

THE DEVELOPMENT OF LAND CONSOLIDATED INTEGRATION IN THE LAND ACQUISITION OF ROAD NETWORK AT KEBUMEN DISTRICT, INDONESIA

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SUMMARY

The implementation of the land acquisition for public development is often constrained on the amount of indemnification agreements which is not considered feasible to improve the social welfare of society. In addition, the land acquisition funding problems that is based on the Local / Regional Budget (APBD) which is not sufficient for the implementation of the land acquisition for the construction of the South Cross Road Network (SCRN) in Kebumen. For that reasons, it needs a solution to implement the development plan by integrating the Land Consolidation (LC) and can provide the good profits for those who need the land (the government) as well as the land acquisition affected (the public).

LC integration is carried out for the 45 land parcels with the allocation of SCRN land acquisition costs in Karanggadung village. The type of community participation in LC integration is to give the Land Donations for Development (LDFD). Based on LDFD calculation is made three designs of land consolidation, adjusted for the Regional Spatial Planning (RSP) that is for the dry land agriculture . The first design is the LC integration of agriculture with the zoning for LDFD distribution, the second design of LC integration is agriculture with the zoning and the commercial location to accommodate the agricultural product, and the third design of LC integration is the settlements with the commercial location. The three designs of LC are analyzed based on the aspect of the benefits and sale values of land based on market prices.

The first design increases the land sale value on average 96.64%, or 1.97 times the value of the previous land sales, the second design 196.64%, or 2.97 times and the third design 404.67% or 5.05 times. The comparison with the land sale value through the restitution is obtained at 1.39 times at the first design, the second design 2.1 times and 3.57 times at the third design. However, in the first and second designs are constrained by the restrictions on the agricultural land ownership that is at least two hectares. Therefore, recommended changes the agricultural commodities for increasing the benefits and higher sale values. The third design becomes the most profitable alternative for land owners to develop its economy with a comparative value of the largest land sale. The third design can be implemented by converting from the dry land agriculture to non agricultural land.

SUMMARY (in Bahasa Indonesia)

Pelaksanaan pengadaan tanah sering kali terkendala mengenai kesepakatan besarnya ganti rugi yang dianggap tidak layak untuk meningkatkan taraf kesejahteraan sosial masyarakat. Selain itu, permasalahan pendanaan pengadaan tanah yang bersumber pada Anggaran Pendapatan dan Belanja Daerah (APBD) tidak mencukupi bagi pelaksanaan pengadaan tanah untuk pembangunan Jaringan Jalan Lintas Selatan (JJLS) di Kabupaten Kebumen. Untuk itu, perlu solusi bagi terlaksananya pembangunan yang terencana dengan mengintegrasikan Konsolidasi Tanah (KT) dan dapat memberikan keuntungan baik bagi pihak yang membutuhkan tanah (pemerintah) maupun pihak yang terkena dampak pengadaan tanah (masyarakat).

Integrasi KT dilaksanakan untuk 45 bidang tanah dengan biaya alokasi pengadaan tanah JJLS di Desa Karanggadung Kecamatan Petanahan. Bentuk partisipasi masyarakat dalam integrasi KT berupa Sumbangan Tanah Untuk Pembangunan (STUP). Berdasarkan perhitungan STUP dibuat tiga desain Konsolidasi Tanah yang disesuaikan dengan Rencana Tata Ruang Wilayah (RTRW) yaitu untuk pertanian lahan kering. Desain pertama adalah integrasi KT pertanian dengan zonasi untuk pembagian STUP, desain kedua integrasi KT pertanian dengan zonasi dan lokasi komersial untuk menampung produksi pertanian, serta desain ketiga integrasi KT permukiman dengan lokasi komersial. Ketiga desain KT dianalisis dari aspek manfaat maupun nilai jual tanah berdasarkan harga pasar.

Desain pertama meningkatkan nilai jual tanah rata-rata 96,64 % atau 1,97 kali dari nilai jual tanah sebelumnya, desain kedua 196,64 % atau 2,97 kali dan desain ketiga 404,67 % atau 5,05 kali. Perbandingan dengan nilai jual tanah melalui ganti rugi diperoleh pada desain pertama 1,39 kali, desain kedua 2,1 kali dan desain ketiga 3,57 kali. Namun, pada desain pertama dan kedua terkendala oleh pembatasan minimal pemilikan tanah pertanian yaitu dua Ha. Oleh karena itu, direkomendasikan mengubah komoditas pertanian untuk meningkatkan manfaat dan nilai jual yang lebih tinggi. Desain ketiga menjadi alternatif yang paling menguntungkan bagi pemilik tanah untuk mengembangkan perekonomiannya dengan perbandingan nilai jual tanah paling besar. Desain ketiga dapat dilaksanakan dengan melakukan konversi dari tanah pertanian lahan kering ke non pertanian.

1. BACKGROUND

In Indonesia, land acquisition stipulated in Law No. 20 at 1961 (Act 20/1961) about Revocation of Rights over Land Parcel and objects that were above, Presidential Regulation No. 36 at 2005 (Presidential Regulation 36/2005) about Land Acquisition for Public Interest Development jo Presidential Regulation Number 65 at 2006 (Presidential Regulation 65/2006) about the amendment of Presidential Regulation No. 36 at 2005. Then followed up with the Head of National Land Agency Regulation No. 3 Year 2007 (KBPN Regulation 3 / 2007) about Implementation Rule of the Presidential Regulation 65/2006.

Land acquisition mechanism has been done in the framework of spatial planning, from a variety of facts often lead to conflict and resistance from land owners (Setiawan, 2008). Regional development are through land acquisition mechanisms for public interests development often have constraints both funding and social constraints in terms of an agreement with the community. As any SCRN development in Kebumen that since 2004, but till now (in 2010) has not been realized. The obstacles in the implementation of land acquisition for SCRN construction are such as the lack of funding from Regional Budget Revenue and Expenditure (RBRE). On the land acquisition mechanism, financing is absolutely whole from the Government. Meanwhile, funds of RBRE is not sufficient for implementation of land acquisition.

The social constraints also obstruct the implementation of land acquisition in terms of amount of indemnification agreements with the communities affected by land acquisition for SCRN. The amount of compensation funds offered by the government is still too small and is considered by the society is not feasible to meet the needs of life compared to before there is land acquisition. The Government shall determine the compensation based on the Tax Object Sale Value (TOSV) which does not reflect the actual value of the land.

1.1 Problem Formulation

1. Is LC can be integrated in the land acquisition for SCRN development in Kebumen regency ?
2. Are the development of LC integration in land acquisition for SCRN development in Kebumen regency can provide the benefits for government and land owners ?

1.2 Hypothesis

1. The LC can be integrated in land acquisition for SCRN development reviewed from the juridical, funding and institusional aspects.
2. Integration of LC in the land acquisition will be benefits for the government or community compared with just the compensation in money.
3. The funding for LC activities can be sustained by land acquisition compensation.
4. Integration of LC in land acquisition for SCRN development **will make** the availability of the commercial locations for LC members and also will increase the land sale value

1.3 Objectives and Benefits

The purpose of this research is to develop the mechanism for the land acquisition by integrating LC that is expected to provide the benefits for implementers of development and land owners.

The results of this study are expected to provide :

1. the academical benefits, as the development of scientific knowledge land administration for the academics, and
2. the practical benefits, as a solution for the implementers of land acquisition by the government and can provide added value to land for land owners in the area.

2. THE CONCEPT OF LAND ACQUISITION AND LAND CONSOLIDATION

2.1 Land Acquisition

From the literature (Sitorus dan Limbong, 2004; Hamzah, 2006) and regulations concerning land acquisition can be concluded about the concept that the land acquisition as the activity to get the land for development through specific mechanisms. The definition has several aspects in the land acquisition of which is the juridical aspect, the funding aspect, institutional aspects, and social aspects.

Juridical aspects of land acquisition have been stipulated in Presidential Regulation 65/2006 which is followed up KBPN regulation 3/2007 as the provisions of the implementation of land acquisition for public interests. KBPN Regulation 3 / 2007 clearly sets out the procedures of land acquisition from planning, determining of the location, until the release of rights. Forms of compensation also clearly stated in Clause 13 of Presidential Regulation 65/2006 in the form of cash, the replacement land, the resettlement, the combination of two or more forms of indemnity, or other agreed form of the parties concerned.

The funding aspects in land acquisition is important because it attempts to obtain the land always to needs funds. Karmono (2005) states that the concentration of the problem lies in the amount of the land acquisition compensation. On one side of the party who controls the land owners want the amount of indemnification according to local market prices, while on the other hand is still limited government funds available for the land acquisition.

The institutional aspects of the land acquisition there is a weakness that is less appreciation to the community in the form of active participation in the institutional implementation of the land acquisition. The role of communities is in deliberation having the strong negotiating position. As suggested by Kalo (2004) that the implementation of compensation is made by consensus and tend manipulative false because at the time the condition of deliberation, the public does not have the balanced negotiating position (*bargaining position*), psychologically people are under pressure from the authorities.

2.2 Land Consolidation (LC)

Basic conception of land consolidation is as the activity of the reordering mastery and land use and infrastructure improvements along soasial facilities by involving the active participation from the community.

In LC activities will be a change of land tenure and land use in terms of realignment. Defined as the arrangement because the subject and the object of land before LC would be similar to the subject and the object after LC. The point is that the owner of the land before LC will occupy the land in accordance with the donations given in the implementation of the LC. Thus there are no LC activities as the land acquisition evictions. While the land use is adapted to LC development in accordance with RTRW (Setiawan, 2008).

The changes in LC activities also include in geometry changes of position/location, shape and size of land, as well as the large areas of land parcels. The position indicates the location of land parcels both in absolute terms and relative to other parcels. Form of land parcels which originally is irregular, after the LC to be regular with infrastructure. Area of land parcels will be smaller because part of the land used for infrastructure development and for the financing of LC.

LC development for residential, becoming the concern is the location where the location for housing has the high economic value. LC for agriculture need to be considered is the productivity and minimum threshold of land ownership as stipulated in Law No. 56 Prp at 1960 about Stipulation Agricultural Land that is equal to two hectares (Ha).

Marosan et al. (2008) argued that LC should and must provide an implementation of the principle of democratic participation of all stakeholders. In this study integrates the participation of all stakeholders including community participation through institutions such as cooperatives organized with the assistance of a competent expert in the field of land consolidation.

The term of STUP in Indonesia called the contribution of land for development, the basic concept referred to as the *contribution* (Sitorus and Sebayang, 1996). Clause 1 verse (4) KBPN Regulation 4/1991 formulating the STUP as part of LC objects provided for the construction and other public facilities as well as for the Implementation of Land Replacement Costs (TPBP). TPBP as part of the STUP is used for the financing of LC. Mathematical formulation of calculations can be seen in equation (1) (Sitorus and Sebayang, 1996) :

$$STUP = (L - L_s) / L \dots\dots\dots (1)$$

Where:

L = land area before LC

L_s = land area after LC

Public participation in the form of STUP will receive refunds in the form of land value is better. The calculation of land value after LC is as follows (Rahman, 1991) :

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1. Calculate the ratio of land area owned after LC with before LC using equation (2) :

$$p = L_s / L, \text{ or } p = (L - L_f) / L \dots\dots\dots (2)$$

Where:

p = ratio land area owned after LC with before LC

L = land area owned before LC

L_s = land area after LC

L_f = land area for facilities / infrastructure

2. Calculating the minimum land value after LC by equation (3) :

$$N_b \geq (N_a + N_m) / p \dots\dots\dots (3)$$

Where:

N_b = land sale value owned per unit area after LC integration

N_a = land sale value owned per unit area before LC integration

N_m = average value per unit area of land development

p = ratio land area owned after LC with before LC

Minimum land sale value after LC can be used for determining the fees of the LC (symbolized by the notation "b") with persamaam (4) follows (Sitorus and Sebayang, 1996) :

$$b = L_{pi} \cdot N_b \dots\dots\dots (4)$$

Where:

L_{pi} = area of land to TPBP, in this same area of land affected by the land acquisition JJJ

N_b = land sale value per unit area of land owned after LC

3.METHOD OF LC INTEGRATED IN LAND ACQUISITION

Our research presented in the form of diagrams as in Figure 1 as follows :

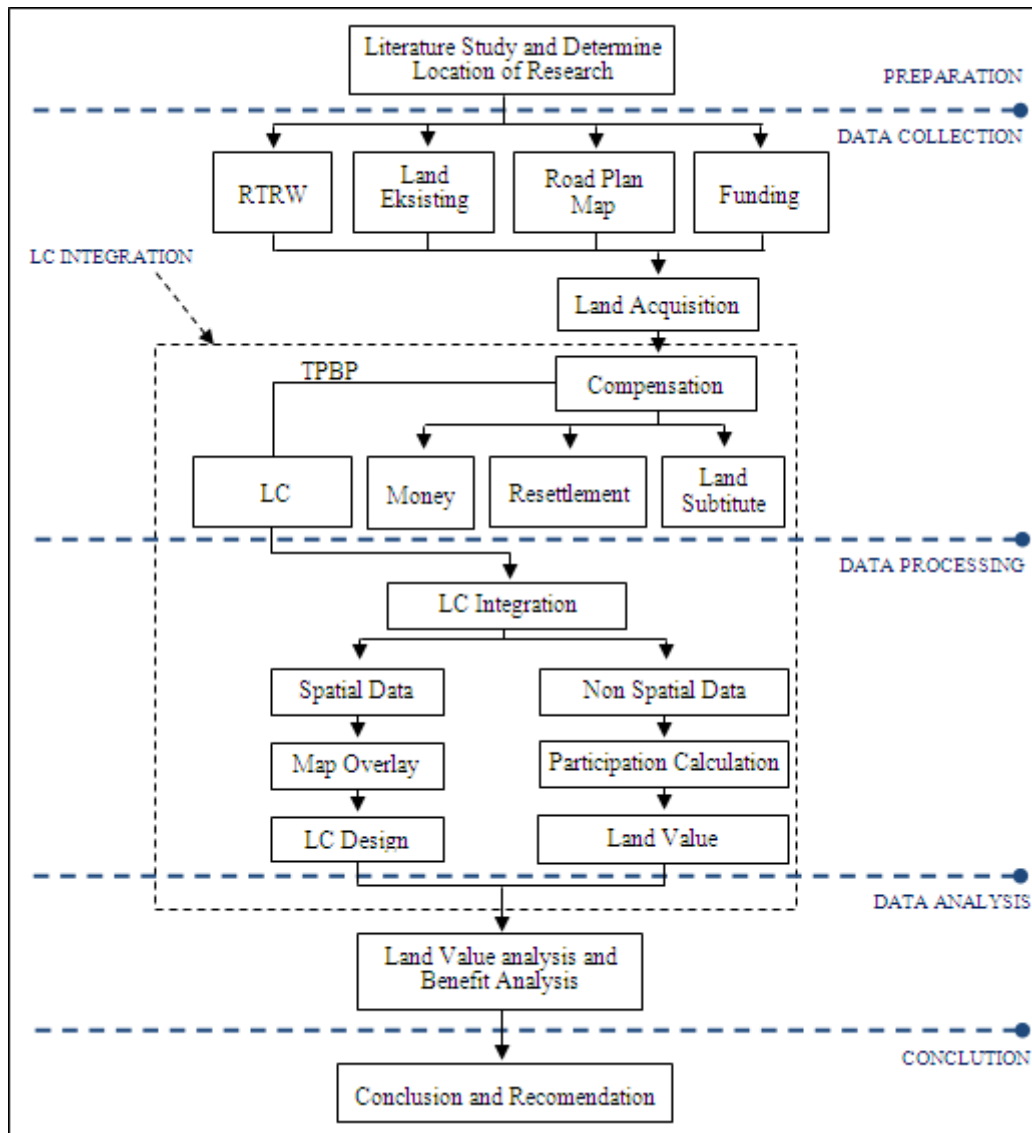


Figure 1 Research Methodology

3.1 Research Preparation

In the preparation phase carried out literature studies and determine location of research. Established research area in Karanggadung vilage of Petanahan in Kebumen which in this case the land acquisition process is still constrained as described in the background of the problem. JJLS development plans through the Karanggadung vilage of Petanahan in dryland farming areas are expected to contribute large indemnity for implementation of LC. Wide area of land and aviability of data makes the problem in the field. Thereforethe research fosed on several land parcel (45 parcels).

3.2 Data Collection

Data obtained from the DPU, the Regional Development Planning Board (Bappeda), Kebumen Land Office, and Village Office of Karanggadung, Petanahan. Data used in the research include:

1. Land parcels covers 45 land parcels in the Village of Karanggadung, Petanahan in JJLS planning area, Land Use Map and Employment Operational Directive (POK) Land Consolidation Project Budget from Kebumen Land Office;
2. Base map from Karanggadung Vilage;
3. JJLS Plan Map from DPU Kebumen, in this case is available at the Land Office as the implementing measures Kebumen road network and land acquisition realization data JJLS Kebumen;
4. The value of land from the Tax Office Pratama (KPP) or from the Office of Kebumen Karanggadung Village;
5. RTRW Map from Bappeda Kebumen Kebumen in this case New Housing Development Plan Map in Kebumen.

3.3 Data Processing

Processing of data was performed in two types, namely non-spatial data processing and spatial data processing. Non-spatial data processing include the preparation procedures of the implementation of the integration of LC in the land acquisition as the basis for operational implementation, the calculation of funding from the compensation value is assumed as TPBP, STUP calculation and land value calculation. Spatial data in the form of thematic maps which overlay to get the design of land consolidation with the calculation of non-spatial data.

Procedures Land Consolidation integration in the land acquisition carried out in three phases that constitute a unity integral activities, including :

1. Preparatory Phase; is the land acquisition planning activities and the preparation of land consolidation activities include determining the location of land acquisition, determination of compensation allocations, determining the location of land consolidation, the filing of Proposed Plan of Activities List (DURK) Land Consolidation plans to manufacture the blocks design.
2. Consolidation Implementation Phase; is land consolidation activities which include layout design, to certification waiver. Implementation phase is the phase of the LC is generally

adjusted to the planned development. In this case JJLS development, the implementation of the LC carried out based on the amount of compensation which is assumed as TPBP.

3. Physical Development Phase; a land consolidation activity which contains physical development of infrastructure and public facilities (roads, social facilities and other needs).

Development of LC integration done in three designs: first is agricultural LC with the zoning for STUP division, the second design is agricultural LC with zoning and the provision of commercial locations, and the third design is LC for settlements with the provision of commercial sites.

Development alternative of LC integration the first is agriculture by zoning. Calculation of the contribution of each landowner based on the STUP. STUP size is determined based on proximity to existing road infrastructure and which will exist which JJLS, where the closest larger contribution. While it is far from JJLS small contribution. If there is road previously infrastructure so there will be smaller contribution to the implementation of the LC integration in the land acquisition.

Proximity is divided into three zones ie zone 1, zone 2 and zone 3, where the first zone closest to the JJLS then subsequent zone 2 and zone 3. By considering the concept of proximity as one concept where the location of the land after the LC LC as much as possible close to the original location, so participants who are in zone 1 is plots of land close to the plan or who became close JJLS due JJLS plans and plots of land affected by the procurement JJLS. Parcels were categorized into zone two at this location because there are no facilities at all of the road. While the plots of land that originally was to have the road facilities were categorized into zone three.

Illustration of the division of zones is outlined in Figure 2 as follow :

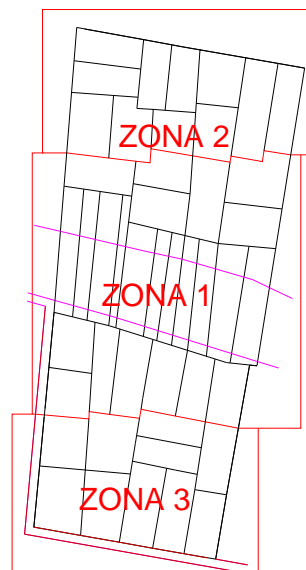


Figure 2 Land Parcels Zoning

The amount of STUP used to determine the extent of land to be provided as a contribution to the implementation of LC by multiplying its value with an area before land consolidation as equation (1). STUP calculation results for each zone are presented in Table 1 follow :

Table 1 STUP Calculation of LC Integration with Zoning

Zone	Area before LC Integration (m ²)	Area after LC Integration (m ²)	STUP (%)
1	11834	7938	32,92
2	5083	4168	18,00
3	4464	3844	13,89
Σ	21381	15950	

Land value before LC in accordance with market prices in Karanggadung Village on location there are two kinds that zone 1 and zone 2 is the Rp. 30.000.00 per square meter (m²) and in zone 3 is the Rp. 35.000.00 per m². Value of land development in accordance with the determination of LC from the Bina Marga DPU Kebumen is Rp. 30.000.00 per m². Results count of land value after implementation of LC integration in the land acquisition by equation (1) and (2) are presented in Table 2 follow :

Table 2 Land Sales Value Increase in LC Integration with Zoning

Zone	Sales Value of Land before LC (Rp./m ²)	Sales Value of Land after LC (Rp./m ²)	Land Sales Value Increase		
			(Rp./m ²)	%	kali
Zone 1	30.000,00	89.448,22	59.448,22	198,16	2,98
Zone 2	30.000,00	73.171,79	43.171,79	143,91	2,44
Zone 3	35.000,00	75.483,87	40.483,87	115,67	2,16
Average	31.666,67	79.367,96	47.701,29	152,58	2,53

Based on Table 2 obtained the land sales value after LC average is Rp. 79.367,96. The sales value of land was used as the basic for calculating the cost of LC implementation by using equation (4) obtained a fee Rp. 255.326.727,00. The land sales value per m² after extensive multiplied by each the land parcel after the LC acquired increased the land sale value an average of 96.64% or 1.97 times of the previous land sale value.

Second development alternative of LC integration for agriculture by zoning and provide a commercial location. This alternative done by adding an commercial location be a place to accommodate agricultural products. Associated with land rights, commercial locations to be join right of LC participants and are given a certificate join right with proportion to the comparative value according the STUP. Land donations from LC participants becomes larger as to provide a commercial location.

STUP calculation results for each zone are presented in Table 3 below :

Table 3 STUP Calculation of LC Integration with Zoning and Commercial Location

Zone	Area before LC Integration (m ²)	Area after LC Integration (m ²)	STUP (%)
1	11834	7386	37,59
2	5083	3888	23,51
3	4464	3604	19,27
Σ	21381	14878	

Results count the land sale value after the LC integration with zoning and commercial location of the formula (1) and (2) and progressive multiplier value from the addition the commercial site of twice are presented in Table 4 below :

Table 4 Land Sales Value Increase in LC Integration with Zoning and Commercial Location

Zone	Sales Value of Land before LC (Rp./m ²)	Sales Value of Land after LC (Rp./m ²)	Land Sales Value Increase		
			(Rp./m ²)	%	kali
Zone 1	30.000,00	144.199,84	114.199,84	380,67	4,81
Zone 2	30.000,00	117.662,04	87.662,04	292,21	3,92
Zone 3	35.000,00	123.862,38	88.862,38	253,89	3,54
Average	31.666,67	128.574,75	96.908,08	308,92	4,09

Table 4 shows the increase in land sale value is higher than the previous alternative. The sales value average of land after LC is Rp. 96.908,08 per m², or 4,09 times from sales value of the previous land. When compared with previous alternatives provides a better improvement to the difference increased to Rp. 49.206,79 per m². The land sales value per m² after extensive multiplied by each the land parcel after the LC acquired increased the land sale value an average of 196.64% or 2.97 times of the previous land sale value.

Third development alternative of the LC integration for settlement by providing a commercial location. This alternative is carried out by allocating land for construction of commercial locations such as shophouses. Every participant get the shophouses to expand and land settlements behind there. Shape and boundary lines of land for housing on alternative design should follow the symmetrical pattern as Figure 6.

The STUP magnitude of this alternative is 30.83%. Land sale value after the LC integration with the equation (1) and (2) and progressive multiplier value of settlements and the addition the commercial location of four times obtained Rp. 226.500,00 per m², or an increase of 7,15 times from sale value before the LC integration. The land sales value per m² after extensive multiplied by each the land parcel after the LC acquired increased the land sale value an average of 404.67 % or 5.05 times of the previous land sale value.

Meanwhile, increasing the land sale value if it is only through compensation will only be felt by owners of land along JJLS plan that is counted 20 land parcels to increase the land sale value per m² at 200% or three times of the previous land sale value. While the plots of land behind it will obtain the maximum the land sale value increased of 50% or 1.5 times of the previous land sale value. In fact, plots of land at the rear, will not benefit from any development JJLS or improvement the land sale value of 0%. The land sale value per m² after extensive multiplied by each the land parcel after the indemnity was obtained increasing the land sale value an average of 41% or 1.41 times of the previous land sales value. In fact, there are of land parcel which has decreased the land sale value after land acquisition because the extend of land that is liberated for development JJLS.

Spatial data processing is intended to provide a consolidated picture of the map. Processing was done by mapping the circumference to restrict the locations to be implemented land consolidation, land use mapping are used to determine the current land use Land Consolidation locations, making maps of Land Consolidation Plan for Block Design. Block Plan Map and Design Land Consolidation Map. Map Before LC (LC Location Map) and LC Design Map is presented in Figure 3 to Figure 6 as follow :



Figure 3 Location LC Map

Location LC Map describes the geometry situation of land areas will be consolidated. The geometry primarily studied is the land area. In our research, most small of land parcels is an area of 219 m² and of 659 m² at most. Average width is 475 m² overall, so it is possible to donate the land in which a large percentage.

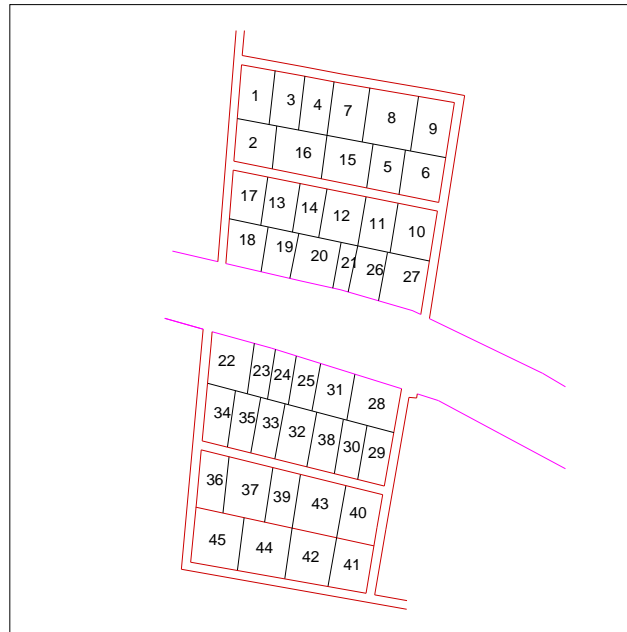


Figure 4 Design of Agriculture LC Integration with Zoning

Development design of Agricultural LC integration with zoning described land parcels geometry after LC is changed with the position, shape, and size. Form of land parcel became more organized with the provision of access to a road. Forms of agricultural LC should not symmetrical but should follow the commodity / agricultural crops. Experienced a reduction of land area where most of the land for the construction of roads access and do not meet the minimum limit ownership of agricultural land. Economically with of roads access ease in the transport of agricultural product, but also facilitate middlemen entry to the location of agricultural.

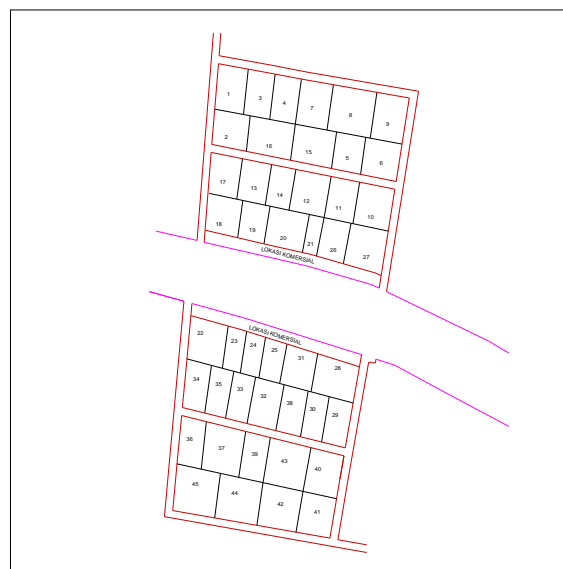


Figure 5 Design of Agriculture LC Integration with Zoning and Commercial Location

Development design of Agricultural LC integration with zoning and commercial location describe the geometry of land parcell after LC in common with the previous design only provided a commercial location to accommodate the agricultural product. Land area experienced a greater reduction from previous designs and do not meet the minimum limit ownership of agricultural land. By providing commercial locations can facilitate marketing and increase bargaining power in agricultural product and prevent the existence of middlemen.

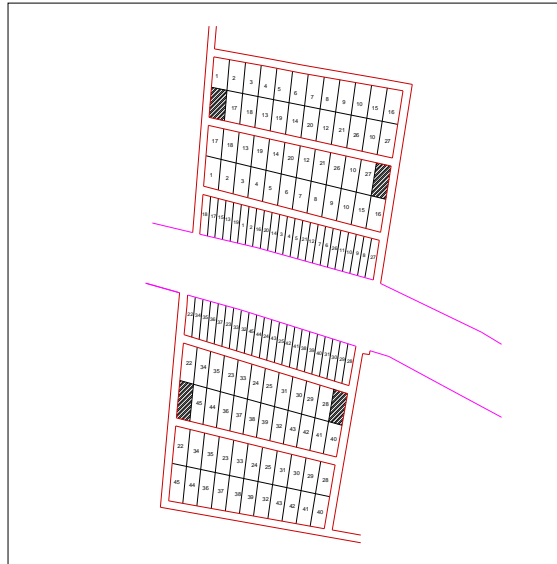


Figure 6 Design of LC Integration for Settlement with Commercial Location

Development design of LC integration for residential with providing commercial site that describes the geometry of land parcels arranged symmetrically as requirements for housing development. LC designs for settlement has become an alternative form of recommendations because their land use is dry land and some housing. Dry land can be converted into housing

4. ANALYSIS OF LC INTEGRATION IN THE LAND ACQUISITION

4.1 Analysis of Land Consolidation Integration Election

Kebumen especially in coastal areas such as Petanahan has a flat topography. Land use is dominated by residential and agricultural use. Specific in the region closest with beach like in rural areas of this research, existing agriculture in the form is dry land farming. Viewed from residential developments based on Rural Housing Development Plan Map, the Karanggadung Village including the area will be developed towards the settlement. To prevent the development of irregular settlements due SCRND development plan, the arrangement would be appropriate if reorganized land through LC.

LC election as an additional mechanism that is integrated in the land acquisition in Kebumen not without reason. One reason is the geographic characteristics as described above. Besides the characteristics of a socially, people in the area of research still adhered to a strong family system in which to decide something is done by consensus agreement together all the

villagers, and religious nature of the relationship between land owners and land occupied hereditarily. This causes the reluctance of Communities for displaced or relocated elsewhere in the economy which can not guarantee its welfare.

Meanwhile, to implement the investment system in development will only involve some communities in which the owner of the land affected by SCRN land acquisition. Whereas, to apply a high compensation would be more burdensome budget because the cost of compensation are responsibility of the government completely. Therefore use LC mechanisms that involve development funding from the public.

Non performance and poorness of quality of the land acquisition as discussed earlier makes people difficult to carry out development on land owned in order to fulfill their daily needs, such as for the development of a kiosk/shop. In the land acquisition mechanism, after determining the location of development, transactions and change of land must be controlled to cope with the emergence of land brokers. But, the time obscurity of the realization the land acquisition consuming even a long time, the study reached six years has not been realized. Sufficient time for farmers to develop the business on its land.

Viewed from the regulation, land consolidation can be integrated into the land acquisition, where the land acquisition regulations (Presidential Regulations 56/2006) provides several alternative forms of compensation, as stated in Clause 13 letter c, Presidential Regulation 65/2006, such as resettlement. Form of resettlement can be realized through the land consolidation so that land owners are not displaced origin, but may occupy more land back to enjoy the results of a repair facility.

Financing of the land acquisition and consolidation of land are equally involving funds from the government. Financing of the land acquisition, especially in the public interest is responsibility of the government. But, land consolidation, funding public participation in the case involving donated STUP as a compulsory donation of land consolidation participants. Integration of these mechanisms can generate more funding sources where the allocation of compensation is used as the implementation of land consolidation. In addition, with such funding can realize two programs simultaneously.

Institutional aspects, both the land acquisition and land consolidation involving cross-sectoral. The involvement of local government roles and BPN is needed in these activities. Land acquisition and land consolidation is always associated with land rights and the establishment of the location. Determining the location and coordination of the duties and responsibilities of local government, while those related to land rights is the duty and responsibility of BPN. In land consolidation involving the community that need to be strengthened again its position as a community institution.

Do not close your eyes, the implementation of LC in several district also still not completely implemented until the development of hardening and paving roads. For example evaluation the implementation of urban land consolidation in Palu, Central Sulawesi Province, where the implementation of the technical aspects are met but the completeness of the facilities are still very scarce. By integrating the LC with the means of development activities in this regard JJLS development undertaken through the mechanism of the land acquisition, then the LC activities will be fully realized until the certification and development facilities.

With all the discussion of some aspects of the above, so that integration of LC in the land acquisition in this study is important and right thing to do on development plans JJLS in Kebumen.

4.2 Benefits Analysis of Land Consolidation Integration

The analysis conducted included a review of aspects of geometry of land parcels, judicial administration, financing, institutional and socio-economic. Overview of the juridical aspect, especially in the field of study benefits of land administration and an assessment on the proposed integration of LC in the land acquisition.

Viewed from the geometry aspect of land parcels that will be formed after the implementation of the LC experience changes in both position, shape and size of land parcels as well as its range. The position of the original land parcels would have experienced a change or shift because most of the land used for infrastructure development and other public facilities.

On integration of LC with zoning, land area as an LC object reorganized the position accordance with the planned design with zoning so the form of land after LLC become more organized together with road infrastructure. Area of land obtained by each participant will experience aa reduction of LC used for infrastructure development and financing of LC. Geometry changes such as aesthetics become more organized and can deliver enhanced land sale value.

So, in development of LC integration with zoning and commercial location nor LC integration for settlement with commercial location, a change in geometry of both position, shape and size of land parcels. However, for agricultural LC, the shape of land parcels do not have to pay attention to aspects symmetrical such as the settlements LC. Forms agriculture LC designs tailored to the type of agricultural commodities. Land area of agricultural are also restricted by a minimum ownership of agricultural land as stipulated in Law Number 56 Prp of 1960 is equal to 2 Ha.

Viewed from the juridical aspects related to land administration, Kebumen level classified as very low land certification. Society still believes and trust with the administration of land in the village and have not felt the need to land certification. Legal guarantee of certainty provided by the listing in the Village is considered sufficient. Besides it is also influenced by the social community that still upholds the nature of mutual cooperation and togetherness, so do not worry about going to the annexation of land by others.

Given the economic development and urban development, it is not impossible to assert that will slowly be eroded. Land will be more valuable economically and certainly society will attempt to increase the status of land ownership with land certification. BPN been using LC as the promotion of land registration. This opened the possibility of integration of LC at research sites in order to implement the wishes of the people and BPN own purposes.

LC activities are integrated with other development activities in this regard JJLS development which will benefit the lands that have not been certified to be certified with a relatively low cost that can be sustained by the value of compensation. This also can increase the value of the land it self as the calculation of land value after the implementation of the integration of

LC in Table 2. Not only is the land situated on the edge of JJLS plan but also the surrounding area. In addition the land use became more orderly.

In terms of funding, the allocation of the cost of the land acquisition compensation enough for the implementation of land consolidation by government programs. This calculation is based on POK LC Project Budget for BPN RI to land consolidation. Comparative financing in Table 5 follow :

Table 5 Comparative Financing of the Land Acquisition with LC

No.	Comparator	Land Acquisition	LC
1	Basis determination	Realised JJLS Land Acquisition	POK LC Project BPN
2	Funding (Rp)	80 billion for 119 Ha	400 million for 500 parcels
3	Land value per m ²	Rp 67.000,00	Rp 800.000,00
4	Land Area (m ² or parcels)	3217	45 parcels = 21.381 m ²
5	Cost	Rp 215.539.000,00	Rp 36.000.000,00

Aspects of funding as in Table 3 explains that the cost of the conduct of LC is smaller than the value of compensation. Thus, the cost of land consolidation can be satisfied with the compensation value, even still remaining. This would favor the government which can reduce the cost for the land acquisition. Table 3 also explains that the cost of implementation of the LC is very small. In fact, if calculated on the basis TPBP planned, the costs will be much greater, is Rp. 255.326.727,00 or 7,09 times from the determination by BPN. This illustrates to need for financing improvements LC set by BPN in POK. Therefore, for the implementation of a complete LC up to improvements in infrastructure, BPN needs to take into account the cost of implementing a more rational. The amount of cost is greater than the amount of compensation so the compensation is not sufficient for LC implementation.

Associated with funding sources of development which can be obtained from the budget/regional budget, public and private loan/foreign aid, such as the World Bank, will certainly for the implementation of development. BPN Regional Office of Central Java alone every year get LC project. LC integration which can also be integrated LC funding from scheduled execution of BPN with funding allocation to compensation amounting to Rp. 252.268.907,56 and still there is lack of Rp. 3.057.819,47 or 1,2 % of LC cost. Therefore, need to consider the sources of financing other development as presented earlier for example by involving private parties or loan/foreign aid for larger projects.

Institutional of consolidation integration will be more complete by including representatives from the community who was accompanied by social institutions and experts as a mediator for the land owners. Community participation in implementation of the LC so far still lacking, the role of the community is still manifested in the form following the LC phase, which

impressed the people only as objects of LC activities. Optimizing the role of society in the form of institutional land owners or cooperatives that can make the community more actively and have the force of the law. The institute is functioning in control of LC implementation, motivator society and expected in certain circumstances be able to raise funds for the implementation of LC.

Proposed guidelines for the integration also provides the distribution of authority, unclear responsibilities. In hierarchy, the task of government institutions in integration of land consolidation are : (i) to make policy, (ii) regulation and control, (iii) coordination and supervision, and (iv) implementation. At the national level, government institutions have the authority to make rules and regulations with emphasis on the importance of LC realignment of ownership and land use.

Duties of local government institutions are important, among others, to provide guidance, monitor and control implementation of LC and to provide solutions the problems during implementation of LC. Further work on the hierarchy of institutions under it is to explain the land owners, to appoint and evaluate the detail design of LC, to organize and plan for better land utilization, and to solve problems. At the project level, the organization responsible for implementing projects to implement the integration of land consolidation.

Related changes in the institutional structure of the BPN, which adds fields to land disputes and community empowerment will further assist in the implementation of the integration of LC in the land acquisition to run smoothly. Areas of dispute will accommodate the wishes of the land owner through the mediation whenever there are disputes over land in the location of LC. While the field of community empowerment as the spearhead to the public in order to approach and counseling that benefits are obtained by LC.

Socio-economic aspects of development LC integration, especially for agriculture depends on the productivity of agriculture itself and its contribution to Gross Domestic Product (GDP). Based on GDP Kebumen at 2008, the role of dominant economic sector agriculture that is equal to 38,64 % and for service sector are 19,59 %, trade sector amounted to 11,37 %, industrial sector are 9,84 %, and other sector non-dominant.

Development of LC integration of agricultural was also influenced by restriction ownership of agricultural land that is at least two hectares. Meanwhile, at research sites in use in the form of dry land farming with an average land area of 475 m² and the smallest is 219 m² and do not meet the minimum limit ownership of agricultural land and is not recommended to be reduced further.

Alternative development agricultural LC integration with zoning course in accordance with designation of spatial Kebumen. Both road construction JJLS and environment road within LC location will facilitate the transportation or distribution of agricultural product. This is expected to improve the welfare of LC participants. But without the support of existing economic facilities in the form market short marketing chain. Collector or wholesaler of agricultural products will be able to conduct transactions with the farmers, while farmers do not have a strong bargaining value. This can cause the development of monopolies and debt bondage system where agricultural output has been purchased since the product was not ready to sell.

Alternative agricultural development KT integration with commercial zoning and provides the location of such a market can help farmers to market outcomes / agricultural production. In addition to the lack of access roads facilitate the transport and distribution of agricultural products. Marketing chain originally from farmers directly to buyers or collectors with the market can extend the marketing chain prior to the purchaser or the collector first collected in the market which was then distributed to the wholesale market.

Market development in commercial location and agricultur will develop community empowerment of farmers through an organization such as the Joint Group of Farmer (farmer group union) or with the form of cooperatives. Container market, managed by the farmers themselves through farmer group union or a cooperative will increase bargaining value of the farmers who ultimately prospering farmers. Cooperatives as a forum for people's economy provides the means of production plants (*saprotan*) and the means of production (*saprodi*) as support to increase agricultural productivity.

Associated with land rights, commercial locations to be join right of LC participants and are given a join right certificate along with proportion value comparative appropriate STUP. Land donations from LC participants becomes larger as to provide a commercial location. Or it could be rented/sold to other parties with a given Management Rights to the market.

Alternative of development LC integration for settlements by providing commercial locations can be done in the form of recommendations because land use is dry land farming that can be converted to non-agriculture. LC for residential development to note is the location. Residential development along the JJLS be hampered by the location or the available space, where participants KT lot while in space with direct access JJLS very limited.

Residential development along the JJLS will be hampered by location or space available, where LC participants lot while in space with direct access JJLS very limited. Also associated with the minimum width of the front side to the housing is five meters as stated in clause 11 act 2 Regulation of the Minister of Housing Number : 06/PERMEN/M/2007 (Permenpera 06/2007) About Procurement of Housing And Settlement With Support Facility Subsidy Through Housing KPRS / KPRS Micro Subsidized Syariah. With Permenpera 06/2007 can be assumed to long JJLS 90 m, the maximum gain access is 36 fields on the side of the road, so it will be difficult to implement and there must be some landowners who do not have access directly JJLS.

Commercial locations such as along the shophouses on JJLS will be more highly valued and not hindered by such this Permenpera. With access JJLS and development of shop gives participants a chance effort to improve the welfare of KT.

4.3 Land Value Analysis

LC integration of agriculture with zoning is obtained the land sale value an average after LC amount of Rp. 79.367,96 per m². The land sales value per m² after extensive multiplied by each the land parcel after the LC acquired increased the land sale value an average of 196.64% or 2.97 times of the previous land sale value.

LC integration of agriculture with the zoning and the commercial location gained the land sale value after LC an average amount of 128,574.75 per m², or 4.09 times the previous land sale value. When compared with the first alternative gives the better improvement of 1.62 times with the average increase in excess 49.206,79 per m². Land sale value per m² after extensive multiplied by each the land parcel after LC acquired increased the land sale value an average amount of 196.64% or 2.97 times of the previous land sales value.

LC integration of settlements with the location commercial is obtained the land sale value average after LC amount of 226.500,00 per m², or an increase of 7.15 times of the previous sale value. When compared with the second alternative gives the better improvement of 1.76 times with the average increase in excess 97.925,93 per m². Land sale value per m² after extensive multiplied by each the land parcel after LC acquired increased the land sale value an average amount of 404.67% or 5.05 times of the previous land sales value.

As the comparison for the three alternatives are used calculations increase the land sale value through indemnity. Land sale value per m² after extensive multiplied by each the land parcel after the indemnity is obtained increase an average amount of 41% or 1.41 times of the previous land sale value. Third alternative is compared with the trading of comparison land value and is obtained the comparative of the land sale value as follows:

Table 6 Comparative of Land Sale Value

No.	Calculation	Amount (Rp)	Comparative (kali)
1	Indemnity	937.940.000,00	1
2	LC 1	1.305.180.000,00	1,39
3	LC 2	1.968.930.000,00	2,1
4	LC 3	3.349.718.508,00	3,57

The comparative can be illustrated in the form of bar charts in Figure 7 follows:

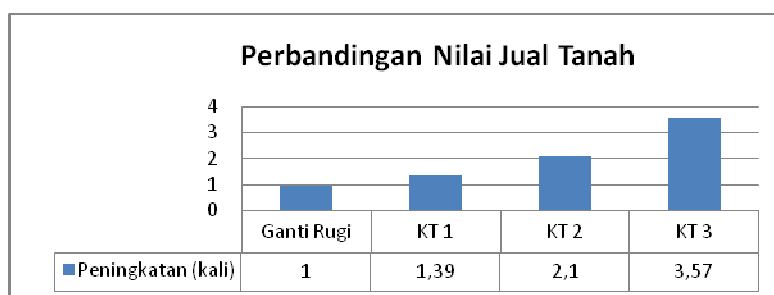


Figure 7 Comparative of Land sale Value Diagram

Based on the above tables and diagrams can be seen that the comparative of the land sale value on LC integration of agriculture with the zoning is the amount of 1.39 times from the land sale value with the compensation/indemnity, on LC integration of agriculture with the

zoning and the commercial location 2.1 times and on LC integration of settlements with the commercial location 3.57 times. Thus the LC integration of settlements with commercial location provides the largest comparative of the land sale value.

5.CONCLUSIONS AND RECOMMENDATIONS

5.1Conclusion

Based on these results and analysis in the previous chapter, it can be concluded as follows :

1. The land consolidation can be integrated in the land acquisition for SCR development, but the cost allocation of compensation is not sufficient for LC implementation, where the combined funding of compensation and costs LC BPN are still less 3,057,819.47 or 1.2%. Therefore, the necessary involvement of other parties, such as the private or world bank for larger projects.
2. LC integration development of agricultural with land zoning increases the value of selling the average 96.64% or 1.97 times of the previous land sale value. Addition of the commercial locations increases the land sale value of the average 196.64% or 2.97 times of the previous land sale values and increases the bargaining position of agricultural products thereby reduces the middleman. LC Integration development of settlements with the commercial locations such as the shop becomes the most profitable alternative for the land owners to develop its economy and the increasing the land sale value amounting 404.67%, or 5.05 times of the previous land sale value. But for the agriculture will be obstructed by minimum threshold for agriculture ownership and for LC settlements are obstructed by RTRW.
3. The comparison of three LC integration alternative with the land sale value if the compensation is obtained that the ratio of land sale value on the agriculture LC integration with zoning is the amount of 1.39 times from the increased land sale value with the compensation, on the agriculture LC integration with the commercial zoning and location 2.1 times and the settlements LC integration with the commercial location 3.57 times. Thus the settlements LC integration with the commercial location provides the comparative value of the largest land sales and availability the commercial locations for the business activity for the LC participants. Although obstructed by RTRW who have set the LC location as the dry land agriculture, LC integration activities can be done by revising the RTRW.

5.2 Recommendations

Recommendations in this research are :

1. LC integration in the land acquisition gives the good benefits geometrically, juridical, economic and social funding to support the orderly development for the prosperity of the people. However, the existing regulations can not be considered as the basic juridical implementation. Therefore it needs to be regulated by the government regulation or the BPN Head regulation as the basic strength of law implementation, so that in every implementation of the land supplying is always integrated with the LC activities.

2. LC integration activities require the financing that is not small. The land acquisition compensation cost and the cost of LC by BPN is insufficient for this integration implementation. Therefore, the funding of LC integration in the land acquisition for SCRN needs to involve other parties such as the private or World Bank for the larger projects.
3. LC integration development for agricultural has agreed with RTRW Kebumen regency on the research location that is for dry land agriculture. However, obstructed by the minimum limitation of agricultural land ownership established under the Law No. 56 Prp at 1960 concerning the Establishment of Large Agricultural Land that is equal to two hectares. Therefore it is recommended to change the agricultural commodities in order to increase the production and need to study more about the changes in the agricultural commodities that will impact in increasing production to improve the LC participants welfare.
4. LC integration development for the settlement gives the greatest benefits as described in the analysis and the research conclusion by converting from the dry land agricultural to non-agriculture. But obstructed by RTRW which has set the LC location for dry land agriculture, so need to revise these RTRW.

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