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**Civil society  
in the Songkhla Lake Basin**

**by**

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## Summary

This paper introduces the support from civil society to the basin-level and de-central governance in the Songkhla Lake Basin (SLB).

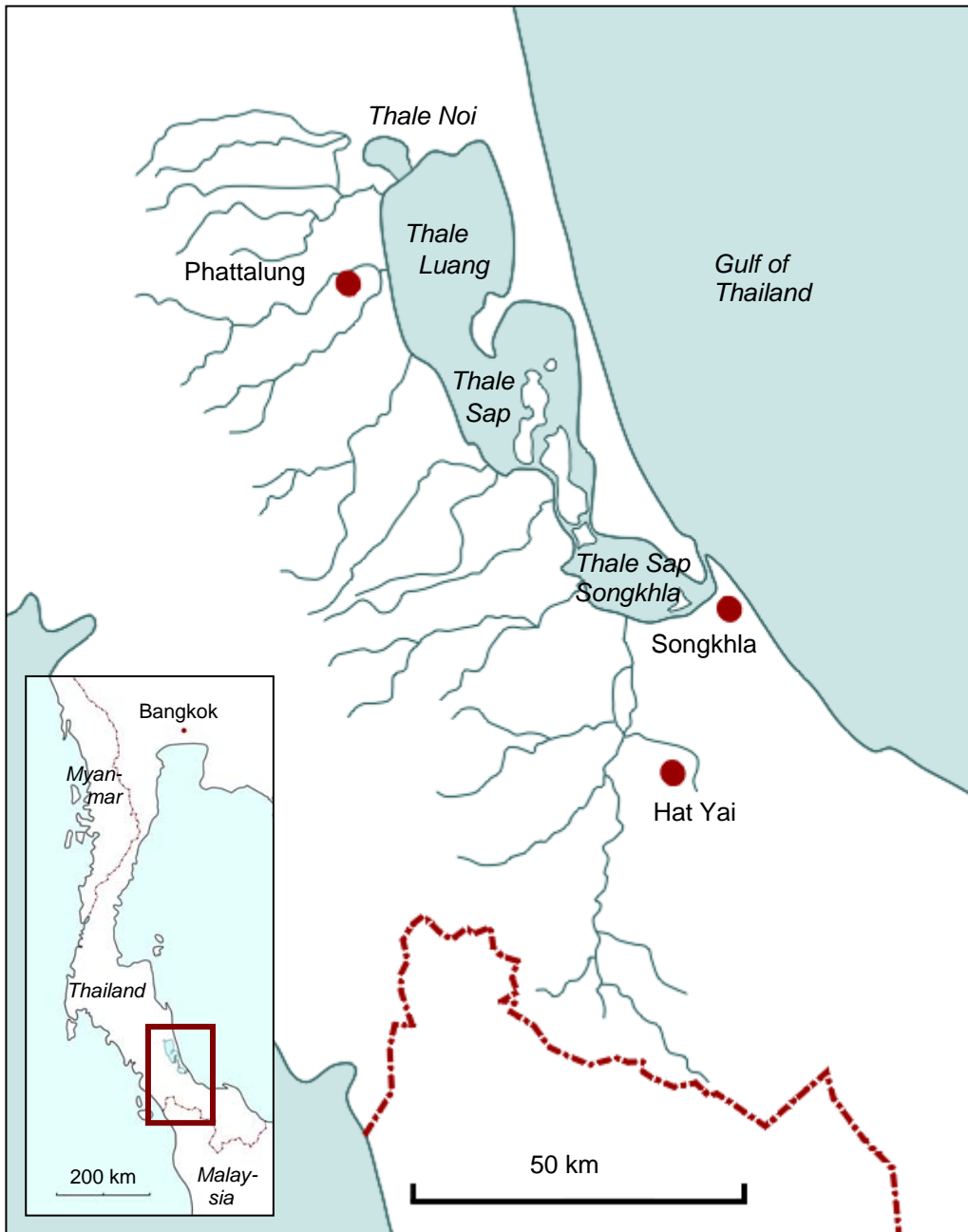
The basin has an active and entrepreneurial civil society that contributes effectively to resource conservation, livelihoods development and disaster preparedness. Examples of permanent civil society bodies are the SLB Board, a non-statutory board that collaborates with the two formal basin committees, providing guidance and coordination; and the SLB Women's Network, formed by various civil society groups with a variety of activities.

The successful achievements are characterized by confidence and good collaboration between civil society, the authorities, the private sector, and the academic community. It is often seen that civil society initiatives are recognized, supported and sometimes adopted by the authorities.

Civil society and the government system can share a vision and general, over-all objectives, but often apply different perspectives. They have different, but complementary competences, knowledge and resources, and can add value to each others' efforts in many ways. Both stand to win from dialogue and collaboration.

## Map

Figure 1 Songkhla Lake



Basin population (2010): 1.6 million

Basin area: 8,495 km<sup>2</sup>

Lake area: 1,040 km<sup>2</sup>

The basin reaches across Nakhon Si Thammarat, Phattalung and Songkhla provinces.

Source: PSU (2010)

# 1 Introduction

Songkhla Lake is the largest natural lake in Thailand. Its drainage basin has a long history of basin-level development planning, dating back to the Songkhla Lake Basin Planning Study (John Taylor & Sons et al., 1985); the EMSONG Project (DANCED, 1999); and more recently the Songkhla Lake Basin Master Plan (Sutiwipakorn and Ratanachai, 2005). The latter involved extensive community participation. The basin has rich but sensitive aquatic and terrestrial ecosystems and a broad range of resource-dependent livelihoods.

The present paper introduces the support from civil society to the basin-level and de-central governance in the basin.

## 2 Songkhla Lake and its basin

### 2.1 Physical geography

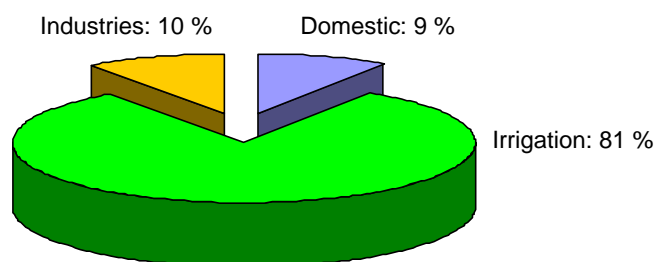
What is known as ‘*Songkhla Lake*’ is a water body of unique characteristics. The mixing of fresh water runoff and overland flow, and saline water from the sea, causes the salinity of Songkhla Lake water to vary spatially and temporally. Shown in Figure 1, the Songkhla Lake is actually a system of 4 connected lakes: Thale Noi (27 km<sup>2</sup>); Thale Luang (473 km<sup>2</sup>); Thale Sap (360 km<sup>2</sup>) and Thale Sap Songkhla (182 km<sup>2</sup>). The latter is connected to the sea by a 300 m wide inlet. Thale Noi is fresh and Thale Sap is brackish (around half of ocean salinity), while the salinity of Thale Luang is seasonal and somewhere in between. The average water depth of the system is around 1.4 m, varying between some 1.2 m in the dry season and some 2.2 m in the wet season.

The Songkhla Lake Basin (SLB) is located between the sea and a mountain range. The rainfall is around 1,800 - 2,100 mm/year with a pronounced seasonal variation. Approximately three-quarters of the rainfall is experienced during November – December.

### 2.2 Livelihoods and water utilization

Off-stream water uses are dominated by irrigation, as well as domestic and industrial uses, as shown in the figure below.

Figure 2: Water uses in the basin



Source: ILEC (2012)

In-stream water uses include a rich fisheries and aquaculture in the lake, as well as preservation of the various unique habitats and the related tourism and recreation.

Thale Luang has a small (and threatened) population of *Irrawaddy dolphins* (*Orcaella brevirostris*). About 4-5 dolphins are unintentionally trapped by fishing nets and die each year. It is estimated that a herd of 20 – 30 dolphins is currently living in the Songkhla Lake.

*Bird's nest harvesting* is a particular resource-based livelihood. Two types of swiftlets produce edible nests: Edible-nest swiftlet and black-nest swiftlet. Both are native to Thailand and are protected by law. Collection of bird's nests and its associated business have flourished in Songkhla Lake for more than 400 years. At present, the Thai government is reaping 500 million Baht for a 5-year concession grant to harvest on the Bird Nest Islands in Phattalung Province. In general, high quality bird's nest fetches around 75,000 – 90,000 baht (USD 2,500 – 3,000) per kg (Meesawat, 2002).

### 2.3 Management framework

Ministry of Natural Resources and Environment (MNRE) is in charge of water resources and the environment. Ministry of Agriculture and Cooperatives represents the dominant off-stream water demand. Other ministries with tasks related to water resources in the basin include Ministry of Energy; Ministry of Industry; Ministry of Public Health; Ministry of Social Development and Human Security; and Ministry of Tourism and Sports. Each ministry has an office in each province.

There are two formal Songkhla Lake Basin committees:

- *The Songkhla Lake Basin Development Committee (SLBDC)* was formed in 1993 as an inter-agency coordination body. It is appointed by the government and re-appointed by any new government (causing occasional interruptions in its work). By March 2009, it was chaired by the Minister of Natural Resources and Environment, with members representing 4 other ministries; NESDB and the Budget Bureau; 3 provincial governors; 10 experts and local academics; 6 community representatives; Office of Natural Resources and Environmental Policy and Planning (ONEP) (as secretary); and 2 representatives from de-central agencies (as deputy secretaries); totalling 28 members.

The SLBDC has responsibilities as follows: (1) Formulating policy for conservation and restoration of natural resource and environment in the basin; (2) proposing annual budgets for implementing the Songkhla Lake Basin Master Plan, and submit to the Cabinet for consideration; (3) overseeing, investigating and monitoring activities relating to conservation and restoration of natural resources and environment in the basin; including related activities conducted by other local government agencies; (4) appointing sub-committees as appropriate; and (5) other activities related to conservation and restoration of natural resource and environment in the basin, as assigned by the Cabinet.

- *The Songkhla Lake Basin Committee (SLBC)* was re-established in 2007 as a coordinating body for water resources management<sup>1</sup>. Like other basin committees in Thailand, it refers to the National Water Resources Committee and has secretariat support from Department of Water Resources. By August 2008, its membership included 2 provincial governors (Phattalung and Songkhla) (rotating chairpersons); 16 representatives from de-central government bodies; 9 water user representatives from agriculture, industry and tourism; and 7 experts; totalling 34 members.

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<sup>1</sup> Thailand is divided into 25 basins, 24 of which are *river* basins, while SLB is the only *lake* basin.

The two committees work well together, sharing knowledge and information, and sorting out between them any potential overlaps; but their work is affected by infrequent meetings; imperfect inter-agency dialogue; and limited abilities to promote and implement their various recommendations.

There is also an active and entrepreneurial civil society, mobilised under the non-statutory *Songkhla Lake Basin Board (SLB Board)*, which will be discussed in more detail in Chapter 3.

It should also be noted that there are 5 universities in Songkhla province. Notable is Prince of Songkla University (PSU), founded in 1968, which has been an important knowledge partner. PSU not only conducts research and thematic studies of the lake and its basin, but also plays an active role in its environmental management and resource-based development planning.

## 2.4 Seven challenges - and several opportunities

### *Seven challenges*

Challenges in the Songkhla Lake Basin include (Sutiwipakorn and Ratanachai, 2005):

- 1) **Forest & mangroves:** Steady decline of upstream forest and mangrove. The upstream forest area has decreased from over 40% to about 12.5% (Year 2004 statistics) of the basin area, during the past two decades. Only about 15,000 ha. of mangrove and wetland, or 1.7% of the basin area, is left.
- 2) **Sedimentation:** Soil erosion & sedimentation in waterways and lake, and erosion along the coast. Studies show that the sedimentation rate in Songkhla Lake is around 5.0 – 6.9 mm per year. At this alarming rate, without any remedial action, the lake will be filled in 300-400 years.
- 3) **Developmental conflicts:** Inappropriate and unplanned land use; conflicts between shrimp farming and paddy cultivation; and impacts of roads and other physical development on drainage and wetlands habitats.
- 4) **Water extraction:** Fresh surface water over-pumping (causing saline intrusion); and groundwater overuse. Annual groundwater surveillance data indicate that the extent of area where groundwater level is below sea level has expanded from 2,700 ha. in 1992 to 10,300 ha. in 2002. In some areas, it is more than 10 m below the sea.
- 5) **Increasing flood exposure:** Hat Yai, the major business city of southern Thailand, was devastated by floods in 1988, 2000 and 2011. Smaller cities and rural areas were also flooded, to varying degrees. Causes have been blamed, among other things, to bad city planning and inefficient water management.
- 6) **Fisheries:** Fishery exceeding capacity; fish migration is blocked; resources are over-used and in urgent need of restoration. There are currently over 2,000 bag nets and over 30,000 sitting cages in Songkhla Lake. One cannot place a 10-m radius circle in the lower part of Songkhla Lake without hitting a fishing gear.
- 7) **Pollution:** Solid waste and sewage disposal, and water pollution, including domestic wastewater; industrial wastewater; and wastewater from pig farms and shrimp farms.

### **Opportunities**

Amidst the above challenges, there are some potentials and important development opportunities, as follows:

- Continued development of resource-based livelihoods, in terms of quality and generated value as much as in terms of quantity.
- Good governance supported by civil society and local wisdom.
- Demand side management of water utilization.
- Capacity building and awareness-building for local governments and society as a whole.
- Eco-tourism development, spearheaded by entrepreneurs.

Figure 3: View from Ban Thale Noi



## **3 Civil society organizations**

SLB has an active and entrepreneurial civil society.

The formal de-central management levels are (apart from the provinces and districts) the tambons and villages, which maintain a close understanding of local concerns and development opportunities. They collaborate with the provincial and district levels administrations, and with civil society.

Civil society is, to varying degrees, active in temporary groups promoting specific initiatives, or can be organized as permanent bodies. Permanent bodies include:

- *Various community councils*, such as water user groups, and fisheries communities.
- *The SLB Board*, a non-statutory board providing informal basin-level guidance and coordination. It operates as a semi-formalized network, assembling (more or less) the members of the two formal bodies, including NGOs and some (but not all) government representatives. It is headed by an elected chairperson. Secretariat services are provided by Prince of Songkla University. This board has no legal basis (and no budget) and meets infrequently. Still, it is recognized by the people and the government.



- *The SLB Women's Network* that has been formed by various civil society groups with a variety of activities.

Below are given some examples of civil society activities in the SLB.

### 3.1 Resource conservation

#### ***Fisheries conservation***

Tambon Ta-Hin has 1,100 households, 4,000 people, and 235 registered fishing boats. The community council is an autonomous body established by the people and endorsed by Ministry of Labour and Social Welfare. Together with two adjacent tambons, the council advocates successfully against illegal fisheries. A no-fishing zone has been established (and is observed). Social sanctions are imposed against illegal fisheries. Fish stocks are replenished on a periodical basis from government hatcheries. Divergences of interests between farmers and fishers are sorted out in an orderly way.

The Tambon Ko Mak fishery community has successfully introduced fish conservation zones on a voluntary basis. Such good practices work well and are now emulated elsewhere and by the authorities.

On the other hand, in Ban Thale Noi (with around 200 fishing boats), a community-based fish conservation zone (of 100 ha) was attempted during 2005-2007, but had to be abandoned due to conflicting interests.

#### ***The Thale Noi elevated causeway***

The 14.5 km Thale Noi elevated causeway was built around year 2000 after a lengthy public debate (since around 1978).

The link has clear socio-economic benefits but potential environmental implications, if intersecting the wetlands area between Thale Noi and Thale Luang.

Consequencely, it was decided to choose an elevated causeway instead of a road embankment - increasing the costs from 20 to 700 million baht. That augmented budget was regarded by local community as worthwhile for protecting the wetland.

Figure 4: *The Thale Noi elevated causeway*



### 3.2 Savings and livelihoods

The Thung Ta-Sapao Wetlands Management Project was launched in 1995 by Department of Accelerated Rural Development and Department of Marine and Coastal Resources, in close collaboration with local communities. Livelihoods development is a major objective, aiming to retain people in the area. Organic farming is promoted, based on local wisdom, with biomass replacing inorganic fertilizers, and the use of pesticides minimized. Today, 600 households earn around 30 million baht (USD 1 million) per year cultivating high-quality chilli for export to Malaysia and Singapore. (The variety is called '*super-hot*' - it is in fact not extremely hot, but highly appreciated by the market).

A water user group has been formed, headed by a chairperson and with two members from each of the 6 participating villages. It operates with support from Department of Water Resources. A water service fee (covering treatment and distribution costs) can be charged if so agreed.

The Tambon Ta-Hin community council is active in livelihoods development, including the *One-Tambon-One-Product* scheme <sup>2</sup> (with sugar palm products); as well as ecotourism (with home stays); fisheries; and operation of a community fund.

The SLB Women's Network, via its member civil society groups, supports a variety of activities: Self-sustaining saving and microcredit (without government contributions, but with an interest-free loan from Siam Cement Company); latex trading; disaster preparedness; fisheries (including stock replenishment, fish drying and marketing support); and environmental restoration.

### 3.3 Disaster preparedness and mitigation

Tambon Ta-Hin is flood-prone. The community council undertakes disaster vulnerability mapping and preparedness. The council has prepared an inventory of people and cars (for evacuation purposes) and has established radio links to each village. A 10-days stock of emergency supplies is maintained. These measures are now being emulated elsewhere, in collaboration with the authorities.

On 1 January 2012 the council was able to cancel a false tsunami alarm, issued by one of the local authorities, hereby preventing confusion and disruption.

## 4 Why it works

The successful achievements are characterized by confidence and good collaboration between civil society, the authorities, the private sector, and the academic community. It is often seen that civil society initiatives are recognized, supported and sometimes adopted by the authorities.

The population in the basin has a reasonable level of education and information - and a high awareness of local and perhaps site-specific development needs. Traditional wisdom can sometimes provide options that are otherwise overlooked, for example in

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<sup>2</sup>

A rural livelihoods development and income generation policy, encouraging each tambon to concentrate on manufacturing and marketing of one product, characterized by specific local materials and particular skills. Originally devised in Japan, the scheme has been promoted in Thailand since 2001. See [www.thai-otop-city.com](http://www.thai-otop-city.com)

connection with high-value niche production and related promotion based on name recognition.

Visible achievements generate support, which will in turn add momentum and contribute to the consolidation of the development efforts.

On the other hand, like so many other development initiatives, those of civil society fail occasionally. Among the reasons are the following:

- Competition for finite resources (such as land or water) for different uses: cultivation, plantations and forest conservation.
- Conflicts of interest between farmers and fishers, for example related to drainage, flood protection and salinity control.
- In the case of fish stock conservation, most would agree to the purpose, but differences of opinion can exist regarding how to reach the goal. The same is the case for sewage and solid waste disposal.

*Figure 5: View of the entrance to the lake system*



## 5 The way forward

Given the SLB seven challenging issues, which resulted from the past unsustainable development, the SLB civil society, spearheaded by the SLB Board, has developed the project whereby communities in SLB and the Tonle Sap Lake Basin, in Cambodia, will exchange experiences, and together try to

- strengthen and consolidate IWRM-based governance, in collaboration among agencies, water users and other stakeholders;
- improve understanding of social, economic and environmental cause-effect relationships and policy options in support of sustainable, resource-based livelihoods in the future; and
- build understanding and raise awareness among agencies and residents about why and how to achieve and preserve a healthy state of the environment.

It is expected that the project will give rise to the following output and ripple effects:

- Better understanding of the coupled nature-society systems in SLB, and short- and long-term benefits from ecosystem service.
- The practicable policy guideline which will lead to restoration of the community livelihood of the SLB.
- Innovative rules, regulations and/or constitution stipulated by local governments in the SLB, adhering to better natural resources and environmental governance.
- Better adaptive capability of SLB community in the advent of climate change.

## 6 Conclusion

Civil society and the government system can share a vision and general, over-all objectives, but often apply different perspectives. They have different, but complementary competences, knowledge and resources, and can add value to each others' efforts in many ways. Both stand to win from dialogue and collaboration.

Capacity-building (including networking and *'learning-from-each-other'*) can strengthen the various bodies and initiatives and add value to their achievements.

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