

## Prevention of Agricultural Land Conversion through Subak Instruments in Apuan Village, Susut District, Bangli District



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**ABSTRACT:** Bangli is one of the districts in Bali that is also experiencing land conversion. The cause of this land conversion is due to the increasing need for development land, due to the increase in population. This will have an impact on reducing food production, socio-economic aspects, socio-cultural aspects and environmental aspects. Rapid population growth which is also accompanied by an increasing need for housing means that agricultural land is decreasing. Agricultural land is increasingly narrow due to land conversion for housing and industrial land. This research examines the function and role as well as strategies of Subak in preventing land conversion in Apuan Village. This research is empirical legal research. The research results show that Subak has a function and role as a traditional institution which is expected to prevent land conversion with all forms of legal regulations owned by this organization and through intensive appeals and approaches. The life of the Subak community which is based on Tri Hita Karana is expected to be able to increase awareness and determination of Subak manners not to convert their land which will impact on the creation of environmental sustainability and the sustainability of Subak itself.

**KEYWORDS:** Subak, prevention, land use change

### I. INTRODUCTION

Indonesia is a country that has a very large population. Indonesia is also known as an agricultural country, which is rich in agriculture. The agricultural sector is a strategic sector and plays an important role in the national economy and community survival, especially in its contribution to GDP (gross domestic product), providing employment opportunities and providing domestic food. Rice fields have an important meaning, namely as a place for farming to produce staple food (especially rice) for human needs. However, as time goes by and the development and growth of population, the existence of land is starting to be disturbed. One of the problems associated with the existence of rice plants is the increasingly widespread conversion of agricultural land to productive land used as housing to support population growth, industry, shops and tourism.

Change of land function or commonly called land conversion is a change in the function of part or all of a land area from its original function (as planned) to another function which has a negative impact on the environment and the potential of the land itself. Kustiwan defines land conversion as the process of transferring land from agricultural or rural land to non-agricultural or urban use. As terminology in land economics studies, the meaning of land conversion in this research is focused on the process of transferring land from agricultural land to non-agricultural use which is accompanied by an increase in land value. (Kustiawan, 2014)

Land conversion can also be interpreted as a change to another use caused by factors which broadly include the need to meet the needs of an increasing population and increasing demands for a better quality of life. Land conversion is usually related to the process of regional development, it can even be said that land conversion is a consequence of regional development. Most of the land conversions that occur show that there is inequality in land control which is dominated by capitalists who have building permits issued by the government.

Bali is one of the provinces in Indonesia which is also experiencing land conversion. Land conversion in Bali cannot be avoided amidst the large demand for housing. Investors, both domestic and foreign, have entered remote areas of Bali. Almost all areas were touched and productive agricultural land was released for settlement and accommodation for Bali tourism visitors. The loss of rice fields in Bali could threaten the sustainability of subak.

Bangli Regency is one of the districts in Bali Province which is active in the agricultural and tourism sectors. Bangli Regency has special attention in building facilities and infrastructure to support the tourism sector. The impact of rapid development can give rise to new problems, namely attracting residents to migrate. This complexity can put pressure on the existence of rice fields. Head of the Bangli Agriculture, Food Security and Fisheries (PKP) Service, I Made Alit Parwata, revealed

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that in 2018 the area of raw rice fields in Bangli was 2,202 hectares. Meanwhile, for the latest data for 2021, the raw area of rice fields was recorded at 2,163.74 hectares. This means that 38.2 hectares of land have experienced conversion in the last three years. The cause of this land conversion is due to the increasing need for development land, due to the increase in population. (bali.tribunnews.com, 2021)

The decline in agricultural land use is in line with the increase in population. This will have an impact on reducing food production, socio-economic aspects, socio-cultural aspects and environmental aspects. Rapid population growth which is also accompanied by an increasing need for housing means that agricultural land is decreasing. Agricultural land is increasingly narrow due to land conversion for housing and industrial land. The current trend is that farmers prefer to work in the informal sector rather than stay in the agricultural sector. Apart from that, the attractiveness of the agricultural sector continues to decline, which also makes farmers tend to relinquish their land ownership. The land owner converts his agricultural land for non-agricultural purposes because he hopes for more profits. Economically, agricultural land, especially rice fields, has a high selling price because it is in a developed and strategic location. With this high selling price, it will tempt farmers to convert their agricultural land into other forms, which, when compared with the income from working on rice fields, is very economically far from it. Apart from that, for sharecroppers and agricultural laborers, land conversion is a disaster because they cannot change jobs. Farmers are increasingly trapped by increasingly limited job opportunities, which will give rise to complex social problems in society. Moreover, Subak, as a traditional Balinese community organization involved in the world of agriculture, will face serious problems.

Subak is a traditional organization of farmers in Bali which mainly aims to manage water irrigation and rice planting patterns in rice fields. In the past, it was only known as subak rice fields, but now there are also subaks which include dry land areas. From there, the term subak yeh emerged for farmer organizations in rice fields. Meanwhile, Subak Abian is for farmers' organizations that manage fields and gardens. (Suarta, 2013 )

In Article 1 number 105 of Bangli Regency Regional Regulation Number 1 of 2023 concerning Bangli Regency Regional Spatial Planning for 2023-2043, it is determined that Subak is a traditional organization in the field of water use management and/or crop management at the farming business level among indigenous communities in Bali which is socio-agrarian, religious, economic which historically continues to grow and develop. Apuan village has 5 subaks, namely Subak Subak Bekutel, Subak Apuan Kaja, Subak Denana, Subak Tegaan, Subak Biya. In essence, Subak is an autonomous traditional community institution. Which means that people who belong to a particular Subak community have freedom in managing their own households and in their relationships with outside parties. However, the autonomous nature of Subak does not necessarily make this institution a sterile institution without any interaction with other government institutions. In fact, there are now many known government programs that use Subak as their program target.

Suyatna states in his book *Gede Pitana* that the role of traditional groups in Bali, especially the banjar and subak, in supporting development programs is very large. Thus, it is natural for the government to use this institution to contribute to the success of its programs. (I Gede Pitana, 1993)

One of the impacts of converting agricultural land to non-agricultural land is the decline in the existence of subak. Meanwhile, Subak is one of the organizations in Bali whose sustainability is important to maintain because its operational concepts are based on Tri Hita Karana which reflects the culture of the Balinese people. The existence of subak as one of the pillars of culture in Bali is increasingly eroding, so Bali's tourist attraction is increasingly fading and has a direct impact on the socio-economic life of the Balinese people. Prevention of conversion of agricultural land to non-agricultural land needs special attention. Apuan village has 5 subaks, namely Subak Subak Bekutel, Subak Apuan Kaja, Subak Denaan, Subak Tegaan, Subak Biya

Starting from the background above, several problems arise in relation to the title of the proposed research. This problem can be formulated as follows:

1. What is Subak's role in preventing land conversion in Apuan Village?
2. What is the strategy used by Subak to prevent land conversion in Apuan Village?

## **II. RESEARCH METHODS**

Research methods are ways of thinking and doing, which are well prepared to conduct research and achieve goals. (Kartini Kartono, 1995). This research uses empirical legal research. Empirical legal research is research in the form of empirical studies to find data regarding the process of occurrence and the process of how law works in society. (Sunggono, 2003). The problem approach used in this research is a sociological approach, examining the problems studied based on facts in the field, supported by statutory and conceptual approaches, namely examining the problems studied based on statutory regulations and legal theories.

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### III. RESULTS AND DISCUSSION

#### The role of Subak in preventing land conversion in Apuan Village

Apuan Village is one of the villages in the Susut District, Bangli Regency with an area of 4.37 km<sup>2</sup> with a population of 4,856 people with a total of 4 sub-divisional areas, namely Apuan Kaja Service Banjar, Apuan Kelod Service Banjar, Bangun still Kawan Service Banjar, Banjar Kangin's Build-a-Lempower Service. The Apuan Village area borders next door in the north with Abuan Village, in the east with Abuan and Demulih Villages, in the south with Bakbakan Village, Gianyar Regency, in the west with Petak Village, Gianyar Regency. In Apuan village there are 5 Subaks, namely Subak Apuan, Subak Bekutel, Subak Biya, Subak Tegaan and Subak Denan. The success of the development of the agricultural sector in Bali cannot be separated from the enormous role of Subak as an organization that manages irrigation water. Subak is a Balinese customary law community that regulates water management for rice fields from a water source in an area.

Sutawan et al (Udayana, 1986) provide a definition that Subak is an organization of wetland farmers who obtain irrigation water from a common source, have one or more Bedugul temples (to worship Dewi Sri, the manifestation of God as the Goddess of Fertility), and have the freedom to manage their own household. as well as in relations with external parties. Apart from that, Subak is also led by a traditional leader known as Pekaseh. Subak has a water system (irrigation), and uses its own technology which later becomes a Balinese culture. Windia (Windia., 2006) states that the Subak irrigation system can be viewed as a community cultural system which basically has three subsystems, namely: (i) cultural subsystem (including thought patterns, norms and values), (ii) social subsystem (including economic), and (iii) material subsystem (including technology).

In essence, Subak is an autonomous traditional community institution, so that people belonging to Subak have freedom in managing their own households and in their relationships with outside parties. The autonomous nature of Subak does not necessarily make Subak a sterile institution without any interaction with other government institutions. In fact, there are now many known government programs that use Subak as their program target. Suyatna (I Gede Pitana, 1993) stated that the role of traditional groups in Bali, especially the banjar and subak, in supporting development programs is very large. Thus, it is natural for the government to use this institution to contribute to the success of its programs. stated that the role of traditional groups in Bali, especially banjar and subak, in supporting development programs is very large. Thus, it is natural for the government to use this institution to contribute to the success of its programs. As a community organization, Subak in Apuan Village, which consists of Subak Apuan, Subak Bekutel, Subak Biya, Subak Tegaan and Subak Denana, has clear legal rules in running its organization. The legal rules that serve as basic guidelines for subak in Apuan Village are written and unwritten laws. These written rules are awig-awig, Perarem and Papuas, unwritten legal rules and norms that live in Subak society.

In the legal rules above, various provisions are contained which are binding on all Subak members, therefore every person who is included as a Subak member in Apuan Village is obliged to comply with all legal provisions contained in the legal regulations above.

In relation to the Tri Hita Karana concept, especially the palemahan concept, the awig-awig in Apuan Village stated that:  
*Sape sire sane ngadol utawi numbas carik ring wewidangan subak apuan patut:*

1. *Mesadok ring prajuru subak utawi Pekaseh Gede*
2. *Patut nginutin sepopa-pali pemargin Subak apuan sane sampun memargi*
3. *Yening wenten salah sinungil carik krama Subak Apuan magentos wiguna ayahan lan pola-pali ring kahyangan mangda kasungkemin*

It means:

Anyone who sells or buys rice fields in the Subak Apuan area is obliged to:

1. Report to prajuru (management) or Pekaseh (chairman)
2. Must comply with the agreed rules that have been implemented
3. If one of the Subak apuan krama rice fields changes function related to the obligations and rules at Kahyangan (Pura/Sacred place) so that it is agreed upon

From the quote above, it can be seen that Prajuru Subak and Pekaseh have an important role in efforts to overcome land conversion in the Subak area. As stated by Nyoman Sudiarta, Klian Subak Apuan, the requirement to report first is a mechanism that must be followed for Subak communities who want to sell their rice fields as well as for people outside Subak communities who want to buy rice fields in this area. Or for people who want to convert their rice fields to non-agricultural purposes.

As mentioned above, to sell or buy rice fields in the Subak area or change the use of rice fields, certain conditions must be met, especially in terms of obligations (obligations) that must be fulfilled, such as the procurement of Subak buildings, the implementation of religious ceremonies and obligations. others.

Apart from the rules in the form of awig-awig, perarem and papuas, Subak manners are often given advice from Subak officials, especially to minimize the occurrence of land conversion as much as possible in the Subak Apuan, Subak Bekutel, Subak Biya, Subak Tegaan and Subak Denana areas. As conveyed by Mr. Berita as Klian Subak Biya, he stated that this appeal was

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conveyed by the Subak prajuru on the sidelines of the Subak lunge. This appeal aims to approach Subak manners intensively in order to maintain agricultural land in its original function as productive agricultural land.

To create legal order in society, it is not only necessary to have those rules, but it is very necessary to have public acceptance and awareness of the law itself. The research team really appreciates the steadfastness possessed by the majority of subak manners in Apuan Village, consisting of Subak Apuan in Apua Kaja, Subak Bekutel in Apuan Kelod, Subak Biya in wake-up comrades, Subak Tegaan in Apuan Kelod and Subak Denana in wake-up lem kangin which to this day remain maintain its rice fields from changing function.

I Wayan Sumerada as Klian Subak Tegaan and I Nyoman Gede Suwarnata as Klian Subak Denana have the following opinion:

"The rice field he owns is an inheritance from his family's removal, he feels guilty if he ignores this inheritance, let alone selling it. As best he can, he will manage it as best as possible for the benefit of the family, both at scale and in the future."

Likewise with I Made Ganti as Klian Subak Bekutel, who believes that as best he can he will manage the rice fields which are his ancestral heritage.

From the opinion of Subak manners, it shows that the Subak people are still strong enough to defend their rice fields to this day. The Hindu community of Subak still adheres to the belief that there is a world of sekala and niskala (the real world and the visible world) which have an influence on human life. The community continues to defend their land as a form of responsibility to their ancestors, which is a dimension of the noetic world believed in by the Subak community in Apuan village. With such determination, the preservation of Subak as a World Cultural Heritage will be maintained.

### **Strategy implemented by Subak to prevent land conversion in Apuan Village**

In dealing with land conversion, the government should implement programs or activities that improve the quality of Subak manners. With Subak manners, in this case, farmers who have good quality will of course be able to cultivate their agricultural land so that it will influence agricultural production results and increase farmers' income. The increasing prosperity experienced by the Subak krama can certainly make farmers reluctant to sell or convert their land. Therefore, empowering subak manners is very important in overcoming land conversion that occurs so that the existence of subak in Bali remains sustainable.

Empowerment is an activity carried out on individuals to give them the power to be able to do things independently. Empowerment is also defined as providing assistance to meet the needs of individuals, groups and communities. Community empowerment has an important goal in improving community welfare. A prosperous society certainly has more power so that the society makes its region more advanced compared to other regions.

Subak empowerment needs to be done in order to create harmony in the life of the organization. Subak as an organization has binding rules regarding subak activities called Awig-Awig. Awig-awig or what is known as customary law in Bali is a binding and standard rule that is prepared by the management and members of the subak and has been mutually agreed upon. According to Sutawan (Sutawan, 2008), Subak members can be divided into three groups, namely Sekaa/krama yeh (active members) which means farmers who actively participate in Subak activities such as maintaining Subak facilities and religious ceremonies at Subak Temple. Sekaa/keama pengampel (passive members) which means members who are not required to be involved in subak activities but must pay a fine such as rice or money. Sekaa/krama leluputan (special member/honorary member) which means a member who is not burdened with subak activities or obligations because the member has a certain position in his environment.

This empowerment is carried out based on the Tri Hita Karana concept Windia (Windia, 2005)The concept of balance between humans, the environment and its creator is closely related to the sustainability of Subak in Bali because this concept is a way of life that is upheld by the community. Tri Hita Karana Etymologically, it means Tri = three, Hita = happiness/harmony, Karana = cause/because, so this concept is the three causes of happiness or harmony that occur due to the balance between God's nature (Parhyangan), human nature (Pawongan), and the natural environment ( Pabelasan). Empowerment activities based on the Tri Hita Karana concept certainly pay attention to every empowerment activity related to the three elements of this concept in order to create a balance between humans, the environment and the Creator.

Apart from human empowerment activities, business activities are of course no less important in the empowerment process carried out for Krama Subak so that they can improve the welfare of farmers so that land conversion that occurs will decrease. Several efforts have been made by both the government and the farming community or Krama Subak itself to prevent the conversion of agricultural land which is increasingly difficult to avoid. In improving agricultural businesses, both the government and Krama Subak have made various efforts in terms of land processing to production results. Some assistance was provided to be used in cultivating agricultural land, such as tractors, weeders, rice harvesting machines and pesticide spraying equipment. Apart from that, the Government continues to improve agricultural facilities and infrastructure to make it easier for Krama Subak to carry out his work as a farmer. The facilities and infrastructure created include improving roads or access to rice fields and improving irrigation systems.

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The strategy that can be carried out by Subak in Apuan village to prevent land conversion is carrying out empowerment activities for Krama Subak so that farmers are more prosperous and have the ability to manage their agricultural land so that they are reluctant to carry out land conversion. As is done by Subak Bekutel, which collaborates with the Directorate of Food Crop Protection by implementing the Healthy Plant Cultivation Area Dem Program, where farmers cultivate environmentally friendly plants by reducing the use of chemicals. Healthy plant cultivation techniques that are applied by improving soil fertility using organic soil amendments, using superior varieties of seeds, using biological fertilizers besides being fertilizer can also be used for seed treatment. Cultivation of these healthy plants has been proven to increase dry grain yields compared to previous results.

Judging from the values of Tri Hita Karana, building access/roads for farming and improving irrigation systems is also an application of these life values. The Parhyangan element or harmonious relationship between humans and God can be realized by improving the irrigation system where water is a very valuable gift from God Almighty so that irrigation water management is considered important in the concept of harmony and togetherness. The Pawongan element or harmonious relations between humans is realized by improving irrigation water so that the irrigation water will flow between Krama Subak fairly and evenly. In Apuan village there are two dams, namely the Apuan dam which irrigates Subak Apuan and the Bekutel dam which irrigates Subak Bekutel, Subak Tegaan, Subak Biya and Subak Denana. Furthermore, the Pabelasan element or harmonious relationship between humans and the surrounding environment is realized by improving farming access/roads and improving irrigation water which of course is able to organize the rice field environment so that it becomes more beautiful and functions well. The environment certainly has an important role in empowerment activities. The social environment which is directly related to people's lives is also very important in the empowerment process, especially in the Subak environment. The agricultural/rice field area in each Subak is a physical environment where Krama Subak work and interact with each other in daily life. The interactions that occur between Krama Subak certainly lead to social relationships, which means there is a social environment that influences activities in the Subak area (physical environment). The Apuan Village Government, through PPL (Field Agricultural Instructors) employees, provides counseling and assistance to Subak manners to pay attention to the physical environmental conditions of Subak so that it remains conducive. Apart from that, Klihan Subak in Apuan Village holds meetings or sangkep which of course can build a good social environment for Krama Subak. The application of the values of Tri Hita Karana in this case occurs in the Pabelasan element or the good relationship that is formed between humans and the surrounding environment, namely mutual cooperation activities to clean irrigation water channels and monitoring the state of the Subak environment. The element of Pawongan or harmonious relationships between humans can be seen from mutual cooperation with Krama Subak and meetings or sangkep Krama Subak which are able to build a good social environment, as well as elements of Parhyangan or harmonious relationships between humans and God that occur in the process of mutual cooperation in cleaning the temple environment and during a ceremony at Ulun Suwi Temple which aims to protect God's creation.

## IV. CONCLUSIONS

1. The role of Subak in preventing land conversion in Apuan Village is that Subak as a traditional institution is expected to be able to prevent land conversion with all forms of legal regulations owned by this organization and through intensive appeals and approaches to appeal to Subak manners through meetings or seminars that The land they own is an ancestral heritage that they must preserve. The life of the Subak community which is based on Tri Hita Karana is expected to be able to increase awareness and determination of Subak manners not to convert their land which will impact on the creation of environmental sustainability and the sustainability of Subak itself.
2. The strategy implemented by Subak to prevent land conversion in Apuan Village is by carrying out empowerment activities for Krama Subak so that farmers are more prosperous and have the ability to manage their agricultural land. Improvement of facilities and infrastructure, namely in the form of improving roads or access to rice fields and improving irrigation systems, holding meetings or sangkep, mutual cooperation in cleaning the temple environment and during ceremonies at Ulun Suwi Temple which of course can build a good social environment for Krama Subak so that in the village There has been no conversion of agricultural land to Apuan.

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