibility study, and was preparing to carry out a pilot LR project. This pilot project was designed to gain experience before drafting Malaysian LR legislation. The pilot project was scheduled for implementation from 1996 to 2004 (Muhammad, 1995). In 1995 Thailand had approved a revolving fund for the financing of LR projects and had draft legislation in the process of being approved. A pilot project designed to test the technique had been designed, but planners were experiencing great difficulty in gaining the consent of landowners (Singhasilarak, 1995). Thus while the experience in different countries has been varied, overall there has been substantial interest in the technique and even considerable success in implementing projects.

The series of conferences has also encouraged the production of a large literature in English on Land Readjustment. More than 120 papers have been presented at the conferences, by presenters representing 18 countries² (MOC, 1995). Some of this material was only distributed at the conferences, but much has also been published elsewhere (Archer, 1987, 1992; Honjo, 1986; Doebele, 1982; Miyazawa, 1982; Hayashi, 1978, 1982; Nishiyama, 1986; Honjo & Inoue, 1984; Misra, 1984). In addition, versions of many of the conference papers by Japanese authors have also been published in Japanese journals (e.g. Kishii, 1993a; Nagamine, 1988; Nishiyama, 1985, 1988).

Many Japanese scholars, researchers and government officials have responded admirably to the need for more information about Japanese LR techniques. Japanese contributors to the debate have enthusiastically shared their expertise and experience in an outpouring of literature and case studies on LR as practised in Japan. The Japanese contributions to the debate set out a persuasive case that LR is a suitable land planning and development technique for developing countries, particularly those in Asia. The fact that virtually all of the literature on Japanese LR was written in the context of the series of international LR conferences to promote the use of the technique in developing Asian countries may account for the fact that they share significant areas of agreement and as a whole form a rather coherent argument. The next section reviews the arguments in favour of LR put forward by the leading Japanese contributors to the international conferences.

3. The Japanese model

The Japanese interpretation of their experience of urbanisation and its relevance to Asian developing countries included: a critique of the failure of western planning methods in developing countries and a description of the parallels between the Japanese experience and that of Asian developing countries; an analysis of the Japanese urban development process, approach to city planning and the role of LR; a description of LR as an effective means of betterment taxation, which forced landowners to bear some of the burden of providing urban infrastructure; a portrayal

² Japan, Thailand, Indonesia, Malaysia, Philippines, Singapore, India, Nepal, China, South Korea, Taiwan, Germany, Norway, Sweden, Holland, Australia, the United States, Canada, and Kenya, see MOC (1995b).

of LR as a consensus based co-operative land development technique; and a positive assessment of the applicability of LR in developing countries in Asia.

The first point is that western models of urban planning and development are not appropriate for currently developing countries. It is argued that this is partly because the developed countries were much more advanced and more wealthy when they experienced rapid urban growth (Honjo, 1984; Nishiyama, 1992), but is primarily because the urbanisation process in western countries was much slower, averaging 2% annual growth of urban population at the peak, whereas in Japan and many of the developing countries the rate has been double that at around 4% per year (Inoue, 1985, p. 12; Nagamine, 1986b, p. 51). Therefore little success was achieved by using inappropriate western planning methods (Honjo, 1984, pp. 23–26; Inoue, 1985, p. 11), because “development standards hitherto applied are largely copies of Western advanced countries. These are impractical guides for development management in Asian realities” (Nagamine, 1986b, p. 54). Japan on the other hand, did not simply adopt western techniques, but borrowed selectively and transformed them into an Asian context of land ownership, land development and urbanisation (Honjo, 1986, p. 363; Nishiyama, 1986, p. 316). This argument is of course indebted to the critique of the inappropriate introduction to developing countries of urban planning techniques borrowed from western countries (e.g. Devas & Rakodi, 1993; Doebele, 1987b; King, 1980; Rodwin & Sanyal, 1987; Turner, 1968).

The second major theme concerns the importance of LR for city planning in the Japanese case where the state spent little on social overhead capital, instead devoting all available resources to enabling rapid industrial growth. Nagamine argues that in the Japanese case, all economic resources were needed for catch-up industrialisation, and the country could not afford city planning and the associated social overhead investment, thus LR played a crucial role in Japan's economic success. As he put it “one of the major factors in accounting for the prosperity of the Japanese economy is that her people have opted to tolerate, rightly or wrongly, a meagre resource allocation for their living conditions, thereby leaving the maximum amount of resources for industrial development.” Thus “Japan has been able to afford only such a living environment as LR could offer. Indeed LR has been the most vital tool for Japan to muddle through, coping with heavy demands for urban land and resource constraints, particularly during the high economic growth period” (Nagamine, 1986b, p. 52). The argument is thus that LR was crucial in the Japanese case because the state did not invest in social overhead capital, instead putting all available resources into aiding industrial growth, while letting the private sector, through LR, take care of discretionary spending on housing, sewerage, and local roads. “The conditions under which Japan developed were so severe that it was impossible to do more than the bare minimum. The accumulated capital was always mobilised for investment in productive sectors, and an urban development policy focused on infrastructure was promoted. Urban land development was carried out with the support of landowners by skilfully sharing with them the development benefits. The housing supply was left to the private sector, and only during emergencies such as natural disasters were public measures initiated or expanded” (Honjo, 1984, p. 28). This helps to explain why Japan, often characterised as having highly congested and largely unplanned cities should serve as a model of urban planning for urbanising countries in the developing world. For example, Nagamine argues that the Japanese development strategy can be useful for developing countries, because “Although cityscapes in Japan still remain relatively untidy compared with those in western advanced countries, it would be fair to say that Japanese citizens, in general, have already been assured of the

minimum requirements of urban services relative to both their living and working environments” (Nagamine, 1986a, p. xiv).

A third point is that LR has been effectively a form of betterment taxation, as much of the cost of developing urban land was borne by landowners themselves (Nagamine, 1986b, p. 52), “LR... rests on the underlying principle that the recipients of the benefits after development bear its costs. It may be considered a self-reliant form of environmental improvement” (Sazanami, 1985, p. 32). This arrangement is acceptable to landowners however, as explained by Honjo and Inoue (1984, p. 9) “the cost of land development and basic infrastructure to provide essential services to the newly developed land is borne primarily by the landowners of the newly developed land. Landowners in the urban fringe areas in Japan, Republic of Korea and some other countries have often been motivated to develop their land voluntarily through LR schemes, for a large part of the betterment that would accrue to their land is internalised by the landowners, that would far exceed the development cost they are bound to shoulder.” This potential for LR to be self-financing through the sale of land contributions is a key part of the argument in favour of LR for developing countries, as one of the most important constraints on urban facility development in developing countries is the chronic lack of funds. A major goal during the 1980s was thus to design urban programmes which approached full cost-recovery so that self-sustaining programmes of land development could be started (see Doebele, 1987a; Schroeder, 1989).

Fourth, LR is described as a consensual, bottom-up style of planning and city building, “Western town planning constitutes control of land use by the government and can be called ‘town planning by public authorities’ whereas LR is a collaborative project by landowners who contribute land and can be called ‘town planning through co-operation’” (Nishiyama, 1992, p. 4). In describing the participation of landowners the MOC claims that “a project is carried out in such a manner as to obtain consensus from landowners and lease holders, as the project is directly related to their property/land” (MOC “User Guide for LR”, no date). This emphasis on the co-operative and consensual aspect of LR projects is quite pervasive in Japan, and is put well by Nishiyama who recently argued that “Neighbours initiate a process of consensus-building and work toward their common benefits, and the project cost is financed by portions of land from land-owners and public funds. This is the foundation of land readjustment projects” (Nishiyama, 1995, p. 1). A similar perspective is put forward by Nagamine who suggests that “the essence of LR is to let people and government join hands in coping with the ordeals of rapid urbanisation” (Nagamine, 1986b, p. 58). The idea that LR was a bottom-up method whereby local land owners could work together to urbanise their community in a planned manner by contributing land for the public good is highly appealing, and fits nicely with the widespread desire to find self-help, participatory techniques of urban development which mobilise local actors and resources.

Fifth, LR is identified as a potentially very useful method for developing countries (Inoue, 1985, p. 21; Sazanami, 1985, p. 33). It is suggested that “land readjustment practice has been attracting the keen attention of third-world countries grappling with huge demands at various fronts of development, as LR is expected to minimise public financial burdens relative to the management of urbanisation” (Honjo & Inoue, 1984, p. 9). Nagamine points out that the use of LR could be particularly appropriate in Asian countries, where there is a need for clarification of ambiguous and complex land tenure rights. He emphasises that an important advantage of LR is that clear title to land is established. At the same time, LR can accomplish rationalisation and modernisation of land patterns and infrastructure while retaining the original community of landholders in place. He

suggests that the three most important advantages of LR for developing countries are: first, LR enlists people's initiative for development, mobilising existing resources and facilitating co-operative, planned development; second, LR encourages the efficient provision of infrastructure at little cost to municipal authorities; and third, LR collects a betterment levy from all the landowners who contribute a part of their land for public facilities such as roads and parks (Nagamine, 1986a, p. xiv).

It must be noted that many of the same writers are careful to point out some inherent weaknesses of LR as a planning tool. These are seen to be the fact that as most of the land remains private property, and most landowners have not made a cash investment in developing their land, there is often little incentive to build on or sell land (Nagamine, 1986b, p. 57). Thus project areas often build up slowly, while owners wait for the value of their land to increase. This means that while LR is very effective at providing infrastructure, it does not necessarily result in more land supply if owners choose not to sell (Honjo & Inoue, 1984, p. 11). For similar reasons it does not necessarily result in better access for the poor to urban land, as it does not change basic problems in land markets, and as it is designed to increase land values the poor will often be unable to afford such improved land (Inoue, 1985, p. 21). The use of some of the public land created through LR projects for low income housing as in Korea may be a solution to this problem (see Hwang, 1986), but as Nagamine points out, any increase in the amount of land landowners must contribute makes LR less attractive to them and can threaten the viability of the process (Nagamine, 1986b, p. 57). Only where a politically very strong government agency is carrying out the process can very large land contributions be enforced, as in Seoul where up to 70% of land was taken as contributions. Honjo and Inoue also mention that in Japan LR projects have often been opposed by anti-LR movements. They argue that this is because while larger landowners can often see the benefit of land development, tenants or a person who owns a small house on a small plot who is primarily interested in the use value of his land, not the exchange value, may see no advantage to an LR project (Inoue, 1985, p. 17). Also the land contribution may make a small lot too small to be sold later, resulting in a net loss in both use value and exchange value (Honjo & Inoue, 1984, p. 11). Inoue (1985, p. 17) notes that as LR must be carried out in many small projects, it is not suitable as a method for planning the overall development of a city, but must be carried out in conjunction with an over-all master plan. Further, it is noted that LR requires a large number of experienced staff to carry it out, including land appraisers, surveyors, planners and project administrators who may not be available in developing countries (Inoue, 1985, p. 17, 18).

The arguments made in support of the use of LR and the Japanese approach to urban development are interesting because they provide an insight into how several leading Japanese planning theorists see the role of land planning and development in Japan's rapid economic growth of the 1950s and 1960s. However the above characterisation of LR raises a host of questions. For example, one wonders whether the 'Japanese people' really *chose* such 'a meagre resource allocation for their living conditions.' Certainly the rising level of protest over deteriorating environmental conditions during the 1960s and 1970s (Ishida, 1987; Krauss & Simcock, 1980; Lewis, 1980; McKean, 1981; Broadbent, 1998) suggests that there may have been less agreement about this than is suggested.

However, it is not possible in this paper to examine the broader political economy of urban planning in Japan. Instead the paper focuses on the most significant differences between the model

of LR presented in the existing literature, and current practice in Japan. Possibly the most important is the portrayal of LR as a consensus-based process initiated by local landowners. In the context of international efforts to transfer LR to other countries this characterisation of LR is appealing because it fits well with the search for self-help methods of urban development that involve local citizens. However, the characterisation of LR as a kind of ‘bottom-up’ planning based on community ‘consensus’ is unfortunate in three key regards: First, it glosses over the long history of opposition to LR in Japan. Second, it neglects the dominant role of local government in most LR projects, and the enormous local planning resources devoted to the process of project initiation. Third, there is little discussion about how projects, whether they are nominally association or local government initiated, are actually managed. The first point is discussed briefly in the next section, while the second and third points are discussed in the final section.

4. Consensus or conflict?

In complex development projects where groups of land owners and home owners are required to contribute a portion of their land, where many households and businesses must be moved, and where a previously semi-rural area is turned into an urban district, it would be surprising if conflict did not sometimes occur. It seems inevitable that some land owners will benefit (or be thought to benefit) more than others, and in that sense local conflict and opposition is unsurprising. However, it is unfortunate that in the stress on ‘consensus,’ opposition to LR projects has been virtually ignored in the large literature on Japanese LR, particularly as organised opposition to LR projects has been an important factor shaping current LR practice.

The idea that conflict is important in Japanese society is not a new one. It arose out of a critique of the widespread characterisation of Japan prevalent among both Japanese and western observers before the 1980s as a nation with an exceptional degree of social harmony and consensus, lacking both major social divides and able to resolve minor conflicts with relative ease owing to an inclusive, consensus based decision making process (see e.g. Nakane, 1970; Vogel, 1979). However that stereotype was increasingly challenged in the 1980s, with a greater recognition that conflict is also an inherent part of Japanese society, although often finding expression in particularly Japanese ways (see Krauss et al., 1984). Sugimoto (1986) in particular criticised the notion of Japan as a ‘consensus’ society, arguing that the term ‘consensus’ has a very different meaning in a country where the authoritarian basis of social control is so strong, and that in reality Japanese ‘groupism’ is merely an expression of an effective system of social control. He argues that the important questions are “who defines the contents of consensus, in whose interests is consensus formed?” (Sugimoto, 1986, p. 67). Reich (1983) similarly suggests that “Unless precisely defined, consensus is a vague, almost meaningless word. Consensus among which groups? What are the boundaries of consensus? How much coercion is necessary to maintain consensus? Without answering or at least posing such questions, the concept helps little in explaining social processes” (Reich, 1983, p. 200). Pressure to achieve ‘consensus’ can therefore result merely in the concealment of power relationships within groups, rather than in genuine participation in making decisions. The frequent descriptions of Japanese LR as being based on ‘consensus’ among landowners should thus prompt some questions about the nature of the relationships among participants. Those relationships are discussed further in the last section.

A brief review of the history of LR in Japan reveals that in fact conflict has been central to the history of LR projects in Japan. It is possible only to note a few salient aspects of the story, though opposition has shaped current LR practice and should certainly be better known.³ Perhaps the most significant early case of widespread opposition to LR occurred during the implementation of the post-war War Damage Reconstruction Plan (*Sensai Fukkô Keikaku*) which proposed the use of LR projects to rebuild some 65,000 ha of war damaged cities. A Special City Planning Act was passed in September of 1946, which authorised local governments to carry out LR projects in designated war damaged areas. Significant improvements in infrastructure, especially large scale road widening were planned. The Act specified that arterial roads were to be widened to a minimum of 36 m in small to medium sized cities, and a minimum of 50 m in major cities. This would have required heavy land contributions by land owners, but the Act also stated that financial compensation would only be paid for sites which lost more than 15 per cent of their area (Nakamura, 1986, p. 20). Minimum plot sizes were also specified, so land owners whose plots fell below the minimum after the required contribution would also have the balance of their site bought by the project at the specified compensation rates. This generated widespread opposition, which was greatly exacerbated by the rampant inflation of the post war years which meant that financial compensation for the loss of land was unattractive to landowners as it was to be paid in a rapidly depreciating currency. At the time the plan was wound up in 1959 only 28,000 ha had been affected, and in Tokyo only 1380 ha of the original planned area of over 20,000 ha (6.8%) had been carried out (Ishida, 1987, p. 231). Organised opposition by land owners was a major factor in the failure of the reconstruction plans, particularly in the case of Tokyo, although financial shortfalls also contributed to the failure to complete the plans (Ishida, 1987, p. 229–30)(Calder, 1988, p. 395). Ishida also notes that the opposition movements established to fight against the War Damage Reconstruction projects were an important base for the later formation in 1968 of the All-Japan Land Readjustment Opposition League (*Kukaku Seiri Taisaku Zenkoku Renraku Kaigi*). That organisation was formed to share information, resources and opposition strategies amongst the proliferating local anti-LR movements, and remains active to the present day.⁴

Local opposition to LR projects appears to have grown in tandem with the increase in the area of new LR projects begun after the passage of the new LR law of 1954. As noted above that law gave expanded powers and central government road funds for local-governments to plan and execute LR projects directly. Ishida argues that the road subsidies resulted in a significant shifting of emphasis of LR towards the building of arterial roads (Ishida, 1986, p. 83). LR projects thus became the main vehicle for local governments to carry out ambitious land development and arterial road construction projects necessitated by rapid economic growth. During the late 1950s and early 1960s there was a rapid increase in the area of local-government-initiated projects, which

³ A thorough history of conflict over the use of LR for land development in Japan has yet to be written, either in Japanese or English.

⁴ The League continues to organise conferences, and publish materials and practical information on how and why to oppose LR and Redevelopment projects. I was able to find several of their books on the shelves of a major Tokyo bookstore in the spring of 1998. Several of their publications document cases of opposition to LR projects (see *Kukaku Seiri Taisaku Zenkoku Renraku Kaigi*, 1973,1983), although it should be remembered that their purpose is primarily agitational and polemical rather than historical.

could be carried out without the consent of affected land owners. While in the literature frequent mention is made of the fact that two-thirds of landowners owning at least two-thirds of the land must agree to be able to legally start an Association project, it is seldom noted that in the case of local-government-initiated projects there is no legal requirement to gain landowner consent. Instead there is a requirement for public display of plans, a procedure to allow public feedback and objections and the requirement to gain the approval of the prefectural governor. This more streamlined procedure allowed many local governments to directly initiate increasing numbers of LR projects during the 1960s and 1970s.

This in turn appears to have led directly to increasing opposition to LR projects by local landowners. During the 1970s local governments found it increasingly difficult to actually carry out projects in cases where landowners were opposed. This is understandable given the complexity of projects involving the reconfiguration of already densely settled areas where there are hundreds of houses, businesses and active farms. Non-cooperation of even an individual landowner can seriously disrupt construction schedules, delaying a project and adding to overall costs. Local governments thus found it difficult to proceed with project implementation in cases where individuals were opposed even though they had the legal right to do so. In many cases local government projects were delayed for many years because of active opposition by landowners. In addition to the fact that projects were easily obstructed by determined individuals or groups, most suburban municipalities in Japan are small enough that local politicians are wary of arousing the ire of even tiny local groups. This was especially true during the late 1960s and 1970s when the solid grip of conservative political groups on local government was lost to a rising tide of opposition success in local elections, particularly in metropolitan areas (see Ishida, 1987, p. 305; Krauss & Simcock, 1980; MacDougall, 1980).

Many of the projects initiated in a hurry in the late 1960s and early 1970s thus experienced major problems in implementation. Both the increase in the total area of projects initiated, and the increased difficulties in carrying those projects to completion are indicated in Fig. 1 which plots the total area of new projects initiated in Saitama Prefecture immediately north of Tokyo in each quinquennial period against the average duration of the projects initiated in that period.

Fig. 1 shows clearly the rapid increase in total area of new projects initiated between 1950 and 1974. The quinquennial period 1970–1974 is the all time peak of new project initiation, and corresponds to the period just after the implementation of the New City Planning Law of 1968. Local governments were attempting to initiate enough new LR projects to ensure comprehensive development of the undeveloped part of their newly designated urbanisation promotion area (UPA). However, as also shown rather clearly, the average duration of projects also increased significantly, from 5.2 yr in the period 1950–1955 to 14.3 yr in the period 1970–1974. The duration measured here is from legal commencement of the project to its legal wind up, and does not include the time spent planning and organising, which is commonly between 5 and 10 yr. These are average durations, and cases of projects taking 20–30 yr to complete were by no means unusual. The increased duration does not appear strongly related to increased average size of projects carried out, as that varies widely between periods, but appears to be primarily a result of the opposition of local landowners, although this question merits further research.

In any case, the experience of increased opposition to LR projects indicated to local organisers that it was essential to do the groundwork and ensure the active support of landowners to be able to smoothly carry out a project once it had been started. Thus the rising level of opposition to LR

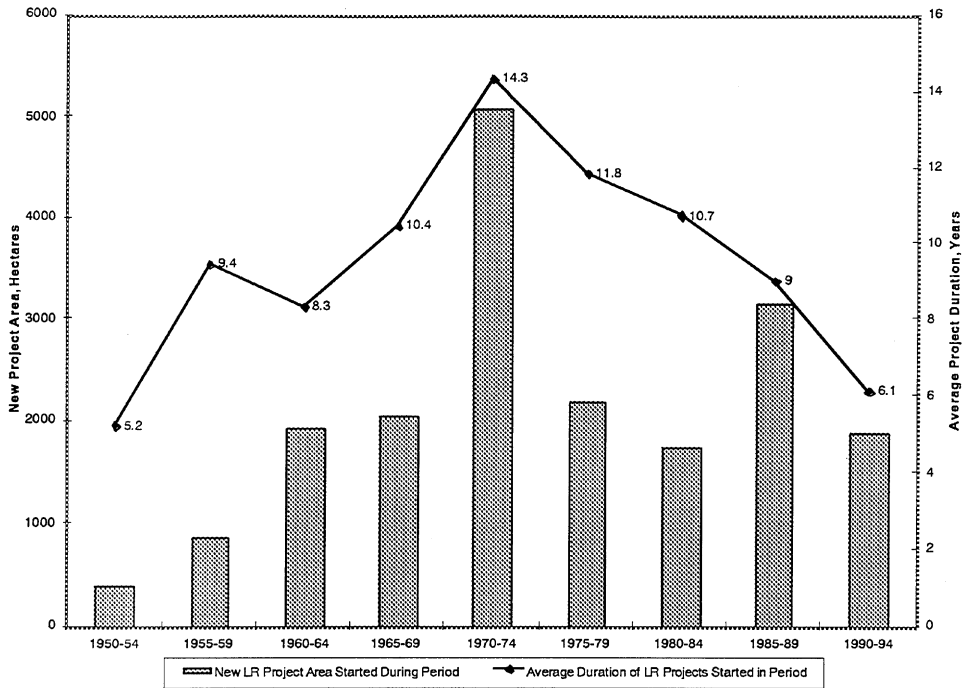


Fig. 1. Area and duration of new LR projects in Saitama 1950–1994. *Source:* Calculated from project data provided by Saitama Prefectural Government 1995.

during the 1960s and 1970s was a key factor behind the widespread acceptance by local governments by the beginning the 1980s that gaining the prior agreement of local land owners was the most efficient strategy of project organising. Once the initial investment of staff time in securing the support of affected landowners had been made, projects could be initiated either as local government or as Association projects, as described below.

The acceptance of the necessity of high landowner support and the continued opposition of many land owners to LR is well illustrated by the experience of the 1980s and 1990s. Since the early 1980s the use of LR projects for land development in the Tokyo metropolitan area has been structured by a policy called “flexible Senbiki.” The three main suburban prefectures outside Tokyo; Kanagawa, Saitama and Chiba, all adopted versions of this method in the early 1980s. The use of the flexible Senbiki method is particularly interesting because it provides a rare indicator of the extent and effectiveness of opposition to LR projects, by allowing a direct measurement of the number of planned projects that were abandoned because of local opposition. In the normal tally of projects, the large numbers which are abandoned because of local opposition are normally invisible.

As the three prefectures were experiencing rapid population growth during the 1980s, and had seen extensive unplanned sprawl development during the 1970s, they were determined to use existing planning tools more effectively to prevent sprawl by encouraging the wider use of LR. The essence of flexible Senbiki was the use of the zoning powers vested in prefectural governments by the 1968 city planning law to persuade land owners to agree to LR projects. Senbiki (translated literally as ‘drawing the line’) divides city planning areas into two zones, the Urbanisation

Promotion Area (UPA), which includes existing built up areas and areas intended to be developed within 10 yr, and Urbanisation Control Areas (UCA), where urbanisation is to be restrained (see Hebbert, 1994). Flexible Senbiki consisted of two policies. First, it provided an incentive to land owners to consent to LR by promising that LR projects in UCA areas would be granted an automatic upzoning to UPA, where the range of permitted developments is much greater, and which have consequently higher land prices. The second policy was that in existing UPA areas where little development had occurred in the first 10 yr since the initial Senbiki in 1970, and where there was the risk of unplanned sprawl development in future, 'Designated Problem Areas' were defined where the prefectural government threatened downzoning to UCA unless steps were taken to organise LR projects. The criterion to prevent downzoning was the establishment of a LR organising committee (*Tochi Kukaku Seiri Hokininkai*) of local landowners. Most of the case study area that was not already LR by 1980 was designated as 'problem area' to be developed by LR (see Sorensen, 1999a, b). However, not all problem areas eventually became LR projects. In Saitama in 1982 some 10,000 hectares of Problem Areas were designated. By 1990 new LR projects had been started in only 28% of that area (Narai, Doi, Mizuguchi & Gojo, 1991), and by 1997 the total project area was still only 35% of the original area designated (Saitama, 1997). Projects failed not because of lack of effort on the part of the local governments trying to organise them, but because of stubborn opposition by local land owners which was maintained in the face of powerful incentives to agree, and the threat of significant sanctions for those who did not.

Two main conclusions can be drawn from the flexible Senbiki experience in Saitama. First, it appears that even in the face of the threat of the downzoning of their land to UCA, many land owners continued to oppose LR projects in their area, as less than a third of the problem areas had become LR projects 17 yr after initial designation. Second, the high failure rate indicates that local government organisers have learned the lesson of the 1970s and are now very hesitant to start projects without a high level of consent by landowners, even though they legally can do so. Instead organisers continue their intensive efforts to persuade landowners to consent to projects until there is overwhelming agreement.

It is difficult to neatly summarise the outcome of conflicts over land readjustment in Japan, as such conflict has been so pervasive, with widely differing contexts, actors, and specific causes of grievance. It is fair to say that from the 1960s increasingly well-organised and visible protest movements, and the widespread experience of projects getting bogged down by small-scale obstruction and non-cooperation by disgruntled individuals contributed to the emergence of a more sophisticated practice that stressed more intensive prior consultation, and more active stress on gaining the consent of landowners before project commencement. Many of the project organisers I spoke with sincerely believed that landowner consent and involvement was an essential ingredient in a successful project. The experience of project organising in the case study cities in the 1980s and 1990s suggests that a commitment to high levels of consent serves not to reduce overall landowner opposition as much as it results in the abandonment of a rather high percentage of all planned projects. It is possible however that the projects that are actually carried out may have very significant degrees of landowner support and involvement where such an approach is followed. In the two projects where I conducted postal surveys of landowners significant levels of involvement were reported, although the number of projects surveyed was too small to draw any broader conclusions in this regard (see Sorensen, 1998, Chapter 9). An important outcome of conflict thus seems to have been the development of a more sophisticated practice

based on the organising of landowner consent, rather than unilateral action by local government planners.

The point remains however that LR projects have been a significant arena of overt conflict in Japanese society. The extent and intensity of conflict over LR in Japan suggests that to claim that “the essence of LR is to let people and government join hands in coping with the ordeals of rapid urbanisation” (Nagamine, 1986b, p. 58) may be, depending on one’s interpretation, either an endearingly effusive endorsement of the LR method, or a disingenuous gloss on a far more complex story.

5. Organising and managing LR projects

A major focus of the larger research project from which this paper derives was to determine the main factors which influenced the location of new LR projects in suburban areas. It examined the principal actors involved in the process of initiating new projects, which was considered to include everything up to the legal commencement of a project, including designating the project area, designing the initial project plan, and the crucial aspect of organising the consent of land owners to carry out the project. A basic goal was to find out where the decisions are made about where projects are located, why projects are developed here and not there, and who is involved in the decision making process. The main source of information about project initiation and management was a series of semistructured interviews with officials in the City Planning and Land Readjustment departments of Saitama Prefecture, and those of Urawa, Omiya and Ageo cities in Saitama during 1995 and 1996. This evidence was corroborated with site visits, mapping of the results of various policies designed to encourage the use of LR in the case study cities over a period of 25 yr, a detailed GIS mapping of land use change in the case study areas during the same period, a postal survey of land owners who had participated in two recently completed projects and a small number of interviews with land owners who had completed the postal survey.

The most unexpected finding of the case study research was that the reality of LR practice in Japan varied considerably from the model presented in the international literature. The literature suggests that private projects are self-started and managed, whereas public projects are the work of the various levels of government and public bodies. While there are no doubt cases of voluntary and consensual development of LR projects, the interviews with local government staff and land owners, and the postal survey all made it clear that in the case study cities local governments had planned and initiated virtually all LR projects, whether they were ultimately ‘Association’ or ‘Local Government’ managed. Even the decision of whether the project would be ‘public’ or ‘private’ is ultimately taken by local government planners. In the three case study cities, out of a total of 66 LR projects, only one small project had actually been started independently. All the rest had been designated, planned, and actively promoted by local government officers.⁵ Of those, only 18 were ‘public’ projects, legally initiated by local, prefectural and national governments and agencies. The remaining 47 were “association” projects.

⁵ There are certainly exceptions to this rule elsewhere, for example in Kanagawa prefecture the Tokyu Real Estate subsidiary of the Tokyu Railways Corporation has been heavily involved in LR project initiation. It may also be the case that in areas outside metropolitan regions where development pressures are less intense that more Association projects are in fact self-started.

The case studies made three key points very clear. First, it is local governments that are responsible for organising almost all LR projects. Second, the enormous local staff and financial resources that must be devoted to planning and starting LR projects suggests that it would be very difficult for local land owners to undertake such a process themselves, except in the case of very small projects. Third, arrangements for managing projects once they have been begun provides further evidence of the dominance of local governments, which manage not only their own projects, but also those which are nominally ‘association’ organised and managed. Therefore Association projects are not, as is routinely suggested in the LR literature, “projects which have been initiated by private associations of landowners” (Masser, 1987, p. 207).

In each of the three case study cities there was a heavy commitment of local planning resources to LR project planning, initiation and management. To initiate LR projects, whether public or private, requires a major investment of local government staff time and resources, with literally thousands of hours of meetings, individually and in small groups to persuade land owners to consent. The process is a classic example of the Japanese practice of *nemawashi* (literally ‘digging around the roots’) or preparing the ground for group agreement through extensive prior consultation and persuasion. According to local government planners the normal time from the beginning of active work to start a project and its legal initiation is from 5 to 10 yr. During this time 3–5 local government staff work steadily⁶ holding public information meetings (*setsumeikai*), talking to every landowner within the designated area, explaining the project, promoting the benefits of LR, and finally convincing each individual landowner to sign a legal document declaring their consent. Thus not infrequently almost half of the total project development time (from initial plan to final wind up) is spent in the stage of organising consent.

If we consider that within a typical target project area of 50 ha there are from 1000 to 2000 residents, and 300–600 property owners, it can be appreciated that it is a challenging task to organise consent to a LR project. The project will take from 5 to 20 yr to complete, during which time significant restrictions are placed on the rights of landowners to build new buildings. Further, during the project many households and businesses will be moved, and all property owners will have to contribute a portion of their land for public use and to pay project costs. While larger landowners are quick to appreciate the promise of increased land values, it is apparently much more difficult to convince the owners of small houses on small housing plots that the scheme will benefit them. The main benefits of being able to connect to main sewers, improved local roads and other community facilities such as parks have to be weighed against the loss of a portion of the land holding, and the years of disruption during the project. According to planners involved in starting projects it usually takes literally hundreds of local meetings, both in groups and individually to convince enough land owners to consent to a project. A wide range of persuasive techniques are employed, ranging from the provision of information on the private and public benefits expected from the project, repeated public and private meetings with project organisers and individual consultations with land owners to gently twist arms, and the enlistment of project supporters to cajole their more reluctant neighbours, to the threat of the downzoning of a whole district as permitted by flexible *Senbiki*. The importance of local governments in initiating Association

⁶ Each team of 3–5 people will normally be responsible for 2 to 5 projects (depending on the size of project) which are at different stages of the process.

projects is thus apparently a direct result of the amount of time and energy required to launch such a project. Individual landowners are unlikely to be willing to invest the time and money required to get a project started, particularly since they can very easily develop their land in a piecemeal fashion without LR.

The preeminent role of local government extends also to the job of carrying the projects through to completion. Such project management involves a range of specialist skills such as scheduling and tendering construction contracts, negotiating household and business moves, financial management, and land sales. As might be expected, all local government projects are managed directly by local government LR departments. However local governments also manage the association-initiated projects.⁷ In the case study cities there were two arrangements for managing association projects. That followed by Ageo (and most of the other cities in Saitama prefecture) is that the local government LR departments directly manage all the projects they initiate, whether they are legally initiated as 'local government' projects or 'association' projects. The other method, which was adopted in the most populous cities of Saitama; Omiya, Urawa and Kawaguchi, is to set up a foundation or non-profit corporation (*Zaidanhojin*) to manage the Association projects. In the case of Omiya and Urawa these organisations, confusingly named the Omiya (or Urawa) Land Readjustment Association (*Tochi Kukaku Seiri Kyokai*), were set up in the early 1970s and are responsible for managing Association projects once they are legally begun. They have their own staff (of 8 and 12 for Omiya and Urawa respectively) and are formally separate from the local government LR departments. In practice however they work closely together, and city LR staff are routinely seconded to the LR Association. Because they manage several projects at once the body can pool project funds, thus reducing the external borrowing needs of projects which tend to have high outlays in the beginning and high revenues towards the end. In 1990 for example, the Urawa Land Readjustment Association was managing five Association projects and had completed nine. In the same year its total income and expenses were just under ¥240 million.

Association projects are therefore neither self-initiated nor self-managed. While a meeting of association members is the final decision making body, and landowners form the association board of directors, the actual day-to-day operations are the work of either local government staff or of the foundation. This means that each project does not need to hire staff of its own, and the local government is able to build a team of experienced personnel. It does however clearly reinforce the central role of local governments in association projects as well as local government projects.

The picture that emerged from my case study research was that it is in fact extremely difficult to get LR projects started, and that local governments devote a very substantial share of their planning resources to project initiation. Contrary to the notion that LR projects are self-organised consensual initiatives of local landowners, it appears that they are the product of intensive efforts of local governments to persuade landowners to agree. The persuasive powers of local governments have included a range of incentives including the power to upzone permitted land uses as an incentive to participate, or to downzone areas where landowners have refused to co-operate. The ultimate threat is that local governments can always proceed with projects even if land owners

⁷ In some cities consultants also organise and manage Association projects, especially in cases where a private corporation such as a railway is the prime instigator. However this practice was not followed in the three cities studied here.

object, although this route is now taken far less often than during the 1960s and 1970s. Thus from the initial stage of project designation, through design, organising consent and construction and financial management, LR projects are the work of local governments. The primary involvement of most landowners is in granting or withholding their consent to the project.

6. Conclusions

In several aspects the picture of land readjustment that emerged from the case studies is not consistent with the interpretation found in the English language literature on LR. First, it seems that very few LR projects are started autonomously by local landowners. In fact, local governments invest a great deal of time and energy into organising projects. The scale of personnel resources required to launch LR projects is indeed such that it would be surprising if private land owners were willing or able to start projects themselves, except in exceptional cases. The vast energy required to start LR projects is little discussed in the international literature. However, the heavy commitment of time and energy required to launch projects should be better understood by those countries considering adopting the system. Developing a successful LR programme is not simply a matter of establishing the necessary laws and incentives. An activist local government, with sufficient staff and resources to be able to sustain an active organising programme over many years is clearly required.

The emphasis in the LR literature on LR as based on ‘consensus’ among landowners is perhaps unfortunate. In English the concept of consensus normally includes some notion of a process of decision making which involves the participants in a process of discussion meant to arrive at a mutually agreed decision. The possibility of the process of decision making affecting the eventual decisions taken is an important part of the concept. The organising of LR projects seen in the case study areas does not fit this idea of consensus. It would be more accurate to describe the process as one in which local government organisers design a project, then work intensively for 5–10 yr to achieve *consent* to that project, making use of a wide range of persuasive techniques. It is also an essential feature of LR that projects can be carried out over the objections of landowners, so in some sense there is always a coercive aspect to LR organisation. While the achievements of the organisers are often impressive, it is misleading to call this a consensus based process.

It appears that the primary influence of landowners on LR project locations is in the form of a veto. In the Japanese case that has been quite a powerful veto it seems, as only 35% of the ‘designated problem areas’ in Saitama had become LR 17 yr later. This veto power is closely related to the difficulties experienced in trying to use LR as a comprehensive development method in suburban areas and appears in many cases to result in a pattern of scattered development of LR projects (Sorensen, 1999a). It is perhaps not an overstatement to suggest that in other countries where landowners have similarly strong rights and incentives to oppose LR projects, it would be unwise to rely on LR as a central element of an urban fringe development strategy. However, if other urban programmes were responsible for the key planning measures and development control, then any gains in infrastructure contributed by LR might simply be counted a good thing.

Because of the complexity of the process, and the typically long times involved in project planning and implementation, LR does not appear to be an easy or quick solution to the serious planning problems and infrastructure deficits common to developing country cities. Second, it

should certainly not be considered a substitute for an effective planning regime. Rather any positive results from LR will depend on LR being carried out in the context of an effective planning system at both the metropolitan and local scales. Further, the heavy demands of LR on planning resources, in particular the time of skilled personnel seems to be a major shortcoming of the method. Even in Japan the demands of project initiation and management have been a severe constraint on the ability of local government planning departments to carry out planned projects.

Praise for the genuinely positive attributes of LR should therefore be balanced by a better understanding of some common difficulties experienced in its use, particularly in the context of the ongoing project to export the Japanese method of LR to developing countries in South East Asia. No one benefits from sweeping Japan's valuable experience in these matters under the rug. It is precisely that LR *is* such a potentially valuable land development technique, and that the Japanese experience of LR has been so long and so rich that it is worth understanding the reality of conflict over LR in Japan, how those conflicts have shaped current LR practice, and how the organising of projects actually works.

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