

Implementation of Subak Functions in Subak Umalayu

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Article Info

Article history:

Received : 20 December 2023

Published : 07 January 2024

Keywords:

Implementas

Subak

Info Artikel

Article history:

Diterima : 20 Desember 2023

Publis : 07 Januari 2024

Abstract

This research aims to examine the implementation of subak functions in Subak Umalayu. The research method used for analysis is qualitative, namely the data and facts found will be described. Next, it will be studied based on existing references or based on logic. The research results show that the implementation of subak functions in Subak Umalayu has gone well. This can be seen from the efforts, activities, innovations and awig-awig in Subak Umalayu which cover the six subak functions, namely (1) religious ceremonial activities, (2) distribution and distribution of irrigation air, (3) operation and maintenance of irrigation networks, (4) resource mobilization, (5) conflict management, and (6) adoption of innovations related to agricultural development.

Abstrak

Penelitian ini bertujuan untuk mengkaji implementasi fungsi-fungsi subak pada Subak Umalayu. Metode penelitian yang digunakan yaitu analisis kualitatif, yakni data dan fakta yang ditemukan akan di deskripsikan. Selanjutnya akan dikaji berdasarkan referensi yang ada atau berdasarkan logika. Hasil penelitian menunjukkan bahwa Implementasi fungsi-fungsi subak pada Subak Umalayu telah berjalan dengan baik. Hal itu dapat dilihat dari upaya, kegiatan, inovasi, dan awig-awig di Subak Umalayu yang telah mencakup keenam fungsi subak, yaitu (1) kegiatan upacara keagamaan, (2) pembagian dan pendistribusian air irigasi, (3) operasional dan pemeliharaan jaringan irigasi, (4) mobilisasi sumberdaya, (5) penanganan konflik, dan (6) pengadopsian inovasi yang berkaitan dengan pembangunan pertanian.

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1. INTRODUCTION

Balinese people are known to really maintain the culture and traditions of their ancestors. Until now, these cultures and traditions continue to operate in harmony with the progress of the times. One of the cultural heritages that still exists today is Subak. Subak is a rice irrigation system. In the Subak concept, the value of Tri Hita Karana is highly upheld. Tri Hita Karana is a philosophy, where if we want to live happily, then we must build harmony with God Almighty, as the Creator of the universe (Parhyangan), build harmony with others (Pawongan), and build harmony with nature (Pabelasan). Presumably, all human beings want happiness and live in harmony. Therefore, people need to learn from the activities of the Subak system in Bali.

Subak as an organization in Bali has five important functions, namely (1) religious ceremony activities, (2) distribution and distribution of irrigation water, (3) operation and maintenance of irrigation networks, (4) resource mobilization, (5) conflict management (Windia, 2006). In order for agricultural products, especially food crops, to be produced more optimally, there is an additional function (6) adopting innovations related to agricultural development (Sudarta, 2012).

The subak function can be useful if it is actually implemented. Therefore, the implementation of the subak function is an interesting study to carry out. By conducting research on the subak function, it is hoped that there will be a description of the inhibiting

and encouraging factors in carrying out the subak function. So, a solution can be formulated as a research output which can be used as a basis for implementing the Subak function.

Subak Umalayu is one of the sustainable subaks in Denpasar City. This means that Subak Umalayu is one of the subaks that is expected to remain sustainable amidst the increasing conversion of agricultural land. Therefore, related to the implementation of subak functions, Subak Umalayu is very relevant as a research location. Based on this background, this topic was chosen in this research to determine the implementation of subak functions in Subak Umalayu.

2. RESEARCH METHOD

The research method used in this research is a qualitative method, namely the data and facts found will be described. Next, it will be studied based on existing references or based on logic. According to Sugiyono (2007:1), qualitative research methods are research used to research natural objects where the researcher is the key instrument, data collection techniques are carried out in combination, data analysis is inductive, and qualitative research results emphasize meaning rather than generalization. Qualitative research aims to maintain the form and content of human behavior and analyze its qualities, rather than turning it into quantitative entities (Mulyana, 2008: 150)

The research was carried out in Subak Umalayu, Denpasar. The research location was chosen deliberately, for the following reasons: (1) Subak Umalayu is located in Denpasar City, and is expected to be a subak area that can continue its existence, (2) Subak Umalayu is one of the sustainable subaks in Denpasar City. To answer the research objectives, the respondents chosen were Pekaseh Subak Umalayu and Secretary Subak Umalayu. The respondents were determined using purposive sampling, namely a technique for determining respondents with certain considerations.

3. RESEARCH RESULTS AND DISCUSSION

As discussed previously, subak as a forum for farmer organizations in Bali has five important functions, namely (1) religious ceremony activities, (2) distribution and distribution of irrigation water, (3) operation and maintenance of irrigation networks, (4) resource mobilization, (5) conflict handling (Windia, 2006). In order for agricultural products, especially food crops, to be produced more optimally, there is an additional function (6) adopting innovations related to agricultural development (Sudarta, 2012). In this chapter, the implementation of the six subak functions in Subak Umalayu will be described. The following are the results of in-depth interviews conducted by researchers with the Pekaseh and Subak Umalayu collectors.

A. Religious Ceremonial Activities

Religious ceremonies in Subak are closely related to the parhyangan aspect. As is known, Tri Hita Karana is the breath of Subak activities. Thus, carrying out the function of a religious ceremony also simultaneously applies one of the elements of Tri Hita Karana, namely parhyangan or maintaining a harmonious relationship with the creator. Basically, the essence of the Tri Hita Karana teachings emphasizes three human relationships in this world. These three relationships include relationships with fellow humans, relationships with the natural environment, and relationships with God (Mahendra and Kartika: 2021: 432).

Subak Umalayu has sacred buildings both internal and external of the subak, some of which are the Suwi Pengulun Subak, the Gedong Sari which is the residence of Bhatari Sri, and the Ngurah Agung (Sedan Carik) which acts as a pest repellent if the rice fields are attacked by rats or leafhoppers. In terms of building form, there are bale subak, jineng, bale kulkul, and bale weigh. All of these buildings function as supporters

of religious ceremonies. Subak Umalayu has the Empelan Temple (DAM) as a place of worship for the God Vishnu or Goddess Gangga, to pray for fertility and safety of the rice fields. Without a regular flow of water, of course the rice fields will not produce well. The dam or empelan is the place to raise river water, so that it can irrigate the rice fields downstream.

Piodalan Subak Umalayu is held on Anggarakasih Julungwangi day which falls 15 days before Galungan, and is held every six months. The costs of piodalan and temple construction were met by submitting proposals to the regional government regularly through special BKK assistance for Subak from 2006. However, the volume was tiered or budgeted differently each year. During the Covid-19 pandemic, there were no funds from the local government for Subak, so the piodalan costs were taken from Subak's self-help funds.

The Nangluk Mrana (Merana) ceremony is classified as a type of Bhuta Yadnya ceremony which generally aims to ask for the safety of Bali so that it is kept away from negative things, especially a number of disasters that have occurred so far in the archipelago. In Subak Umalaya, the Nangluk Mrana (Merana) Ceremony is a Yadnya Ceremony which is carried out as a request to Ida Sang Hyang Widhi, God Almighty to be willing to fortify or control disturbances that can bring destruction or disease to plants. "Nangluk Mrana" comes from the Balinese language which may also be influenced by Sanskrit. "Nangluk" means dam, embankment, fence or barrier and "Mrana" means pest or disease. Mrana is a term commonly used to refer to types of diseases that damage plants. Apart from the Nangluk Merana Ceremony, a series of religious ceremonies in Subak Umalaya include *mapag toya*, *ngedang makal*, *Ngurit Mamulih*, *Ngawit Mamula Utawi Nandur*, *Maiseh utawi mabiukukung*, *Pantun Sedeng Mluspiusin*, *Ngusabha rikala pantuné kuning*, *Nyaup utawi ngadegang Dewa Nini*, *Manyi Ring Sawah*, and *Mantenin Pantun Ring Lumbung*. All series of ceremonies went well and were carried out with their respective functions.

B. Sharing and Distribution of Irrigation Water

The distribution and distribution of irrigation water in Subak Umalaya is given evenly to each agricultural land so as not to give rise to jealousy or problems in the future. Regarding the formation of irrigation land in Subak Umalaya, it is carried out before land processing. Krama Subak cleaned the irrigation canals, after that the water ran smoothly, meaning it was distributed to each region flexibly according to the water needs of each region. For example, when processing plants, plants require more water. If the distribution of rice irrigation water is uneven, this is because the irrigation network in Subak Umalaya is still manual, so the distribution of water is also manual in the sense that it still uses an open and close system. This manual method requires coordination and agreement.

One of the functions of irrigation is to overcome drought. In Subak Umalayu, apart from strengthening the irrigation system during the dry season, water borrowing is also carried out upstream or what is known as borrowing Kedewatan water and sucking water from the river. This method is carried out in rotation on Wednesdays and Saturdays, so that it is done twice a week. Subak Umalaya's main water flow comes from Kedewatan and Laban Temple located in Sindu, Gianyar. This water source also irrigates 77 Subaks in 3 districts. 14 subaks in Denpasar, 14 subaks in Badung, and the remaining subaks in Gianyar.

The distribution of irrigation water in Subak Umalayu is also used as a means of sanction for Subak members who violate Subak regulations or awig-awig. Subak members who violate this will have their irrigation water closed. The water channel will

be opened if the person concerned has paid the fine according to the provisions. This method has so far been effective in providing a deterrent effect for violators.

C. Operation and Maintenance of Irrigation Networks

Irrigation is the business of providing and regulating water to support agriculture, the types of which include surface irrigation, underground water irrigation, pump irrigation and swamp irrigation. Irrigation also means flowing water artificially from available water sources to a plot of land to meet plant needs (Indra Suharyanto, et al: 2023: 11). Financing for the operation and maintenance of the irrigation network in Subak Umalayu is carried out in two ways. Firstly, submitting a request for assistance to the local government for tertiary buildings such as the Tembuku water channel and secondly, through the self-help of Subak members for small canals. Checking the irrigation network is carried out generally and periodically by Subak prajuru. So that if there is a problem it can be resolved quickly.

In Subak Umalayu there are 3 types of water channels, namely the primary level such as a DAM/dam, the Tertiary level which is in the form of a canal, and the quarter level which can be a worm/small channel. Enlarging and narrowing the water flow independently/individually cannot be done because the water flow has been adjusted and determined by the Subak lung. Every matter relating to irrigation channels in Subak Umalayu must be known to Subak officials. If there is an emergency situation such as a blocked drain, contributions from Krama Subak are very much needed, both in the form of labor and material.

D. Resource Mobilization

Each subak member has a structured role with their respective duties. Subak members will hold a meeting if there are problems that need to be resolved and agree on a planting date. Subak members have the same rights in protecting the Subak environment. Apart from that, Subak members also have the obligation to comply with the Subak awig-awig, and decisions or collective agreements resulting from Subak meetings, as well as implementing government policies such as paying taxes and implementing Panca Usaha Tani and Sapta Usaha Tani.

Member meetings at Subak Umalayu were held at Subak Hall. So far, Subak members have been relatively diligent in attending meetings. Announcements regarding the meeting will be notified to Subak members no later than three days before the meeting day. Subak members who are not present at the meeting without clear explanation will be subject to a fine. Subak membership in Subak Umalayu remains relatively unchanged, because in principle it is not permitted to sell agricultural land in the subak. Even if you have to sell, the land buyer must continue to use the land for agriculture/rice fields.

E. Conflict Handling

Conflict comes from the verb, namely configure, which means to hit each other. Sociologically, conflict is defined as a social process between two or more people (can also be a group) where one party tries to get rid of the other party by destroying or making him helpless (Irwandi and Endah: 2017: 26). According to Soerjono Soekanto (2006), social conflict is a social process in which individuals or groups try to fulfill their goals by opposing opposing parties accompanied by threats or violence.

If a conflict occurs between members in Subak Umalayu, the Pekaseh and/or Subak Prajuru will mediate to reconcile the parties. If the peace efforts fail, the conflict will be discussed at a Subak meeting involving all Subak members. The Subak meeting still prioritizes family values to resolve problems. In this case, the conflicting parties are expected to lower their respective egos in order to create peace. Thus, life in Subak remains harmonious, harmonious and balanced.

Violations of Subak awig-awig rarely occur in Subak Umalayu. Even if there is a violation, the awig-awig Subak has regulated the sanctions imposed, namely fines and/or the performance of certain religious ceremonies. The Pamrayascita Carik ceremony (cleaning rice fields) is one of the ceremonies that must be carried out if a conflict occurs that endangers lives. If the person committing the violation/crime is not a Subak member, it will be reported to the authorities.

In principle, conflicts between Subak members are resolved as amicably as possible through the Subak mechanism. However, if the conflict cannot be resolved, it will be handed over to the government or the parties will be given the freedom to take legal action. So far, the conflict that has occurred in the Subak Umalayu environment has been limited to the distribution of irrigation water. These conflicts can all be resolved well through mediation.

F. Adoption of Innovations Related to Agricultural Development

Subak Umalayu is committed to maintaining agricultural land so that it does not change function. Moreover, Subak Umalayu is one of the sustainable subaks in Denpasar City. This commitment is proven by the Subak awig-awig arrangement which does not allow agricultural land in Subak Umalayu to be used other than as farming land. If there are investors who want to request road access, such as building a jogging track or rides other than agricultural land, they must first request permission from the Denpasar City Government.

Subak members' ideas or suggestions regarding agricultural development can be expressed at every Subak meeting. These ideas are usually related to planting patterns, religious ceremonies, production, purchase and use of agricultural tools. Every idea will be accommodated and accepted by Subak officers for discussion with Subak members or related agencies. Implementation of the incoming ideas will be divided into short-term, medium-term and long-term activities. Apart from receiving input from Subak members, the innovation carried out by Subak Umalayu is related to agricultural development, namely by continuing to cultivate rice, vegetables and chilies according to the direction of the Denpasar City Agriculture Service.

4. CONCLUSION

Subak has six important functions, namely (1) religious ceremonial activities, (2) distribution and distribution of irrigation water, (3) operation and maintenance of irrigation networks, (4) resource mobilization, (5) conflict management, and (6) adoption of innovations related to agricultural development. The implementation of subak functions at Subak Umalayu has gone well. This can be seen from the efforts, activities, innovations and awig-awig in Subak Umalayu which cover the six subak functions. By carrying out the function of subak, subak will be able to survive amidst the widespread conversion of agricultural land. That means the resilience of Subak Umalayu will be stronger.

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