

SUBAK, A TRADITIONAL ORGANIZATION OF PEASANT FARMERS IN BALI

(with a case of Leput Subak)*

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Ringkasan

Subak merupakan salah satu dari banyak kelompok sosial yang ada dalam masyarakat Bali. Agama Hindu yang dianut oleh hampir semua orang Bali sudah merupakan tradisi yang membudaya dan merupakan salah satu ciri khas orang Bali.

Desa di Bali merupakan kesatuan sosial ekonomi yang berdasarkan wilayah diperkuat oleh adanya kesatuan adat dan upacara keagamaan yang keramat.

Dari 73.375 ha sawah di Bali hampir semuanya (71.600 ha) merupakan sawah berpengairan pedesaan dengan sistim irigasi yang seluruhnya diselenggarakan oleh petani. Suatu kesatuan irigasi kecil yang bersumber dari satu saluran atau satu sumber diurus oleh suatu organisasi adat subak yang selain mengurus pengairan juga mempunyai kegiatan yang meliputi pertanian, sosial ekonomi dan keagamaan.

Subak sudah ada sejak beratus-ratus tahun yang lalu sepanjang ingatan orang Bali. Diduga subak terbentuk karena adanya kepentingan bersama dari sekelompok petani akan kebutuhan air pengairan untuk pertanian dari suatu sumber air tertentu dan mereka berusaha memecahkan masalah mereka bersama secara gotong royong dan mufakat. Jadi nampak bahwa perkembangan subak tidak dapat dilepaskan dengan perkembangan pertanian sawah di Bali.

Anggota subak adalah orang-orang yang ada hubungannya dengan sawah baik pemilik maupun penggarap non pemilik, meskipun ada perbedaan dalam hak dan kewajiban. Hak dan kewajiban anggota subak diatur dalam anggaran dasar subak atau awig-awig, meliputi hak-hak anggota suatu organisasi yang demokratis, seperti hak memilih, hak

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dipilih, hak mengemukakan pendapat dan sebagainya, dan hak ikut memiliki kekayaan subak dan pelayanan air pengairan dan sebagainya secara adil.

Tugas dan kewajiban anggota subak meliputi :

- (1) bidang fisik, yaitu membuat dan memelihara bangunan - bangunan pengairan dan bangunan subak lainnya.
- (2) bidang keagamaan, menyelenggarakan upacara keagamaan yang berhubungan dengan pertanian, dan
- (3) bidang sosial, untuk mentaati dan memelihara kelangsungan organisasi dengan ikut bertanggung jawab terhadap pelaksanaan ketentuan-ketentuan organisasi dengan kegiatan dan sanksi-sanksinya.

Dari berbagai bidang kegiatan yang dilakukan oleh subak, sedemikian jauh berjalan lancar dan telah berhasil dilaksanakan dalam kegiatan bersama secara gotong - royong, baik secara periodik maupun insidental, termasuk pengembalian kredit bimas, penarikan IPEDA, pembuatan kantor subak dan lain - lainnya. Nampak di sini bahwa mekanisme di dalam organisasi tradisional subak mampu memecahkan masalahnya sendiri dalam kegiatan dan keputusan bersama.

Subak mempunyai kerja sama yang erat dengan dinas-dinas pemerintah daerah setempat, terutama dinas yang ada hubungannya dengan pengairan dan pertanian. Peranan pemerintah dapat berupa :

- (1) bantuan langsung berupa biaya, material atau pembuatan bangunan irigasi,
- (2) bantuan dalam koordinasi antar subak dan dengan pemerintah, dan
- (3) penggunaan subak untuk mensukseskan program pembangunan.

Jadi nampak di sini bahwa subak sangat berhasil sebagai suatu organisasi di tingkat petani didasarkan atas beberapa hal :

- (1) adanya kesadaran akan adanya kepentingan bersama dari para anggotanya yang berupa kebutuhan akan air pengairan,
- (2) dirasakan adanya kebutuhan yang sungguh-sungguh dari para anggotanya untuk dapat mencapai sesuatu dengan kegiatan bersama, hal ini sudah merupakan tradisi orang Bali untuk mengatasi masalah di antara mereka sendiri,
- (3) adanya ikatan yang selalu dipelihara dengan suasana upacara keagamaan yang khusuk,
- (4) adanya landasan yang dapat digunakan sebagai pedoman berupa awig - awig yang berisi aturan - aturan sebagai pedoman dasar yang sudah berakar kuat dalam masyarakat Bali, dan

(5) adanya bantuan, pelayanan dan kebijaksanaan pemerintah yang memberikan iklim yang baik untuk perkembangan subak.

Karena subak merupakan organisasi yang terbentuk dari bawah maka anggota dan pengurus tahu benar alasan apa mereka harus bergabung dalam kegiatan kelompok, membayar iuran dan juga tahu benar apa yang dapat diharapkan dari subak.

Dengan demikian subak yang sudah berakar dan ternyata sangat bermanfaat untuk usaha pembangunan perlu dibina. Pembinaan organisasi subak ini lebih ringan bagi pemerintah karena dapat dibatasi pada bantuan - bantuan yang sungguh - sungguh diperlukan oleh subak dan di luar kemampuan subak seperti bangunan - bangunan pengairan yang lebih modern dan dalam skala besar, penggunaan teknologi baru dalam pertanian dan sebagainya.

1. Introduction

In speaking about subak, it can't be apart from the behavior of Balinese community with all the socio-structural complexities. Subak is only one of many groupings in Balinese community that based on various unrelated bases, resulting grouping those are intercepts to each others.

The Balinese people are an ethnic group united by the consciousness of the same culture, strengthened by the same language, although there are still some local differences. The Hindu Religion had long been integrated in the Balinese culture and to be another element to that unity.

The Bali Province have more than two millions population, with 400 people per square kilometer density, and most are Hinduists (93%). The other religions are Moslem (5%), Budha, Catholic and Christian.

The Island of Bali is 5561 km² of size, divided by east - west stretching mountains, with volcanous of 1500 - 3000 meters, form a narrower flat land in north and wider is the south of 8 - 16 km from the coast. All the areas are cut by many small rivers into peases of land of hundreds meters wides. Most of the mountains cover by forests those are very important in the Balinese beliefs. At those mountains are located the holly temples of Bali.

A Balinese village is mainly based on territory. Beside that this village is also a religious based unit determined by a set of village temples. So this village as a socio - territorial based unit is strengthened by custom and holly religious ceremonies.

An *adat village* is a traditional custom based unit, divided in several smaller unit called *banjar*, leaded by *klian banjar*, that is elected for a certain period. A banjar has a central place in *bale banjar* where members can meet each other and hold meetings periodically.

A Banjar does not only deal with administration and social aspect of the banjar community, but also in religion, land and adat law etc.

Beside the village and banjar system, social system in Balinese Community is a more complex system with the influences of wangsa (caste), dadia (relative), seka (special activities) and others those inter-cept each others.

Most of the 73,375 hectares of sawah rice fields in Bali are irrigated (71,650 hectares) by systems of small scale irrigations those are entirely carried out by farmers. The farmers build small dams made of coconut trees and *broujong* (a bamboo made filled with stones), primary, secondary and tertiary irrigation canals with all the irrigation accessories needed. Beside that there are also some large scale irrigation structures built by the Government.

An ecological unit area in both side of a rivers is called *paredahan*, under a *sedahan*. Each *paredahan* consists of many smaller unit areas those are got from single stremflow canals out of the river, called *subak*. These small units are basic elements of the agricultural system in Bali. Although the main job of *subak* deals with irrigation, but it is more than that. *Subak* is an autonomous traditional institution, a planning board of agricultural activities and a religious group.

So a *subak* is a traditional-religious organizations deals with irrigation in Bali, but its activities also covers agriculture, socio-economic and religious aspects.

Knowing more about *subak* recently a case of *subak* of Leput are taken, in the Baha Village, the Kabupaten of Badung.

2. The Background Information of the Baha Village

The Baha Village is in the Kecamatan of Menguwu, the Kabupaten of Badung, Bali Province. This village is 5529 populated with the increase in the last five years was negative because of the trans-migrations to Sumatera (1974 - 1975) and Sulawesi (1976 - 1977).

Most of the people are farmers (47%) and labors (48%), and few of them do handicraft works, traders and civil servant etc.

The Baha Village leaded by a village leader called *perbekel*, and the administrative unit of this village is also called *Perbekelan Baha*. A *perbekel* is assisted by a *Juru tulis perbekel* as secretary. The *Perbekelan Baha* is divided into ten banjars with 348 to 857 population of each (table 1)

Table 1. The Name and Population of Banjar in The

Perbekelan of Baha, 1978.		
No.	The Name of Banjar	Population
1.	Selat	669
2.	Tengah	687
3.	Narungan	857
4.	Dukuh	581
5.	Bedil	521
6.	Gegaran	462
7.	Kedua	562
8.	Pengabetan	362
9.	Busana Kelod	348
10.	Busana Kaja	513
Total		5579

Beside the administrative unit of perbekelan, there are *adat villages* (traditional custom villages). An *adat village* characterized with a complete set of *pura* (temples). A complete set of *pura* consists of *kayangan tiga* and *rajapati*. *Kayangan tiga* consist of *pura dalam*, *pura pusah*, and *pura desa*.

The Perbekelan of Baha covers four *adat villages*: Baha, Sabangan, Dukuh, and Cengkok; *Klian* (leader) of an *adat village* is assisted by one or more *klianpatis*. Baha village has six *klianpatis*: three in Sabangan and one each in Baha, Dukuh and Cengkok.

The banjar and the *adat village* are not related. The perbekel only help in coordinating inter *adat villages*.

The agricultural land in Baha village is 665.77 hectares, mainly sawah 299.64 hectares (45%), upland 264.13 ha (40%), and home-yard 103 ha (15%). In general the sawahs have good irrigation with three rice crops a year or two crops of rice and one palawija (non rice crop). The first rice crop is in March-July, the second is in July-November, and the third crop of rice or palawija is November-March. The palawija here are: corn, soy bean, peanut etc.

Most rice varieties here were non IRRI varieties which have high yield, about 4 - 5 ton per ha. The HYV's were among others: IR32, IR30, IR26.

Hog, chicken and duck are the main husbandery here, and a few of cattle. The number of hogs in the Baha village was 1523, cattle 809, chicken 2921 and duck 2780.

3. The history of subak

The people of Bali have known subak since hundred years, it has not been known when the first exist. It might be founded because a group of farmers with the same need on irrigation water from the same source, tried to solve their 'problem' together based on mutual help and agreements, and then tried to manage a better water distribution.

So it seems that subak can not be apart from the history of the agricultural development in Bali itsef.

Some people said that subak began in Markandea era, a yogi from Java in the first century of Saka, together with his followers, opened the forest in Bali for agriculture. An archeologist, Dr. R. Gores, stated that in the year of 600 A.C agriculture was known in Bali, using cow and kerbau (water buffalo) and tunnel irrigation system. From the written deposite (prasasti) it was found that in year 800 of Saka (882 A.C) the word *makah aser* was known, means *pekaseh* or irrigation leader. Other statement said that subak was known in 896 and developed in 1022. The word subak might be from "seuwak" that meens a good distribution of water.

People said that the subak of Leput is the result of the people of Baha village in a successful water source searching. It was because of the increasing need of food from agricultural product because of the population increase, that make them tried to get irrigation water to increase production. They were looking for water resources and found a spring and called Toya Sampian Pangkung Leput.

The useful spring is always maintained by the people united as members of Leput subak.

4. The Membership

The member of subak are people those are related with irrigated sawah. Usually they are distinguished between owners and operators. So Some people called the owners as a formal members and operators as a practical members. But most people said that operators are the members of subak, because they do the activities related to subak.

The word *ngoot ngutang* for non-operator-owners, means that they do not participate in the work but sharing in financing, and *ngoot ngoyah* for operators that do the works.

The whole member of subak can be divided into three kind : *krama pekaseh*, *pengampel* and *leluputan*. *Krama pekaseh* or *krama subak* also called *sakeha yeh* means water associatian, are members those do the subak activities in irrigation works. *Pengampel* is non-active members in the water-distribution works, but they pay an amount of money decided in subak rule. *Leluputan* are free from water distribution works in the substitute of carrying out religious ceremonies of

subak. The members of the Leput subak are 728 krama, 682 owners, and 857 operators, cover the sawah area of 273.85 hectares. These members are grouped in smaller groups called tempok or munduk (table 2).

Table 2. The Membership of Leput subak

No.	Munduk/Tempok	Krama	owners	operators	Areas (ha)
1	Narungan	53	38	33	16
2	Kebon	62	47	62	13
3	Apuan	64	64	70	23
4	Moncos	70	84	99	35
5	Sana	102	87	112	35
6	Babakan	62	70	75	26
7	Baha	80	83	110	30
8	Ngabetan	118	89	124	28
9	Gaing	75	73	102	51.85
10	Sagu	40	42	50	12
Total		728	682	857	273.83

The members of subak has their rights, jobs and duties written in the subak rule of *awig-awig*. The rights of subak members are the rights :

- (1) to elect subak leaders (pekaseh, penyarikan, klian, tempok, juru arah etc.)
- (2) to be elected as subak leaders.
- (3) to speak and to vote equally in subak meeting
- (4) to get services and treatments fairly from subak
- (5) to get a share of subak properties
- (6) to get a share of money paid as penalties from members not doing their duties.

The jobs and duties of the subak members consist of physical, religious, and socio-economic fields.

The physical jobs are building and maintaining all the irrigation structures and accessories and non irrigation structures, together or not together. The non-irrigation structures are subak roads, subak hall for meeting and places of religious ceremonies related to subak. There are many religious from land preparation up to the harvest is stored. Some are done together and someothers are not. In Leput there are 13 kinds of ceremonies, and another additional ceremonies for preventing special pest, such as mouse, hopper etc.

In socio economic field, every subak member as a member of an organization, hold the responsibility of all the rules and decisions of it with all the activities and penalties, and ought to obey and maintain the life of the organization.

Those duties are among others as follows :

- (1) to obey and carry on the subak rule, written in the *awig-awig* or not written
- (2) to carry on all the decisions of subak meeting
- (3) to do all the instructions of subak leaders and subak rule
- (4) to attend the subak meeting
- (5) to conduct a proper water distribution
- (6) to pay fees and penalties
- (7) to carry on the government instructions stated through subak
- (8) *krama subak* ought to do the *ngoot nguyah* in all the subak activities.
- (9) to do the repairing and maintaining the irrigation structures, roads and pura together.
- (10) to carry on religious ceremonies related to subak.

The penalties in the form of money must be paid by members who are not doing the jobs. Such as a *krama subak*, who do not do the *ngoot nguyah* has to pay one kilogram of rice.

If he do not do it three times in a serries, he could be regarded as a nonactive member and has to pay *ngoot ngutang*, one kilogram of rice for every 0, 1 ha. Not attending the meeting has to pay 5 kg of rice etc.

5. Organization

Subak is an outonomous organization. This freedom of subak to arrange the irrigation has been since the kingdom era and continued untill now. The highest rank in subak organization is *sedahan agung*. He is a government official at kabupaten level with the jobs dealing with irrigation, subak and land tax.

Under the *sedahan agung* there is *sedahan*, also a government official with the same job and smaller area. In the old written articles they are often called as tax officials and the recent articles the are more regarded as irrigation officials.

The job of *sedahan* and *sedahan agung* according to I. B. Teken et al (1973) are :

- (1) to manage the irrigation and water resources is their areas.
- (2) to solve the problem among subak those cannot be solved by themselves.
- (3) to collect the land tax (now IPEDA)
- (4) to facilitate a better communication between subaks and the government in deciding the dates of many kinds of ceremonies.
- (5) to coordinate adat ceremonies related to subak.

Under sedahan there is *pekaseh* or *klian subak*.

Pekaseh is not a government official, nominated and elected from and by the subak members in subak meetings, generally does not get any land, except in Badung kabupaten.

The election of *pekasih* is done in a meeting attended by all members and leaders, in an agreement basis, and often also attended by *sedahan* and *perbekel*.

In a small subak under *pekaseh* are members directly. But in a larger one, it divided in smaller units called *tempok* or *tempek*. In Leput these smaller units are called *munduk*. There are differences between the structure of subak leaders in general and Leput. In general a *tempok* lead by a *klian tempok* assisted by *juru arah*, *kasinoman* and *juru tibak*. A *juru arah* delivers orders and announcement from leaders to members. *Kasinoman* is a general assistant and *juru tibak* specially distributes water. In certain areas there is also a man with a job on sacuring the irrigation netflow and water distribution called *petilik*.

In Leput there are one or two *juru munduk* in every *munduk*, and two to three *munduk* are under a *pengeliman* that is nominated by *pekasih*, usually a man that able to read and write.

There are two kind of member meeting : periodical and special meeting. The periodical meeting is once in 35 days. The special meeting is help when there is a need to discus work plans and activities have to be done soon (flood, pest, quarelling etc).

6. The Activities

The subak activities consist of organizational, irrigational and agricultural, and socio - religious activities. The organizational activities are those all kind of meetings. From the samples of Leput members, there were only 3% attending all the meeting in the last year (1977-78), 40% attending 76% of the meeting or more, 37% attending 50%, 23% attending less than half of the meetings.

The irrigation and agricultural activities are a group action in repairing and maintaining the irrigation structure and accessories, implementing bimas (registering participants, distributing fertilizers and pesticides, credit repayment etc).

The religious activities are participating in ceremonies and offerings. The others are repairing and maintaining subak road together, cleaning and maintaining pura, subak road, the place for meeting, subak office etc.

7. The Decision Making

The foundation of the subuk organization is written in subak *awig-awig*. All the decisions decided by leaders based on the *awig-*

awig. In dealing with important things the decisions decided in a meeting, where every member can participate the decision making. The decision are taken based on agreement and the most voters support basis.

In general the problems and the implementation of subak activities are decided in meetings, such as bimas, credit repayment, the input use, IPEDA (tax) penalties, building the office, the election of pekaseh, cropping pattern, ceremony arrangement etc.

There are some decisions that are decided in the meeting of munduk level, such as the election of klian munduk or juru munduk, repairing canals or accessories of each munduk, ceremonies at *Bedugul* (the place for ceremonies of each munduk).

When there is an unsolved problem by pekaseh, it goes to the sedahan. And when sedahan cannot solve either, it goes to the sedahan agung. And when sedahan agung cannot decide either, it goes to the court. But generally all problems can be decided and solved at the subak level. The difficult problem because of lack of prove just ended with *macaran*, a statement at the religious ceremonies with certain offerings according to the traditional costum.

8. The Experiences and the Problems

From the various kind of activities done by subak, so far, are running well.

These activities covers routine and insidental activities. The routine activities related with irrigation, road, ceremonies, bimas, tax and credit repayment. The insidental are building the subak office, building and repairing permanent irrigation structures. All the works are done in a group action on mutual help basis (gotong-royong) periodically, once in a season or else.

It seems that the mechanism within the traditional organization of subak is able to solve its problem by itself. All of these are based on (1) the same need for irrigation water, strengthen by (2) the holly religious ceremonies, and (3) the awig-awig which contain all the rule as a basic guidance to face problems together, that strongly rooted in Balinese community.

9. The Support Services

An irrigation (and agricultural) organization at the farmers' level can live and develop, among others, when there is an awareness of the serious need of its members to achieve by group activities and also there exist aids and services from the government policies to create a good climate in developing this organization.

The role of the government in relation to subak can be :

(1) a direct aid in the form of finance or material aid in irrigation structure rehabilitation or to build the dam itself, supervising agriculture, (2) coordination inter subak and between subak and the government, and (3) using subak for a successful government programs, such as the bimas, the agricultural extension and the tax collection.

It seems here that subak has a very close relationship with the local government agencies, especially the irrigation and the agricultural agencies. In the increasing food production program through the bimas, the government officials in Bali tend to use the subak than other institutions.

The role of the irrigation section of the public work (PU) are important too in the irrigation construction, the technical assistant to subak, and technical training.

In the Kabupaten level there is a Board of irrigation (Panitya Pengairan), leaded by Bupati (the chief of kabupaten), with members of sedahan agung, the head of Agricultural Service, the head of irrigation section of public work, the head of agrarian office, the head of Community Development Service and the head of the police.

The jobs of this board are : to facilitate the coordination in using water, in cropping pattern, security and maintaining irrigation structures and the netstream flow canals, and to facilitate the coordination among government agencies, that the Gubernur be able to aid with policies and finance from the development budget allocation.

10. Discussion and Evaluation.

subak is one of the social groupings those exist in Balinese community. The Hindu religion that is widely adopted by most people of Bali to be a tradition in the Balinese people. The Balinese villages are a socio - economic and territorial unit based on traditional custom and holly religious ceremonies.

From the 73,375 hectares of sawah in Bali, most (71,600 ha) are irrigated with the irrigation system arranged by farmers. A small unit of an irrigation area originated from a single water canal is managed by a traditional organization of subak that also deals with agriculture, socio-economic aspect and religious ceremonies.

The subak has existed since centuries ago. It might be founded because of the same need and the will to solve the problems together in a group activities based on mutual help and agreements.

Members of a subak are people related to sawah, although there are some differences among them, every member has his own right and duties . So far activities are running very well, also in making the

government program to be successful. The close relationship with the local government agencies and the support services have made all the successful story of subak.

It seems here that subak is a very successful organization at the farmer level based on several bases :

- (1) the consciousness on the same need of irrigation water
- (2) the serious need of group activities in achieving their goal ; that roots in Balinese tradition to solve the problem by themselves.
- (3) the alliance that is always maintained by the holly religious ceremonies.
- (4) the foundation that to be a guidance in the form of the awig - awig contains the rule strongly rooted in the Balinese community
- (5) the aids and the support services from the government policies to facilitate the development of subak.

In fact a subak is a bottom-up organization, that the members and the leaders know very well why they joint in it, pay fees and what can be expected.

So the strongly rooted subak is a very beneficial for development efforts. With some aids at the key points those seriously needed, this existing organization can be improved and made more useful toward the development as a whole.

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