Land utilization changing of Pelaba Pura and Druwe Desa on pre and post-reclamation in Serangan Island

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Abstract The phenomenon of reclamation on Serangan Island is an inexhaustible field for further research. Reclamation of the island conducted by private company to build tourist destination facilities, started in 1995 and stalled in 1998 due to monetary, political, social and cultural issues factors. Post-reclamation physical changes have an effect on land use change owned by the village such as Pelaba Temple land and Druwe Desa land. Through this research, it will be explored how many land uses have changed through land comparation pre and post-reclamation. Research method used is qualitative descriptive with purposive sampling method. The result of the research shows that the land of Pelaba Temple and Druwe Desa is owned by Puri Kesiman and Desa Pakraman Serangan. There are 3 types of changes in the land use Pelaba Temple and Druwe Desa land that is the use of land that functions social, economic, and religious scattered in residential areas and areas of PT. BTID. In other words, there are land ownership of Desa Pakraman Serangan on the territory of PT. BTID with religious functions such as Temple Pat Payung, Temple Batu Api, Temple Tirta Arum and other temples.

1. Introduction
This research is motivated by an interesting phenomenon about the expansion of land area through reclamation in Southern region of Denpasar precisely on Serangan Island. The reclamation was conducted with the aim of developing tourism on Serangan Island. The reason for choosing Serangan Island as the reclaimed and developed area because Serangan Island has potential close to Ngurah Rai International Airport, Benoa Harbor, BayPass Ngurah Rai roadway, mangrove forest potential, fishery, seaweed cultivation and turtle habitat to lay eggs so that Serangan Island is named Turtle Island as well. Private company conducts reclamation of Serangan Island by hoarding the sea area so that the land area increases with the purpose to established tourist facilities such as golf courses, resorts, lagoon for water recreation facilities, yachtclub, beach club house, superlot development in the form of villas, other tourism supporters, as well as marinas / ferries. But the project was finally stopped in 1998 due to monetary, political, social, cultural, and other factors [1].

The physical changes of Serangan Island also influenced the changes in the utilization of ulayat land owned by Pakraman Serangan and Puri Sakenan villages. Ulayat land in question is Pelaba Temple Land and Druwe Desa Land. During the pre-reincarnation period, Pelaba Pura land and Druwe Desa land in Serangan Island were only in the form of land Pura Tegak located in residential areas and temples located in the tourist development of PT. BTID. This means that it can be said that Pelaba Land and Druwe Desa Land on pre-reclamation is very limited/the number is small because it is only land for
Temple and front page of Temple (Pelaba Temple), and village land in a relatively small quantity only. Post-reclamation, Desa Pakraman Serangan already owns Pelaba Temple land and Druwe Desa land outside the temple grounds on Serangan Island currently, mostly used for economic functions that generate income for Desa Pakraman Serangan and Serangan Island Community.

This research is expected to be a comparison between the existing land of Pelaba Temple and Druwe Desa pre-acclamation and post-reclamation. The comparison can show about the changes of location, land areas and type of land uses. There are also several cases of new lands given by PT. BTID to Desa Pakraman Serangan to be used as a religious function with Pelaba Temple land type. Therefore, it can be concluded that the reclamation of 1995-1998 enlarge the quantity and type of land use Pelaba Temple and Land Druwe Desa significant or not to the owner of Puri Kesiman and Desa Pakraman Serangan

2. Method
This research uses descriptive qualitative method because of location and research case which have high locality value. It is possible that the case of land use change of Pelaba Pura and Druwe Desa Land due to reclamation only happened in Serangan Island. In this qualitative approach, the research sample is taken with non-random sampling technique by purposive sampling that is taking samples with certain considerations that are considered relevant or can represent the object being studied and considered to have the most information / useful for the researcher [2]. For example, taking a sample of Bendesa Adat as a representative of Desa Pakraman Serangan, Kelihan Banjar is the leader of each Banjar in Pakraman Serangan Village, the business owner representing Pelaba Pura and Druwe Desa land use actors, as well as community leaders who are considered to know problems in the field related to the research. Techniques of collecting and analyzing data using observation techniques, surveys, and documents.

3. Results and discussion

3.1. Land acquisition of pura dalem and druwe desa land in serangan island
Basically, the ownership of Pelaba Pura and Druwe Desa Land on Serangan Island is owned by two parties namely Puri Kesiman and Desa Pakraman Serangan. Ownership of some land by Puri Kesiman is inseparable from the detail of land ownership as presented in the Table 1.

Table 1. Land ownership of pura peluru and druwe desa.

| No | Land Ownership                  | Pelaba Pura and Druwe Desa Land | Pre-reclamation | Post-reclamation |
|----|---------------------------------|---------------------------------|-----------------|------------------|
| 1  | Puri Kesiman                    | Pura Dalem Sakenan              | ✓               | ✓                |
|    |                                 | Pura Pesamuan Agung             | ✓               | ✓                |
|    |                                 | Pura Dalem Susunan Wadon        | ✓               | ✓                |
|    |                                 | Pelaba Pura (Northern and       | ✓               | ✓                |
|    |                                 | Eastern side of Pura Sakenan)   | -               | ✓                |
|    |                                 | Pura Beji Dalem Sakenan         | -               | ✓                |
| 2  | Desa Pakraman Serangan          | Pura Desa                       | ✓               | ✓                |
|    |                                 | Pura Dalem Kahyangan dan        | ✓               | ✓                |
|    |                                 | Prajapati                       | ✓               | ✓                |
|    |                                 | Pura Puseh/Dalem Cemara         | ✓               | ✓                |
|    |                                 | Pura Segara                     | ✓               | ✓                |
|    |                                 | Pura Tanjung Sari               | ✓               | ✓                |
|    |                                 | Pura Puncaking Tingkah          | ✓               | ✓                |
Based on the above table it is explained that in pre-reclamation, the zoning of Pelaba Pura and Druwe Desa only existed in one area that is Serangan Island (no zone on left / residential area and right canal/area of BTID) because there was not yet an investor which is namely PT. BTID. Meanwhile, in post-reclamation, Serangan Island has been divided into two zones of territory i.e., residential areas (left of the canal) and the area of PT. BTID (right canal).

3.2. Utilization of pelaba pura and druwe village land in serangan island

According to Andika, the utilization of ulayat land raises three functions, namely social, economic and religious functions. In the context of social functioning, land can be banjar ‘village’, cemetery and other facilities that the community uses as a container to conduct activities that are social among humans (pawongan/human relationships with humans). As an economic function, sometimes land that profitable because of its strategic place and favorable land condition, can be used for income generating activities for Desa Pakraman. As a religious function, land like Pura is of course used for worship activities (parahyangan/human relationship with God). Similarly, in Serangan Island whose ulayat land is utilized into three functions, namely social, economic, and religious [3]. In pre-reclamation, Pelaba Pura and Druwe Desa Land functioned more on social and religious functions, while economic function (Market, LPD, KUD) were few and located in less strategic land / located in small alley therefor economic activity was less able to run smoothly.

Meanwhile, in post-reclamation, there is quite a lot of new lands, especially in the northeast corner which is used/used as an economic function which are water sport facility, restaurant, villa, dolphin show, camping ground and turtle conservation hall. In addition, the location of Market, LPD, and KUD was already located in large and strategic land. Pelaba Pura and Druwe Desa Land with social and religious function also there are extension of reclamation result and addition of some religious function of reclamation like Pura Batu Kerep and Pura Batu Api that exist after reclamation.

Land Comparison of Pelaba Pura and Druwe Desa Land the pre and post reclamation villages on Serangan Island can be divided into 3 types of land, i.e., land area and its utilization remains on pre and post-reclamation, land expanding, and undergoing land use change with details as follows:

- **Pelaba Pura and Druwe Desa** Land, the village area and its utilization remain in pre and post reclamation period, namely: *Pura Dalem Susunan Wadon* and *Laba Pura Dalem Sakenan*, *Pura Desa*, and *Pura Pat Payung* (religious function).
- **Pelaba Pura and Druwe Desa** Land which are experiencing land expansion from pre to post reclamation, namely: *Banjar Dukuh*, Cemetery (social function), Melasti Area at North East End.
Serangan Island, Pura Dalem Sakenan and Pesamuan Agung, Pura Puseh/Dalem Cemara, Pura Segara, Pura Dalem Khayangan, Pura Tanjung Sari, Pura Puncaking Tingkiah, Pura Taman Sari, and Pura Tirta Arum.

- Pelaba Pura and Druwe Desa Land that experienced land use changing from pre to post-reclamation: Banjar Kubu (social function) Village Market, LPD and KUD, Turtle Conservation Hall, Water sport Facility (economic function), Pura Beji Dalem Sakenan, Pura Batu Api, and Pura Batu Kerep (religious function).

Based on a detailed description of the exploitation of Pelaba Pura and Druwe Desa Land, both social, economic and religious, in the pre and post-reclamation period, the following will be summarized in the form of tables where the Pelaba Pura and Druwe Desa Lands are pre and post-reclamation comparable / compared to facilitate in seeing the differences / changes in its utilization (See table 2).

Table 2. Comparison of land utilization pelaba pura and druwe desa land pre and post-reclamation [4, 5].

| Pelaba Pura and Druwe Desa | Pre-Reclamation | Post-Reclamation |
|---------------------------|-----------------|-----------------|
|                           | Land Utilization | Surface Area | Location | Land Utilization | Surface Area | Location |
| Case 1                    | Banjar Kubu      | 2 are          | Northern Pura Tanjung Sari | Property belongs to PT. - BTID | Right side of the channel |
| - Banjar Kubu             |                |                |          |                |                |          |
| - Banjar Dukuh            | Banjar Dukuh    | 2,5 are        | Southern Banjar Kawan | Banjar Dukuh 3,5 are | Southern Banjar Kawan |
| Case 2 (Cemetery)         | Cemetery        | 1,7 acre       | Northern of Utara Pura Dalem Khayangan | Cemetery (has unified/not split) 2,5 acre | Northern of Utara Pura Dalem Khayangan |
| Case 3                    | Village Market  | 1 are          | Southern of Pura Desa | Village Market (reclaimed sea) 8,7 are | Southern of Pura Segara |
| - Village Market          |                |                |          | LPD (reclaimed sea) 0,8 are | Southern of Pura Segara |
| - LPD                     |                | 0,9 are        | Northern of Pura Desa | KUD (partly former reclaimed sea) 8,2 are | Southern of Pura Segara |
| - KUD                     |                |                |          |                |                |          |
| Case 4                    | Sea             | -              | Eastern Side of The Cemetery | Turtle Conservation Center and Campground (previously reclaimed land) 80 are | Eastern Side of The Cemetery |
| - Turtle Conservation Center and Campground | | | | | |
| - Watersport and Melasti Area Expansion | Melasti Area and the Sea | ± 66 are | The Northeast end of Pulau Serangan | Watersport and Melasti Area (previously reclaimed land) 2,35 acre | Eastern Side of The Cemetery |
| Case 5 (Pura Owned by Puri Kesiman) | Pura Dalem Sakenan and Pesamuan Agung | 51 are | The Northwest end of Serangan Island | Pura Dalem Sakenan and Pesamuan Agung 1 acre | The Northwest end of Serangan Island |
| Land Use                  | Description                                                                 |
|--------------------------|-----------------------------------------------------------------------------|
| Pelaba Pura Sakenan      | Empty land and market place upon piodalan Pura Dalem Susunan Wadon 1,45 acre |
| Pura Dalem Susunan Wadon | Empty land and market place upon piodalan Pura Dalem Susunan Wadon 26 are  |
| Pura Beji Dalem Sakenan  | Eastern side of Banjarn Dukuh Pura Beji Dalem Sakenan 6 are               |
| Empty land               | Eastern side of Pura Puncaking Tingkih                                      |
| Land Moor                |                                                                              |
| Case 6 (Pura Owned by Desa Pakraman Serangan) |                                                                              |
| Pura Desa                | Eastern side of SD N. 1 Serangan Pura Desa 10 are                          |
| Pura Puseh/ Dalem Cemara| Eastern side of Village Market (Newly) Pura Puseh/ Dalem Cemara 19 are     |
| Pura Segara              | Eastern side of Newly Village Market Pura Segara 6 are                     |
| Pura Dalem Khayangan and Pura Prajapati | Western Side of the Cemetery Pura Dalem Khayangan and Pura Prajapati 18 are |
| Pura Pat Payung          | Northern Side of the Pura Tanjung Sari Pura Pat Payung 2 are               |
| Pura Tanjung Sari        | Western Side of the Pura Pat Payung Pura Tanjung Sari 21 are               |
| Pura Puncaking Tingkih   | Southern Side of Pura Tanjung Sari Pura Puncaking Tingkih 19 are           |
| Pura Taman Sari          | Southern Side of Pura Pat Payung Pura Taman Sari 6,5 are                   |
| Pura Tirta Arum          | Southern Side of Pura Pat Payung Pura Taman Sari 5 are                     |
| Pura Batu Api            | Southern Side of Pura Taman Sari Pura Batu Api 50 are                      |
| Sea                      | Southern End of Serangan Island Pura Batu Api 1,2 are                      |

Notes:
- **Empty land** and **market place** upon piödalan for specific puras.
- **Land Moor** indicates unused land.
- **Case 6 (Pura Owned by Desa Pakraman Serangan)** details specific land ownerships and their locations.
- **Territory of PT. BTID** indicates the land owned by PT. BTID.

Source: 3rd Annual Applied Science and Engineering Conference (AASEC 2018)
4. Conclusion

There are 2 land ownership of Pelaba Pura and Druwe Desa Land in Serangan Island namely Puri Kesiman and Desa Pakraman Serangan. The changing of land use categories of Pelaba Pura and Druwe Desa Land on pre and post-reclamation consist of three types including Pelaba Pura and Druwe Desa Land whose utilization remains in pre- and post-reclamation period, which are: Pura Dalem Susunan Wadon and Laba Pura Dalem Sakenan, Pura Desa, Pura Pat Payung (religious function). Pelaba Pura and Druwe Desa Land which is extended from pre- to post-reclamation land, namely: Banjar Dukuh, Kuburan (social function), Melasti Area at East End of Serangan Island, Pura Dalem Sakenan and Pesamuan Agung, Pura Puseh/Dalem Cemara, Pura Segara, Pura Dalem Khayangan, Pura Tanjung Sari, Pura Puncaking Tingkiah, Pura Taman Sari, and Pura Tirta Arum (religious function). Pelaba Pura and Druwe Desa Land that experienced land use change from pre- to post-reclamation: Banjar Kubu (social function) Village Market, LPD and KUD, Turtle Conservation Center, Watersport Facility (economic function), Pura Beji Dalem Sakenan, Pura Batu Fire, and Pura Batu Kerep (religious function).

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