

A Test of Local Financial Approach

To Cooperative Land Use and Public Services Management

Naohiko IIDA

Chief Research Engineer,

Department of Housing and Urban Planning,

Building Research Institute, Japan.

Contents

SUMMARY

- § 1. Introduction ---cooperative management between land use and public service ---
- § 2. “Suspended UCA” ---its history---
- § 3. New Options switching from “Suspended UCA” ---its outlook---
- § 4. Actual Choices in Eight (8) districts in Saitama-City
- § 5. Summary
- § 6. Appendix --- ABBREVIATIONS and their meanings

SUMMARY

This paper shows land use controls has a strong relationship between and infrastructure management properly servicing and acting in concert of the kind of land use, from the view of both the financial aspect and the intention of the local communities. So a case study is illustrated, on switching their urban polices from “Suspended UCA “to new options, from such viewpoints.

First of all, what kind of solutions are actually used for seventy-six (76) local communities whose area is designated as Urbanization Control Areas (UCA) where private urbanization-oriented investment is severely controlled because of poor urban infrastructures, to make a decision whether applying for Urbanization Promotion Areas (UPA) in association with supply of urban infrastructures, or accepting UCA as before, in Saitama, northern to Tokyo Metropolitan Area.

Secondary, these cases show such presumptive viewpoints relate to a consensus-building of the communities, for both in vision of future land use patterns and forms, and in scope of financial resources for operating public services supportive to these land use forms. And referring these viewpoints, each communities choose whether UPA or UCA, taking into such circumstantial conditions as their urbanization potentials based on geographical locations and required urban infrastructure networks, from the beyond the municipal jurisdictions’ scope, in expectation of coming depopulation, strained financial, and environmental-friendly ages.

Finally, a local financial approach is illustrated to cooperate between land use controls and public service supply, taking account of local governmental finances which depend on both actual land use patterns and public service operations, toward sustainable up-grading public welfare.

§ 1. Introduction ---Cooperative Management between land use and public services

Local governments serve two functions; land use controls objectively associated with land use planning, and infrastructure improvements successfully considered into their management. A developer prepares housing sites, for instance, under in conformity with permission program with zoning regulations operated by a municipal government, and offer tail-end infrastructure to the government. After completion of the development, new residents to live in these sites get urban services based on trunk and end infrastructure, and pay taxes.

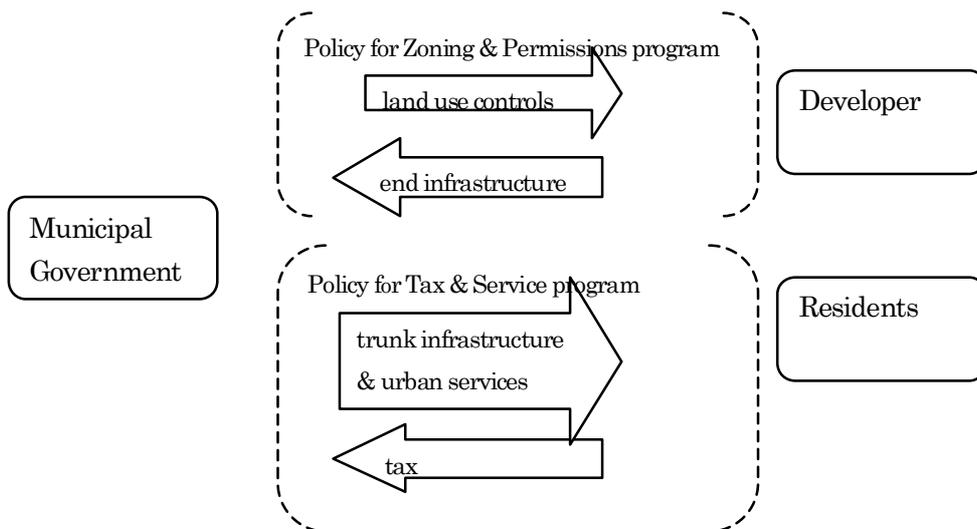


Fig. 1 land use controls and infrastructure management

Such land use control and infrastructure management system went well in a rapid economical growth age. Now, we are in the depopulation age in Japan, this system does not work well, that is; we wonder, whether total amount of tax paid by new residents finances to run urban services, or not. More effective land use control policy against urban sprawl is required, than in the population growth age, in the viewpoints of sustainable urban infrastructure improvements and their operation.

Not a few vacant housing lots have been observed in a newly developed housing complex in the suburbs. Therefore some another residential development plan might not be approved by land use control jurisdiction in a local government, for example, where a urban sewerage authority in the same governments does not have a capacity to stretch main sewerage pipes to the project-planned site in such low-density area.

Following case study shows us, cooperative policies between land use planning & controls and infrastructure improvement & management must be considered, especially in depopulation trend in Japan.

§ 2. “Suspended UCA” ---its history---

In 1970's, the economic growth era (1960's-1970's), in Saitama, northern to Tokyo Metropolitan Area, we had huge urbanization pressure to ask unreasonably for extension of Urban Promotion Area (UPA) where private urban development permissible. The Saitama prefectural government more excessively designated UPA than supposed population growth to live in, and where massive actual private developments need urban services such as streets, sewerage system, parks, schools and so on which were supposed to be supplied by the governments, based on expected tax increase. Actually, amount of small developments with poor services scattered in agricultural lands, and in 1976, the government decided not to accept extension of UPA which would be inevitably a fiscal burdensome.

In 1984, seventy-six (76) districts where urbanization had not started yet and such urban infrastructures were poorly supplied, in UPA was decisively re-designated from former UPA to Urban Control Area (UCA), by the Saitama government. The re-designations had such saving clause as promised to return to the former UPA, if landowners in such agricultural district decided to reallocate their land to prepare sites for newly coming residents with urban infrastructure. So in this paper, we call them “Suspended UCA”, which the Saitama prefectural government has an intention to switch from such short-lived UCA to UPA, on the urbanization-oriented initiative of the land owners. By 1988, however, most “Suspended UCA” (60 districts) had not decided yet, the only six (6) districts returns to UPA, and ten (10) remained UCA.

The population growth era has passed, we are in depopulation era and can't expect tax income growth), Nowadays, in 2005~, the Saitama government again requested whether choices are accepted, to the municipal governments and the owners; i) to remain as UCA with a future scope to the view to mainly agricultural land used district (hereinafter choice (A)); ii) to switch to UPA through land relocation projects requiring public investment for urban infra structures such as sewerage and drainage system and urban trunk street net work system, with a urbanization-oriented view in future(choice (B), or iii) to switch also UPA, toward gradual urbanization in conformity with some Guidelines on development controls and locally-required public investments such as streets or parks for the districts themselves (choice (C)).

Therefore, such “Suspended Districts” might be expected to come back to UPA, going with LRP, under the economic growth and population increase era. Actually, however, only six (6) “suspended districts” of seventy-six (76) returned to UPA. Now the population growth is over, and these districts might be not bedroom community or commuter town to the Tokyo Metropolitan Area, any longer.

In the next chapter, These “Suspended UCA” which are required to take choice A, B, or C, depending on their own future land use and their approaches.

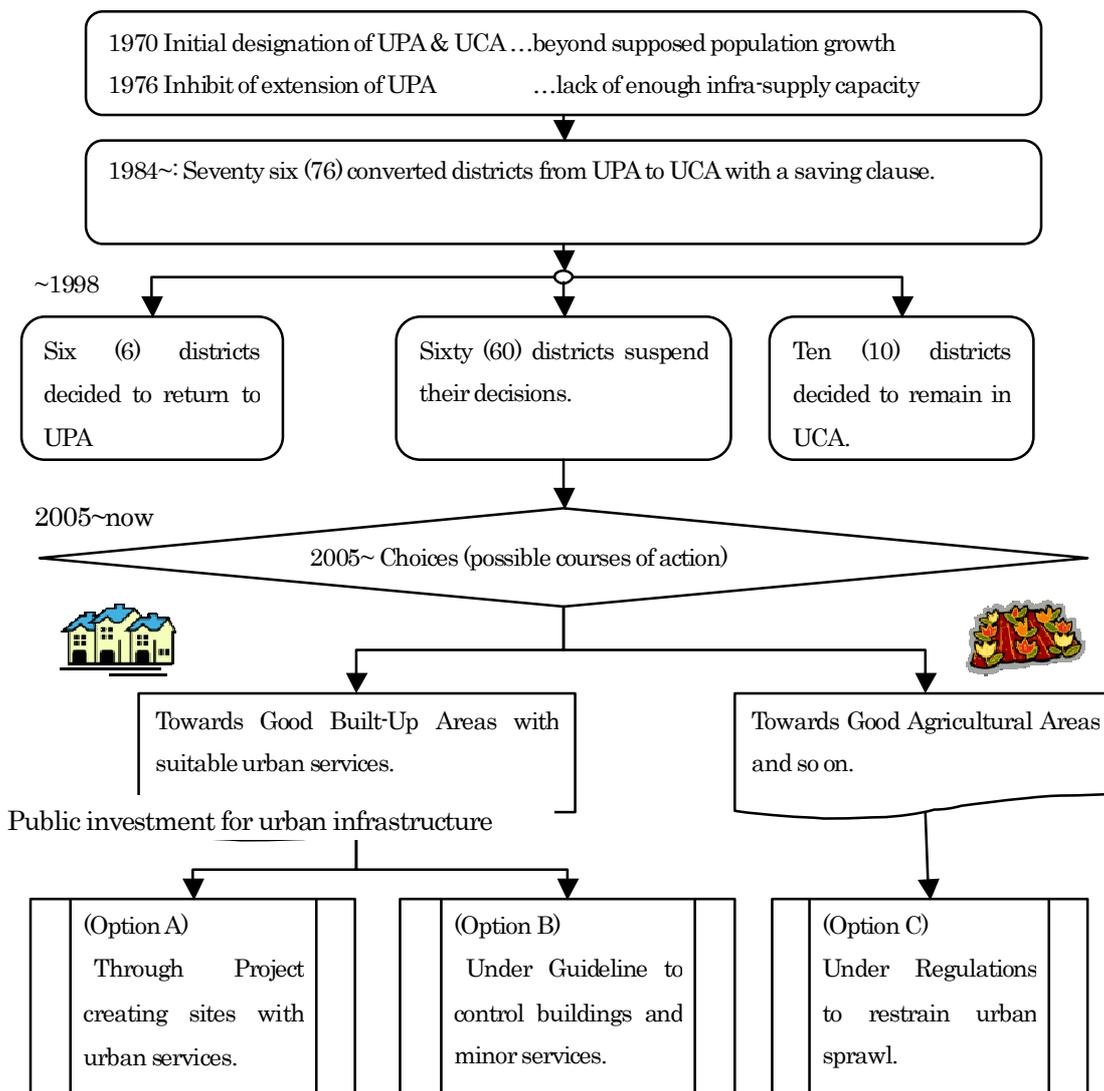


Fig. 2 Short history on switching between UPA and UCA

§ 3. New Options switching from “Suspended UCA” --its outlook--

Decisions of three options, as of 2009 March, are shown in Figure.3. That is; 35 % prefer to remain UCA(choice C), 40% prefer to change in UPA (choice B) on Design Guidelines designated on the District Plan, 7% prefer to UPA through LRP(choice A), and 17% are under discussion, whereas seventy-one (71) “Suspended UCA” in Saitama Prefecture is 1,185ha.

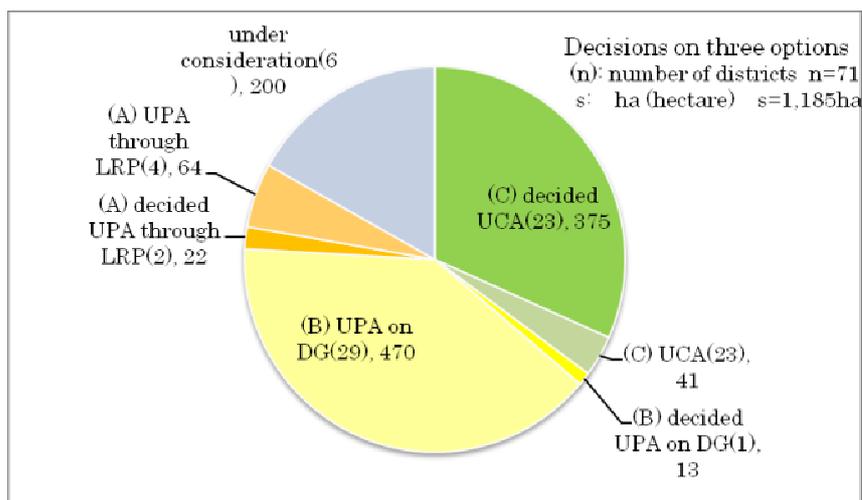


Fig. 3 Decisions on three options (as of 2009 March)

Following three questions related to the three options are gained;

(Question 1) Why does an option (C) to remain in UCA seem earlier settlement of a consideration than other options? ;

(Question 2) Why was not an option (A) to switch to UPA through LRP decided on, although this option was supposed to be preferable for original spirit of the transit “Suspended UCA”? ;
And

(Question 3) Why an option (B) to switch to UPA under Development Guidelines on the District Planning Scheme is likely to be adopted instead of option (A)? And why have the most of the adoptions not been established yet?

An answer to question 1 is its situations are originally advantageous, not for future urban land use but for actual agriculture. Some logic was supposedly constructed to make reasoning to remain UCA (UCA-oriented case).

i) Landowners in the district said they had a will to keep engaging in agriculture in a question in 2004; and there have seemed no data observed to show both need for residential use and urbanization trend;

ii) The Local governments had no plans for urban-oriented program such as new urban trunk street or new sewerage system in the district.

Therefore, the government decided to remain USA and to start agricultural supporting policies. This naturally means land use for agriculture does not require urban public services such as



trunk streets, sewerage system and so on. Of course, we pay attention to prepare countermeasures against urbanization in white-colored zone in Fig.4. Because of surrounding UPA which has an impact of urbanization to the UCA.

To choose an option (C) is, supposedly, a prompt decision making, based on the landowners' will preferable to agriculture. Most of the citizens in the city welcome the option (C), from the natural conservation point of view, and the local government does without new urban infrastructure which would be burdensome to their financial conditions.

Fig. 4. Example of option (C) 23 ha in area

Next, an answer to question 2 is that Land Re-plotting Program requires both public investment and consensus building to start. Fig.5 shows draft of planned land use patterns through the project. This project plan is estimated to cost 6,050 billion Yen for both construction of major traffic arteries and preservation of existing woods.

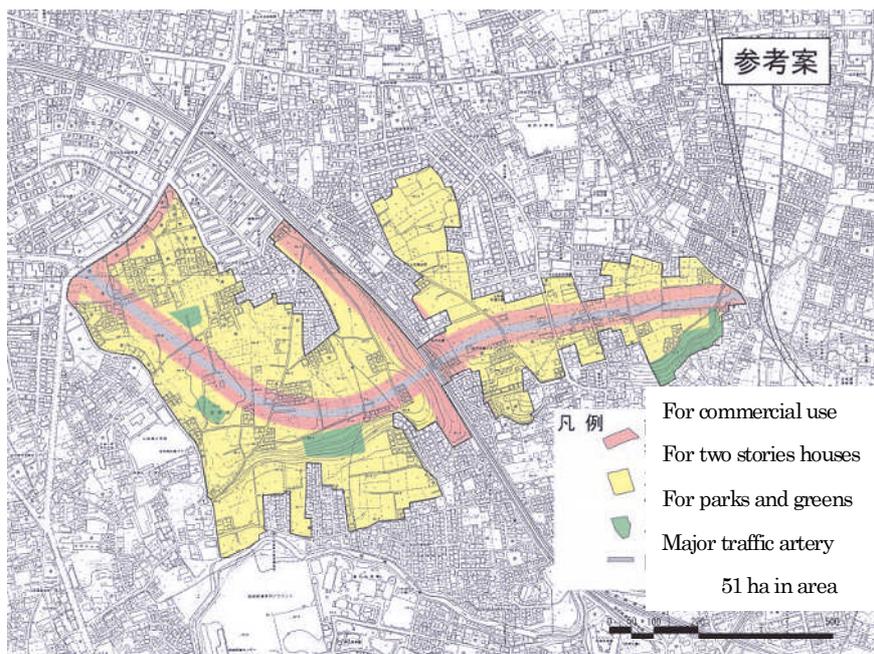


図-2.4.7 対象計画原案の土地利用イメージ(2)

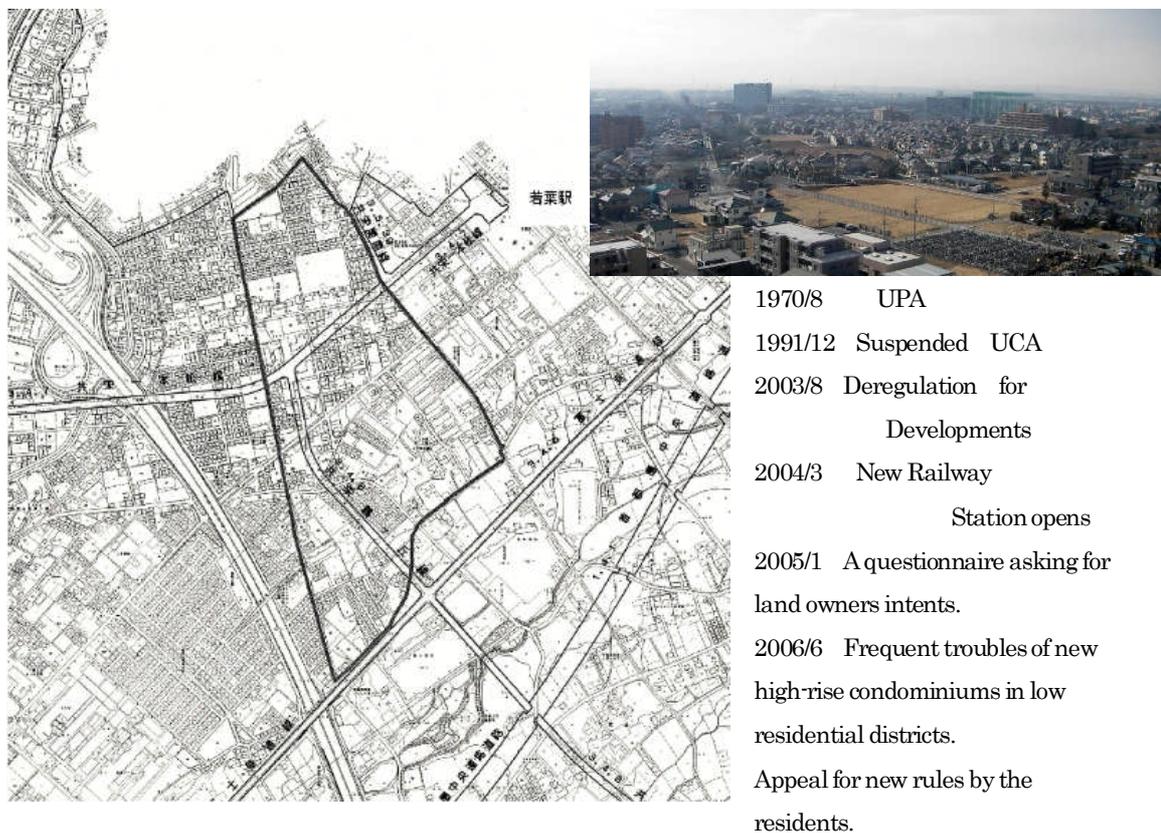
Fig. 5 draft image of land use layout after LRP (option (A))

Almost half of the total project cost 12,100 billion Yen would become a heavy burden on a municipal government to establish financial resources. Expected income of the government after the project is also estimated: new comers have a potential to buy 7.48 billion Yen/year, new commercial activities have a potential to sell 10.73 billion Yen/year, and total of Real Estate Tax supposedly amounts to 0.32billion Yen, etc.

A heated controversy on such fiscal problem as well as natural reservation problem including

good woods or tea field might make consensus-building for the citizens difficult.

Finally, answer to question 3 is time-consuming to start consensus-building on future land use and their measures for actualization and realization.



2007/7 Draft of Development Guidelines is shown.

2007/12~ meetings for Consensus buildings of Development Guidelines

Fig. 6 Short history in (option (B))

A history in Fig.6. says no decision seems to be made other than option (B). No discussion was made relating to Suspended UCA since 1991/12. LRP is too late to work, because of mixed and crowded built-up areas owing to good transportation and deregulations in 2003~. The community has just been aware of land use plan and controls with suitable public services especially sewerage system and open spaces, and just started study and discussion since 2007/12.

§ 4. Actual Choices in Eight (8) districts in Saitama-City

In Saitama-City, eight (8) suspended districts seem grouped into either two (2) inner ones enclosed by UPA and six (6) fringe ones located on edge of UPA boundaries. The two all inner ones switch to UPA, and which is favorable decision in view of urban service management. On the other hand, the two of the six fringes suspended UCA remain in UCA, and which is also advantageous decision in view of efficient urban services, and the other four of the six switches to UPA.



Fig. 7 Eight (8) suspended districts and their choices

Three functions managed by municipal government might be useful to take into consideration which alternatives are better or not.

Table 1 issues for course of actions in “suspended UCA”

Land use	Agricultural Use	Urban Use
Three functions		
i) Land use regulation:	UCA strict	UPA flexible
ii) Tax:	low assessed ~ Real Estate Tax ~	highly assessed ~ Real Estate Tax & City Planning Tax ~
	Low density of population ~ A residence tax in proportion with his income ~	High density of population
iii) Public investment(*):	small sum	large sum

(*) remarks:

The residents want Sewerage system. But there are some “suspended UCA” with full mains sewerage, where construction of sewerage is not a motive for UPA through LRP or Development Guidelines. LRP is a good chance to construct effectively sewerage pipes concurrently with the project, and to supply quickly sewerage services succeeding housing construction after the project.

And three governmental functions have relationship among them. For instance, such generous land use regulations as leads to urban sprawl with low density and mixed land use would bring about increase in tax might and would cause increase in inefficient expenditure for public services.

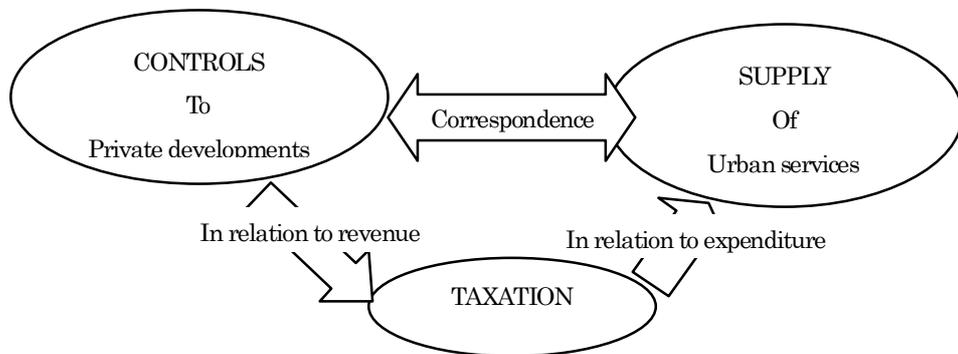


Fig. 8 Land use controls and Urban service management has relationship

4-A: reasoning to return to UPA -UPA-oriented case through Land Replotment Program (Fig.9~11)

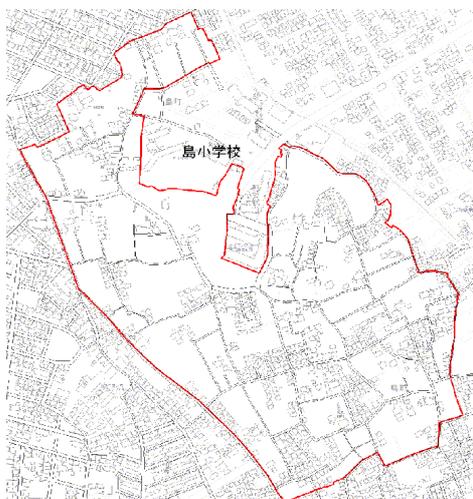


Fig. 9 case of option A

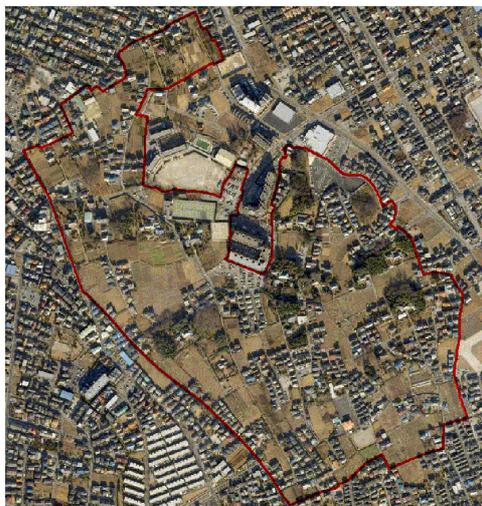


Fig. 10 case of Option A



Fig. 11 This area occupies an important position for urban structure.

LRP in this red-colored area would contribute to form urban network of major traffic artery with main sewer serving the city-wide scale.

This is an inner “suspended district”, which returns to UPA through LRP.

This Project is expected to give considerable advantages to the communities in city-wide scale beyond the district itself, to serve the convenience of both arterial roads between two railway stations or other existing trunk road in view of forming urban road networks and trunk sewer lines dividing into peripheral pipes, other than these urban services for the district itself. This expectation could be reasonable to pay the tax for the project which is roughly estimated to cost 10 billion Yen whose revenue sources are 7 billion Yen by the municipal government based on tax and 3 billion Yen as income the established sites for sale.

Most landowners in this case seem to have a motivation to UPA, in spite of uneasy conscience to coming Land Replotting Project, because of their living and economical benefits. And a block plan specifying lot and streets on the project is, reasonably, supposed to be kind of cost-down designs which would avoid increase in an amount of compensation of the project, with paying attention to deference to existing road networks and newly built valuable structures.

4-B reasoning to return to UPA –UPA-oriented case under Guideline Scheme (Fig.12~14)



Fig. 12 case of Option B

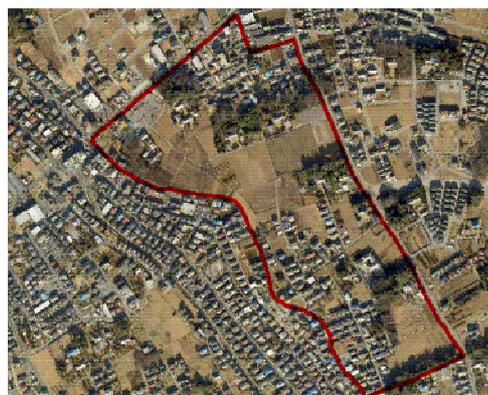


Fig. 13 case of Option B

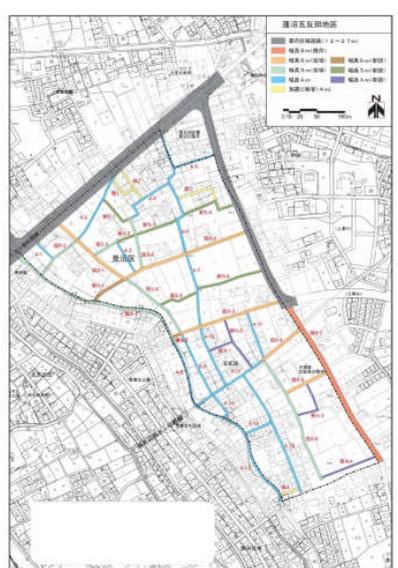


Fig. 14 Guidelines toward good and feasible urbanization

Guideline shows planned road networks with T-shaped crossroads and crank-shaped roads, with feasible width and arrangement, corresponding to existing alleys’ geographical patterns, keeping off actual structures on site.

This choice is to adopt a development Guideline to placement of feasible planned road network paying high regard to existing alleys. And this Guideline has construction rules relating to use, volume, height, set-back and so on, for houses or structures. New developments are to meet the Guidelines, and less public fund would be paid for road-widening work in conformity with the Guidelines, than choice B. On the contrary, option C is affordable, where urbanization speed is not so rapid.

Burden taken by the landowners in Guideline scheme is not as heavy as that through LRP. Real Estate Tax on farmland in UPA is reduced as much as in UCA, if the farmland is a Productive Green Zone.

4-C: (option C) reasoning to remain UCA –UCA-oriented case (Fig.15~16)

This case shows option C could be adopted from different point of original view stated in the chapter 2. Favor of whether urbanization or not is not successfully grasped, because of a poorly responded questionnaire or inactive meetings, in this community (Fig 15, 16). So, there is no choice but adopt continuously current UCA regulations. And public investment for urban services is to be restrained, as well as waiver of imposition of Special Tax for Urban Infrastructure. The location is poor urban transportation services, so private investment for development is supposed to be inactive. More, no participation to planning is any change in planning.



Fig. 15 postponing option C (photo)

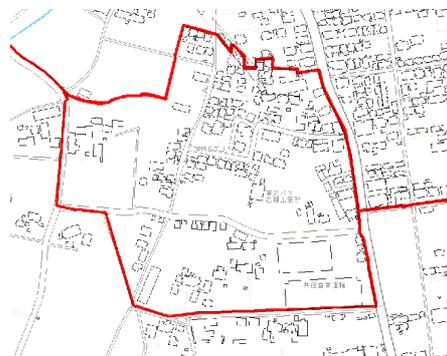


Fig. 16 postponing option C (map)

§ 5. Summary

This above case study shows a following natural rule: UCA is a domain not only where private investment for urban development is in general prohibited, but also where public investment for urban infrastructures and services is refrained, because the beneficiary pays principle becomes worth in current depopulation and financial difficulty era. On the other hands, in UPA where beneficial citizen lives, public expenditure for initial cost of urban infrastructure and services as well as for their running cost, are paid more advantageously than in UCA.

Table 2 shows to summarize characters of the three options, and a Review & Revise system is

required to work after each decision.

Table 2 Review & Revise System is required after the decisions

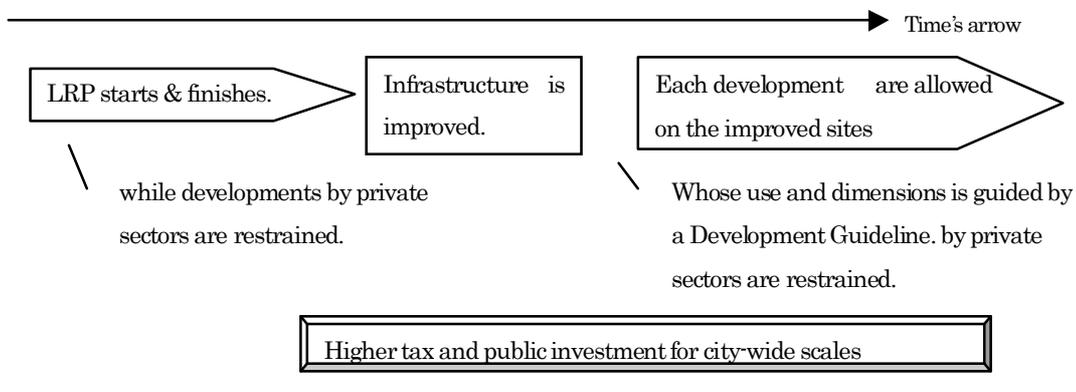
Decided options and their characters.		Review & Revise system to be developed.
option A Switch to UPA through LRP	Public sectors opinion with strong public investment toward good urban structure in future tracts to its decisions of choice A more heavily than local residents' inclination	<p>These decided options are to be monitored, evaluated and revised, in following viewpoints;</p> <p>i) increase or decrease in revenue of local governments, such as several taxes,</p> <p>ii) expenditure</p> <p>Increase in expenditure for initial and running const of urban infrastructure or urban services.</p>
option B Switch to UPA under DG	A moderate decision is made, based on local residents' will and local governments' guidance.	
option C Remain in UCA	Unstable decisions are made, because of poor communication between private sectors and public sectors	
Choice D Keep in UCA	Consistent future image on land use patterns and related infrastructures and reasonable policy is successful, between local residents' opinion and public sectors' planning will	

The reason why these system is necessary after the decisions is such decision is a “start point” to do an urban management scheme for sustainable community, accompanied with monitoring urbanization process (see Fig.16) composed of land use and urban services, and with evaluating the two from the standpoints of Quality of Life for the citizens and Municipal Finances.

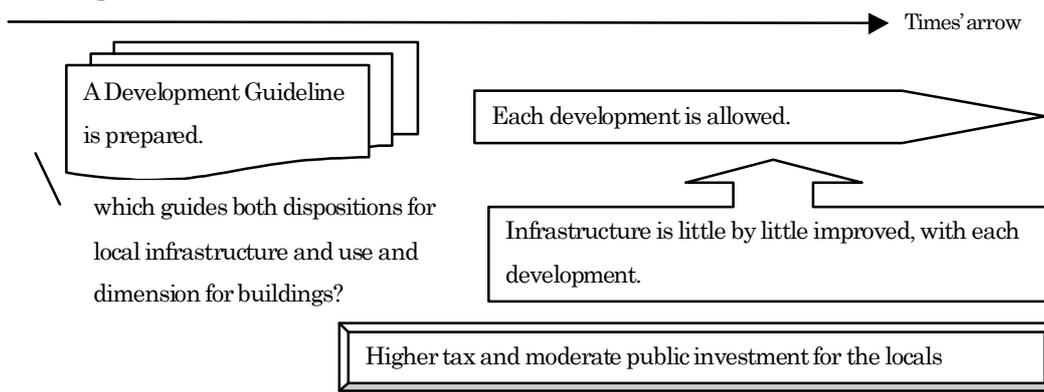
Under the depopulation era, a scheme to evaluate the decisions of urban policies must be a dynamic one.

Of course, this case-study needs further monitoring on both practical public investment in these urban infrastructures as well as income of tax, and public investment in number of houses under construction, settlement of households, and so on. Moreover, level of residential conditions is to be evaluated, in order to review such options.

[Option A] Switch to UPA through LRP



[Option B] Switch to UPA with DG



[Option C] Remain in USA

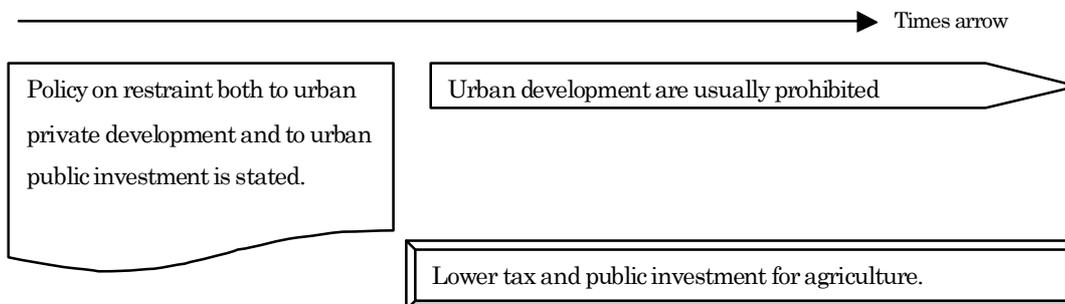


Fig. 17 Urbanization Process according to the three options

§ 6. Appendix ---ABBREVIATIONS and their meanings---

UPA & UCA System ;

Which Prefectural governor adopts, so as to geographically divide into UPA and UCA in CPA

UPA: Urbanization Promotion Area

Where private investment for urban land use is naturally permitted through Development Control Scheme, if the investment conforms to Zoning System. Both Development and urban public works are promoted.

UCA: Urbanization Controlled Area

Where private investment for urban land use is in principle, prohibited through the Development Permission Scheme, and supply of urban public works such as trunk roads sewerage system, or urban parks is not given priority.

CPA: City Planning Area

Where the City Planning Law which has UPA & UCA System, Development Control Scheme, Urban Infrastructure Planning Projects, and soon, works.

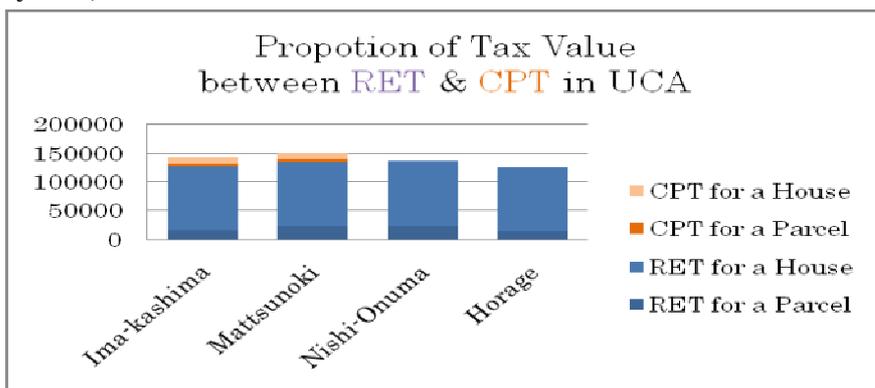
RET: Real Estate Tax

Municipal tax on real property, and the value of which is higher in UPA than that in UCA.

CPT: City Planning Tax

Which is a special tax imposed in land in especially in UPA, and purpose of which is capital funds for urban infrastructure. Special Tax for Urban Infrastructures;

Which is levied to landowners who have land mainly in UPA, adding on Real Estate Tax; the use of which is spent for construction cost of urban infrastructure such as Trunk Street, sewage system, and so on?



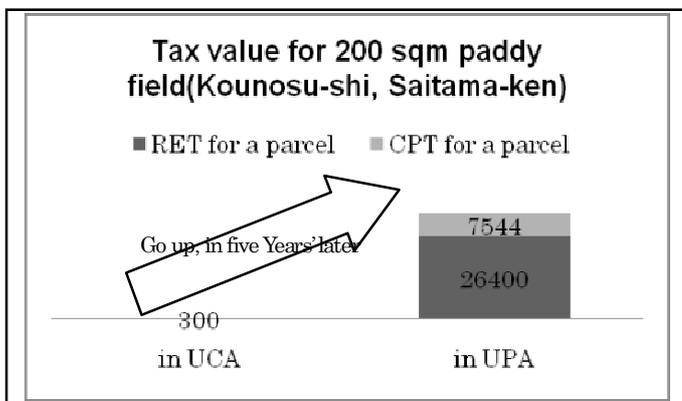
Parcel in area 500sqm,

House in size 120sqm,

Assessed Value for construction cost of a house

average cost of wooden structure and light-gauge steel framed structure 79,500 Yen/sqm (= (82,000 Yen/sqm + 77,000 Yen/sqm)÷2)

Value assessed in four (4) years after new construction.

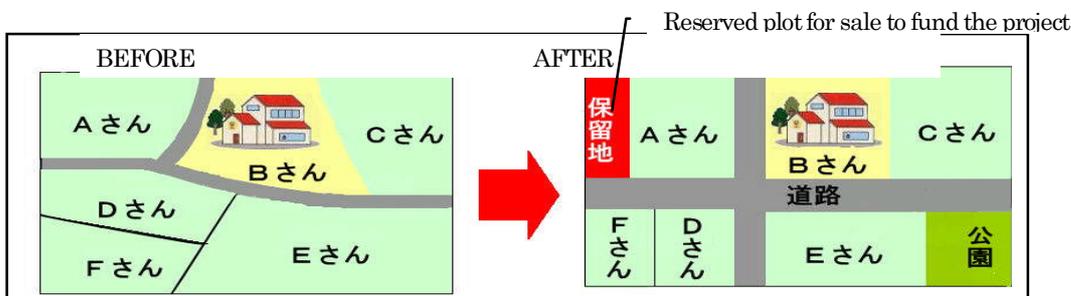


Development Control Scheme

One who has a plan to prepare the land and to erect structures on the site should make an application for a Development Permission issued by local government.

LRP; Land Re-plotting Projects

Whose concept is; each land owners in the project area get his own re-plotted, well-conditioned sites through contribution of his own land for road or parks. This project might pay if both private fund to sell out put together land for sale and public fund for such infrastructures, depending on demand for residential sites and tendency of land prices.



Plots of land with good infrastructure would be viable, through the LRP.

Development Guidelines;

Private investment, e.g. preparation of housing site, erection of buildings on leveled ground, should conform to standards stated in Development under the District Plan Scheme.

PGZ: Productive Green Zone

To protect agricultural land in UPA, real estate tax for farmland in the Zone in UPA is reduced to that in UCA.