

Effect of Agricultural Land Function Transfer on Urban Development in North Kuta District

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ABSTRACT

Land use change in general concerns the transformation in allocating land resources from one designation to another. The aims of this study were (1) to identify problems with the conversion of agricultural land, especially paddy fields (2) to analyze its spatial pattern and the influencing factors, and (3) to analyze policies related to the conversion of agricultural land. This study used a qualitative approach, collecting data using interviews, observation, and documentation techniques. The data analysis technique used is descriptive qualitative. The research was conducted in North Kuta District, Badung Regency. The conclusions from this study are (1) the conversion of agricultural land to non-agricultural use is strongly influenced by the dynamics of very rapid urban growth, both from a demographic, economic, and physical perspective. 2) The spatial pattern of the conversion of paddy fields is influenced by socio-economic factors, including urban population growth, growth and shifts in economic structure, growth of land-using agricultural households, and changes in the area of land tenure. 3) The policy related to controlling the conversion of agricultural land is the consistency of the implementation of the District RDTR as the key to preventing the conversion of agricultural land to non-agricultural land.

Key words: change of function; agricultural land; transformation; analysis; control policy.

INTRODUCTION

Until now in the State of Indonesia, the expansion of infrastructure continues to be carried out and is starting to continue to experience development, in order to be able to support the country's economy. The rate of population growth is one of the triggering factors for the emergence of population activities, in which these activities will underlie the emergence of the needs of the population itself. The conversion of paddy fields into other land uses is a complex problem when viewed from the degree of growth in land conversion, topographical factors, links to social and cultural life, population growth, level of farmer welfare, irrigation, city expansion, political will from the government and other stakeholders. other interests (Kaputra, 2013). However, on the other hand, the availability of land that remains unchanged and causes problems in land use in urban areas (Puspasari, 2012). The need for greater land has resulted in the transfer of land use from agricultural land to non-agricultural land, so that this problem has become a serious problem for the Indonesian people. In general, the conversion of agricultural land is the impact of the process of transforming the economic and demographic structure, which requires a transformation of the allocation of land resources from agriculture to non-agriculture (Kustiawan, 1997). The conversion of agricultural land functions can be said to be one of the impacts of the development of a region. The higher the development in urban areas, and the rate of population growth, the greater the potential for conversion of agricultural land to occur in these urban areas (Catur, 2010).

The expansion of urban areas causes a reduction in fertile agricultural land, land as an object of speculation whose use is misused (Kitamura and Kobayashi, 2002). Land use that should have been designated for agricultural land, has been converted into industrial areas, residential areas, offices and so on. However, the increasing need for land is not followed by the availability of the land itself, while land is fixed and cannot change or increase, the result is a reduction in agricultural land. According to (Irawan and Friyatno, 2005) the process of conversion of agricultural land at the micro level can be carried out by the farmers themselves or by other parties. Therefore, the protection of food agricultural land needs to be carried out by determining food agricultural areas that need to be

protected. Food agriculture areas are part of the arrangement of rural areas in a region. In reality, food agricultural lands located around urban areas also need protection. Protection of food agriculture areas includes planning and determination, development, research, utilization and development, control, supervision, information system development, farmer empowerment, community participation, and financing.

The reduced area of available paddy fields can affect food production. In North Kuta District, the agricultural sector is a sector that has an important role in the economy, most of the people live from agriculture, especially in terms of the provision of food, especially at this time the need for food cannot be denied because the need for food by the community is a necessity. Therefore, the increasing number of land use changes that have occurred so far will cause various problems (Mustopa, 2011). At present, it is considered that the change in use of agricultural land into settlements can no longer be controlled, supported by the rapid development of development in the industrial sector. According to the National Statistics Center (BPS) in 2020, the population growth from 2018 to 2020 has increased by 1.91%. North Kuta is a sub-district in Badung Regency, Bali, Indonesia. Its area is 33.86 km². Before experiencing division, North Kuta District was part of Kuta District which was later split into three areas, namely North Kuta District, Kuta District and South Kuta District. Based on the table above, the population in North Kuta District continues to increase every year with a population growth rate of 1.91% per year. The growth and development of population is followed by an increase in the need for shelter, this is what is expected to cause many changes in land use for settlements. One of them is the change in the use of paddy fields.

Many policies and regulations regarding the conversion of agricultural land have been stipulated by the government, both central and regional. The policies in question have various forms, both in the form of laws, government regulations, regional regulations, and regional government decrees. However, what often becomes a question is its implementation in the field, which in real terms can be said to have not been implemented optimally. As for the causes that can be explained here, what is obtained from observations in the field is that there is still a lack of public knowledge, a lack of education on the importance of agricultural land, most of the younger generation are reluctant to become farmers and prefer to change the function of their inherited agricultural land or sell it. This statement is also supported by (Harsono, 2008) in his book entitled Indonesian Agrarian Law, History of the Formation of the Basic Agrarian Law, Contents and Implementation.

RESEARCH METHODS

This study uses a descriptive-qualitative research approach, which is a form of research aimed at describing existing phenomena, both natural phenomena and man-made phenomena. Further explained, in descriptive research there is no treatment given or controlled and there is no hypothesis testing as found in experimental research. The primary data from this study were obtained through physical observation and unstructured interviews. While secondary data, it is attempted through a review of various related literature along with data from studies carried out by previous research teams, as well as by government agencies, government agencies.

The approach used in the appointment of respondents is a purposive sampling technique. This decision was taken taking into account the limitations of time, costs, and staff of the researchers, so they could not take large samples. The main criteria used in selecting respondents in this study, as emphasized by (Sugiyono, 2014) when purposive sampling is applied in a study, is that prospective respondents have an interest in and understand in depth the phenomenon of conversion of agricultural land, which especially occurs in Kuta District. North, or be part of the process. It is hoped that the data obtained will be relevant to support the process of finding solutions to research objectives. After going through the initial study, it was decided that the respondents selected for this study represent two (2) groups involved in the conversion of agricultural land in North Kuta District, namely: (i) natives and migrants; (ii) Badung Regency Regional Government officials who have tasks related to spatial planning.

RESULTS AND DISCUSSION

Conversion of agricultural land that turns into a residential area is a change in land function or conversion of agricultural land that is used for non-agricultural functions, namely for industry and

housing. The process of conversion of agricultural land is closely related to the expansion or expansion of urban areas, population growth, industrial development and tourism activities (Catur, 2010). The factors behind the planning for land conversion or land conversion are based on requests from investors for development. Based on the application, it will then be processed through the stages determined by the regional government regulated in the Regional Regulation. If the application is in accordance with the RTRW or RDTR Regional Regulations, processing will then be carried out, but if this is outside the RTRW or RDTR Regional Regulations, it will not be processed and will be returned to the applicant, in this case the developer or investor.

Agricultural land is one of the lands that very often experiences changes in spatial use, or conversion of land into built-up areas. This phenomenon is true, especially for agricultural land that is located in the middle of an urban area, has a supportive topography, and is equipped with road access, and is supported by the availability of facilities and infrastructure (Winoto, 2005). This is the factor causing the conversion of agricultural land in North Kuta District.

Land Conversion in Period I (2003 to 2011)

In the period from 2003 to 2011, the conversion of agricultural land in North Kuta District tended to be due to the presence of developers. Changes in this period were undeveloped land in the form of agricultural land which was converted into built-up land in the form of accommodation for tourism, trade and services as well as housing. The display of changes in space utilization in North Kuta District in the period 2003 to 2011 is shown in the following figure 1 below.

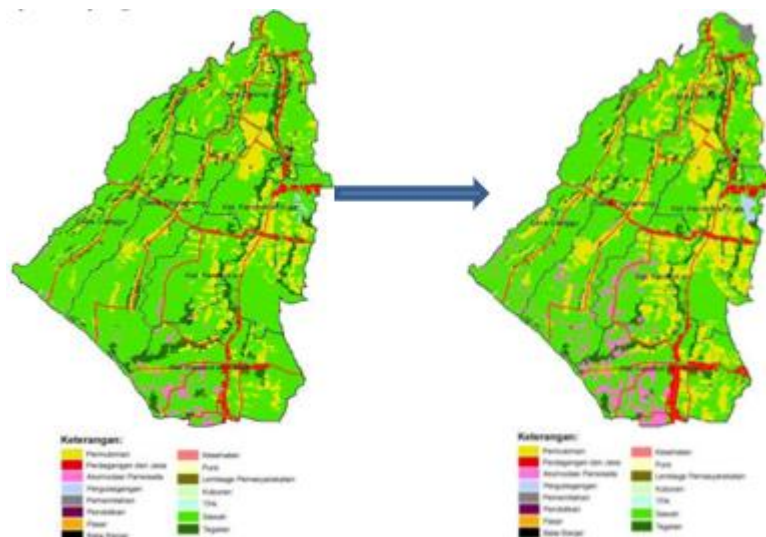


Figure 1. Land Use from 2003 to 2011. Source: Results of Analysis, 2021

Table 1. Land Use in 2003 and 2011

Land use	Area (ha)		Description
	2003	2011	
Moor	254,73	190,09	-64,65
Settlement	510,92	754,79	+243,87
Trade and Services	72,18	112,39	+40,21
Government	0,9	15,92	+15,02
Social Facilities	21,63	22,64	+1,01
Ricefield	2459,61	2091,35	-368,26
Tourism Accommodation	60,31	183,89	+123,58
Warehousing	5,72	14,94	+9,22

Source: analysis results, 2021

In the period from 2003 to 2011, North Kuta District experienced the conversion of agricultural land into built-up land in the form of land for housing, trade and services as well as tourism accommodation. However, in the period from 2003 to 2011, spatial use was still dominated by the presence of undeveloped land in the form of paddy fields.

Conversion of agricultural land in this period is indicated by the change of paddy fields into housing. The developer chose North Kuta District as the location for the construction of a residential area because of its location which is directly adjacent to the City of Denpasar. Locations of housing developments such as in Dalung Village, Kerobokan Kaja Sub-District and Kerobokan Kelod Sub-District which have direct borders with Denpasar City and good connecting access. Another conversion that occurred was the conversion of paddy fields into trade and services. The existence of a tertiary institution located in Dalung Village has a spatial impact on the surrounding environment.

The presence of immigrant students from various regions has resulted in residents around the campus taking advantage of this opportunity by building facilities to support student needs. In addition, accommodation in the form of roads built to connect Denpasar City with the surrounding area, especially in North Kuta District such as Jalan Gatot Subroto Barat and Jalan Tangkuban Perahu resulted in a change in the use of space in the form of rice fields which turned into land for trade and services. Discussing land conversion, expansion and/or development of urban areas will have an impact on changes in land values. This value will be greatly influenced by its position on the transportation network and city activity centers (Daldjoeni, 1992). This statement is in line with the theory put forward by Johan Heinrich Von Thunen in (Hermit, 2009), which examines land use, when viewed from the aspect of economic value. He explained that the price of land is determined by the length of the geographical location of the land to the center of city activity or the Central Business District (CBD). The closer the land location is to the CBD, the higher the price and demand for the land, and vice versa.

Tourism accommodation that is developing in the coastal area of North Kuta District is in the form of hotels, villas and restaurants developed by investors. The close distance to the Kuta Beach tourism object which has developed previously resulted in the coastal area of North Kuta sub-district also experiencing developments in supporting tourism activities. Other land conversions, namely paddy fields in Subak Kedampang in the Kerobokan Kelod Sub-District and also Subak Muding in the Kerobokan Kaja Sub-District, through the agricultural land arrangement policy, have experienced land consolidation. This land consolidation was carried out based on a local government decision that determined the rice fields in the subak to become urban land. The paddy fields that underwent consolidation then underwent a change into built-up land in the form of warehousing, housing as well as trade and services. In addition, based on the 2003 North Kuta District RDTR which allocated land in Dalung Village to become a government area for Badung Regency, this also resulted in the conversion of paddy fields into government areas. The availability of land which is starting to decrease in the administrative area of Mangupura City and the availability of undeveloped land in Dalung Village has prompted the government to free up community rice fields to become the center of government.

In 2011 there was a conversion of paddy fields into trade and services. The very rapid rate of population growth has resulted in housing growth also increasing, this has also resulted in an increase in the need for space in North Kuta District. According to (Sumitro Djohadikusumo in Daldjoeni, 1978) states that the need for settlements is influenced by the increase in population that occurs in an area so that it requires a place to live. The phenomenon of the growth of trade and service infrastructure often sacrifices productive paddy fields as built-up land. The conversion of trade and service land is in the form of shop buildings and shop houses.

According to (Ritohardoyo, 2013) states that, land conversion is defined as a process of change from previous land use to other uses that can be permanent or temporary and is a logical consequence of the growth and transformation of changes in the socio-economic structure of a developing society for both commercial purposes as well as industry.

Land Conversion in Period II (2011 to 2017)

In the period from 2011 to 2017, the land conversion that occurred was indicated by the rapid development of housing, tourism accommodation and trade and services in North Kuta District. The development of spatial use in this period not only changed the spatial use of green land such as rice fields and dry fields, but also changed the use of space in residential buildings. In this period the conversion of paddy fields into built-up areas accelerated due to supportive policies that made investors more interested in developing various businesses in North Kuta District. On the other hand, local people are also not inferior in opening business land that can be developed either by changing agricultural land or changing parts of their homes.

The comparison of land conversion that occurred in this period can be seen in Figure 2 below.

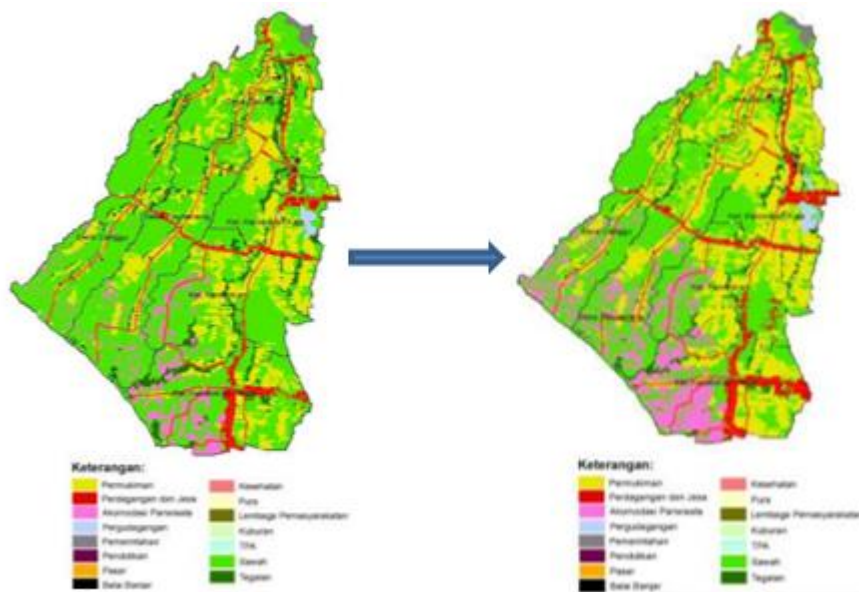


Figure 2. Land Use in 2011 to 2017. Source: Results of Analysis, 2021

Table 2. Land Use in 2011 and 2017

Land use	Area (ha)		Description
	2011	2017	
Moor	190,08	107,42	-82,66
Settlement	754,79	1124,29	+369,5
Trade and Services	112,39	181,72	+69,33
Government	15,92	15,92	0
Social Facilities	22,64	22,64	0
Ricefield	2091,35	1504,06	-587,29
Tourism Accommodation	183,89	407,55	+223,66
Warehousing	14,94	22,4	+7,46

Source: analysis results, 2021

In the period from 2011 to 2017 the conversion of paddy fields into built-up land experienced more rapid changes compared to period 1. In this period the dominant land changes were in the form of housing, tourism infrastructure, as well as trade and service land. During this period, built-up land was superior to undeveloped land. North Kuta Subdistrict which was designated as the Sarbagita urban area development area has caused the allotment of existing land in North Kuta Subdistrict to be more oriented towards urban land. This policy had the effect of rapidly increasing land prices.

From then on, the community sold or leased their land because they felt it was more profitable than using it for agricultural activities. The land that has experienced a change in property rights is what has changed to become built-up land. Developed infrastructure is infrastructure for tourism, housing and trade and services. Land in North Kuta District has high value for investors because of its strategic location, which is between the centers of urban activities, namely Denpasar City, Mangupura City and Kuta District which is a meeting place for urban activities in southern Bali.

In addition, local people who see opportunities with the rapid development of tourism objects in North Kuta District have built tourism accommodations in the form of guest houses equipped with various facilities such as swimming pools, free wifi, hot water, air conditioning and other supporting facilities. The need for supporting facilities caused by the increasing number of foreign tourist visits has resulted in the rapid development of tourism accommodation in the coastal areas of North Kuta District, such as in Kerobokan Kelod Village, Canggu Village and Tibubeneng Village. Another conversion that occurred during this period was the conversion of local community residences into dual functions, namely as a residence and also a place of business. North Kuta District, which has developed due to population growth, housing areas and tourism accommodations, is used by local communities by developing and changing the function of their homes into places of business. Residential houses that have changed their function into places of business are located on main roads because they have high economic value. For example, in Dalung village, the roads where there are houses that have changed their function are Jalan Raya Dalung, Jalan Raya Padang Luwih and other roads that have high traffic density. The people of Dalung Village who have changed their homes into places of business have the goal of increasing their income. Business premises either for rent or self-employed.

The rapidly increasing population growth caused by the development of residential areas in Dalung Village has made the local residents think about developing the land where they live for trade and services. As a result, there is multi-use on residential land, which is not only a place to live, but also a trade and service designation. In homes that still have sufficient yards, the community tends to change their yards beside the main road into a place of business, whereas in homes that do not have yards, the community modifies their house so that it can be converted into a place of business. This modification process is by dividing the function of the existing building. The part of the building that functions as a residence is positioned towards the inside of the yard or is placed on the top floor, then the part of the building that functions as a place of business is placed on the side of the road. Businesses that are developing with multiple or multi-use functions in residential houses in Dalung Village have various types of businesses, including stalls, food stalls, laundry services, photocopying services and so on. Meanwhile, houses that are close to tourist attractions such as in Canggu Village, Tibubeneng Village and Kerobokan Kelod Sub-District are more likely to be converted into tourism supporting accommodations such as restaurants and accessories shops for tourists. In addition, it is also developing as a place to stay for tourists in the form of a home stay.

Factors Causing the Conversion of Agricultural Land Functions in North Kuta District

(Yunus, 2012) argues that the development of the life of a city can be seen from the addition and reduction of the number of buildings, the addition and reduction of functions in land use, changes in the number and composition of the population. Changes in these aspects of life have enriched the dynamic nature of an urban area. It was further explained that there were three factors that resulted in the conversion of agricultural land (Lestari, 2010), including: a) external forces, namely factors caused by the dynamics of urban area development, increased demographic or population conditions, as well as economic growth; b) internal strength, a factor in the socio-economic condition of farmers caused by economic pressure, so that many farmers sell agricultural land to make ends meet; and c) policy aspects, namely regulatory factors and regulations issued by the government relating to spatial planning. Deficiencies in policy factors are related to the problem of the strength of legal products, law enforcement agencies, data accuracy that is still lacking, and low sanctions for violations of spatial use. Taking into account the approach presented by Lestari, and based on the results of interviews conducted with 32 informants who have been selected through a purposive sampling approach, the triggering factors for land conversion in North Kuta District can be classified into four (4) groups. This grouping can be seen in Table 3.

Table 3. Results of Interviews Regarding Factors Causing Conversion of Agricultural Land Functions

Source person	Social			Economy		Environment			Regulations		
	Population Growth	Socio-cultural	Interest farming	Investment value	Economic pressure	Land conditions	Strategic location	Facilities and infrastructure	Law enforcement	Government coordination	Understand of law
Immigrant	0	2	0	8	1	3	8	7	7	0	6
Indigenous residents/ lands owner	4	1	5	1	6	2	1	3	5	0	0
Public figure	5	0	2	0	5	3	1	4	3	0	0
Government agencies	9	2	4	4	6	3	1	9	5	2	1
Developer	2	1	1	0	2	1	1	2	2	0	0
Spatial observer	1	1	0	0	1	0	1	1	1	0	1
Amount	21	7	12	13	21	12	13	26	23	2	8

Source: Author, 2021

The above grouping also takes into account the principles of sustainable development, which are interpreted as activities and efforts to meet the needs of the current generation, without compromising the ability of future generations to meet their needs (Sudarmaji, 2008). Sustainable development has three aspects which cannot be separated from one another, namely economic development, social development, and environmental protection. The link between economic and social is expected to be able to create a just relationship. The relationship between the economy and the environment is expected to continue. While the relationship between social and environmental aims to be continuously maintained. The three aspects, namely economic, social and environmental aspects will create sustainable conditions. The relationship between the three aspects can be seen in Figure 6 below.



Figure 3. Sustainable Development Diagram. Source: Sudarmaji, 2008

(Saroso, 2002) stated that the development of sustainable urban areas must embrace the basic elements of development, namely: social and cultural (socially and culturally suitable and accountable); politically acceptable, economically feasible, and environmentally sound and sustainable. The combination of these four components which is carried out consistently and consequently will create sustainable and environmentally sound urban development. The following will describe in more detail the factors driving the conversion of agricultural land in North Kuta District.

Social Aspect

Social aspects that can affect the conversion of agricultural land in North Kuta District, include:

Population Growth

Agree with the opinion that has been expressed by Colby in (Yunus, 2012) that the development of urban areas is dynamic, including in the context of land use. Colby then conveyed several forces that influenced the dynamics of this development, including changes in population, adding and removing buildings, changes in community demands, changes in life values, as well as aspects of people's lives. Based on the data obtained, the population growth in North Kuta District in ten years (2011-2020) has constantly increased, both as a result of birth rates and urbanization.

The population of North Kuta District in 2011 reached 108.32 thousand people, with an average density of 18.89 people/km². Next, in 2020, the population will reach 142.03 people, with an average density of 28.11 people/km². This proves that the rate of population growth in North Kuta District is relatively high. If interpreted, in the last ten years the population has increased by 33.71 people. Details of this population growth can be seen in Table 4.

Table 4. Population Growth in North Kuta District

No	Changes in Population Density (years)	Population		Amount	Density Per Km ²
		Male	Female		
1	2011	55,65	52,67	108,32	1 889,93
2	2012	57,65	54,52	112,17	2 020,73
3	2013	59,61	56,44	116,05	3 427,35
4	2014	61,53	58,28	119,81	3 538,39
5	2015	63,47	60,16	123,63	3 651,21
6	2016	65,41	61,99	127,40	3 763,00
7	2017	67,32	63,81	131,13	3 873,00
8	2018	69,18	65,55	134,73	3 979,00
9	2019	71,04	67,38	138,42	4 088,00
10	2020	72,86	69,17	142,03	2 811,00

Source: Central Bureau of Statistics for Badung Regency, North Kuta District. In Numbers, 2011-2020

The high rate of population growth is one of the factors increasing the need for space or land, both for purposes of housing, industry, commercial activities, public services, physical infrastructure, and activities related to social interaction in the community. This condition will directly have an impact on the expansion of the built area, in several locations that are considered strategic and appropriate for fulfilling these interests. The relatively high population growth in North Kuta District, as previously explained, apart from being one of the reasons for the expansion of built-up areas, has also had an impact on the accumulation of activities in several areas that are centers of activity. This expansion often occurs on land that accommodates agricultural functions. In the reality that occurs in the field, these spaces have been converted into built-up areas. This phenomenon indicates that there has been a violation of the applicable spatial regulations.

Socio-Cultural

The socio-cultural factor that drives the change in the function of agricultural land, in this case, is the existence of an inheritance distribution system carried out by people who own large enough land. We all know that agricultural land is a hereditary treasure that has strategic value. Problems are often encountered, where the division of inheritance gives rise to plots of land, with a physical scale that makes it impossible (technically and economically) to be used as agricultural land. The solution is to buy and sell land which will then make changes to the form of its utilization by the new land owner.

This phenomenon is in accordance with the view put forward by Mufaganti in (Pambudi, 2008), who stated that the inheritance distribution system is more likely to result in less control over agricultural land, and will have the impact of changing the function of agricultural land to built-up land. This condition is common in North Kuta District. The activity of changing the function of agricultural land is largely due to land owners who sell land with their inheritance rights to buyers or developers. Some of the farmers questioned in this study stated that a narrow area of land would be less productive to manage as agricultural land. If forced, the income earned will also be less than optimal. Production costs are inversely proportional to crop yields and are unable to meet the basic needs of farmers in sustaining life. It is this incident that really drives the transfer of land rights which then triggers changes in the function of agricultural land.

3. The Low Interest of the Young Generation in Engaging in the Agricultural Business Field

The small interest of the younger generation in engaging in business in the agricultural sector can be seen from changes in the livelihoods of residents in North Kuta District. Statistical data for the last nine years (2011-2019) proves that there has been a very rapid change in the work that the residents in North Kuta District are doing. According to the data in Table 5, in 2011, the livelihood of the people in North Kuta District in the agricultural sector was quite attractive. A total of 42,681 people work in the agricultural sector. The rest, of the entire productive population, work in the non-primary sector or outside agricultural activities.

Table 5. Changes in People's Livelihoods in North Kuta District

No	Change in livelihoods	Types of Livelihood					
		Agriculture	Trading	Communication Industry	Financial institution transportation	Bank services and others	Government
1	Th. 2011	42.681	98.046	44.919	11.702	15.242	63.701
2	Th. 2012	41.485	94.520	55.276	10.656	15.907	60.533
3	Th. 2013	32.803	106.254	58.666	15.490	23.394	59.654
4	Th. 2014	26.129	115.686	49.733	14.453	17.007	61.426
5	Th. 2015	32.161	141.975	34.663	20.778	22.937	55.216
6	Th. 2016	32.161	141.975	34.663	20.778	22.937	55.216
7	Th. 2017	31.680	140.335	26.843	18.385	18.075	82.513
8	Th. 2018	28.364	65.960	37.477	16.510	11.268	34.118
9	Th. 2019	28.364	79.179	44.116	17.865	17.707	21.324

Source: Central Bureau of Statistics for Badung Regency, North Kuta District. In Numbers, 2011-2019

Over time, the number of people who make a living from the agricultural sector has decreased. In 2019, the population with livelihoods in the primary sector was recorded at a minimum of 28,364 people, and residents with livelihoods in the non-primary/non-agricultural sector totaled 180,191 people from all types of livelihoods of the population. This proves that there has been a decrease in interest and the number of farmers in North Kuta District, while the number of workers in the non-primary sector has increased along with the development of the non-primary sector in North Kuta District. The non-agricultural sectors involved in the population include trade and services, industry, finance and banking.

Changes in land use cannot be separated from changes in views and lifestyles in the community. The agrarian life is slowly shifting to a non-agrarian lifestyle. Farming life is often interpreted as a form of life in rural areas, while non-agrarian life is defined as urban life, which is a condition desired by the current generation, including the generation who own land in North Kuta District. Economically, this phenomenon is supported by the fact that the agricultural sector has not been able to provide certainty about income, due to its dependence on various external conditions (weather, pests and export/import policies). In contrast to the non-agricultural sector which offers certainty of economic contribution.

The decline in the interest of the younger generation to work in the agricultural sector has been suggested by (Herlina, 2002), which states that nowadays the younger generation tends to choose to

depend on the non-agricultural sector in urban areas to obtain a more promising income. The most basic background that encourages them to choose jobs outside the agricultural sector, is the low wages they receive when working in the agricultural sector, the work taken is quite heavy, the results obtained depend on external conditions (weather, pests, and export/import policies). .

Economic Aspect

The economic aspect is one of the aspects that drives the conversion of agricultural land in North Kuta District, several causative factors seen from the economic characteristics of the land, and the economic conditions of the community, which include:

Land as an Investment Tool

The development of urban areas has had an impact on increasing competition in land tenure, to accommodate various kinds of needs that arise as a result of various development sectors. The real phenomenon that occurs is the imbalance between demand and availability of land, considering the increase in demand can never be matched by an increase in supply. We all know that land is a limited (finite) production support resource, and cannot be renewed. This statement may be countered by the argument that reclamation activities are able to provide new lands. As a consequence, this condition has provoked an escalation in the overall economic value of land.

The increasingly expensive price of land in urban areas has prompted agricultural land owners to sell or convert their land from agricultural functions to built-up land. Economically this action was taken, because it was considered that it would provide a higher financial contribution. In other words, the function of land for agricultural activities is less competitive, when compared to the same land used as built-up land. This is especially the case for land that is geographically located within a radius of the urban center. In this study, the closer the land is to the city center, the more land will inadvertently increase the economic value of the land.

The consequence of these conditions, has increased the price of land in the city. This phenomenon is the same as the opinion put forward by Von Thunen in (Hermit, 2009) who argues that land prices are determined by the geographical length of the location of the land to the center of city activity or the Central Business District (CBD). The closer the location of the land to the city center, the higher the price and demand for the land. And vice versa, the farther the location of the land from the city center, the lower the price and demand for the land. Reilly and Brown in (Widoatmojo, 2007) argue that business in the property sector, especially buying and selling houses and land transactions, is the most profitable investment. This activity was not affected by economic inflation that occurred. This reason is the basis for the rampant buying and selling of land, especially for available land in strategic locations. Thus, land used as an investment tool directly impacts the increasingly widespread transfer of land rights from farmers to capital owners, which will change the function of land from agriculture to a built form, which can provide much more profitable economic value.

Economic Urgency of Farmers

The economic pressure that occurs, especially by landowners, indirectly causes land conversion, whether carried out by the landowners themselves or through the process of buying and selling to other parties. The increasing cost of living, and the occurrence of a consumptive culture, an instant culture, has made landowners want to convert the agricultural land they own. Economic pressure will be felt when there is a discrepancy between the income derived from the harvest and the expenses that must be incurred. The increasing need to meet the costs of children's education, family health, and meeting the necessities of life, adds to the economic urgency experienced by farmers. This situation has led to the emergence of farmers' ideas of converting agricultural land to built-up land or selling their land to developers. This incident is in line with the opinion expressed by (Fadholi, 1991) that farmers experience difficulties and problems that will lead to increased conversion of agricultural land.

This phenomenon cannot yet be mediated by the government as the decision-making party. The government has also not been able to motivate farmers to accommodate advances in science and technology in agricultural activities. The guidance and counseling process provided for farmers is also still not optimal. Protection of the agricultural sector and the products it produces has also not

been implemented optimally. Prices of agricultural products usually decrease during the harvest season. This condition is made worse by the absence of subsidies available for farmers who experience crop failure.

Environmental Aspects

The environmental aspects that cause the conversion of agricultural land in the Mangupura Urban Area, Badung Regency, are factors seen from the environmental characteristics and geographical position of the land being converted, which include:

Agricultural Land Condition Factors

One of the reasons for the reduction in agricultural land in North Kuta District is the development of spaces in the surrounding areas. This activity causes irrigation flows to be cut off and provokes environmental pollution, in the form of dumping rubbish and liquid waste onto productive agricultural land. The pollution that occurs can reduce the quality and fertility level of productive agricultural land. This phenomenon has been warned by Sargent in (Yunus, 2012) by stating that water and soil pollution and disruption of irrigation channels have disrupted agricultural activities in urban areas.

Physically, the agricultural land in North Kuta District is on a site with relatively flat topography. Land like this is what developers are targeting to use as housing, services and commercial complexes. According to Colby in (Yunus, 2012) an area like this will have centripetal forces (site forces). This area with flat topography will make it easier to physically process the land, especially in the construction of supporting facilities and infrastructure to fulfill the community's living needs.

Location Factors

To support community life activities, local governments have gradually made various efforts to support land management. Including spatial development for office areas, shops, industry and housing. As a result, land use is increasingly dense, which has an impact on the conversion of agricultural land into built-up areas. Based on the results of interviews conducted as part of the study process, data was obtained that the price of land located in Canggu and Kerobokan villages was higher compared to land located further from the city center, such as in Dalung Village and Tibubeneng Village. This is by the location theory put forward by Von Thunen, where the economic price of land located near the city center is more expensive compared to land located on the outskirts of the city.

Regulatory Aspects

The regulatory aspects here are factors related to spatial planning regulations which include regulatory arrangements related to planning, control and use of space which influence the conversion of agricultural land in North Kuta District. This aspect includes:

Law Enforcement

Violations regarding agricultural land conversion that occur in North Kuta District reflect the lack of and ineffective law enforcement processes related to spatial planning regulations. Law enforcement is actually the duty and responsibility of the Badung Regency Regional Government, but its success cannot be separated from the participation of the community. According to Soekanto's opinion in (Mandey, 2015), the following are the factors that cause low enforcement of spatial planning laws in North Kuta District, including:

1. Law enforcement factors, here referred to are agencies or Regional Work Units (SKPD) in Badung Regency which are related to spatial planning. The SKPD which has the main task and function of enforcing spatial planning regulations is the Civil Service Police Unit (Satpol PP). However, in carrying out its duties, Satpol PP requires data and information from SKPD related to space utilization activities. However, the increasing number of violations in space utilization, this situation illustrates the lack of coordination between relevant agencies in Badung Regency. This phenomenon has become an opportunity for the community and developers, which has

resulted in an increase in the number of space use violations, including agricultural land conversion in North Kuta District.

2. Facilities or facilities factor, here referred to is the lack of facilities that support the operation of controlling buildings that are proven to have violated space utilization or conversion of agricultural land. Actions to enforce spatial planning laws and control violations of space use will be implemented without budget support.
3. Community and environmental factors where the law is applied. Based on the results of interviews, the majority of people in North Kuta District still do not understand and know about spatial planning regulations. Most people think that spatial planning regulations do not exist and are not important to implement. This is where the government needs to take an approach and socialize to minimize and overcome the increasing number of space use violations and agricultural land conversions.

Socialization of Spatial Planning Regulations.

Socialization is very important to carry out so that the public knows the applicable spatial planning regulations. Socialization acts as a means to provide direction and understanding to the community so that optimal spatial planning can be achieved. If seen from the results of interviews and field observations, almost all of the interviewees, especially the public, do not know and do not understand the applicable spatial regulations. The result is inappropriate use of space, one of which is the conversion of agricultural land.

CONCLUSION

The conversion of agricultural land into a built-up area in North Kuta District indicates that regional regulations related to spatial planning regulations that protect the existence of agricultural land are not working as they should. This study found that the factors causing the conversion of agricultural land include: 1) social aspects, including high population growth, the inheritance system, and the younger generation's decreasing interest in farming; 2) economic aspects which include the high value of land investment and farmers' economic urgency; 3) environmental aspects which include the condition and location of agricultural land and the availability of infrastructure; 4) regulatory aspects that embrace the factors of low law enforcement and lack of socialization of spatial planning regulations to the community. Meanwhile, this study also tries to formulate a strategy on how agricultural land conversion, which is increasing from year to year, can be controlled. The results of the study show that this strategy can consider two basic aspects, namely: 1) the aspect of availability of space utilization control instruments which includes the need to establish more detailed spatial planning regulations, as a measuring tool before a space utilization permit can be issued, providing incentives and disincentives, granting location permits, providing sanctions for violations of space use, and reviewing development programs; 2) aspects of the agency implementing space utilization control, which among other things defines the need for firmness from law enforcement officials, increased coordination between regional government agencies, and collaboration with the community in controlling space utilization. It is hoped that the synergy between the two control aspects mentioned above along with an understanding of the factors that trigger agricultural land conversion in the Mangupura Urban Area, Badung Regency will be able to control and overcome agricultural land conversion in the future.

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