



Analysis of Urban Regional Planning Use Ex-HGU PTPN III Siantar Martoba District

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ABSTRACT

Utilization of PTPN III Ex-HGU Land in Siantar Martoba Sub district has an area of 573.42 Ha with the largest land use being in Tanjung Pinggir Sub-District with utilization area of 487.40 Ha. PTPN III's Ex-HGU Land Use Analysis was analyzed using the highest and best land use analysis through 3 of them: Physical aspects referring to SNI-03-1733-2004 regarding the procedures for planning the urban environment, Legality aspects, and cost aspects involving Local Government Organizations in the Focus Discussion Group. The results of the analysis can be concluded that the Utilization of the Ex-HGU Land of PTPN III is planned in 3 (three) stages for 15 years namely: Phase I (2020-2024) Settlement and Industrial Areas, Phase II (2025-2029) of Industrial and Trade Industrial Areas, and Public Facilities Area, Phase III (2030-2034) Settlement and Environmental Areas I, Settlement and Environmental Areas II with a total planning cost of IDR 2.936.816.327.250. In the planning of PTPN III's ex-HGU land, it not only determines land use planning but also involves several stakeholders, namely government institutions, both central and regional with all ranks, private institutions

as users of the area, as well as the community as the development, community as actors of development (stakeholders) also as the owner of the development (shareholder).

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1. INTRODUCTION

The arrangement of spatial planning in urban areas has been regulated by the government, namely in Government Regulation No. 15 of 2010 Article 59 regarding Spatial Planning, it is stated that each Regency or City must have determined a part of its territory by composing a Spatial Detail Plan and its zoning regulations, zoning regulations it is an urban area, as well as a strategic area of the city. In the development of an urban area, land use has important aspects in accommodating urban activities such as economic, social and cultural activities. Land use becomes a significant need along with the population growth rate, so the land use must be done optimally in order to provide maximum benefits for all residents in urban areas.

PTPN III Ex-HGU Land Siantar Martoba District covers three villages namely Pondok Sayur Village, Tanjung Pinggir Village, and Tanjung Tengah Village, the use of the land of these three villages certainly has an attractive use for investors. In addition, land use can increase Regional Original Revenue both intensely by increasing PAD in terms of existing revenues, especially Pematangsiantar City itself, and extensification digging deeper into new sources of revenue in Siantar Martoba sub district, Pondok Sayur sub district, Tanjung Sub-District Periphery, and Tanjung Tengah Urban Village as a sub-growth center area for new cities.

PTPN III's Ex-HGU land use will create agglomeration economics. One of them is the migration of population, when the population increases there will be new economic activity, if there is new economic activity it will certainly create new jobs, and can increase the income of the population. The population growth rate before land use is estimated at 1.9% while after land use the population growth rate will increase by 5.7%. This can be seen from the results of population projections in the table below:

Table 1. Projected Population (Soul) before and after Agglomeration Economics Utilization of PTPN III's Ex-HGU Land

Villages	2021		2026		2031		2036	
	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>
Pondok Sayur	6.661	8.150	7.183	10.753	7.746	14.187	8.352	18.719
Tanjung Pinggir	4.978	6.168	5.300	8.138	5.643	10.738	6.008	14.167
Tanjung Tengah	3.547	4.361	3.807	5.753	4.086	7.591	4.385	10.015
Total	15.186	18.679	16.290	24.644	17.475	32.516	18.745	42.901

Source: Projection Analysis Results, 2020

From the results of these projections it can be seen that land use will have a positive impact on the region and society, changes in rural character towards urban character will provide significant changes, in addition to this land use will have a major influence in the field of trade and services due to the Ex-Land PTPN III's concession is in the position of developing a new outer ring road that connects Pematangsiantar City to Parapat Street. PTPN III's Ex-HGU land has a land area of 573.42 Ha, due to the large land use conditions in this study, the use of land use will use the highest and best analysis with some benefits both economically, socially, and environmental benefits.

2. LITERATURE REVIEW

Land suitability is all the physical conditions of the environment that influence the potential in its use, in the concept of land use planning, the level of suitability of climate, soil, hydrology, landforms, vegetation and fauna must be known. Land suitability in land use includes the consequences of human activities both in the past and in the future (Dent and

Young, 1981). The results of land suitability are a process of approaches that have been tested so that they can provide good information about land use in accordance with the needs of the planning process (land use planning) (Ritung et al, 2007).

Land suitability change alternative is an activity carried out by humans on existing land resources to meet the needs of life, in alternative land uses will be carried out the development of components that can be used in land development. Grouping alternative land uses is divided into two namely: (1) the use of agricultural land used as drylands, rice fields, gardens, grasslands, forests, etc. (2) land use that is utilized in the form of non-agriculture which can be used as a settlement, industry, recreation, mining, etc. (Arsyad 2010). Please note that alternative land use changes can be made if there is a development for the benefit of a region or city. The rate of population growth is increasing and economic activities that occur there will be demands for a decent life in the future. For example, the increasing need for space in human activities, transportation, recreation will encourage alternative land use changes.

This research using policy direction for the detailed spatial planning RDTR's policy review on ex-HGU land use leads to land use. The PTPN III Ex-HGU land use plan can be designated as follows Settlement activities, Green Open Space activities, trade and service activities, office activities, Education activities, Industrial activities.

3. MATERIAL AND METHODS

Research location PTPN III's ex-HGU land use is 573.42 Ha, covering several villages including Tanjung Pinggir Village, Tanjung Tengah Village, Pondok Sayur Village. The biggest land used is Tanjung Pinggir Village, the land use is 96.61% of the total area of the village that is 504.5 Ha. Whereas for land use in the other two locations only around 13.65% in the Pondok Sayur Village, and 21.29% in the Tanjung Tengah Village. For more details, can be seen through the table below

Table 2. Land Suitability Location ex-HGU PTPN III

Village	An Area (Ha)	Land Use ex-HGU PTPN III (Ha)	Land Use (%)
Pondok Sayur	293,9	40,13	13,65
Tanjung Pinggir	504,5	487,40	96,61
Tanjung Tengah	215,4	45,87	21,29
Total	1.013,8	573,42	-

Source: Pematangsiantar City in Numbers; Badan Pertanahan Nasional, in analyzed 2020

The data that will be used in the ex-HGU PTPN III land research uses primary and secondary data. Primary data were obtained from direct observations in the field, while secondary data were taken from various sources namely the Badan Pertanahan Nasional, BAPPEDA of Pematangsiantar City, and supporting scientific publications for this study

After the data is collected, there will be an analysis of Highest and Best Use which includes several aspects, including physical aspects, legal aspects. However, due to the large land use conditions in this study, social benefits, economic benefits, and environmental benefits will be added both in Siantar Martoba District and in Pematangsiantar City.

1. Physical Aspects: carried out in this study include (1) land location (2) accessibility intended is the affordability of PTPN III's Ex-HGU land with transportation, (3) city utilities, public facilities and social facilities that refer to SNI-03-1733-2004 concerning the procedures for urban environmental planning namely the availability of access to

electricity, clean water and internet connections with the closest connection (4) landforms related to the physical conditions of the topographic, lithological, and hydrological environments.

2. The legality aspect: in the use of PTPN III's ex-HGU land in this study follows legal procedures which cover (1) the area, analyzing whether the use of some activities is appropriate or not if built on it in accordance with city planning that leads to local government policy
3. The cost aspect: in this study first uses an analysis of SNI - 03-1733-2004 on the procedures for urban environmental planning in accordance with the needs that can be built on the ex-HGU PTPN III land which is compared with the Focus Discussion Group with the Local Government Organizations that are directly involved in PTPN III Ex-HGU Land Utilization, after knowing what needs are needed to be built on PTPN III Ex-HGU Land then analyzed using the building price unit that refers to Pematangsiantar City HSGBN

4. RESULT AND DISCUSSION

Social, Economic, and Environmental Benefits

As for the benefits of the ex-HGU land use of PTPN III are the economic benefits, social benefits, and environmental benefits, described as follows.

1. **Economic Benefit**, PBB Revenue for all buildings to be built in the village of Tanjung Pinggir; the assumption is that if 5,916 buildings are built with NJKP of 20-40 % only multiplied by NJOP and collected by the PBB by 0,5 % then there will be an acceptance for the addition of PAD from the UN object of IDR 4,021,401,302/year. Income tax from the receipt of industrial estates; the assumption is that if 85 industrial units are being built with an average net income of 4.8 billion annually; then there will be a net income of IDR 408,000,000,000, if a PPh rate of 12.5% is charged there will be a tax income of IDR 51,000,000,000/year
2. **Social Benefit**, land use investment plan are as follows the number of workers absorbed in the Industrial Estate; the assumption is that if 85 industrial units are being built and an average of 1 medium industrial unit is 100 people, there will be around 8,500 new workers absorbed in the medium industry; if 125 small industrial units are built with an average of 10 workers for 1 small industrial unit, there will be around 1,250 people who will work in the small industry sector. If the projected number of unemployed in Pematangsiantar City is 11,640 people until 2028 (until the stage of small and medium industrial development), there will be an employment of 83,76%.
3. **The Environmental Benefit**, with the use of land in the PTPN III Ex-HGU land there will be environmental benefits because in the planning area will be built a theme park area (children, adolescents, and the elderly).

Physical Aspect

Based on observations it can be concluded that the ex PTPN III land has a distance to the city center is > 10 KM, which is served by Artery Street. In the city planning (RDTR) of Siantar Martoba sub-district near the PTPN III's ex-HGU land, there will be the development of accessibility as follows:

- The development of the Road network is directed at developing the accessibility of the outer ring road (Siantar Martoba - Siantar Sitalasari - Siantar Marimbun);

- Development of a local road (feeder road) to the Center for Environment and centers of agriculture, trade and services to improve internal accessibility and facilitate the flow of commodity movements.

It should be noted that PTPN III's Ex-HGU land has a slope of land between 0 - 25% so that it can be built properly for industrial estates, and the land is developed. Besides that, the activities around Tanjung Pinggir, Tanjung Tengah Kelurahan and Pondok Sayur are activities with moderate, low and very low density settlements. There is a type A terminal that is the Horas Jaya terminal (but does not function optimally), there is a landfill in Pondok Sayur, and there is a plan for a trading and service area (outer ring road). And some other activities such as the warehousing area which is located on the northern part of the ring road.

The utilization of PTPN III's Ex-HGU land area development plan is carried out in stages. There are 3 stages in developing the PTPN III Ex-HGU land area, in each of the stages required the first land acquisition. The first phase was built in 2020-2024, the second phase was 2025-2029, and the third phase was 2030-2034.

Table 3. PTPN III Ex-HGU Land Use Plan

Region	Content	Supporting Facilities
Phase I (2020-2024) Industrial Estate and Residential Estate	Industrial Area	Small Industry
	Residential Area	Residential Buildings and Facilities
Phase II (2025-2029) Industrial and Trade Industrial Zone Public Area	Industrial Area	Small Industry Medium Industry
	Environmental Area	Landfills (TPA) Public Burial Place (TPU)
	Trade and Service Area	Trade and Services (Market
	Education Area	TK SD SMP SMA
	Medical Area	Public health center
	Office Area	Village Office Support Office Meeting Hall Gazebo – like building
	Worship Area	Mosque Church
Sports Area	Sports Building	
Phase III (2030-2034) Residential and Environmental Areas I Residential and Environmental Areas II	Other Supporting Areas	Flats Environmental Market Plan for Laying Street Vendors
	Environmental Area	Elderly Garden Garden of Youth Children’s Park
	Residential Area	Residence
	Settlement	Settlement Areas

Source: Analysis Result 2020; calculation referring to SNI-03-1733-2004 about the procedures for urban environmental planning

For the planning of PTPN III Ex-HGU land, you can see the perspective picture below:

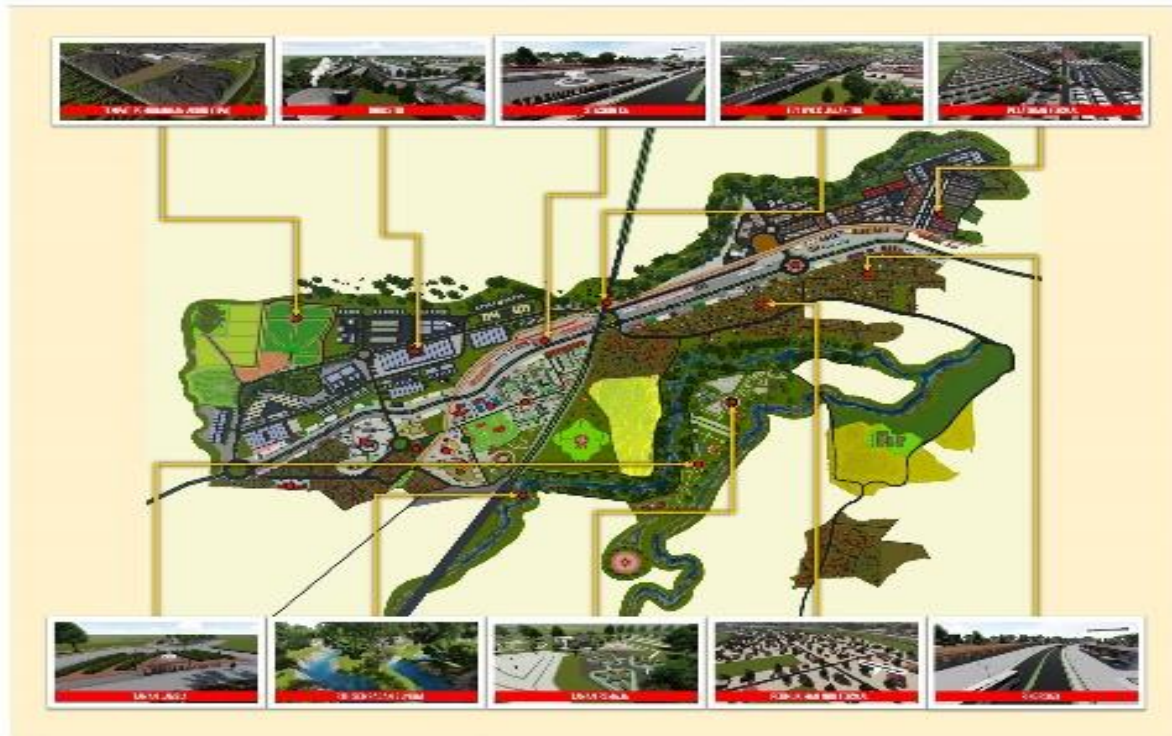


Figure 1. PTPN III Ex-HGU Land Planning Siantar Martoba District

Legal Aspect

The legality aspect is needed in planning using Highest and Best Use Analysis to avoid land use that is not in accordance with the rules that have been applied to the government. The concept of legality for the use of PTPN III's Ex-HGU Land is as follows:

1. GSB Housing Area 6 m for a 200 m² Plot, 4 m for a Plot of Land less than 200 m², KDB 60-70%;
2. Commercial Area GSB 2-3 m, KDB 70-80%, 10% for Urban Space and Fire Alley;
3. 8 m GSB Industrial Area, KDB 70-80%.

The Cost Aspect

The cost aspect relates to the planned budget for the arrangement of the Ex-HGU-PTPN III Land in accordance with what is to be planned. The use of PTPN III's ex-HGU land is also adjusted to the analysis of urban area planning needs based on population. The existing cost planning programs for PTPN III Ex-HGU Land Utilization are as follows:

1. PTPN III's Ex-HGU Land Development and Utilization Program;
2. Development of Industrial and Trade Industrial Estate Programs;
3. Resettlement and Industrial Area Development Program;
4. Public Facilities Area Development Program;
5. Resettlement and Environmental Development Program;
6. Utility/Environmental Network Development Program;
7. Activity Service Center.

The programs are also designed based on an analysis of costs, sources of funds, as well as anyone who is involved in the use of the Tanjung Pinggir land. Realization of the implementation of the regional restructuring program is very dependent on the available funding system, it also depends on the Pematangsiantar City development system as a whole, especially those that are sustainable with the area arrangement of the Siantar Martoba Sub district. starting from RTRW, RDTR. Thus, the implementation timetable is adjusted to prioritized considerations that must be developed as the most important program to be

implemented in the medium and long term to support this strategy (core strategy) in the structuring of PTPN III's Ex-HGU Land Arrangement.

Institutions related to the realization of the development of the use of PTPN III's Ex-HGU Land, Siantar Martoba District include several stakeholders, namely central and regional government institutions with all ranks, private institutions as users of the area, as well as the community as a development, the community as development actors (stakeholders) as well as owners of development (shareholders). Community involvement is intended as a shareholder intended to reduce the region's dependence on investors from outside the region, but what is expected is cooperation between investors and the community as landowners in the area.

With the position as a shareholder it is expected that the community will truly have development in their area, be able to compete with migrants and thus the local community will not be displaced from their territory. Before planning the program matrix and costs, it is important to note that PTPN III's Ex-HGU land use planning will be divided into 3 stages for 15 years. The cost plan can be seen through the table below:

Table 4. Analysis of Plans and Cost of Utilizing Ex-HGU Land of PTPN III Siantar Martoba District

Region	Investment (IDR)
Phase I (2020-2024) Industrial Estate and Residential Estate	290.937.453.000
Phase II (2025-2029) Industrial and Trade Industrial Zone	1.788.930.124.250
Phase III (2030-2034) Residential and Environmental Areas I, II	856.948.750.000
Total Cost of PTPN III Ex-HGU Land Planning in Tanjung Pinggir	2.936.816.327.250

Source: Analysis Result, 2020

5. CONCLUSIONS

1. PTPN III Ex-HGU Land Planning is planned in 3 (three) stages for 15 years, namely: Phase I (2020-2024) Settlement and Industrial Areas Phase II (2025-2029) Trade and Environmental Industrial Estates, Public Facilities Areas Phase III (2030-2034) Settlement and Environmental Areas I, Settlement Areas and Other Environmental Areas II with a total planning cost of 2,936,816,327,250 rupiah's.
2. In the planning of PTPN III's Ex-HGU land, it not only determines land use planning but also involves several stake holders, namely central and regional government institutions with all ranks, private institutions as users of the area, as well as the community as the development, the community as the actors of development (stakeholders) as well as the owner of development (shareholders). Community involvement is considered important for the use of PTPN III's ex-HGU land because it can accelerate the development of PTPN III's ex-HGU land use.
3. Realization of the implementation of PTPN III's Ex-HGU Land area structuring program is very dependent on the available funding system, also depends on the Pematangsiantar City development system as a whole, so commitment is needed by stakeholders directly involved for the utilization of PTPN III's Ex-HGU Land for example alone needs to conduct an integrated review of all spatial planning, starting from the RTRW, and RDTR and RPJMD of Pematangsiantar City. Thus the implementation timetable is adjusted to prioritized considerations that must be developed as the most important program to be implemented in the medium and long term to support the strategy (core strategy) of the utilization of the PTPN III Ex-HGU Land Use.
4. The researcher can then conduct a feasibility study analysis for the description of the land

use of the area, because in this study only leads to the utilization planning alone, not yet analyzed one by one about the feasibility study for the description of the utilization of the land.

REFERENCES

- Arsyad, L., 1988. *Ekonomi Pembangunan: Bagian Penerbit Sekolah Tinggi Ilmu Ekonomi-YKPN*.
- Ritung, S., n.d. dkk 2007. *Panduan Evaluasi Kesesuaian Lahan dengan Contoh Peta Arahana Penggunaan Lahan Kabupaten Aceh Barat*. Balai Penelitian Tanah dan World Agroforestry Centre. Bogor.
- Sussna, S., 1989. *The concept of highest and best use under takings theory*. Urban Law, Volume 21, P. 113.
- Young, D., 1981. *Survey land evaluation*. Boston-London-Sydney: Allen and Unwin, Ltd.