

# Managing a living cultural landscape: lessons and insights from the *subaks* of Bali, a UNESCO World Heritage Site

## Introduction

In 2012, the cultural landscape of Indonesia’s Bali province was inscribed as a World Heritage Site – a place of “outstanding universal value”, to be protected and preserved for all humankind. The inscription recognizes the value of Bali’s *subaks*: farmers’ organizations that collectively manage irrigation systems on rice terraces, as well as water temples.

The *subak* system, which dates back to at least the 12th century, embodies the philosophy of *Tri Hita Karana* (three causes of goodness), which seeks to create harmony between humans and the spiritual realm, between humans and nature, and among humans. The *subaks* perform rituals, ensure the equitable distribution of water to farms, maintain the irrigation system, mobilize resources and mutual assistance, and resolve conflicts.

All the farmers who draw on a single water source – a single dam and canal running from dam to fields – belong to a single *subak*. Bali has about 1,200 *subaks*. The World Heritage Site includes a selection of *subaks* that “exemplify the interconnected natural, religious, and cultural components” of the traditional *subak* system, including organic cultivation of traditional Balinese rice varieties.

Proponents of the site envisioned a broad, participatory and inclusive management system, involving government agencies at different levels, village leaders, and the *subaks* themselves. Yet successfully realizing this vision is no small task, given Indonesia’s complex bureaucracy and very hierarchical social structure. Bali is also undergoing rapid socio-economic changes, which the establishment of the site could itself accelerate by attracting more tourists and investors.

In 2013, at the request of the Government of Indonesia, SEI launched a two-year project to support the development of a

## Key findings

- The Bali Cultural Landscape is one of the two *living* cultural landscapes among World Heritage Sites in Southeast Asia, and managing it successfully will require close engagement with the *subaks* that make up the site. Conditions are changing rapidly, and centuries-old traditions may not be viable for much longer unless the farmers get the support they need to maintain them.
- The farmers of Catur Angga Batukaru, their leaders, their king and the high priest have important roles to play in the management of the World Heritage Site. They are eager to get involved, and they are well prepared, as they have longstanding practices of deliberative and democratic governance, learned through generations of managing their *subaks*. What they need are effective mechanisms to participate in the site management, and real, sustained attention to their needs, such as an adequate supply of water, and support for organic farming practices.
- The ingredients for a successful farmer-led management system are already available, in the form of the *subaks* and their leaders, the *pekasehs*. They have set up the *Forum Pekaseh Catur Angga Batukaru* as a vehicle for their involvement with the World Heritage Site, and codified the rules that bind them together and define their responsibilities.
- The *subaks* face several challenges that require prompt attention, including increasing costs of rituals, changing farming practices in favor of intensive production systems, declining availability of family labour for farming, changing occupational preference against farming among the young, declining availability of water, high land taxes, and growing incentives to convert rice paddies to other uses.



A newly planted rice paddy in Jatiluwih.

participatory and effective management structure for the site. This policy brief synthesizes our findings, with a focus on the *subak* landscape of Catur Angga Batukaru (CAB), which has the largest number of *subaks* and villages in the World Heritage Site.

The recommendations were formed from several rounds of interviews and focus group discussions in four villages – Rejasa, Sangketan, Wongaya Gede and Jatiluwih – as well as a *subak* assembly in May 2014 to build consensus among the 20 *pekasehs* of the CAB, where the *pekasehs* established a coordination forum and developed a collective action plan.

### A difficult beginning for the World Heritage Site

The implementation of the World Heritage Site in Bali has encountered several hurdles. First of all, the diverse group of public- and private-sector actors, academia, NGOs and others who successfully worked to achieve the inscription is not responsible for implementation. Instead, a new Governing Assembly was set up, with representatives from different government agencies, and frequent turnover resulted in the assembly members not being able to mobilize resources or solve problems that required collaboration.

Moreover, among farmers, the assembly's name – *Dewan Pengelola* in Bahasa Indonesia – had negative connotations, as a “*dewan*” is a formal entity in Indonesia and is typically a top-down body that issues decrees for others to follow. This sense was exacerbated by the fact that important actors were excluded from the assembly, notably the king (*puri*) of Tabanan, the high priest of Batukaru (*pemangku gede*), *pekasehs* in the CAB, and NGOs active in the area.

In 2014, the governing assembly was replaced by a Coordination Forum (*Forum Koordinasi*), chaired by the Regional Administrator, who has the authority to call the heads of offices (*dinas*) to join meetings. Udayana University (UNUD), whose experts played a key role in the nomination process, is an official member, as are the *pekasehs* and *bendesa adat* (heads of customary villages). This structure provides a more viable platform for coordinating across government agencies to provide the resources needed to meet the goals of the World Heritage Site. The forum's first meeting was held in September 2014.



The *pekasehs* during their assembly in May 2014.



A kecak dance performance in Uluwatu.

### Challenges faced by the subaks

Rituals are a core aspect of *subak* life. The Balinese believe that all land belongs to deities, and every action on the land requires a ritual to seek the gods' permission, or else the farmers will have bad luck, in the form of pests, diseases or other disturbances. Yet these rituals are expensive; in Pura Luhur Batukaru, the highest temple in the CAB, the five major rituals performed each year cost at least 40 million IDR (3,333 USD). Already in the 1980s, a study had estimated that rituals accounted for around 60% of a *subak*'s expenditures.

The cost of rituals, in turn, affects the cost of growing rice in the *subaks*, and the farmers' choice of rice varieties. Traditionally, they have grown a local variety (*padi lokal*), which is well suited for organic cultivation and requires relatively few inputs. But it takes five to six months to grow, with several associated rituals. Farmers are thus increasingly opting for a new variety (*padi baru*) with a three-month growing season, which requires fewer rituals. Technical support for *padi lokal* is also limited, as extension workers are only knowledgeable in the production of *padi baru*.

Still, farmers expressed a willingness to grow *padi lokal* organically, but only if inputs, techniques and guidance are provided, and if any losses from reduced yields are offset. The Green Revolution has changed farming practices, and farmers want to use modern inputs and technologies. Organic fertilizers are more expensive than chemical ones, and making them affordable would require either subsidies or landscape-level efficiency improvements.

In addition, the *subaks* need financial support to renovate their water temples, which are crucial parts of the landscape, and to maintain the paths and irrigation networks needed for wet rice cultivation. The availability of water is a critical concern in the CAB and the rest of Bali. Not only is tourism



SEI photo by Albert Salamanc

Women as ritual assistants in a mecaru ritual, which seeks to maintain the harmony between humans and nature.

being given preferential treatment in water allocation, but there is no coherent water policy or central authority to oversee water allocation.

High tax rates on farmland are another major challenge, as they depress income and are leading more and more farmers to quit and sell their land. The probability of land conversion thus becomes high, and feeds a vicious cycle wherein non-farming land uses increase the value of the land, leading to further increases in the assessed tax of adjoining lots.

Land conversion is now forbidden within the World Heritage Site, but in the surrounding area, farmers who need money have no qualms about disposing of their land. The problem is exacerbated by the fact that a growing number of young people are uninterested in farming, and are moving away or taking jobs in tourism instead. As a result, farming in Bali is becoming the domain of the aging, and even young people who return to the village lack the skills or interest to farm like their parents.

These challenges raise important questions about the long-term viability of the *subaks*. How can their rich heritage be truly preserved, as a living entity, amid such drastically changing conditions? These are existential questions that the Balinese need to ponder as the pressures from dwindling farm income, development, tourism and cultural protection become severe.

### Engaging with the World Heritage Site

Tourism already sustains the Balinese economy. Bali accounts for roughly 0.3% of Indonesia's land area but 37% of foreign tourist arrivals; tourism directly employs 28% of the island's work force, and contributed nearly 30% of its GDP in 2013. So far, tourism development in the CAB has been limited, even in Jatiluwih, but since the inscription, the pace of change has accelerated. There is more traffic, more garbage, and rising demand for water. Some farms in Jatiluwih have been booked for tourists to experience an "authentic" rice harvest. Unless tourism is managed more carefully, it could dramatically alter the landscape.

Still, *Subak* members are generally optimistic about the World Heritage Site and see it as an opportunity to address

the challenges they face. However, we encountered several issues, starting with a notable lack of information about the site and its implications for the villages and their inhabitants. Village representatives have attended various meetings on the site, but said they need more "farmer-friendly" materials, including explicit instructions on what farmers and villagers should or should not do on their *subaks* to comply with World Heritage Site rules.

Another widely cited concern is that the Regency of Tabanan established a local management body (*badan pengelola*) for the Jatiluwih Tourism Site, which handles the entrance fees, manages parking lots and maintains the road near the World Heritage Site monument. That body was set up before the inscription, and although after the inscription, the chiefs from surrounding villages were invited to get involved, they do not see it as the *badan* for the entire World Heritage Site. The *subaks* are also not represented in that body, and the infrastructure improvements it has overseen since the inscription have centred on Jatiluwih, leading to discontent in other villages.

Looking ahead, farmers expect the World Heritage Site designation to have a positive impact on their livelihoods. They want to test new rice varieties, and be able to sell rice to new restaurants. They want training to help them engage in tourism, such as how to set up homestays, culinary skills, and foreign language instruction. They want clearer regulation on spatial planning and land conversion, to control development around the World Heritage Site. And they hope for incentives or support to keep growing *padi lokal* in the traditional way, organically, and to help them reduce the risk of crop failures and avoid having to give up their land or convert their rice fields.

All these issues need to be addressed to protect the outstanding universal value, integrity and authenticity of the *subak* landscape as a World Heritage Site. Actions are needed to help ensure a continuous supply of water for the *subaks*, maintain land for farming, ensure that labour is available, and provide enough funds for rituals. All the CAB actors need to work together to address these issues, but formal mechanisms have yet to be set up to enable those conversations. The Coordination Forum has not met again since its inaugural session, and the government of Tabanan Regency has yet to create an administrative body to manage the sites in its jurisdiction. Ongoing efforts led by the *subaks* and their *pekasehs* must also continue.



SEI photo by Albert Salamanc

Tourism is growing quickly in Bali, reshaping the local economy.

## Recommendations for managing a living cultural landscape

Although these recommendations are solely for the CAB and do not apply to other parts of the World Heritage Site, our intention is to ensure that the World Heritage Site protects the universal values that make Bali unique and sustains the *subaks* into the future while improving people's well-being. To address these cross-cutting concerns, we suggest the following options:

**Implement the UNESCO approved management plan and make better use of existing materials:** UNESCO approved a management scheme, with five strategic priorities: livelihood protection and enhancement; conservation and promotion of ecosystem services; conservation of material culture; appropriate tourism development; and infrastructure and facility development. This scheme should be implemented, and existing materials, including a completed interpretation design framework, maps, plans and databases, should be put to good use. If needed, a neutral repository may be established; UNUD's Subak Research Centre (*Puslit*) may be an option.

**Establish the *badan pengelola* Tabanan Regency or consider empowering an interim authority:** The decree that established the Coordination Forum specifies the creation of a management body (*badan pengelola*) at the regency level. The body in Jatiwulih is not sufficient; a more inclusive regency-wide *badan pengelola* is needed. In the meantime, an interim authority with convening power and resources should be considered, to enable coordinated action as soon as possible.

**Meaningfully engage the *Forum Pekaseh*:** To ensure that the *Forum Pekaseh* can function effectively, the institutional context needs to be improved, particularly with regard to the regency-level local government operating units (*Satuan Kerja Pemerintah Daerah*, or SKPD). A consensus-building process needs to be conducted with key offices, including culture, agriculture, forestry, public works, revenue and tourism. Engagement with the *Forum Pekaseh* should also go well beyond meeting UNESCO requirements. Monitoring and evaluation (M&E) protocols should be developed in such a way that they empower people and enable learning. We envision a *subak*-based monitoring system that gathers insights and implements actions in a living cultural landscape, reflecting, learning and adapting over time.

**Expand engagement with other actors in the World Heritage Site area:** There are issues that local actors cannot address on their own, but require engagement with other sectors – such as spatial planning of national strategic areas, tourism sustainability, water policy, and the implications of new laws and regulations on villages. Facilitating dialogue on these issues should be a priority.

## Conclusion

Bali is the first cultural landscape in Indonesia inscribed as a UNESCO World Heritage Site, and it is still struggling with the implementation of its management plan. The sites are not managed formally and properly, and the designs of those who led the nomination remain unimplemented. Resolving these issues will require political will and engagement at all levels of government and – just as important – meaningful participation by all key stakeholders, particularly the *subaks*.

The good news is that the farmers are eager to get involved: to work to maintain their practices and rituals, prevent land conversion, and ensure that there continues to be enough farm labour for the rice terraces. They are well prepared for the challenges of the World Heritage Site, as they have well-established democratic governance practices, and they have shown for hundreds of years that they are capable managers of their landscape. What they need are effective mechanisms to ensure their participation in site management, and real, sustained attention to their needs, such as an adequate supply of water, and support for organic farming practices.

The ingredients for a successful farmer-led management system are already in place in the *subaks*. What is needed is for UNESCO, the government, the tourism sector and other

stakeholders to actively engage with the farmers and their *pekasehs*, and take their ideas and concerns seriously. The *subaks* and their rituals are the soul of the Bali Cultural Landscape. If their traditional way of life is lost, the green terraces of Bali will be reduced to ordinary rice fields.

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