

Fit For Purpose - Participatory Mapping for Cadaster: a Village Approach

Mr Jaya, Virgo Eresta (Indonesia), Mr. Martono, Dwi Budi (Indonesia), Mr. Leo Pantimena (Indonesia)

Key words: Cadastre; Fit for Purpose; Indonesia; Mapping

SUMMARY

Indonesia has started its ambitious systematic land registration since 2017. The number of parcels being registered are 5 millions parcels in the initial year. This figure is a huge leap compare with the 1 million parcels registered in the previous year. Nevertheless, the number of parcels to be registered is increasing ever year until 2025.

Having the same resources of internal surveyor and regulation cause a lot of suffer to fulfill the task. Some adjustment must be change in terms of introducing (back) the licensed surveyor and finding the fit for purpose solution.

One of the piloting area is in Madiun Regency. It is located in eastern part of Java. Most Village administrators are involved in this project. They are being trained to have the competence of land registration. Their local knowledge and influence are also used to ask all land owners participation in defining the boundaries and profing the ownership of their own parcel.

This Pilot will be evaluated for defining upcoming "fit for purpose" regulation.

Fit For Purpose - Participatory Mapping for Cadaster: a Village Approach

Mr Jaya, Virgo Eresta (Indonesia), Mr. Martono, Dwi Budi (Indonesia), Mr. Leo Pantimena (Indonesia)

1. INTRODUCTION

The demand for land every year always increases significant, the needs of the community will not only be found in urban only but also in the sub urban even in the region Forest. Areas that are supposed to function to preserve the environment and buffer the life. Area of Indonesia 190 million Hectare, about 65% is forest area while the remaining 35% are other usable occupancy areas community and can be given a certificate. Many of the lands are already occupied community but can not be certified because it is included in the forest area. In order to solve the problem government especially BPN has project Inventaritation of land tanure, ownership, landuse and Utilization (IP4T). This program is not a Program like Land registration that can produce Land Certificate product, but this program is only entrance for the spatial data and non - spatial data. However, through this Program a plot of land will be recorded and recognized by the Land Office as though it is merely a map of land parcels tucked into a large map.

2017, BPN launch the program Complete systematic land registration (PTSL) is a registration activity land for the first time conducted simultaneously which includes all land registration objects that have not been registered in one area village / kelurahan or other names of the same level, and also included mapping all have registered land registration objects order to collect and provide complete information about the plots of land in the village, the target of program will issue 5.000.000 certificates.

The PTSL can be carried out as routine activity of Land Office. One of the stages of land registration is activity physical data collection. Physical data collection is an activity collect physical data which includes:

- 1) Determination of land parcels,
- 2) Measurement of boundary plot,
- 3) Mapping of plot,
- 4) Announcement of physical data,
- 5) Run the procedure and enter the data and information relates to the physical data of the plot of land in Office Computerization Aplication .

Both IP4T and PTSL are as tool for implemeting Fit For Purpose (FFP). Both are the methods to collect the parcel data. *Enemark* mentioned in his Fit for Purpose that there were three fundamental characteristics to the FFP approach such as the purpose, the flexibility and the incremental improvements. IP4T are methods to have all parcels registered with the cheaper and faster way. The quality then will be improved afterwards using PTSL approach and following registration.

Enemark also mentioned that the concept of FFP includes three core components: the spatial, legal and institutional frameworks, see Figure 1. Each is flexible and can be improved in response societal needs and financial resources.

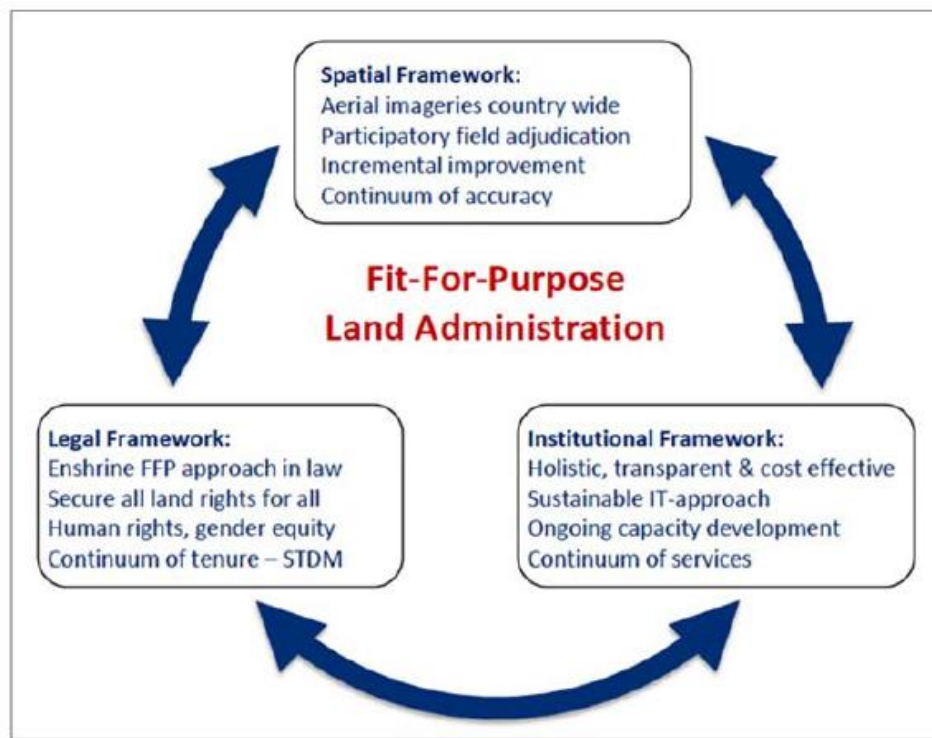


Figure 1. The FFP concept, Enemark et al

This project in several village doing on the spatial framework aims to represent the way that land is occupied and used. Spatial framework is performed delimitation on the high resolution image with participatory mapping.

2. THE CASE OF MADIUN

In 2017, Land office Madiun regency has implemented IP4T in two villages Ngampel and Kedungrejo, Number of parcel can be collected 2575 parcels. IP4T was done Spatial framework that is performed delimitation on the high resolution image with participatory mapping.

If compared with the tax data, less than 602 parcels. In addition, are 7 villages that are measured for the PTSL are Jerukgung, Garon, Tampelan, Warurejo, Glonggong, Sidodadi and Balerejo as much as 11565 parcels. The result of PTSL measurement also same with IP4T parcel data are not the same as the base data from tax map. The experiment resulted that both IP4T and PTSL are the implementation of fit for purpose in this case PTSL will continuously increase the land tenure and accuracy data. In 2018, land office Madiun regency will implement IP4T

in all regency, 206 villages with number 410,000 parcels and doing PTSL 65.000 parcel at 59 villages.

Table 1. Analysis PTSL 2017 Madiun regency

No	Sub – Region	Village	Number Of Parcel		
			Parcel Tax Data 2017	Parcel By PTSL	Remark
1	Balerejo	Jeruk Gulung	1620	1802	182
2	Balerejo	Garon	2295	2239	-56
3	Balerejo	Tapelan	1435	1333	-102
4	Balerejo	Warurejo	1258	1725	467
5	Balerejo	Glonggong	1656	1265	-391
6	Balerejo	Sidodadi	1418	1284	-134
7	Balerejo	Balerejo	2483	1917	-566
			12165	11565	-600

Table 2. Analysis IP4T 2017 Madiun regency

1	Mejayan	Ngampel	1510	1453	-57
2	Pilangkenceng	Kedungrejo	1667	1122	-545



Figure 2 Coordination in Ngampel Village for IP4T implementation

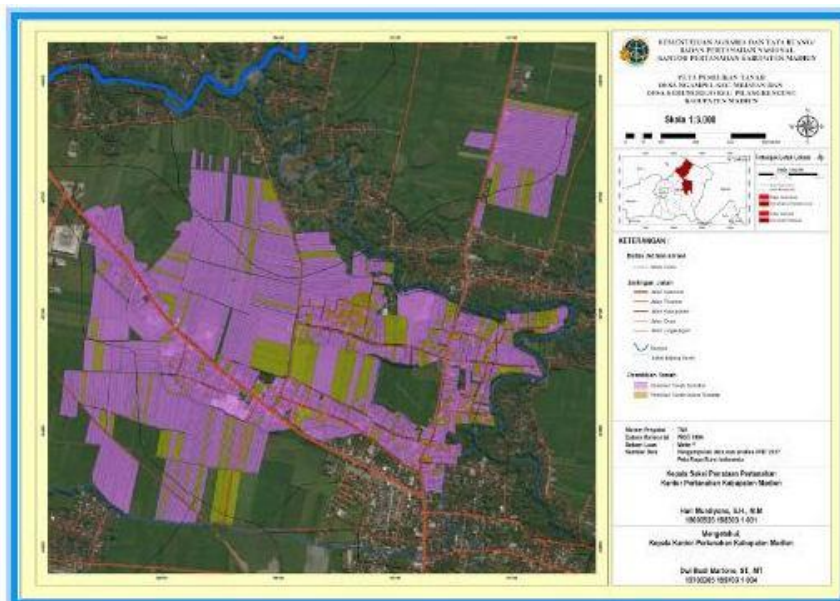


Figure 3 The result of IP4T at Ngampel Village

3. THE OUTCOME

IP4T activity is done by using high resolution satellite image data by involving the community. From this activity has expected that the data of all parcel the village can be mapped. IP4T project in 2017 had resulted complete the whole parcel at 2 village of Ngampel and Kedungrejo. Not only spacial data, IP4T also collected textual data about land tanure, ownership, landuse and utilization.

Land office will countinue the result of IP4T especially land tanure, with cadastral Survey will produce certificate that give to people. But not all data in PTSL can issue certificate since the data of subject and oobject are not complete. Also the land registration in Indonesia is voluntary so it does not oblige all owners to register the land in the land office.

Therefore, a regulation or law is required which requires that every land parcel to be registered to the state in this case through BPN so that it will get the result of mapping a plot all over Indonesia that will support to build of land Administration. This data can also be used by local governments for the preparation of spatial plans, update of land value zones and development or licensing.

4. CONCLUSIONS

Land Office Madiun regency in 2018 will try to implement the FFP land administration to register 410,000 parcels of land located in 15 regencyts and 206 villages. The first stage has been done in 2017 through IP4T as much as 2575 parcels of 2 Villages and PTSL as much as 11565 parcels of 7 villages. Total number of parcel can be issued certificates 9950 parcels and 1615 parcels is not issued certificates since not enough data for subject and object.

FFP land administration in Indonesia is carried out in the activities of IP4T and then PTSL to continuum of tanure adn accuracy. In this year, Madiun will be implement IP4T in all 206 villages and PTSL in 59 villages as much as 64000 Parcels

REFERENCES

1. Enemark, S.; Bell, K.C.; Lemmen, C.; McLaren, R. Fit for Purpose Land Administration; The World Bank and the International Federation of Surveyors: Copenhagen, Denmark, 2014.
2. Enemark, S.; McLaren, R.; Lemmen, C. Fit-for-Purpose Land Administration— Guiding Principles for Country Implementation; UN-Habitat: Nairobi, Kenya, 2016.