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## HOW THE LOCAL WISDOM INFLUENCES THE SUSTAINABILITY OF SPATIAL DEVELOPMENT IN DENPASAR, BALI, INDONESIA

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**Abstract:** The urban development in Bali, especially Denpasar City, as the capital city of Bali Province, is growing fast in all sectors, leading to dynamic of city and creating some issues as well. Some aspects which have changed due to those developments are the growth of economics, the adequate of facilities and utilities, the comfort, the safety and the local wisdom of Balinese tradition as well. The local wisdom of Bali, as the cultural value system of Balinese tradition, is a solid reliability between culture and religion which becomes the root and the base of all Balinese community life. The existence of Balinese cultural value has been kept well, although some values are starting to change so far, it is not beyond the fundamental rules and meanings. In fact, the power of Balinese traditional sophistication value system is shaping the growth of Denpasar City. This article will explore the aspects of Balinese local wisdom values such as: Balinese traditional spatial pattern, traditional community and religion systems, also how those aspects have strongly generated the development of Denpasar city, especially on city spatial and land use. The study shows that existence of the local wisdom has significant factors in shaping urban patterns and structures and in providing limitations to the use of urban space.

**Keywords:** local wisdom, spatial development, sustainability.

### A. Introduction

The passage of city is an accomplishment from the force of organization or social-community linkage (Eade 2002; Gilbert 1976). The city is created from the enlargement of many efforts which have been accomplished by all city stakeholders for some ages. This creates identity and significant arrangement of a city linked to culture, which has been implemented from the previous (Krase 2012; King 2002; Budihardjo 1986).

The existence of a value system and cultural heritage of a city will present wealth both physical and non-physical as a community decision, which has legitimized its existence to the devel-

opment of a city (Matthews 2013; Krase 2012; Schofield 2011). Maintaining the values and cultural heritage, the procession of life in urban areas from the past, present and future will be maintained and sustainable (John 2010; Janssen 2008; Teasdale 2003; Wee 2002).

Denpasar City, which is the capital of the Province of Bali, experienced very rapid growth in the fields of population, economy, government, tourism and others. The increasingly sophisticated technology also causes fast-growing influences from outside of the city of Denpasar. This is also supported by the nature of the openness of the era and the era of globalization, so that the rapid

growth affects the development of the physical city area (Wong 2008; Suhaedi 2003; Wilson 1996).

The strength of Denpasar City with the complexity of facilities and infrastructure has caused high mobilization of people, investment, goods and services that encourage rapid development of the Denpasar City. These developments resulted in changes in traditional city patterns that are cosmological to the multiple nuclei pattern with many new nuclei developing.

Denpasar city was initially established as the center of the kingdom with a great crossroad pattern which is the implementation of traditional Balinese spatial concept pattern namely *catus patha*. This concept, which is loaded with philosophical meaning, as a controller of the city development in the future, needs an adjustment to Balinese values such as *desa* (situation), *kala* (condition) and *patra* (tolerance). This is able to adopt the needs of modernization without losing its meaning or characters of the local cultural values.

Denpasar City as the capital city of Bali is also based on strong concepts which are considered as heritage, such as: harmonious relationship between concepts of *bhuana agung*, *bhuana alit*, *manik ring cucupu*, *tri hita karana*, *tri angga* and *hulu-teben* to create the values of the *sanga mandala* which gives direction to spatial planning on a home, residential and city scale (Dwijendra 2003).

The modernization influence is also undeniable, resulting in changes to the face of Denpasar City especially in the city center, which leads to a shift in traditional values and local culture. The influence of Balinese traditional cultural values that are so strong that has been carried out from generation to generation and community compliance has led to self-conservation in their effort to preserve their culture both physical (tangible) such as: temples, palace and traditional settlements, and non-physical (intangible) such as *awig-awig* (customary village systems). On the other hand, the influence of Balinese cultural values which has been rooted in the lives of Ba-

line people, has a significant influence on the extended urban area in the fringe of the city, close to the village.

The formulation of the problem that arises is how the existence of traditional Balinese cultural values in the Denpasar City develops especially in the spatial aspects of Denpasar City. Furthermore, this formula can be expressed in the following framework:

1. Archaeologically, the development of the city of Denpasar began from the center of Denpasar City (since the days of the kingdom) with the strength of the potential of the city so that it developed very rapidly.
2. Very rapid development of the city both in the economy and population (due to urbanization) which let the modernization influence or influence from outside get into the city center causes an increase in land prices, limited land, social problems, congestion and others.
3. The factors that influence these developments (economic factors, the completeness of facilities and utilities, comfort and safety) are inseparable from the existence of the traditional Balinese cultural values.
4. The traditional Balinese system of values is the integrity of a culture and religion that have taken root and are the foundation of people's lives. In its development, its existence is still maintained, although there is a shift but not out of the basic norms. The strong existence of the traditional Balinese value system is very influential in the development of Denpasar City.
5. The embodiment of aspects of the cultural value of traditional Balinese society in the Denpasar City development can be seen from: traditional Balinese spatial patterns, social and religious systems, religious ceremonies and customs.
6. The existence of Balinese traditional cultural values for the development of Denpasar City can be seen from various aspects: the tendency of Balinese Hindu society to apply Balinese traditional architectural and

spatial concepts in the context of houses and other developments, restrictions on the height of buildings as tall as coconut trees, the realization of self-conservation areas, the prohibition of development the bridge/overpass in Denpasar City, and this has led to the Denpasar City development leading out of the city/suburb (urban extended area).

7. In term of building development context, Bali has some local rules that is causing the development of Denpasar city to urban extended areas such as: the limited height of building just under 15 m, self conservation areas, forbidden for fly over bridge and highway road.
8. With the strong traditional Balinese cultural values, it is necessary to have a strategy and policy of the development and the Denpasar City development especially in the use of land and space.

## B. Development of Denpasar City

Denpasar is as the capital of the Bali Province, developed from a former royal city with spatial planning and the social community which is regulated according to a cultural system that is a tradition of customs based on Balinese culture. The development of Denpasar City can be seen from the development of the population and developments in the business activity sector. The population of Denpasar City in 2018 is 930,600 inhabitants, this shows that Denpasar City has entered as a big city (category of 500,000-1,000,000 residents). The rate of development of the population of Denpasar City over the past ten years is 2.21% per year. While at the same time the development of the population of Bali Province was only 0.94% per year (Bappeda, 2018). So it can be concluded that the growth rate of the population of Denpasar City is due to the large amount of migration/urbanization entering the city of Denpasar. While in terms of the development of the business activity sector, it can be indicated from the development of the GRDP of the Denpasar City which is experiencing growth of 4.65% per year (2014-2019) with the dominance is trade,

hotel and restaurant (BPS Denpasar 2018).

The rapid growth of population and the business sector in Denpasar City affects the needs to accommodate various activities in Denpasar City, while, instead, the area of land decreases. This can be seen from the size of Denpasar City with 12,778 Ha built, which was approximately 5,197 Ha (41% of the city area) in 1998, with an average development area of 100 Ha each year (BPS Denpasar 2018), so that the development of Denpasar City can already be classified as a big city. As a big city, a strong magnet for attracting activities, resources and investment from other regions so that the dominant factor causing its development is the population migration factor. Coupled with the scarcity of land, it creates competition in the use of land and high prices of land, so that people are able to utilize the land more to commercial activities.

The increase in population and scarcity of land in the city of Denpasar, resulting in physical, social and economic pressure on the limited urban space, so that the urban development tends to be extensive to the suburbs which gives rise to new centers of activity that are characterized by process suburbanization. The expansion of the urban area will further unite the spaces between cities or agglomeration of cities which will form a larger urban area which causes the emergence of setting up the Sarbagita Metropolitan Region (areas of Denpasar, Badung, Gianyar and Tabanan).

The development of Denpasar City with high population growth and limited land, influenced by the main factors such as economic factors, the completeness of facilities and utilities, security and comfort, cannot be separated because of the influence of the existence of traditional Balinese cultural values.

The cultural aspects of traditional Balinese society are the integrity of culture and religion that have taken root and are the foundation of Balinese life (living culture). Traditional Balinese cultural values are imbued and are based on three frameworks in Hinduism namely *tattwa*, *susila* and *upakara*. The embodiment of the three frameworks in Balinese culture is in: (1) Balinese tradi-

tional spatial patterns (direction of spatial orientation, rural and urban environments, yards, and buildings); (2) social system (kinship system and *pekraman/adat* village); and (3) religious systems, religious ceremonies and traditional ceremonies. These three embodiments will influence spatial patterns in both the macro and micro sphere.

### C. The Presence of Balinese Cultural Values the Denpasar City Development

The embodiment of space in traditional Balinese spatial planning is in the direction of spatial orientation, rural and urban environments, yards, and buildings (Dwijendra 2008). The embodiment of Balinese traditional cultural values in the spatial patterns and settlements will lead to the following embodiments:

1. Settlement patterns in Balinese society such as the *Kahyangan Tiga* Temple with its purity radius, the existence of public buildings such as the *bale banjar*, the existence of traditional open spaces such as: the square, *campuhan/spring*, grand stall, *setra/grave*, *kekeran/vacant land*, *natah* house, city/village and social, morphological, functional and symbolic attributes.
2. The placement and arrangement of the function of the activity cannot be done only with economic considerations, strategic location and the likes, but also by considering the rules and restrictions in the allocation of land, the basic dimensions of the building, and the distance between the two functions.
3. The conceptions governing the zoning and its designation functions (such as *Tri Hita Karana* Concept, *Tri Mandala*, *Sanga Mandala*, *Luan-Teben*) must be considered. The placement and arrangement of zonation and designation functions must follow these conceptions both in the micro scope (home yards) and macro scope (village, region, city).
4. The rules in the measurement of plot and placement of building (*Hasta Kosala Kosali* and *Hasta Bumi*) will indirectly demand

relatively large land requirements for a residential building.

#### 1. Traditional Balinese Values in Housing and Settlement Development

The culture of Balinese people imbued with Hinduism has taken root and is integrated in the daily life of the people, so that the existence of cultural values in spatial patterns tends to be maintained. The shifts are only an adjustment, which basically not out of the norm. The cultural ties that still exist cause the tendency of people in Bali to implement housing development based on the traditional Balinese concept of space. The construction of houses based on the traditional Balinese concept of space requires a relatively large area of land. The minimum area of land required by the Hindu community to build a house (outside its old house) is relatively large, between 150 m<sup>2</sup> to 900 m<sup>2</sup>. This is due to the use of certain traditional Balinese measurements (elbow) that govern the construction of these houses which are regulated in *Kosala Kosali* and *Hasta Bumi*, because it is believed that if the elbow is applied it will bring harmony, happiness and prosperity in the family, spared from all kinds of miseries. Balinese Hindu community tends to follow these rules starting from the selection of land to the construction of foundations and the installation of hoods.

But, seeing the limited land conditions in Denpasar City and the very high price, it is difficult to implement the traditional Balinese rules for people to apply outside the city center. As a consequence, the development of housing and settlements shifted to the outskirts of the city or hinterland areas close to the city cannot fully implement traditional Balinese values as well. This is a dilemma in implementing housing and settlement strategies that apply traditional Balinese rules or values.

#### 2. Restriction of Building Height and Underground Development

The Balinese cultural values are also manifested in the limitation of the height of the build-



ing which is no more than a coconut tree (15 m or 3-4 floors). It has become a Bali Regional Regulation, which results in the use of space in Denpasar City being nonoptimal. As a result, development in Denpasar City cannot be carried out intensively while the availability of land for urban activities is increasingly limited, rare and very pricey. Some considerations of the existence of traditional Balinese cultural values with restrictions on building heights are as follows.

1. Consideration of respect for the Hindu community to God and sanctified ancestors. If the construction of houses is made high, the house of God and ancestors must be made even higher while the provisions in the construction of shrines/temples in Bali require contact with the land.

2. Consideration of the realization of the *Tri Hita Karana* Concept.

*Tri Hita Karana* is a Balinese concept of the three things that cause harmony, namely the harmonization of humans with their Lord in the form of *Parhyangan*, harmonization of humans with each other in the form of *Pawongan* and harmonization of humans with their environment in the form of weakness. In addition, there is also the *Segara-Gunung* Concept where the most sacred and highest location is a mountain and the lowest/dirtiest is the sea. The limitation of the height of the building is the reflection of the harmony of the Balinese people towards the environment (friendly environment) to maintain the balance of nature, preservation of the overall Balinese spatial structure, holiness, magic power and Balinese religiosity and to realize Balinese culture and humanity.

3. Preservation of Bali's land and natural atmosphere.

The concept of green with the height of a coconut tree as a boundary is a form of Balinese society integrated with nature, not to disturb the atmosphere of land. Coconut tree is seen as an ideal tree and dominates the trees in Bali, so that if the height

of the building exceeds the coconut tree, natural harmony and buildings are eliminated and even disappear altogether.

On the other hand, the existence of Balinese cultural values also provides limits to development by using it underground.

1. Concept of *Tri Loka* where earth is divided into three parts, namely the universe/God's realm (*swah loka*), earth/human nature (*bhuah loka*) and the subterranean/*bhuta* nature (*bhur loka*). Underground development means that we are in the realm of *bhuta/sarwa prani*. The concept of *Bhuta Hita* believes that there is an underground nature that maintains its well-being and sustainability.

2. Hindu community in Bali has strong ties with the land, especially in religious rituals such as the planting of ancestral spirits, planting *pedagingan*, *caru*, *placenta*, and installing *penjor*. So, if housing construction is carried out underground, the ritual procession is very difficult to implement. Basically, the use of underground for cultural development can still be justified by sticking it to naturalist laws and appropriate technology so that it does not interfere the harmony and balance of nature.

The existence of Balinese cultural values in the limitation of building heights is indeed a dilemma in Denpasar City where land is the main cause of difficulty in applying these cultural values. This becomes an agenda in formulating development strategies and policies, especially the housing development in Denpasar related to the cultural values of the Balinese people. It results in the expansion of housing development outside the city center where the price of land is still affordable both by the community and by the developer (Potter 2012; Reese 2012).

#### **D. Community System versus the Denpasar City Development**

In the Balinese social system, communities are bound in the forms of kinship (*nyama*, *braya*, *soroh*, *warga*) and in other forms of family ties

that form a community relations unit called a hereditary bond. The traditional ceremonial tying in the offspring as a form of social system are mainly the joint presence in the ceremonies of *Yadnya* (*Manusia, Pitra* and *Dewa Yadnya*) within certain limits (Dwijendra 2003).

These forms of kinship will form family clans such as kinship groups (*dadia*/descendants) and kinship groups formed as a result of marriages of children from a nuclear family. *Pekurenan* is the smallest unit in society in Bali. *Pekurenan*/family will build and establish a place of worship in his house called *sanggah merajan*. Whereas, the *dadia* kinship group will establish *Pura Dadia*. Further, a collection of a number of single *dadia* worshipping the same ancestor will form *soroh* (big *klen*) and will establish *Panti/Paibon* Temple. There are several links to this with Balinese culture as follows.

1. The Balinese Hindu belief that God is everywhere also implies that he must be given a place in every space of life, therefore in every house must be built a holy place (*sanggah merajan*) as an embodiment of *tatwa*/respect for his creator.
2. Traditional Balinese culture believes the house is identified with humans. Humans are the microcosm and the house is the macrocosm. The dwelling house also has a head, body and legs where the head is a sacred place (*sanggah merajan*), the body is the house itself and the feet are the backyard. Furthermore, in the book of *Manawa Darma* Literature it is stated that the house is intended for those who have died/ancestors in the form of a holy place, humans who are still living in the form of dwellings and for those who will be born in the form of pages/empty space (land development for their children and grandchildren).
3. The beliefs and teachings of Hinduism in Bali to worship their ancestors who were allowed to rest in their respective holy places.
4. Embodiment of the Concept of *Tri Hita Karana* and the Concept of *Luan* (holy)-

*Teben* (profane), one of which is the human harmonization with God as the creator (*Parhyangan*). This is manifested in establishing a shrine/*sanggah merajan* that is placed in *luan* (holy). If it is not obeyed, it is believed that there will be disturbances and misery in the household.

Everyone who gets married in Bali will become new family (*pekurenan*). It means that they will build a new house, so that they will practically build a shrine/*sanggah merajan*. As a result, there is an increase in demand for space or land for building holy sites (Matthews 2013; Kanbur 2006).

The kinship system also tends to form a strong bond of Balinese with the original house. The frequency of activities related to culture and religion in the original house is relatively high, so that they often return to the place of original house for ceremonial activities (Dwijendra 2009; Budihardjo 1986). The embodiment of cultural values is caused by:

1. Values of religious emotional sense, the existence of a deep sense of kinship with members of traditional villages in their home villages, ancestral ties in their native villages (spiritual psychological), graves (*setra*) that have been arranged and grouped according to their tradition. As a consequence, they move to a custom village that means moving the grave and in practice it is very difficult to apply.
2. The original bond (*kawitan*). It causes people to fear of being ostracized by the community in their home village if they do not become members of the customary village there (there are many customary cases regarding this condition).
3. The ancestral ties and the place where their ancestors worshiped were still in their original house in their original village. The Balinese believes that the spirits of their ancestors are subject to the traditional village where their house is located.
4. High solidarity in Balinese society and cultural/customary ties with their homeland. This solidarity occurs because of emotional

ties that have been fostered for decades, thus forming a kinship. As a result, the Balinese have ties in religion, *pekraman*, *soroh* and profession and this is why most Balinese do not want to leave the traditional village of their homeland.

This will have an impact on the alternative choice of location of residence that is always oriented to its original home, as well as other factors, due to economic considerations, utility facilities, safety and comfort (Weisenfeld 2012; Kwok 2005; Cooke 1983).

The existence of Hindu cultural values in Bali also affects the increase of land use in the city of Denpasar, namely the need for land area for housing in accordance with traditional Balinese rules and conceptions. The implication of development in the city of Denpasar, especially housing, is by building a holy place (*sanggah merajan*) on the 2nd floor or higher floor as an effort to use land effectively while they are still adjusting to the concept of Balinese cultural values. This kind of development in Bali is also a discourse in the establishment of development policy strategies, especially housing development in relation to aspects of Balinese cultural values (Kawakami 2013; Budihardjo 1986; Cooke 1983).

#### **D. Religious System And Traditional Ceremonies versus The Denpasar City Development**

The religious system embodied in religious ceremonies and traditional ceremonies is by carrying out ritual and traditional activities (*Panca Yadnya: Dewa Yadnya, Rsi Yadnya, Pitra Yadnya, Manusia Yadnya, Bhuta Yadnya*). Within the scope of the room, this will naturally require space for the ceremony. So, it is necessary to get attention to build, repair and arrange the infrastructure of the ceremony while maintaining the allotment of ceremonial activities both from the aesthetic value and the radius of purity. The rooms are: springs (rivers, reservoirs, lakes, waterfalls, springs, etc.), *campuhan* (a meeting between two tau more rivers), *pempatan agung*, coastline for *melasti* ritual, *setra*/grave, *telajakan* and others.

The embodiment of Balinese cultural philosophy in religious systems, religious ceremonies and customs will indirectly lead to cultural ties that result in the realization of self-conservation areas such as: traditional Balinese houses (*umah, griya, puri, jero* including *sanggah/merajan, telajakan, lebu* and *natah*), holy sites such as: *Sad Kahyangan* Temple, *Dang Kahyangan* Temple, *Kahyangan Tiga* Temple and their respective purity radius (arranged in *Bhisama*), open spaces for ceremonial activities, and so on. The strong existence of these cultural spaces makes these hereditary areas very difficult to be moved or converted and these norms are highly obeyed by the Balinese people as part of their lives (living culture). In Denpasar, these areas can be seen as: *Puputan Badung* Square, *Pempatan Agung*, *Patung Catur Muka*, *Jaganatha* Temple, *Mahospait* Temple, *Pengrebongan* Temple, Palace of *Puri Satria*, *Puri Pemecutan*, *Jero Kuta*, Cultural Park, traditional settlements, etc. (Dwijendra 2009).

Traditional Balinese houses as one of the self-conservation areas that are very difficult and are less likely to be moved (evicted) or converted are due to several things related to the governance of Balinese Hindu cultural values as follows.

1. The ties to the ancestors (*sangkan paraning numadi*) and the ties to the *pekraman* village where they were born are historical, including the people who have fused the original home location with nature and its environment. The house has become a soul (spirit of life) so that even if the inhabitant became poor, it is very rare to sell the house. Selling the house where one came from means that he also leaves all these ties and is believed to bring misery in his life and even the next life.
2. There are strong bonds with a holy place (*sanggah merajan*), leading difficulty to the Balinese to sell a house because they believe that it will cause unhappiness in their lives.
3. House of origin ties are united in the kinship of Balinese because all the processions of religious rituals are carried out in the original house so that it is very unlikely that

the Balinese will sell the house of origin.

4. The ties of cultural law in Balinese society are strong, so that the old traditional houses in Bali as original homes tend to be conserved by the inhabitants.

The realization of self-conservation has an impact to the preservation of cultural heritage but also impacts on the reduced availability of land to accommodate the growth of Denpasar City so that the availability of land becomes increasingly limited (Dwijendra 2003; Wilson 1996).

The embodiment of Balinese culture in the religious and ceremonial system also affects the consideration of not allowing the construction of elevated roads and crossing bridges as an alternative to solving traffic congestion problems in Denpasar City so that the consequence is an increase in traffic congestion ratios and decrease in safety and comfort of traffic in Denpasar City. The related cultural values are as follows.

1. The religion factor, particularly the process of religious rituals in Bali, such as the *melasti* procession, cremation and purifying ceremonial facilities to the sea (*melis*), must be collected somewhere. At these times it should not pass under a bridge/overpass (*nyulubin*) because it is believed to result in the loss of purity (*leteh*).
2. The Hindu community in Bali glorifies the concept of *sor-singgih*, of which *sor* is bottom (feet) and *singgih* is top (head), so they are very uncomfortable when stepped over by others, especially by the gods which are worshiped as something very sacred and respected by the Hindu community in Bali.

The existence of these cultural values also causes problems in the development of the Denpasar City, so that the development leads to the outside of the city where land is still possible to expand and is relatively inexpensive (Wong 2008; Yonemoto 2003).

### E. Study findings

The findings from the above analysis found regarding the existence of the cultural values of Balinese traditional society and urban develop-

ment of Denpasar City in the spatial study are as follows.

#### 1. Social system-Conception of traditional Balinese spatial value-Denpasar City development

The existence of Balinese cultural values imbued by Hinduism has become one and is rooted in the daily lives of Balinese. In some aspects it began to shift, but it is more as an adjustment not out of norms or basic principles.

These strong cultural ties cause the tendency of the Balinese Hindu community to be strong in carrying out house construction based on the traditional Balinese concept which requires wider land requirements. This has an impact on the development of the City of Denpasar expanding into suburban areas where land conditions are still relatively inexpensive (Cole 2003; Adams 2011).

The existence of Balinese cultural values, which is related to the limitation of building height (not more than height of coconut tree, 15 m or 3-4 floors) and the limitation of underground development, has implications for less optimal land use in Denpasar City. Consequently, land use in the Denpasar city is not intensive and the land becomes very limited and expensive.

The existence of a social system in Bali is a kinship system that will form a bond with the original home. This gives a tendency for Balinese to choose a residential location by orienting to their original home, because the frequency of conducting activities at the place of origin is relatively high. This gives a tendency to choose a place to live in the suburbs because besides being close to the city center (economic reasons), it is also close to the original home (cultural reasons). The impact on the development of Denpasar City is the expansion of the urban area (extended urban area).

#### 2. Religious System, Religious ceremony and custom-Denpasar City development

The embodiment of Balinese cultural philosophy in the religious system, religious ceremonies and customs will indirectly lead to cultural ties that result in the realization of self-conservation



areas in Denpasar City such as: traditional Balinese houses (*umah, griya, puri, jero* including *sang-gah/merajan, telagan, leluh* and *natah*), holy places such as: *Sad Kahyangan* Temple, *Dang Kahyangan* Temple, *Kahyangan Tiga* Temple and their respective purity radius (*Bhisama*), open spaces for ceremonial activities, etc. The strong existence of these cultural spaces makes these hereditary areas very difficult to be moved or converted. These norms are highly obeyed by the Balinese people as part of their lives.

The existence of these self-conservation areas has a logical consequence on the reduced supply of land to accommodate the growth and development of the Denpasar City but it has an impact on the preservation and conservation of cultural heritage in the Denpasar City (Dwijendra 2009; Suhaedi 2003).

The embodiment of Balinese culture in the religious system and ceremony also influences the consideration of not allowing the construction of flyovers and flying bridges as an alternative to solving traffic congestion problems in the city of Denpasar. The consequence is an increase in the ratio of congestion and decrease in safety and comfort of traffic in the city of Denpasar. This also causes problems in the development of the City of Denpasar, especially in terms of transportation, so that the development leads outside the city/suburbs where land is still possible to expand and is relatively inexpensive (Wesenfeld 2012; Wee 2002).

## F. Conclusion

The existence of traditional cultural values of the community is one of the significant influencing factors in shaping urban patterns and structures. The cultural value aspect also provides limitations to the use of urban space. Aspects of cultural values in its realization such as traditional spatial patterns, social system/customs, religious systems, religious ceremonies and customs affect the optimal capacity and capacity of the city of Denpasar to cause a developmental tendency to the outskirts of the city (fringe area) so that cultural values give a large share in land use and urban area development (see Figure 1).

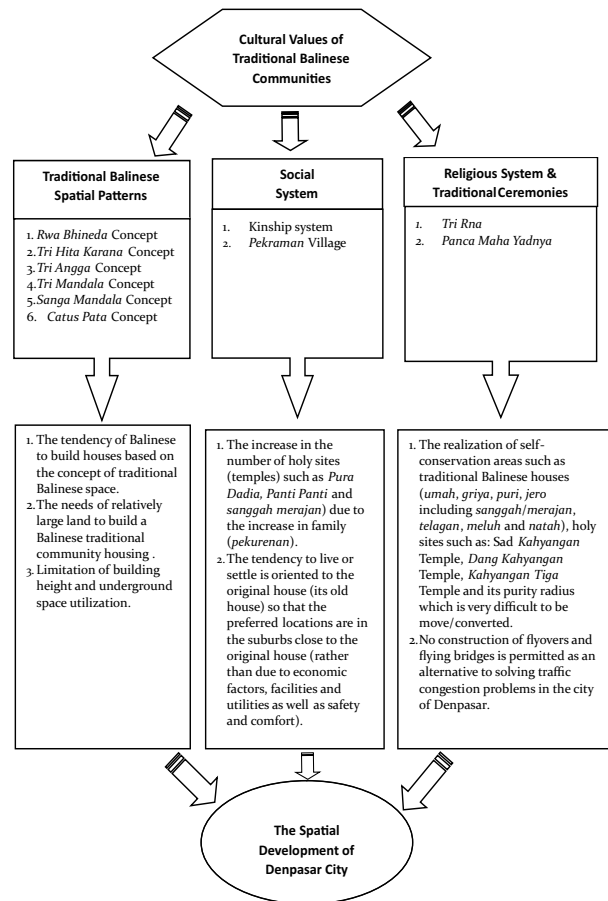


Figure 1. Influence of cultural values of traditional Balinese communities on the sustainability of spatial development in Denpasar City. Source: Author Analysis, 2019.

The need for a more careful and in-depth study of cultural values, so that wise decisions can be taken appropriately as an anticipatory step in handling urban problems related to the cultural values of the people. There is a need to determine concrete steps by establishing a regional development strategy that is faster, more precise, effective, efficient, integrated and comprehensive before the urban areas that are formed already develop in an uncontrolled direction, also by emphasizing and considering aspects of the socio-cultural values of the Balinese in their use of urban space and land.

There is also a need of limitation of self-conservation areas in Denpasar City that cannot be evicted or converted so that it can be known how much land reserves that can be used for urban activities. Furthermore, there needs to be a new development area outside the Denpasar city in

anticipation of growth and development in the city center. Last but not least, there needs to be maintenance over the regulations to limit the height of buildings and the construction of flyovers as a conservation of traditional Balinese values and strengthen a city's identity and character.

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