

ICM Solutions

Harmonizing the Spiritual and Economic Uses of Gangga Beach through ICM Approaches

- The rehabilitation and improvement in management of Yeh Gangga Beach faced a number of conflicting uses of the limited beach space, principally because the beach was a sacred area for Hindus in Bali to worship, a center for traditional fishing in the regency, and an emerging area for tourism.
- The traditional village in Bali has three characteristics that lent themselves to organizing and implementing the rehabilitation and management of Yeh Gangga Beach: (1) an organizational structure recognized and respected by the village members; (2) social, cultural, and religious rules that are obeyed by the members; and (3) village leaders who are highly respected by the members. The local government recognized the importance of these values and partnered with the traditional village institution to improve the management of the Yeh Gangga Beach.
- Through a participatory process involving the national and local governments, the private sector, and the traditional village, designated areas for various uses were identified and conflicts among interest groups were reduced. The beach and its functions were restored, facilities and public access to the beach were improved, livelihood from fisheries and tourism activities were enhanced, and most importantly, the beach was preserved to support spiritual and cultural activities in Bali.



Profile of Yeh Gangga Beach

Gangga Beach, approximately 9 km to the south of Tabanan City in Bali, Indonesia, sits in the Yeh Gangga traditional village in Bali, and is commonly called Yeh Gangga Beach by the locals: Yeh means “water” while *Gangga* is the name of the sacred river in India.

The beach is flanked by two estuaries similar to that of the Ganges in India, hence the name Yeh Gangga. Its importance as a sacred place to bathe and cleanse as a traditional ritual of Hindus as is done in the Ganges of India became widespread such that people from far away would visit Yeh Gangga to observe their rituals. It remains today as a sacred place.

In addition to being a place for rituals, Yeh Gangga Beach, which is divided into east and west zones by a headland, remains as the base and center of traditional fishing activities of the Tabanan Regency. Local folk, mostly artisanal fishers, use simple fishing gear and small boats.

Over time, with the rapid development brought about by tourism in Bali, the government promoted the Yeh Gangga Beach as a tourist area. The scenic view and the sea waves that are perfect for surfing attracted domestic and foreign tourists. Private investors bought land along the beach and developed facilities for tourism. Business flourished.

Context

The heavy use of the Yeh Gangga Beach both as a place of worship, especially during the melasti ceremony, as a tourist destination attracting believers and tourists in their huge numbers, and as a fishing center of the Tabanan Regency brought about conflicts among its users.

Most of the 2.13 km stretch of land along the beach was barred from public use by tourism establishments including hotels and villas. There was no zoning arrangement over the use of the beach area.

Environmental problems also exacerbated the conflicts over the use of the narrow beach area. Heavy erosion triggered by the mining of rocks on the headland on the east end of the beach and at the mouth of the river severely damaged Yeh Gangga Beach. The flow of the river turned into a meandering stream on the east side of the beach zone, eroding the beach of its sediments, causing heavy loss of sand.

Due to the heavy influx of people, solid waste along the beach area accumulated. The other source of waste came from the urban areas that the river water, especially during the rainy season, carried to the beach area. Proper waste management was not implemented.

The severe damage of the Yeh Gangga Beach threatened the survival of the traditional village in terms of both economic and spiritual aspects.

Solutions

The traditional village community, realizing the gravity of the situation, took collective action in 2005 to rehabilitate Yeh Gangga Beach. To them, the paramount importance in reviving the beach area was tightly woven in their culture; Yeh Gangga Beach is a sacred place — a place of worship, of spiritual connection — such that the whittling away of its scenic beauty and with it the serenity of the place brought by urbanization had to be addressed collectively.

With the assistance of the local government and cooperation among the community members, the erosion of the beach was controlled by building a jetty at the mined headland to stem the sediments that were carried away by the longshore current. A riverside embankment was also built at the mouth of the river to normalize water flow directly towards the sea. These efforts were able to stop the erosion, although the riverside embankment made of stones required regular maintenance.

Recognizing the community's initiative and commitment to improve their environment, and the spiritual and economic importance of the beach, the Indonesian Ministry of Marine Affairs and Fisheries in 2007 facilitated the community's efforts in managing the coastal environment in a comprehensive and holistic manner through the program called Environmental Management Based on Community Empowerment. The program, implemented using ICM principles and approaches, aimed to raise awareness and build the capacity of the community, other stakeholders, and the local government to sustainably address environmental problems, and lay the foundations for socioeconomic development of the area. This was done by taking them through a simple learning process of planning and managing their own environment. The program, which involved several strategic management components, was implemented using a participatory planning process that was assisted by the local government and a facilitator or companion. In developing the program, the community was encouraged to determine their priorities and needs towards developing their coastal area, and guided to:

I. Strengthen existing local institutions

Institutionally, Yeh Gangga Beach is the responsibility of the traditional village whose existence is recognized by the state and is protected based on the Bali Provincial Regulation No. 3/2001 (box 2). The existence of the traditional village institution was an advantage in implementing the management of the beach because:

- a. the institution has a complete organizational structure divided into three divisions: the *Prahyangan* division that is responsible for the spiritual aspects, the *Pawongan* division that is responsible for the relationship among the community members, and the *Palemahan* division that is responsible for the human relationship with the natural environment;
- b. the institution has rules or the *awig-awig* that is obeyed by the members, and
- c. the leaders of the institution are highly respected by the members.

Traditional Village in Bali: Upholding local values, culture, and practices

Balinese Hindus believe in a life philosophy called the *Tri Hita Karana* that has three main elements: the *Parahyangan* or the attachment to a specific place of worship; the *Pawongan* that tightly binds each fellow member, especially the religious Hindu to one another; and the *Palamahan* that roots a traditional village to their territory or land.

The *Tri Hita Karana* provides the basis for the identity, existence, roles, and obligations of a traditional village in Bali called the *Desa Pakraman*. The *Desa Pakraman* is the unity of indigenous peoples who have a whole tradition and manners socially Hindu, living for generations in the bond of *kahyangan tiga* (three main temples in the village level), that has a certain region and their own property, and the right to manage their household autonomously.

The *Desa Pakraman* is led by leaders called *parjuru desa pakraman* who are elected and/or chosen by members according to the *awig-awig*, a set of written rules and guidelines that the traditional village observes in the implementation of the *Tri Hita Karana* according to the conditions and values in each village. The tasks of the traditional village are: (1) to make the *awig-awig* (rules); (2) to manage or take care of its members; (3) to manage the property and assets of the village; (4) to implement development programs together with the government in all fields, especially concerning religion, culture, and society; (5) to foster and develop the values of the Balinese culture in order to enrich, preserve, and develop their national and local cultures; and (6) to secure the members of the village (Regional Gazette of Bali Province, 2001).

In the implementation of the program, the traditional village set up a working group to take charge and be responsible in implementing the program on a daily basis based on agreed plans. Community groups were set up led by a chairman who served as a motivator. A motivator's role is to motivate the groups and build togetherness in the community towards implementing the program.

In order to facilitate the capacity building of the community, the government commissioned a companion or facilitator from a university whose role was to assist the learning process of the community groups to ensure that the management plan was developed and implemented based on scientific data and information with appropriate methodologies and approaches.

2. Draw up a management plan

The preparation of the plan was implemented in a participatory manner facilitated by the companion and the local government. Issue-based action plans were formulated in three stages:

- a. the first phase (2007-2009) focused on planning, strengthening the community group, community awareness and concern, beach rehabilitation, and development of some beach facilities;
- b. the second phase (2010-2012) focused on the setting of the agenda for structuring beach use through zoning and increase of public access to the beach; and
- c. the third phase (2013-2015) focused on laying the foundations for the program's self-continuation by the community in a sustainable manner through the development of income-generating sources that will be derived from the management of the beach.

As a basis for managing the use of the beach, the village prepared a coastal use zoning plan (**figure 1**) through a participatory manner involving a series of discussions at the village level in 2009. The zoning plan includes:

- a. regulating the use of the beach space that will harmonize the spiritual function, the economic role and tourism role of the beach;
- b. developing facilities that will provide access to the beach and supporting facilities for economic empowerment;
- c. formulating rules on permitted activities, not permitted (prohibited) activities, and activities with conditional permission (Ministry of Marine Affairs and Fisheries/Government of Tabanan Regency, 2009).

3. Restore and conserve the beach

The effective control of erosion does not end with the successful restoration of the physical condition of the beach. Maintenance of the protection structures is continuously carried out by the community. Beach greening was carried out to maintain the stability of the sediments by introducing vegetation such as *Callophyllum inophyllum*, *Thespesia populnea*, and *Terminalia catappa*. These enhanced the natural beach vegetation such as the *Ipomoea pes-caprae* and the *Pandanus tectorius*.

At present, Yeh Gangga Beach has a wider beach space and the physical condition remains relatively stable. However, small pocket areas experience erosion especially during seasonal periods due to the river flow. This problem remains as an important item in the restoration and conservation programs of the beach.

4. Manage solid waste

Solid waste management is entirely the responsibility of the traditional village. Solid wastes coming from use of the beach area for ceremonies and recreation activities are manageable for the village, while wastes from the river and the sea during the rainy season require more facilities and manpower. This was addressed by the traditional village by commissioning a group of people to carry out daily garbage collection, using funds obtained from the parking fees. The hotel owners, in turn, pay for the transport of the collected garbage to the processing plant. This arrangement is an example of cooperation and shared responsibility between the traditional village and local private sector.

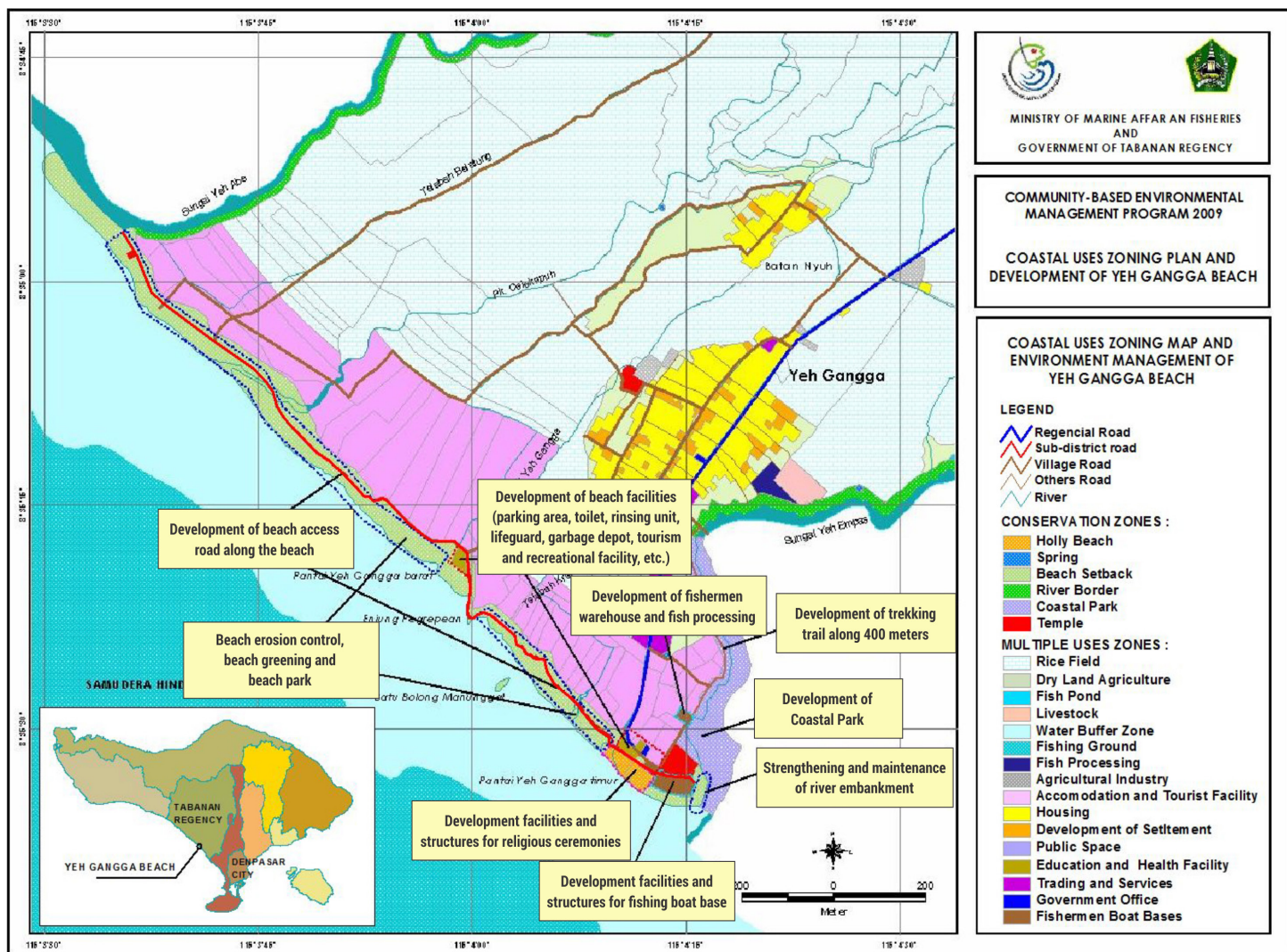


Figure 1. Coastal use zoning plan and development of Yeh Gangga Beach.

5. Develop facilities and access to the beach

Facilities for the public use of the beach such as toilets, rinsing units, garbage cans, lights, water supply, and security stations were set up in accordance with the zoning plan.

More importantly, roads were built providing public access to the beach area, where before, private investors blocked large parts of the beach from public use. Road tracks with a width of 1.5 m now connect the east beach zone to the west zone, and delineate private land and public space along the beach. This achievement went through a series of dialogues and negotiations initiated by the head of the community group given the mandate by the traditional village, with private investors who realized that a sustainable plan to use the beach area would be for the benefit of all. Eventually, the investors agreed to give up an average width of 5 m from their land for the construction of footpaths along the beach. Personal approach, intensive consultation, and communication with stakeholders were key in developing their comprehensive understanding of the management efforts and the benefit of all parties in the long term.

6. Develop and implement programs for economic empowerment

The target groups of the economic empowerment program in the village, which was facilitated by the national and local governments through partnership and collaborative programs, were the fishers and the tourist service providers because they are the most economically vulnerable groups in the community who have a high dependence on the resources of the coastal area.

The program was implemented in accordance with the zoning plan, whereby activities and programs for the fishers were focused in the east zone while the west zone was developed for the tourist service providers.

The programs for the fishers included facilities such as a warehouse for their catch and for processing fish, access to market for their catch and processed products, access to cheap credit schemes, and provision of and assistance in utilizing environmentally friendly fishing gear and technology.

Programs for the tourist services group, on the other hand, included establishment of restaurant stalls, souvenir shops, development of tour guiding services, and development of cooperation with local tourism entrepreneurs in managing tourist attractions. Efforts to enhance tourism services and facilities are still ongoing.



The east side of Yeh Gangga Beach: Facilities for fisheries activities and religious ceremonies were set up, based on the zoning plan. The beach is also used for meditation and spiritual cleansing.



The west side of Yeh Gangga Beach: Photos show: (A) The headland separating the east and west sides of Yeh Gangga Beach; (B) an announcement that prohibits putting up commercial establishments, gathering rocks and disposing waste on the beach area, with corresponding fine of Rp 1,000,000 for offenders based on the District Regulations of Tabanan Regency and Customary Laws of Yeh Gangga Traditional Village; and (C) the drinking water supply facility. Tourism facilities and enterprises are found behind the beach set back zone.

Results

Continuing efforts towards sustainability

Presently, the traditional village derives income from parking fees and levies of stores that are also used to fund management of the beach area. Despite the increasing number of tourists, the funds remain inadequate. To address this, local entrepreneurs have been putting in their share to support the maintenance of the beach.

To augment the additional income of the traditional village, the national government has also provided a drinking water supply facility with desalination technology that is managed by a village cooperative. The facility provides people with cheaper drinking water while the cooperative earns income from running the drinking water facility. Part of the earnings are contributed to the traditional village that is in turn used to develop facilities in managing the beach.

While medium- and long-term plans for generating income from tourism are being developed, the national government, through the Ministry of Marine Affairs and Fisheries, has recognized the commitment and efforts of the community in Yeh Gangga and awarded them the Adibakti Mina Bahari Award in 2011. The award recognizes community groups for their participation in coastal environmental management and is also given to the Regent for their leadership in implementing integrated coastal management. This recognition has served to encourage the community's commitment, foster trust, and uplift the community spirit, which are very important for the sustainability of the program.

Lessons Learned

The success and sustainability of the community empowerment and environmental management in Yeh Gangga Beach was influenced critically by the application of ICM approaches and good practices.

- 1. The consciousness, awareness, and collective responsibility among the indigenous villagers served as a strong foundation in implementing programs.** The status of Yeh Gangga Beach as a sacred area for the community has greatly encouraged people to contribute to its rehabilitation and continuing development.
- 2. Institutionally, the traditional village has a strong leadership and commitment in protecting the coastal region.** Its role in managing the beach is vital because these traditional institutions have values, norms, and rules that are observed by the community. In addition, the traditional village leaders are open to external parties, including government, the private sector, and universities, thus, making it easier to transfer knowledge and experiences, and arrive at partnerships with other stakeholders.
- 3. The village leaders and community groups in Yeh Gangga Beach have earned the trust and confidence of the village members and other stakeholders in the area.** The people have been open to accept new ideas because the leaders have taken great care in disseminating information about the programs and have been transparent in their activities and plans. The leaders have consistently encouraged open participation in discussing the programs with the community.
- 4. The management process was implemented through appropriate steps by identifying strategic issues and analyzing the root causes, and preparing strategic plans to address the identified issues.** An action plan was formulated that identified definite phases and measurable results based on the concerns and issues raised by the people. The zoning plan provided the structural basis to arrive at a harmonized solution to address the various uses of the beach. The process in arriving at a management plan was implemented in a transparent manner. A village companion/facilitator is important to oversee and ensure the proper preparation of the plan.

5. **One key factor to the success of the program is the motivator who is trusted by the village leaders and the community.** The motivator should be able to communicate, mediate, and negotiate decisions among stakeholders, and encourage participation from the community. The traditional village appointed a proper motivator who is respected by the community — he is one of the community leaders, with a good record as a police officer who also engages in fishing on his spare time, with good social and communication skills, open and transparent, and with no perceived personal interests.
6. **The national and local governments showed their strong commitment to the program and provided necessary support and facilitation in accordance with the local needs and capacities.** By doing so, they have earned the local community's trust such that intervention programs introduced by the governments to the area were easily adopted by the community.
7. **There is rising optimism in the development of Yeh Gangga Beach as a popular tourist destination, especially for surfing.** Considering its accessibility from key tourism destinations in the Kuta area, business opportunities and jobs that will arise from tourism and the traditional village's revenues from managing the beach area show promise. This optimism serves to further foster the community spirit for improving management efforts in the area.

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