



Licensed Surveyor Role Analysis for Achieving Indonesia Complete Systematic Land Registration (PTSL) in 2024

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Licensed Surveyor Role Analysis for Achieving Indonesia Complete Systematic Land Registration (PTSL) in 2024

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Abstract. *Based on the Regulation of the Minister of ATR No. 12, 2017, Complete Systematic Land Registration (PTSL) is a program that is held simultaneously for first time land registering of all land registration objects in Indonesia. PTSL program are mandated in the Strategic Plan 2020-2024 and targeted to register all land parcels in Indonesia in 2025. The land parcels mapped target through PTSL activities is 126,000,034. However, until January 2022 the number certified land parcels are only 75,632,819. In order to complete PTSL, Licensed Surveyor is strongly needed for supporting government, but Indonesia Licensed Surveyor is not evenly distributed yet. Therefore, Licensed Surveyor role analysis is required so it can be used to formulate policies for achieving the PTSL target in 2024. This research evaluates data on Indonesia's composition, number, and distribution of Licensed Surveyors. The results show that there are seven provinces lack of Cadastral Surveyor Assistant (ASK) indicated by a minus value in ASK capacity remaining parameter. The seven provinces are Papua, West Papua, Maluku, North Sulawesi, Aceh, Riau Islans and West Sulawesi.*

1. Introduction

According to Boedi Harsono (2008), land has various meanings so in use need there is a limitation. Article 4 of Law No. 5 of 1960 (UUPA) concerning Basic Agrarian Regulations gives limitation official definition land, that is surface of the earth that can be clinging something right on the land. Surface earth also includes the space below land, water, and space above land. because of that, land has two aspects that are aspect space and aspect law. Aspect room is land used for various activities man like live and match plant, while aspect law is given land to and owned by people with rights on soil for utilized. Two aspects are the becomes right for the owner to plot land and the owner the apply as subject rights and land as object rights. because of that, there is a relationship essential between subject rights and objects right that is connection mastery and use in skeleton get the benefit for interest life and livelihood. That thing needs certainty law ownership of land (Guntur, 2014).

According to base constitutional Article 33 of the 1945 Constitution states that the earth and water and the natural resources contained therein are controlled by the state and used for the greatest prosperity of the people. One of the noble ideals of the founding fathers of the nation, namely the enforcement and certainty of law in the land parcel to realize the greatest prosperity of the people, was formed Law No. 5 of 1960 concerning Basic Regulations on Agrarian Principles. In 2001, a derivative regulation was issued, namely MPR Decree No. IX/MPR/2001 on Agrarian Reform and Natural Resource Management. In line with the agrarian law, to overcome the problem of inequality in agrarian structure, poverty, and food security, Agrarian Reform can be solved. Article 19 of the Agrarian Law stipulates that to ensure legal certainty, the government conducts land registration activities throughout the territory of the Republic of Indonesia. Land registration activities throughout Indonesia are carried out according to Government Regulation no. 24 of 1997 concerning Land Registration. Land registration activities in Indonesia are carried out by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (Ministry of ATR/BPN). Presidential Regulation of the Republic of Indonesia No. 47 of 2020 concerning the Ministry of Agrarian Affairs and Spatial Planning and Presidential Regulation of the Republic of Indonesia No. 48 of 2020 concerning the National Land Agency, the Ministry of Agrarian and Spatial Planning/National Land Agency has the task of assisting the President in carrying out government affairs in the fields of agrarian/land and spatial planning and is directly responsible to the President.

In Plan Strategic Ministry of ATR/BPN in 2020-2024, one of the strategic plans in 2023 towards land registration with a positive publication system or positive stelsel in some PTSL location areas after a positive stelsel declaration is made. Currently, Indonesia uses a negative publication system with a positive tendency (Oelom, 2015) which means that the state guarantees the truth of the data presented in the evidence of rights as strong evidence of rights as long as there is no judge's decision stating otherwise. The data presented is true, valid, recognized, and guaranteed by law. This raises problems, questions, and doubts over the legal strength of proof of land rights in the form of a certificate as evidence. For landowners, the certificate is a guide in terms of proving their rights because they are issued by a legally authorized agency. According to Listyowati (2017), one of the efforts to realize changes in land registration towards a positive publication system, namely: the preparation of human resources, both government and community (private). Action real from setup source power man that is role surveyor profession to become a professional surveyor in land registration field.

Measurement and mapping of land parcels at the Ministry of ATR/BPN can be carried out by surveyors for the State Civil Apparatus (ASN) or Licensed Surveyors. The existence of Licensed Surveyors in Indonesia has existed since 1998 with the issuance of Regulation of the State Minister of Agrarian Affairs/Head of the National Land Agency No. 2 of 1998 dated February 27, 1998, regarding Licensed Surveyors. Regulation the experience four times change until regulation latest that is Regulation of the State Minister of Agrarian Affairs/Head of the National Land Agency No. 9 of 2021 dated January 19, 2021, regarding Licensed Surveyors. Licensed surveyors consist of the Cadastral Surveyor (SK) and Assistant Cadastral Surveyor (ASK). SK must have expertise and skills in carrying out the survey and mapping process and be responsible answer absolute front law on the survey and mapping data it produces. ASK must have skills in carrying out the survey and mapping process under the supervision of Licensed Surveyors or authorized and responsible officials answer absolutely in front law on the survey and mapping data it produces.

Directorate General Survey and Mapping Land and Space (Dirjen SPPR) is one of The Directorates of the Ministry of ATR/BPN that has the duty of doing measurement and mapping land parcels in skeleton registration land. In 2020, the Director-General of SPPR prepares *Roadmap* National Priority 2020-2024 for PTSL priority programs toward system positive that will be implemented in Indonesia in 2023. The estimated amount of land parcels in Indonesia is 126,000,034 parcels, while until January year 2022 number of land parcels certified a total of 75,632,819 parcels. The number and distribution of Licensed Surveyors in the provinces of the Indonesian territory are not yet evenly. Condition this will influence completion of acceleration program implementation land registration through PTSL, then required Licensed Surveyor role by massive for support PTSL solution.

2. Method

Data used in the research originated from the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency consisting of the above :

1. Estimated Data Land Parcels;
2. Quantity Data Certified Land Parcels;
3. Data Surveyor Licensed.

Estimated data land parcels contains estimation data amount of land parcel in each province in Indonesia up to December 2021. Furthermore, the data on the number of land parcels certified contains about the amount of land parcel that has been certified in 33 provinces in Indonesia according to with PTSL *dashboard* in 2022. It's different from licensed surveyor data in the form of data on the number of Cadastre Surveyors (SK) and Assistant Cadastre Surveyors (ASK) in 33 provinces in Indonesia up to December year 2021.

These data were processed for count burden work Assistant Cadastre Surveyor to estimate the remain of land parcels in PTSL activities for three years the last (2022, 2023, and 2024) in 33 provinces in Indonesia. Based on Document Contract Umbrella (*Framework Agreement*) for Measurement, Mapping and Information Systematic Land Registry-Complete Community Participation (PTSL-PM) for FY 2022-2023, there are two qualifications for doing professional PTSL survey and measurement. Qualification in the form of power main and equipment main (GNSS CORS or GNSS RTK). To study this, just use qualification power main or ability source power, human.

In profession PTSL survey and measurement assumed that every 10,000 fields for execution 150 days calendar needed source power human consisting of on 1 Team Leader, 1 Licensed Surveyor, and 5 Assistant. Calculation results state that 1 Assistant person can complete 13 field measurements of land per day. Next, calculate the Assistant ability to carry out daily targets in the profession PTSL survey and measurement. The final result show remainder of Assistant capacity and remaining ASK in 33 provinces in Indonesia.

2.1. Results and Discussion

In calculating the daily capacity of human resources, namely ASK, there are two important aspects, namely the number of land parcels and the ability of human resources. The aspect of the number of land parcels consists of three parameters, namely the estimated number of parcels, the number of certified land parcels, and the estimated remaining land parcels. Aspect ability source power man consists of five parameters, namely mapping targets per day, several licensed surveyors (Surveyor and Assistant), assistant's daily capacity, rest assistant's daily capacity, and remaining ASK.

2.1.1. Amount Land Plot: Estimate Amount of Land parcels, Amount Certified Land Parcels, and Estimates Remain Land Parcels.

Systematic Land Registration Complete (PTSL) is one of the National Priority Programs of the Indonesian state which is a form of the Long Term Development Plan (RPJP) 2005-2025. PTSL aims for acceleration registration land in Indonesia. Through this program, the government planned complete the mapping, registration, and certification of land in all parts of Indonesia by 2025. PTSL program implemented start 2017 and targets for each year could be seen in Table 1 (Research and Development Center of the Ministry of ATR/BPN, 2017).

The government has also created a PTSL target that contains an estimated amount of land parcels that must be mapped to 33 provinces in Indonesia. The total estimated amount of land parcels that must be completed in 33 provinces in Indonesia through the PTSL program is 135,659,430 land parcels. fields soil the targeted done mapped in 2024. Figure 1 shows estimation amount of land parcels in 33 provinces of Indonesia, as for three provinces with an estimated least amount of land parcels are located in North Maluku, Gorontalo, and Bangka Belitung Provinces while the three provinces with an estimated most amount of land parcels is province Central Java, East Java, and West Java.

Table 1. Completion Target Land Registration in Unregistered Fields

Year	Unregistered Land Parcels (parcels)	Target (parcels)
2017	63,827,880	5,000,000
2018	58,444,710	7,000,000
2019	51,444,710	9,000,000
2020	42,444,710	10,000,000
2021	32,444,710	10,000,000
2022	22,444,710	10,000,000
2023	12,444,710	10,000,000
2024	2,444,710	2,444,710
2025	0	0

Source: Bureau of Planning and Cooperation of the Ministry of Agrarian and Spatial Planning/BPN (2017)

The amount of land parcels that is certified in Indonesia is appropriate PTSL January 2022 *dashboard* reaches 75,632,819 land parcels. In Figure 2, the three provinces with the least amount of certified land parcels are Gorontalo, West Papua, and Maluku, while the most amount of land parcels certified are located in the province of Central Java, East Java, and West Java.

Calculation result using estimation data amount land parcels and quantity of land parcels certified obtained score estimation remain land parcels. As for estimation remain of land parcel in Indonesia is 50,367,215 land parcels. Figure 3 shows the estimation remain of land parcel in 33 provinces in Indonesia. In the province of Yogyakarta has an excess of 65,735 land parcels and in Bali, there is an excess of 18,768 land parcels which means the amount of land parcels certified in the two provinces the more many than the estimated amount of land parcel. because of that, three provinces with amount estimation remain land parcels located in the province Riau Islands, North Maluku, and DKI Jakarta, while the most amount estimation remain land parcels located in the province East Java, West Java, and Central Java.



Figure 1. Estimation Chart Amount Land Parcel 2021

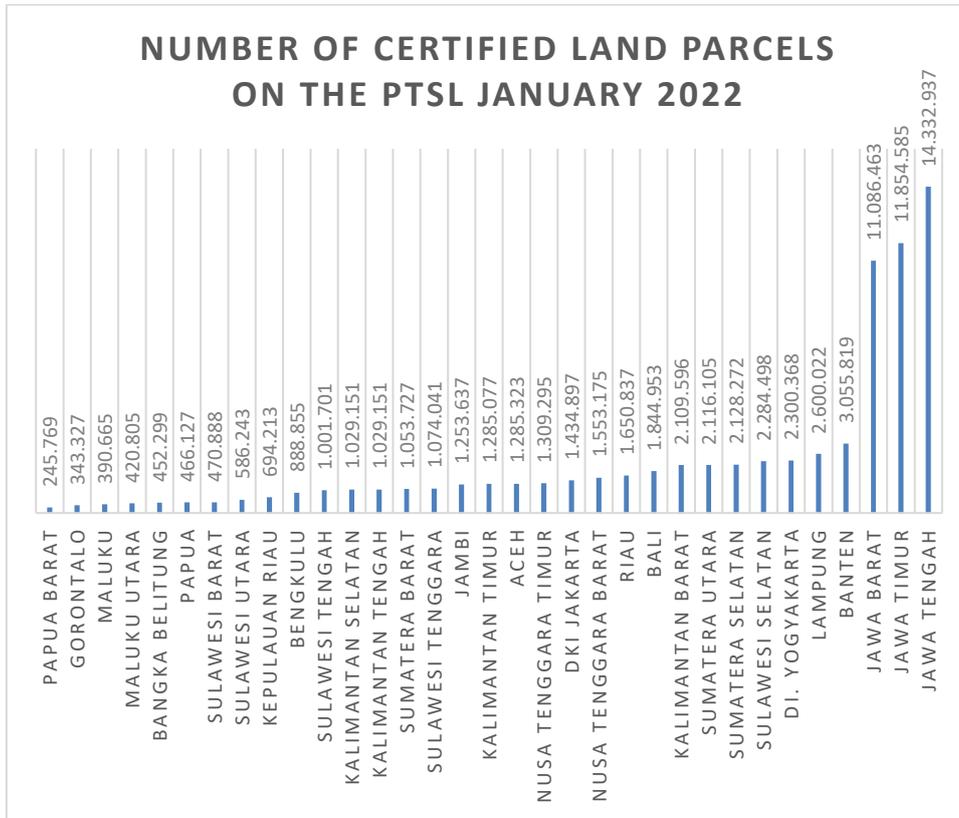


Figure 2. Quantity Chart Certified Land Field on PTSL 2022 *Dashboard*

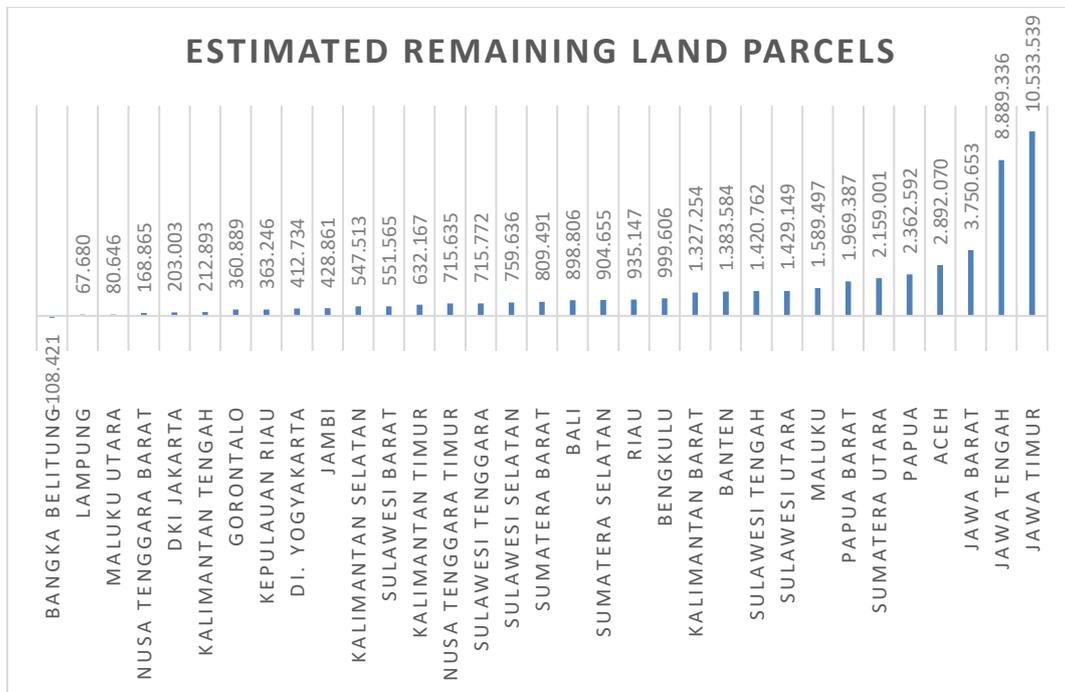


Figure 3. Estimation Chart Remainder Land Field

Based on Figures 1, 2, and 3 above could conclude that three provinces with an estimated amount of land parcels, amount of land parcels certified, and estimation most remain land parcels is at three same provinces that is Central Java, East Java, and West Java. As for three provinces with estimation amount land parcel, amount land parcels certified, and estimation least remain land parcels is at three different provinces. If customized with government targets following Table 1, then in 2022 should be there are 22,444,710 parcels of unfinished land registered however reality until the end month January 2022, the estimated remain land parcels in total is 50,367,215 land parcels. That thing shows that by 2022 the government's target is not by existing reality.

2.1.2. Estimate Land Parcels and Capabilities Source Power Human.

2024 is the government's target for complete registration of land so that there are remain 3 years namely 2022, 2023, and 2024. The estimated remaining of land parcels until the end month of January 2022 is 50,367,215 land parcels. To achieve the target in 2024 then estimation remain of the land parcels the calculated to get a daily goal in the period remain of 3 years. Land parcels target per day that must be mapped to 33 provinces in Indonesia can be seen in Figure 4. Three provinces with lowest land parcels mapping target per day is province Lampung, North Maluku, and West Nusa Tenggara, while the three provinces with highest land parcels mapping target per day is province East Java, West Java, and, Central Java.

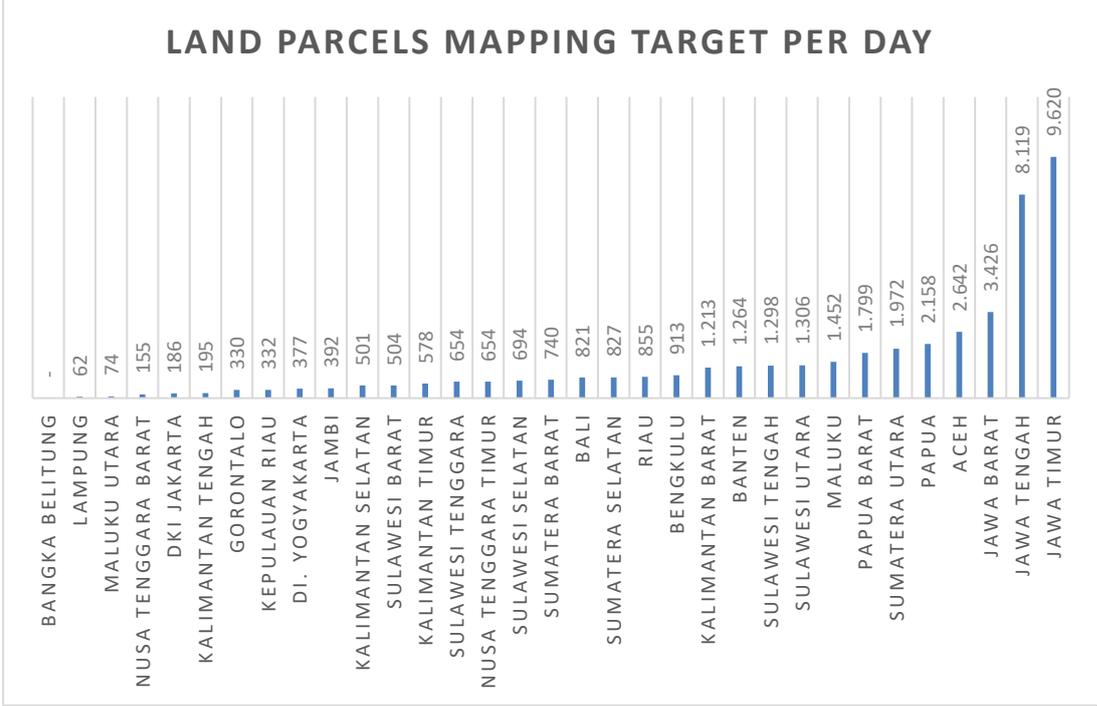


Figure 4. Mapping Target Chart Plot Per Day

To reach the target per day required source power of enough humans. Source power man the is a Licensed Surveyor consisting of on SK and ASK. The number of SK and ASK in 33 provinces in Indonesia is shown in Figure 5. Three provinces with a maximum number of SK are the Province West Java (437 people), Central Java (235 people), and West Java (234 people). Likewise with three provinces with the highest number of ASK are in the province West Java (1,645 people), Central Java (1,248 people), and East Java (879 people). Different from Maluku province which does not have SK and three provinces with the minimum number of SK are the provinces of Papua (1 person), Southeast Sulawesi (3 people), and West Sulawesi (3 people). Three provinces with the least amount of ASK that is the provinces of Papua (3 people), Maluku (10 people), and Bangka Belitung (10 people). The total of all SK in Indonesia is 1,432 people, while the total of all ASK is 6,947 people.

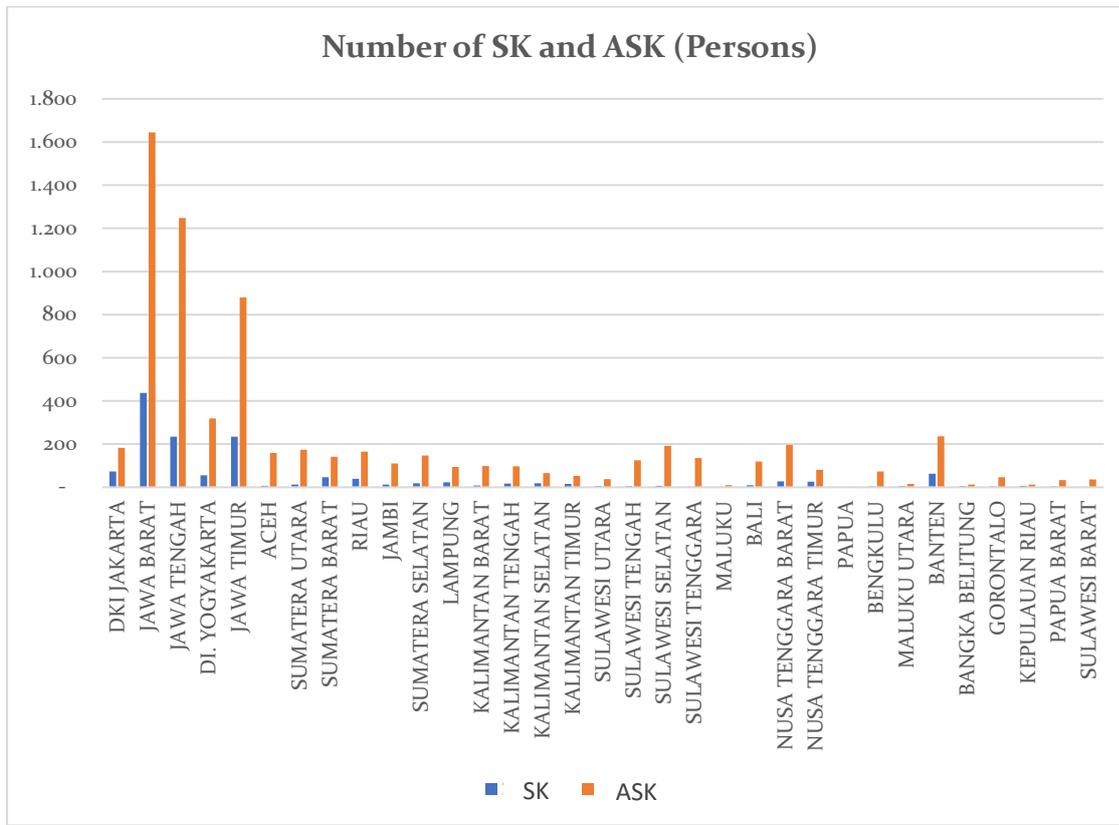


Figure 5. Diagram of the Number of SK and ASK

One ASK person is assumed capable map 13 land parcels per day. From daily ASK capability data and daily mapping target obtained results capacity ASK daily as seen in Figure 6 which shows capacity daily ASK in map land parcels in 33 provinces in Indonesia. Three provinces with the ASK lowest daily capacity are Papua, Maluku, and Bangka Belitung provinces, while the three provinces with ASK highest daily capacity that is province West Java, Central Java, and East Java.

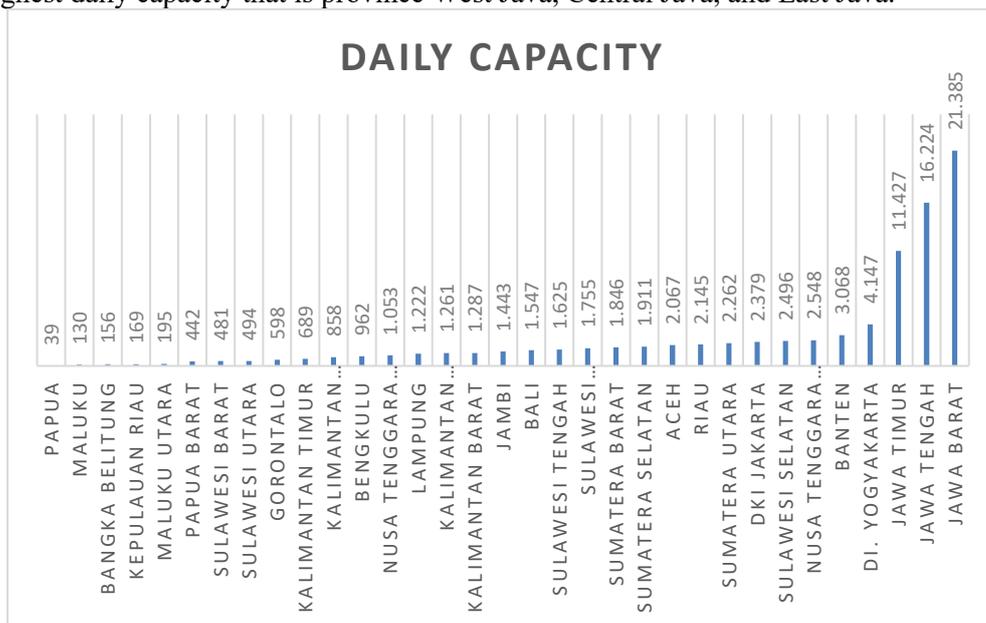


Figure 6. Capacity Chart ASK daily

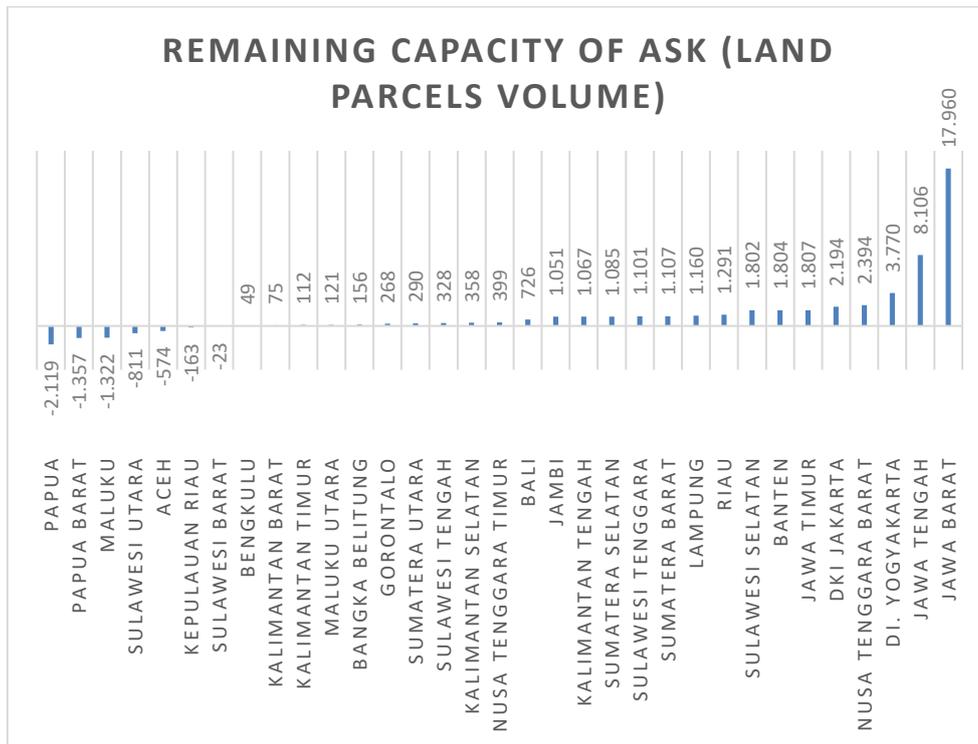


Figure 7. Remaining Chart Capacity ASK Ability

Furthermore, from the of ASK daily capacity and mapping target per day obtained results remaining of ASK daily capacity shown in Figure 7. In the results calculation remaining of ASK daily capacity earned two important points. First are provinces with the rest of ASK which means the number of ASK in provinces the more than enough to complete the mapping daily target and second is a Province that requires additional ASK to complete the mapping daily target. A diagram showing the province with remaining ASK and provinces that require The addition of ASK in detail is shown in Figure 8. From the figure could is known that 7 provinces require the addition of ASK is Papua (163 people), West Papua (104 people), Maluku (102 people), North Sulawesi (62 people), Aceh (44 people), Riau Islands (13 people), and West Sulawesi (2 people). Because of that, the government needs to create a purposeful strategy for even distribution of source power humans so as not to occur inequality number of ASK between provinces so that whole provinces in Indonesia can complete their respective PTSL targets.

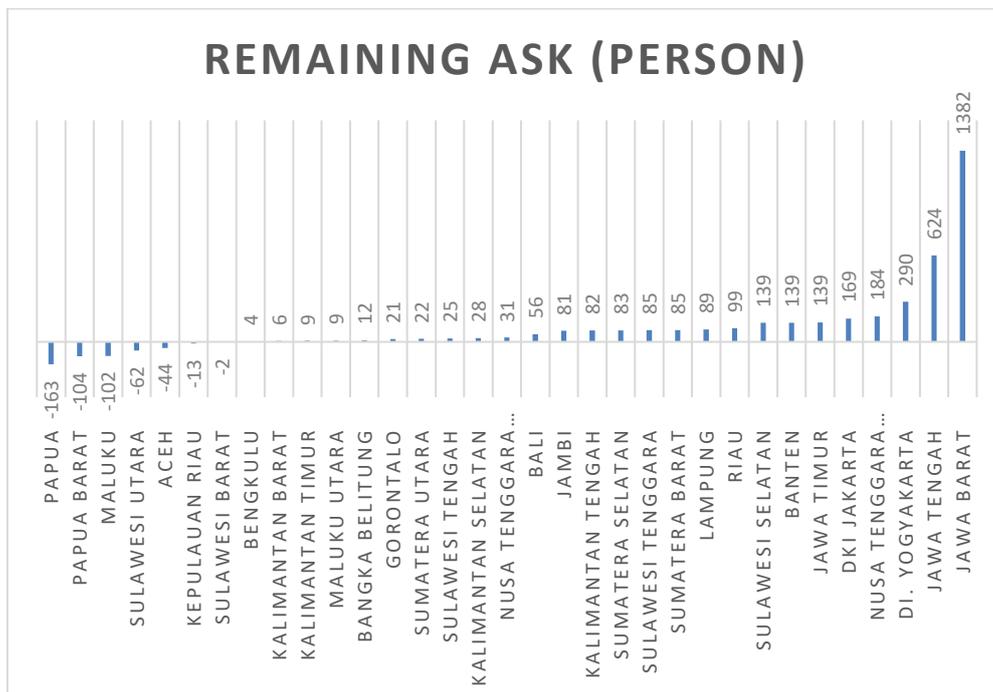


Figure 8. ASK Remaining Chart

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