

A Consensus Model for Coastal Potential-Conflict Management: The Case of Pangkung Tibah Village, Bali

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Abstract. *The tourism development of the Pangkung Tibah Village coastal area has reportedly caused various changes in the functions of lands. These changes have led to potential conflicts among the involved actors, who have different interests, indicating the necessity for problem-solving efforts. Potential conflicts should be addressed early to prevent them from developing into bigger conflicts. The results of this study may be used as a guideline for developing policies to prevent potential conflicts. The study aimed to: (1) identify the characteristics of the potential conflicts in the Pangkung Tibah Village coastal area, (2) carry out an analytical mapping of the potential conflicts, and (3) formulate a consensus model for the management of the potential conflicts by maximizing the role of the local community. The participatory rural appraisal (PRA) approach was used to identify and conduct an analytical mapping of potential conflicts in the Pangkung Tibah Village coastal area. The findings revealed that due to the vulnerability of this coastal area to damages, interventions should be controlled by direct action that is supported by formal and customary laws. Regarding the identification of the actors, causes, and types of differences in this study, an analytical mapping was conducted, with the potential conflicts being categorized into three levels: 'mild', 'moderate', and 'severe'. These levels were determined based on the nature of their relationships with the three categories of sustainable development. In conclusion, a consensus model is proposed as a solution to manage the existing potential conflicts in the coastal area of Pangkung Tibah Village based on the local community and stakeholders' participation in order to well manage the social, economic, and environmental aspects towards sustainable development.*

Keywords. *coastal conflicts, community participation, consensus model, management of potential conflicts, participatory approach.*

Abstrak. *Perkembangan pariwisata kawasan pesisir Desa Pangkung Tibah dilaporkan telah menyebabkan berbagai perubahan fungsi lahan. Perubahan-perubahan ini telah menimbulkan potensi konflik di antara aktor-aktor yang terlibat, yang mempunyai kepentingan berbeda, sehingga menunjukkan perlunya upaya penyelesaian masalah. Potensi konflik harus ditanggulangi sejak dini agar tidak berkembang menjadi konflik yang lebih besar. Hasil penelitian ini dapat dijadikan pedoman dalam menyusun kebijakan untuk mencegah potensi konflik. Penelitian bertujuan untuk: (1) mengidentifikasi karakteristik potensi konflik di wilayah pesisir Desa Pangkung Tibah, (2) melakukan pemetaan analitis terhadap potensi konflik, dan (3) merumuskan model konsensus pengelolaan potensi konflik dengan memaksimalkan peran masyarakat lokal. Pendekatan partisipatif pedesaan appraisal (PRA) digunakan untuk*

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mengidentifikasi dan melakukan pemetaan analitis terhadap potensi konflik di wilayah pesisir Desa Pangkung Tibah. Temuan menunjukkan bahwa karena kerentanan wilayah pesisir terhadap kerusakan, intervensi harus dikendalikan melalui tindakan langsung yang didukung oleh hukum formal dan adat. Terkait identifikasi aktor, penyebab, dan jenis perbedaan dalam penelitian ini, dilakukan pemetaan analitis, dengan potensi konflik dikategorikan menjadi tiga tingkatan: 'ringan', 'sedang', dan 'berat'. Tingkatan ini ditentukan berdasarkan sifat hubungannya dengan tiga kategori pembangunan berkelanjutan. Kesimpulannya, diusulkan model konsensus sebagai solusi untuk mengelola potensi konflik yang ada di wilayah pesisir Desa Pangkung Tibah berdasarkan partisipasi masyarakat lokal dan pemangku kepentingan agar dapat mengelola aspek sosial, ekonomi, dan lingkungan dengan baik menuju pembangunan berkelanjutan..

Kata kunci. *konflik pesisir, model konsensus, partisipasi masyarakat, pendekatan partisipatif, pengelolaan potensi konflik.*

Introduction

Similarly to what occurs in other Indonesian coastal areas, development activities in coastal areas of Bali have resulted in these areas being used for various purposes, ranging from traditional ones, such as agriculture and fishing, to modern ones, such as settlement, industries, and tourism. Additionally, several land use issues have arisen in these regions. The conflicts have resulted from beach reclamation, changes in the functions of uncontrolled lands, beach demarcation violations, the violation of flora and fauna conservation areas, the transformation of public spaces into private spaces, the transformation of sacred spaces into profane spaces, and the violation of temples' sanctity radius, among others.

The coastline of Tabanan Regency is located on the south coast of Bali, which is utilized for various purposes, such as fishery, agriculture, settlement, and tourism. The most prominent attraction is Tanah Lot, which influences the surrounding beaches (Purba, et al., 2020). In these areas, the development of tourist accommodations around Tanah Lot has caused rapid changes in land use, including in the coastal area of Pangkung Tibah Village, which is used for agriculture, plantation, fishery, settlement, tourism, mangrove conservation, as well as customary and religious activities.

Land acquisition for tourism development in the village's coastal area in Bali started in 1989. Initially, the land acquisition plans were not welcomed by the community. The investors used a variety of ways to convince the land owners to sell their land. The land function changes have resulted in some after-effects, including the loss of access to land plots, causing some farmers to lose their livelihood. In addition, the investors' land plots are next to the locations of customary and religious activities, which has caused the activities to be disturbed.

The utilization of resources in coastal areas that have various characteristics can be carried out optimally and sustainably only with integrated and sustainable planning and management (Kay & Alder, 2017; Lloyd et al., 2013). The abundance of resources in coastal areas may lead to various problems. The unintegrated utilization of a coastal space may create conflicts among the interests of various sectors (Camus, 2019; Moore, et al., 2017; Sukardjo & Pratiwi, 2015). Coastal spatial planning is crucial for resolving spatial utilization conflicts by identifying and mapping all the utilizations carried out, the regulations used, and existing conflicts (Lloyd et al., 2013; Moore, et al., 2017; Prestelo, 2016). Initially, conflicts generally occur within the ecological domain (Magarotto et al., 2017). They then become social conflicts and finally economic conflicts (Brown & Raymond, 2014; Sukardjo & Pratiwi, 2015). Various activities (zones) in coastal areas that intersect one another or that are close to each other, which have the potential to be compatible or

incompatible, need to be identified and mapped (Dronkers & Stojanovic, 2016; Moore, et al., 2017; Subandono, 2015).

In the phase of potential conflict, conflicts can occur but their intensity is still very low. Structural factors and causes of conflict may trigger differences among groups besides socio-economic, cultural, and political differences. In this phase, there are many problems, which are hidden in nature and need thus to be disclosed so that they can be overcome (Wirawan, 2009). It is not guaranteed that there is no hostility and conflict in a community that seems to be stable. Preventive actions in this phase are not risky and have the potential to be successful (Susan, 2014).

Various problems related to the utilization of coastal lands in Pangkung Tibah Village bear potential conflicts among the actors involved, who have different interests. Although these problems are based on potential conflicts, they may develop further into open differences with different severity levels. This indicates that potential conflicts should be addressed at an early stage, to prevent them from developing into bigger conflicts. This underlines the necessity of a problem analysis in the village's coastal area, where the results may be used as a guideline for developing policies toward the prevention of potential conflicts from harming the stakeholders and resources in the area.

This study focused on the importance of a consensus among various stakeholders regarding the utilization of resources in Pangkung Tibah Village, based on the following questions: (1) how to map and analyze the potential conflicts arising from the utilization of the coastal area? (2) what is an appropriate consensus model with the potential to maximize the roles of the local community? In addition, good management of social, economic, and environmental aspects should help to create the sustainable utilization of the coastal area based on the participation of the local community.

Similar research has been carried out in the coastal area of Teluk Banten (Cadith, 2019). Since several stakeholders with different interests were involved in the utilization of resources in that area, a map of conflicts that resulted from the utilization of coastal resources was needed. An effective conflict resolution was produced after the causes of the conflicts were established. The conflict resolution used coercion, arbitration, mediation, compromise, and adjudication methods, according to the characteristics of the conflicts faced by the community. With that in mind, the current research focused more on the role of the local community in the management of conflicts resulting from the utilization of resources in the coastal area of Pangkung Tibah Village with different methods, although the characteristics of the area are almost the same as those of the coastal area of Teluk Banten.

Therefore, the following objectives were determined: (1) identify the actors, causes, and types of potential conflicts; (2) conduct an analytical mapping of potential conflicts in the affected area; and (3) develop a consensus model for utilizing the coastal area, by maximizing the role of the local community. This model is expected to help increase the role of the local community and other stakeholders in managing potential conflicts to realize a sustainable society.

Study Area

The land area of Pangkung Tibah Village is approximately 199 ha, containing three and five *banjar dinas* and *banjar adat*, respectively, i.e., administrative and customary areas within a Balinese settlement. The village borders on the Indonesian Ocean, Bengkel, Yeh Bumbung River/Belalang, and Yeh Empas River/Sudimara Villages to the south, north, east, and west, respectively, as shown in Figure 1.

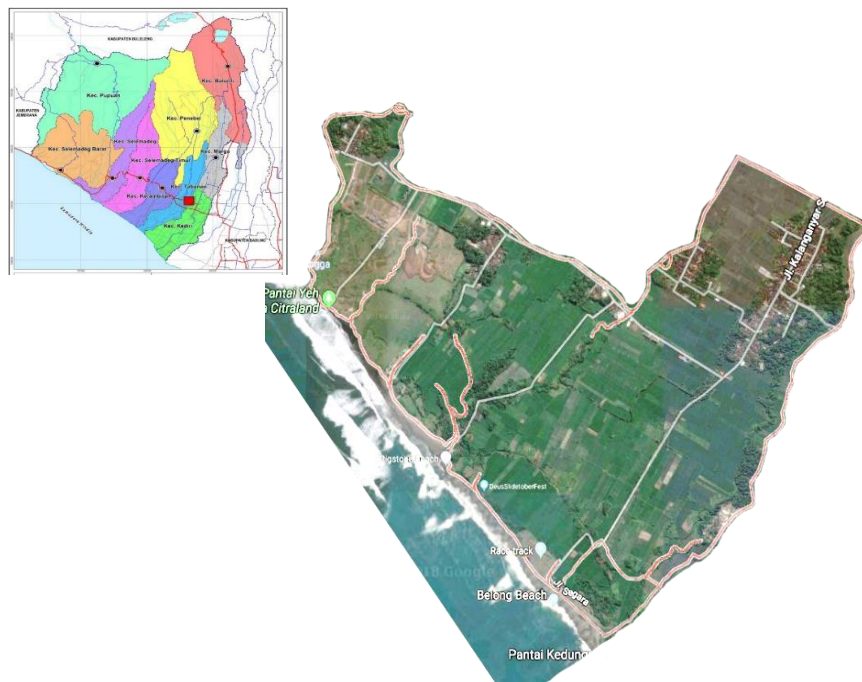


Figure 1. Study area

In the Spatial Plan for 2012-2032, the function of this village is integrated into the Special Tourist Attraction Area of Tanah Lot, which covers approximately 252 ha and includes five settlements. From the obtained data, 34.6% and 26.3% of the population are farmers and sharecroppers, respectively. The population's livelihoods as well as the investors and their lands also have some connection with the characteristics of the potential conflicts arising from the utilization of the village land. This is because most farmers and sharecroppers have lost their livelihoods due to land ownership changes and the function changes of areas taken over by investors. These conditions are seen as the seeds of potential conflicts in the coastal area, with land ownership as the major cause.

Research Method

A participatory approach can be used to identify the development needs of a region, where the community is the main actor in the development (Dobbs and Moore, 2002; Narayanasamy, 2009; Tokey et al., 2020). This concept places the grassroots community in the position of planners and decision-makers on development policies at the local level (Kalibo and Medley, 2007; Kumar, 2002). According to Purcell (2009), mapping and photography are very suitable for community-based participatory reports, specifically during the regional identification of development needs. In this study, data were obtained through five methods, namely interviews, observations, image recording, mapping, and focus group discussions (FGDs). Unstructured interviews were also conducted with some resourceful individuals, according to methodological guidelines. These respondents were mostly villagers with the ability to provide relevant information, as some of these individuals had deep and comprehensive knowledge about Pangkung Tibah Village. Meanwhile, others are responsible for the administrative and customary affairs of the settlement (e.g., the customary leader and village head). In addition, interviews were conducted with investors and common villagers, with field observations being carried out to obtain images of the affected coastal locations. These observational data were obtained through image-recording devices (camera and video recorder) and mapping.

The next method utilized to obtain data was FGD, which was used to obtain the strengths, opportunities, weaknesses, and threats of resource utilization within the village's coastal area. These data were important in developing a consensus model for the utilization of the area, as shown in Table 1.

Table 1. Data collected from unstructured interviews and FGD.

| Research objectives | Data required | Data sources | Collecting data techniques |
|--|---|---|----------------------------|
| Identifying the characteristics of potential conflicts | Land acquisition history Type of use of village area Potential conflict locations | Village head (<i>perbekel</i>) Customary leader (<i>bendesa adat</i>) | Unstructured interviews |
| Conducting an analytical mapping of potential conflicts in the affected area | Actors Conflict causes Types and stages of the potential conflicts | Village head (<i>perbekel</i>) Customary leader (<i>bendesa adat</i>) Neighborhood leaders (<i>kelihan adat/dinas</i>) Common villagers Investors | FGD |
| Developing a consensus model for utilizing the coastal area | Data on interaction between investors and common villagers | Village head (<i>perbekel</i>) Customary leader (<i>bendesa adat</i>) Neighborhood leaders (<i>kelihan adat</i>) Common villagers Investors | FGD |

To analyze some of the findings, several techniques were used. The collected data were used as the basis to understand the local context in connection with the first aim of the research. These data included data on land use changes in the coastal area and data on the locations of potential conflicts. For this purpose, a timeline was put on the map of potential conflicts. Then, the actors utilizing the coastal area and the causes and types of potential conflicts could be identified. Meanwhile, the second and third aims of the research were carried out by applying the technique of participatory rural appraisal (PRA), which involves the participation of the local community in focus group discussions (FGDs). A SWOT matrix was used to analyze the potential conflicts and group them according to their levels.

An FGD is one of the tools of PRA, which enabled villagers to share their local knowledge and function according to the achieved consensus without any external influence (Alam and Ihsan, 2012; Cavestro, 2003; Narayanasamy, 2009). This boosted the local community's participation in developing a consensus, as well as representing the wishes and targets of the involved stakeholders (Madon et al., 2018).

Results and Discussion

Land Ownership Change

In Pangkung Tibah Village, the occurrence of massive land ownership changes began in 1989, with investors setting an acquisition zone of approximately 154 ha while seeking approval from villagers (Table 2 and Figure 2).

Table 2. Areas of the village in comparison to the land areas in which ownership change occurred

| No | Description | Area |
|----|--|--------|
| 1 | Village administrative areas | 199 ha |
| 2 | Planned land acquisition zone by the investors | 154 ha |
| 3 | Inside investors' lands | 140 ha |
| 4 | Lands not able to be acquired | 14 ha |

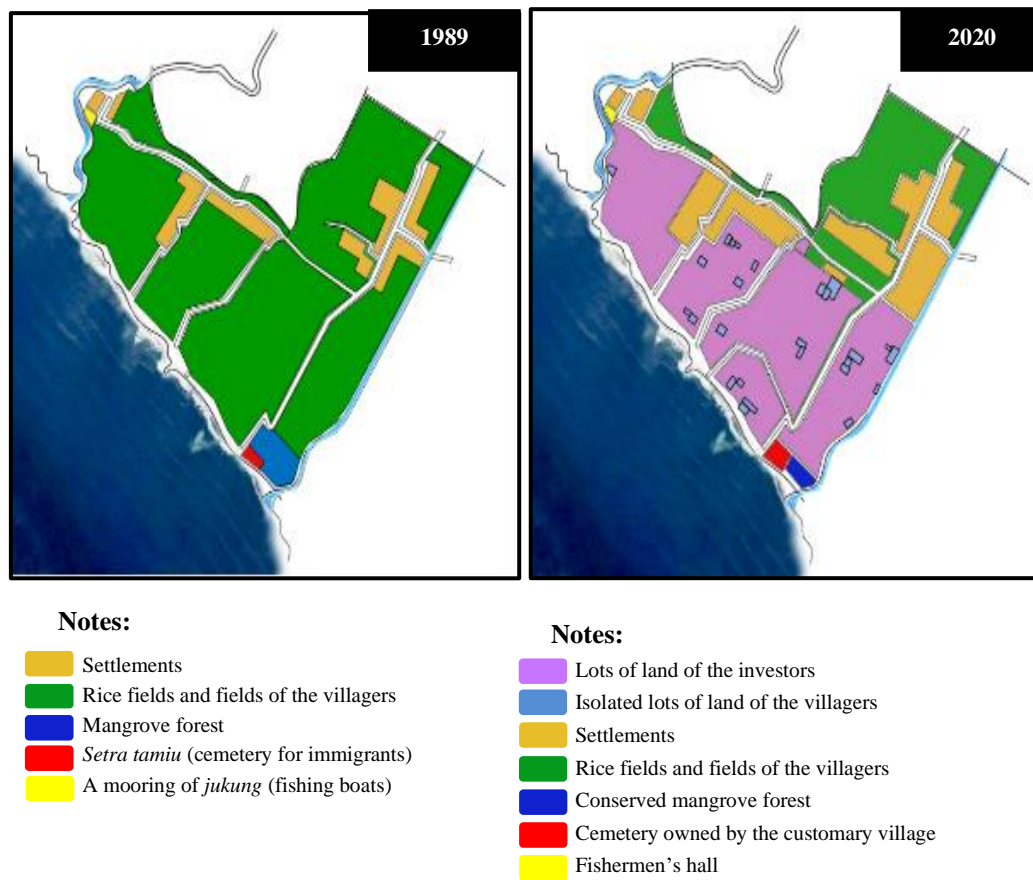


Figure 2. Maps of the land ownership before and after the land acquisition conducted by the investors.

Actors Involved in the Utilization of the Coastal Area

From the FGD data, the actors determining policies were the local and village government, as well as the leader of the customary institution responsible for formulating and developing regional rules and regulations, as regards *awig-awig* (customary rules) and *perarem* (decisions made in customary meetings). At the operational level, other involved actors were the farmers/sharecroppers, fishermen, and tourism investors, as well as some neighboring villages (Table 2).

Table 2. Actors involved in the utilization of the coastal area as well as their interests and levels.

| Actor | Interest | Level |
|---------------------------------------|--|----------------------------|
| Villagers (farmers and sharecroppers) | Utilizing the coastal area for agricultural activities, subsequently clashing with the developmental programs of tourist accommodations. | Operational |
| Farmers whose lands are isolated | Wishing to have access to their isolated lands. When this is not possible, they wish to sell their lands to investors at the right price. | Operational |
| People from neighboring villages | Wishing to use the seaside land areas for religious rituals. | Operational |
| Fishermen | Utilizing the coastal waters for fishing activities. | Operational |
| Tourism actors/ investors | Utilizing the coastal area for tourist accommodations, elite housing complexes, and other tourism-supporting facilities. | Operational |
| Customary institution | Wishing to preserve customary heritage, with the economic development being associated with the local customs and culture. | Decision-maker on policies |
| Village government | Ensuring the sustainability of the coastal environment and the village community welfare, specifically safety and comfort. | Decision-maker on policies |
| Local government | Ensuring the sustainability of the coastal environment and the general welfare of the community, especially safety and comfort while conducting economic activities. | Decision-maker on policies |

Based on the observations and interviews, three locations were observed in the affected coastal area of Pangkung Tibah Village as follows:

Location 1. Villagers' isolated lands inside the investors' properties

The villagers who owned isolated land plots and the investors were observed to have different views. The villagers wanted to sell their land at the right price, while the investors refused to reciprocate. The investors argued that although the plots were isolated within theirs, they were not obliged to solve the problem by buying them from the villagers. A map of the villagers' isolated plots inside the investors' lands is shown in Figure 3.

Location 2. The conserved mangrove forest, village cemetery, and the investors' plots

In this location, three different interests overlapping each other were identified. This confirmed that three differently utilized areas were observed, i.e., the mangrove forest (owned by the government of Tabanan Regency), state-owned land plots used as the village cemetery, and the investors' properties. These utilizations were respectively carried out based on different interests, which had the potential for conflict, as shown in Figure 4.

Location 3. Cemetery of Banjar Adat Tampih Kanginan and investor's villa

Figure 5 shows that two adjacent areas were differently utilized in this location, namely the cemetery of *Banjar Adat Tampih Kanginan* and an investor's villa (located between the *Dalem Temple* and the cemetery). This proved that the existence of the villa made the villagers unable to freely use the access road to the cemetery, as a notification has to be provided before the performance of religious ritual processions.

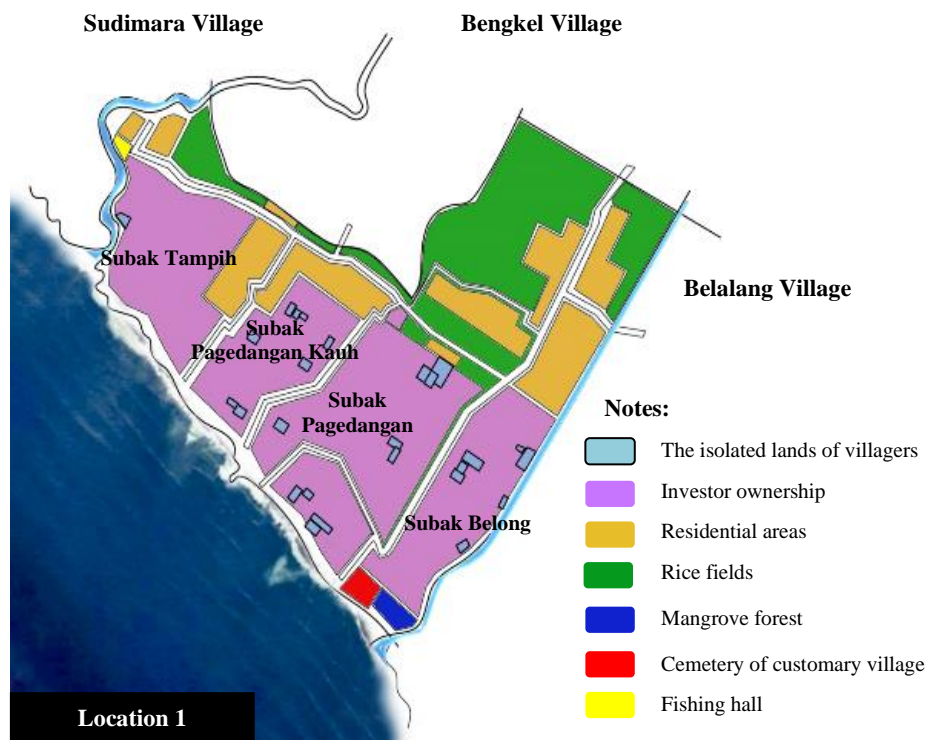


Figure 3. The villagers' isolated land plots within the investors' properties.

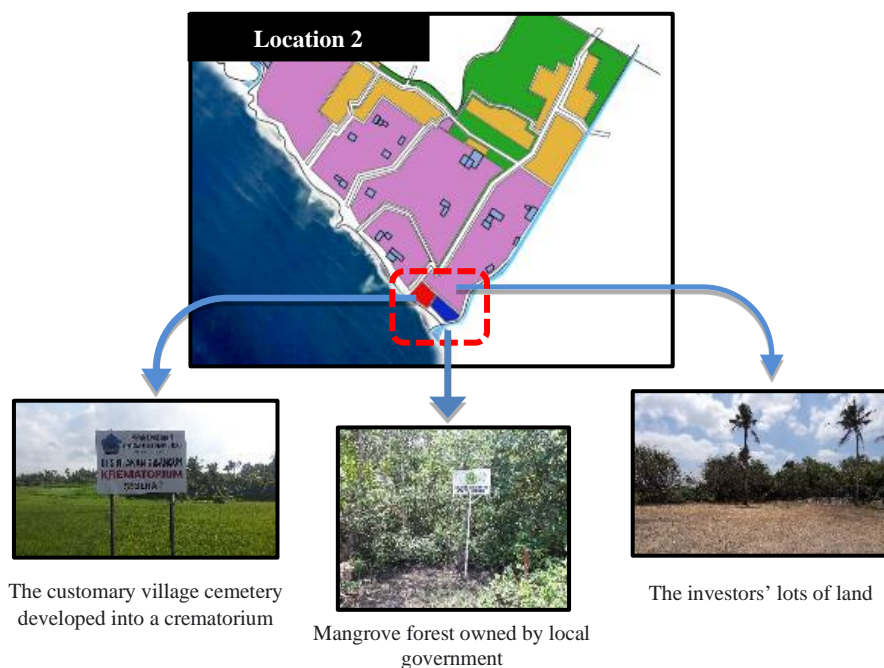


Figure 4. Utilization of the coastal areas with the potential for conflict in Location 2.

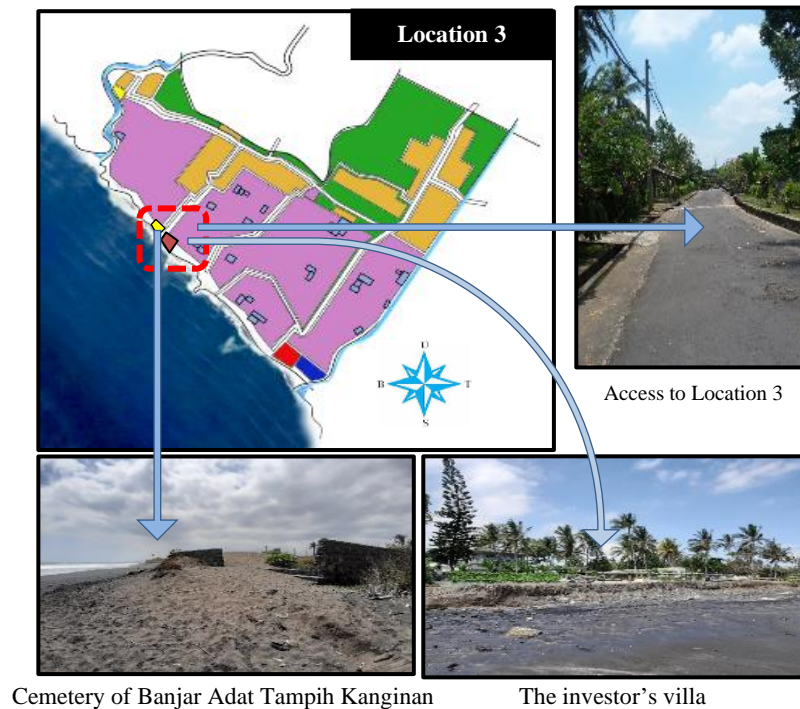


Figure 5. Utilization of the coastal area that has the potential for conflict in Location 3.

Identification of the conflicts' potential causes is important for the subsequent mapping of problems. According to Dorsey (in Mitchell, 1989), possible causes of conflict can be grouped as follows: (1) differences in knowledge or understanding; (2) differences in values; (3) differences in interests; and (4) personal problems or historical background. According to the FGD data, this is in line with the present study, where the field data identified these causes in the affected area, with conflicts being found to be in closed and open types, or, latent and manifest. A closed conflict is characterized by invisible, underdeveloped, and hidden tensions, with disputes between the involved active parties identified among the open differences (Kay and Alder, 2017). In the study locations, the potential conflicts observed were of the closed type, due to being unclear and hidden. This was because the actors with conflicting interests had not disclosed their disputes. Table 3 shows the conflict types and potentials in these locations.

Table 3. Conflict types and potentials in the utilization of the coastal area

| Location | Conflict Potential | Conflict Form |
|------------|---|---------------|
| Location 1 | Farmers whose lands are isolated are planning to raise pigs or ducks. It is expected that the bad smell from the farms is likely to disrupt the surrounding tourist accommodations. | Closed |
| Location 2 | The villagers feel disturbed by the use of their area for the cremation ceremony of <i>Ngaben</i> , without the neighboring population asking for permission. This disturbing feeling has not developed into a dispute yet. | Closed |
| Location 2 | The investor's parking lot is used without permission by <i>desa adat</i> (the customary village). This has the potential for conflict, although presently unclear. | Closed |
| Location 3 | The villagers feel disturbed by the request of the villa's management to provide a notification before carrying out customary activities. However, they do not explicitly express such a feeling. | Closed |

Causes and Types of Potential conflicts

Based on Mochran (2003), conflict developments were grouped into four stages, namely (i) latent conflict, (ii) conflict occurrence, (iii) conflict without violence, and (iv) conflict with violence. From the utilization of the coastal area, the observed conflict was categorized as Stage 1, where the differences among the actors with contradictory interests were still unclear. When these potentials are quickly addressed, the chance of successful resolution is quite high without incurring great losses.

Analytical Mapping of Potential Conflicts

According to Oakley (1999), an interaction can have mild conflict potential due to the occurrence of disturbances in one of the three sustainable development aspects, i.e., social, economic, and environmental. The potential for moderate conflict also exists when two of these aspects are disturbed. The potential for severe conflict is observed with disturbances in all three aspects. Based on the results of the present study, the interaction of the actors in Location 1 had the potential for moderate conflict, due to the disturbance within two sectors, namely the social and economic aspects. This explains that social disturbance is reflected in conflicts between the views, understandings, and values of the involved actors. Related to the economic aspect, differences were observed in the actors' views on the isolated lands.

In Location 2, a potential for severe conflict was observed due to disturbances being observed within all sectors, i.e., the environmental, social, and economic aspects. For the social and economic aspects, disturbances were observed in the differences in interests and land utilization among the actors, without any compensation being provided. Meanwhile, environmental disturbance was found in the utilization of the areas around the local mangrove forest, which had harmful potential. Based on Location 3, a potential for mild conflict was identified among the villa's management and the customary community, with disturbance only found in the social aspect. This was because the customary community was disturbed by the request of the villa's management to provide a notification before carrying out activities. A matrix mapping of the potential conflicts is shown in Table 4 and Figure 6.

Table 4. Matrix mapping of potential conflicts

| Interaction among Actors with Different Interests | Disturbed Aspect | | | Potential conflicts Level | | |
|---|----------------------|---------------|-----------------|---------------------------|----------|--------|
| | Environmental Aspect | Social Aspect | Economic Aspect | Mild | Moderate | Severe |
| Location 1 Investor and farmers whose lands are isolated | | √ | √ | | ● | |
| Location 2 Investor, customary community, mangrove forest (the government of Tabanan Regency) and people from neighboring villages | √ | √ | √ | | | ● |
| Location 3 Villa management and customary community | | √ | | ● | | |

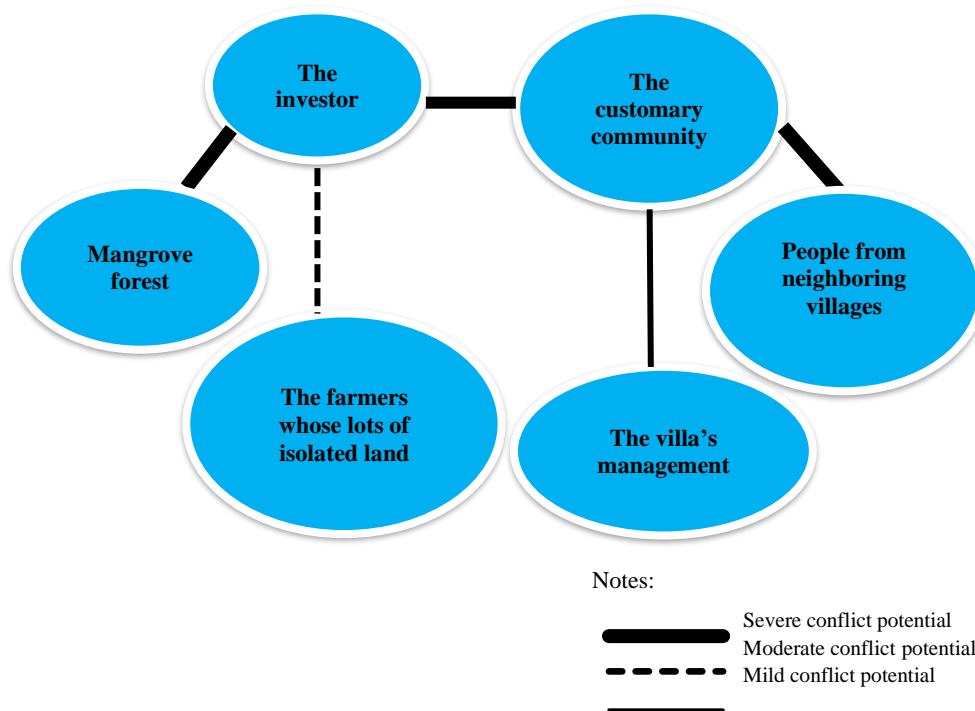


Figure 6. Diagram of the map of the conflict.

Coastal spatial planning is crucial for resolving utilization conflicts by identifying and mapping all the utilized performances, regulations, and existing issues (Prestelo, 2016). At first, conflicts were found to generally occur within the ecological sector, subsequently shifting to the social and economic sectors (Brown and Raymond, 2014). Therefore, various activities (zones) in coastal areas close to each other should be identified and mapped (Subandono, 2015). The various potential conflicts should be appropriately managed for better control and conditions (Subandono, 2015). This is because conflict management and control are responsible for facilitating the process of decision making based on the different spatial allocation interests of the involved actors.

A Consensus Model for the Utilization of the Coastal Area Based on the Levels of Community Participation

Based on the analytical mapping, disturbances were identified in the three sustainable development aspects, i.e., environmental, social, and economic. These disturbances may be solved by having the highest community participation level in the decision-making process on the utilization of coastal lands with the aim of achieving a sustainable society, which requires feasible development within the economic, social, and environmental sectors. A consensus model for the utilization of Pangkung Tibah Village based on community participation level is formulated in Table 5.

Table 5. Consensus model based on community participation level in Pangkung Tibah Village

| No | Participation Level | Participation Target |
|----|---------------------|--|
| 1 | Consultation | Socialization meetings/public hearings attended by the villagers and the other actors based on the utilization of the village's coastal area. |
| 2 | Decision-making | Achieving a consensus on several issues regarding the utilization of the affected coast. |
| 3 | Consensus building | Establishing a management body with the task of managing the utilization of the village's coastal area, with the members being the representatives of all the involved stakeholders. This will be responsible for all activities required for the land utilization management based on the planning, decision control, policy formulations, and problem-solving processes. |
| 4 | Risk-taking | The management body predicts the impacts of the achieved consensus. This includes the advantages of the consensus, encountered implementation problems, and the implications directly felt when the model is being implemented. |
| 5 | Partnership | Equal cooperation produces beneficial results for all actors involved. This is reflected in the structure and functions as well as the responsibility of the planning, decision control, formulation of policies, and problem-solving processes. |
| 6 | Sustainable society | A society conducting sustainable development in the social, economic, and environmental sectors based on achieving present needs without reducing the ability of future generations. |

Oakley (1999) classified community participation into seven levels, namely manipulation, consultation, consensus building, decision-making, risk-taking, partnership, and self-management. This is in line with the current study, where the field data confirmed that the community participation in decision-making on coastal area utilization was at the consultation level. This proved that the stakeholders had the opportunity to provide suggestions and share opinions, although not all were accommodated and considered. The community was informed about the investors' development plans and was invited to attend public hearings involving the stakeholders, societal representatives, customary figures as well as the village and regency government. Therefore, the community involvement level should be increased, as changes are unlikely when participation is only at the consultation level. A comparative analysis between the levels proposed by Oakley (1999) and the formulated consensus model is shown in Figure 7.

Wilmot and Hocker (2010) state that conflicts develop anytime the components are interdependent (the aims of one condition and the objectives of the other(s)) and when they become aware of conflicting goals and interests. These disputes result from the following circumstances: insufficient resources (where there are disparities about access to or distribution of resources); power control; involvement in decision making; and divergent values (cultural, social, and political). Conflict analysis is typically mentioned in the literature concerning consensus building (Susskind & Thomas-Larmer, 1999); alternative dispute resolution (Susskind & Cruikshank, 1987); and negotiation and mediation techniques (Susskind & Cruikshank, 1987). The definition of conflict suggested by Wilmot and Hocker (2010) underlines some of its sources:

conflicting interests, shortage of resources, and rivalries caused by competing interests between individuals or groups of individuals.

Community involvement has emerged as a crucial component of the planning process (Brody, Godschalk, & Burby, 2003). The highest level (by empowerment) of community engagement is when a community has the authority to make choices (IAP2, 2014). The community must select whom to entrust with authority and delegate decision-making authority (Parkins & Mitchell, 2005). Through community engagement, justice and equality are supposed to be integrated into the decision-making process. Justice is fundamental to the decision-making process (Smith & McDonough, 2001).

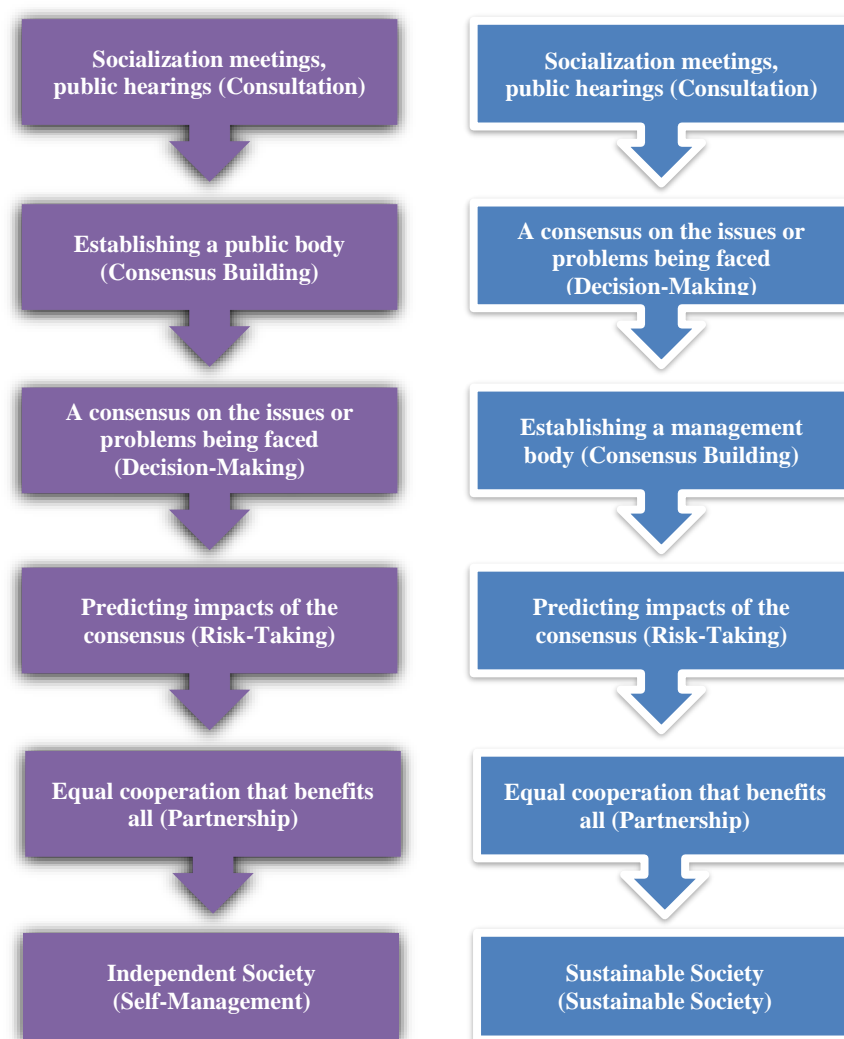


Figure 7. Comparison of the community participation levels proposed by Oakley (left) and the formulated consensus model for the utilization of lands in Pangkung Tibah Village (right).

Arnstein (in Kenny et al., 2013) believes that community involvement satisfies only the formality requirement, where formality-based community participation occurs throughout the third and

fourth stages of the decision-making process, namely information and consultation. Participation is the highest level of civil authority, which consists of partnerships, authority delegation, and control. This aspect of formality is seen in the planning process in several nations. In China, public engagement in planning and the decision-making process is uncommon (Lin & Liu, 2006; Zhang, 2007). Three studies concluded that community participation exists only in the third and fourth rounds of consultation and information collecting, notably in China and Indonesia (Dinata, 2013; Shan & Yai, 2011; Prastiyo, 2016). Public involvement may be increased depending on the institution, the topic, and the geographical context (Ernoul, 2010).

Virtudes (2016) states that local community participation in planning and decision making is complex, so an identification process employed by local governments to encourage such participation is essential. To achieve public participation it is necessary to enhance the coordination mechanism and adopt best practices for public consultation. A new model for government management has been investigated to increase public engagement through a collaborative approach and improve information, including proper community communication, while delegating decision-making responsibilities. The flow of information between authorities and individuals through communication technology has a significant impact on the government's capacity to meet acceptable information, democracy, and openness requirements.

Government performance to enhance public services for sustainable development should be evaluated. In land-use planning for the public interest, the public scrutinizes the regional government's willingness or good intentions to include the community's role and aspirations. People are unable to accept decisions made by a single person or a small group of individuals. Cheung and Leung (2007) observed that diminished public involvement may lead to a reduction in the public's perception of government accountability. Local communities in Indonesia are still attempting to emphasize the idea of debate and agreement when making significant decisions (Zaim et al., 2020). This practice is observable in the use of customary land as a village asset, which is preceded by *rembug desa* (villager consultation), particularly in Central Java and Bali, Indonesia.

As stated by Oakley (1999), the highest level of participation is self-management, where the community has the majority of votes and authority in the decision-making process. This authority is based on regulating the programs or institutions according to the public's interests. They are also used to negotiate with outsiders who are willing to carry out changes. An example of community participation at this level is the villagers' cooperation in approaching a funding source to obtain financial assistance without the help of a third party.

The formulated consensus model emphasizes the active participation of the community and other stakeholders with the interest of utilizing the coastal area for specific purposes, specifically tourism. This model is managed by the village tourism management in order to properly maintain the social, economic, and environmental aspects so they are not easily disturbed. Therefore, this sustainably contributes to the local community-based coastal area utilization.

Conclusion

Coastal areas (terrestrial and water areas) have very dynamic regional characteristics, with the terrestrial and aquatic habitats ecologically and socially influencing each other. This indicates that these areas have high potential for conflicts since the utilization process involves actors with different interests. In the planning and development of coastal areas, the identification and mapping of potential conflicts is very important due to the interaction of human activities, specifically the utilization of coastal areas and the cumulative impacts of the related activities.

Due to the vulnerability of these areas to damages, interventions should be controlled by direct action supported by formal and customary laws. To achieve sustainable development, such as economic growth, improved environmental quality, and unified care, spatial planning, management, and utilization of coastal areas are also very important.

One of the best methods to understand the tendency and pattern of differences is conflict mapping, which is also a tool of the conflict analysis framework (CAF). Based on this method, the results obtained are often used for the formulation of strategies, to manage and resolve conflicts (Almeida, et al. 2017; Rizal et al., 2020). By identifying the actors, causes, and types of differences in the present study, analytical mapping was conducted, with the potential conflicts being categorized into 'mild', 'moderate', and 'severe' levels. These levels were subsequently determined based on the nature of their relationships with the three aspects of sustainable development, i.e. social, economic, and environmental.

A consensus model was also required as a solution, to manage the existing potential conflicts in the coastal area of Pangkung Tibah Village. This is one of the models used for the management of potential conflicts, based on the local community's and stakeholders' participation in managing the social, economic, and environmental aspects. It was also used as a reference in addressing conflicts arising from the utilization of the village lands. In applying the consensus model, the strategies were adjusted with the types, levels, and locations of the conflicts. In addition, modification of the model was conducted according to the situation and condition of the conflicts, with the results of strategic application having positive implications for the utilization of the village's coastal area (terrestrial or aquatic area).

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