

# Achieving Integrated Coastal Management Scaling Up throughout the Coastline of Selangor, Malaysia

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## Key Message

- The scaling up of an integrated coastal management (ICM) program throughout the entire coastline of the State of Selangor, Malaysia, was achieved through effective demonstration and replication of local-based ICM practice.
- Scaling up ICM programming was supported by state legislative measures which ensured sustainable budgetary allocation and continuous capacity development at the local level. The role of the Selangor Water Management Authority (LUAS), a leading state institution, as the facilitator was also critical.

the sustainable development of its entire coastline. The efforts to gradually scale up ICM practice throughout the state closely followed Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) Framework for Sustainable Development of Coastal Areas (SDCA) and LUAS Enactment of 1999. The gazettelement of ICM enabled LUAS to secure needed budgetary allocations and funds as well as commitments from the state government and other stakeholders.

## Background

Selangor's coastline, stretching from Bernam River to Sepang River (Figure 1), has always been a source of fascination. The coastal ecosystems in the area offer a variety of valuable habitats for numerous plant and animal species and provide important ecosystem services.

The scenic beauty and richness of the goods and services that coastal zones offer have made them popular areas for settlement, tourism, and other important businesses such as port hubs and transit points. However, population growth and excessive exploitation

## Abstract

Over the past 15 years, Selangor made significant progress in demonstrating the benefits of an ICM program. The implementation of ICM helped resolve several coastal use issues and convince the State government to support the development and implementation of strategies and management plans for



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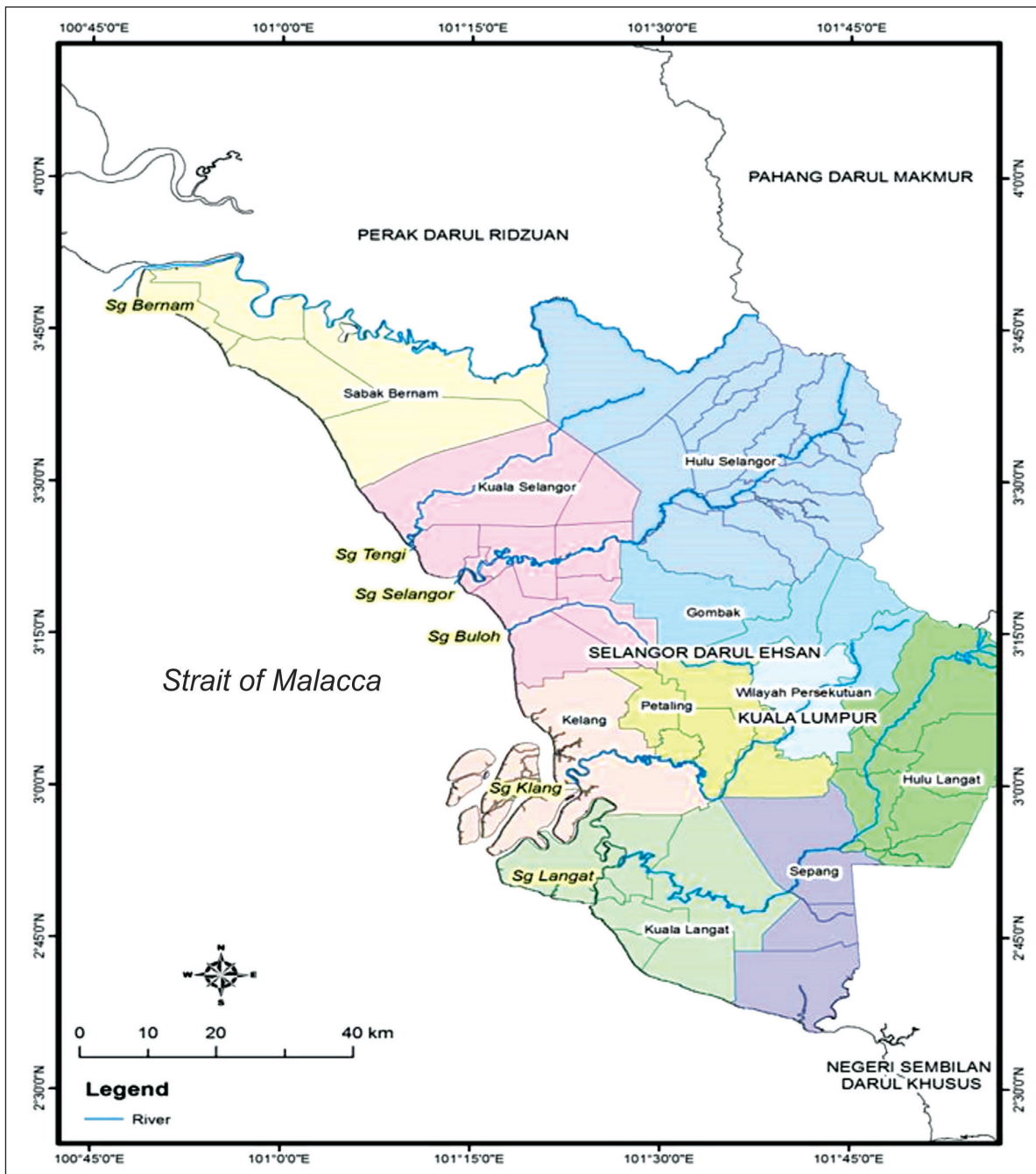
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of natural resources have exerted enormous pressure on the coastal ecosystems, leading to biodiversity loss, ecosystem degradation, coastal erosion, pollution, multiple use conflicts, and space congestion problems.

In order to address these problems and to preserve the coastal areas for present and future generations, PEMSEA provided the needed working

methodology for promoting effective coordination and integration of policies and functions of concerned agencies through the implementation of an ICM program (Chua, 2006). The State Government of Selangor adopted the ICM approach in 2001. In the past decade, the state government made significant progress in expanding its management plans and strategies for sustainable development by promoting ICM practices.

**Figure 1. Selangor coastline.**



## Approach and Methodology

In line with PEMSEA's Sustainable Development Strategy for the Seas of East Asia (PEMSEA, 2003), the Port Klang Coastal Strategy was formulated and adopted by the Selangor State Government in August 2007 (LUAS, 2005). The process for developing the coastal strategy followed PEMSEA's "Guide to Developing a Coastal Strategy" and entailed a series of consultations with various communities, government, and nongovernment organizations as the principal stakeholders (PEMSEA, 2001). The Coastal Strategy outlined a concerted action program to achieve the clearly defined vision and mission for the State's coastal areas. The strategy also served as a guide for future sustainable development in the area by addressing current and emerging issues and challenges.

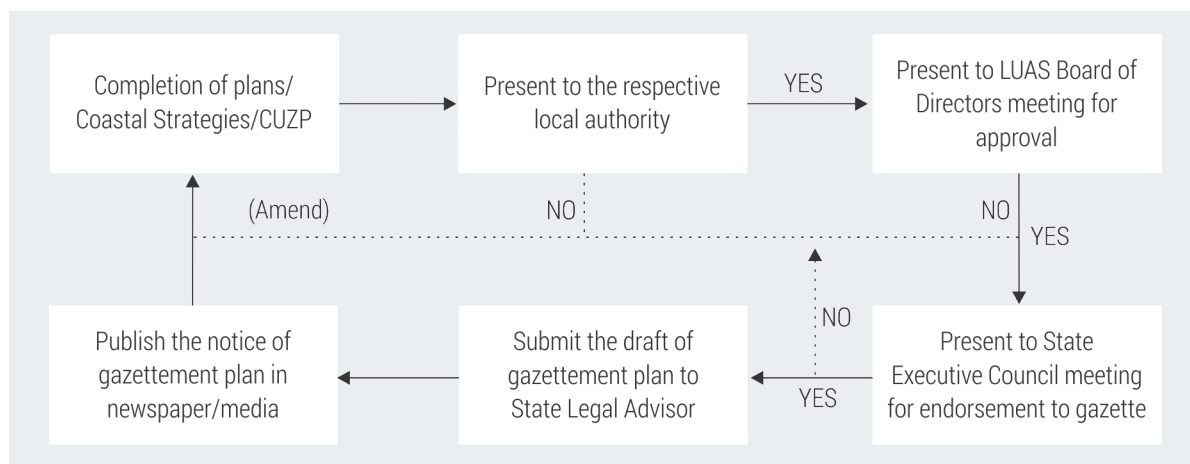
The Coastal Strategy also complemented the SDCA Framework which PEMSEA advocated starting 2007<sup>1</sup>. The action plans took into consideration the various sustainable development aspects focusing on habitat restoration and management, water use and supply management, pollution reduction, waste management as well as natural and man-made hazard prevention and management. This was to ensure that the numerous issues related to conflicting uses of

coastal resources, habitat loss, and pollution, identified in the early stages of the development of the Port Klang ICM program, were systematically addressed.

The process of developing the ICM program and plans in Selangor was in accordance with the LUAS Enactment of 1999 that required the state to develop and implement integrated management plans, as stated in Section 46. Under this section, LUAS was mandated to develop and implement an integrated management plan for the conservation and sustainable development of any water resources (LUAS, 1999). To start the implementation of ICM and the replication processes, LUAS secured the approval at its Board of Directors Meeting, chaired by the Chief Minister of Selangor State.

Thus, the state gazetted the Port Klang ICM Plan in 2010 and the Northern Selangor ICM Plan in 2013, while the Sepang ICM Plan was gazetted in 2015. Gazetting of the ICM Plans aimed to provide the legal basis for action plan implementation, particularly that of the Coastal Use Zoning Plans (CUZPs). The process of gazetting the ICM plans involved several steps (Figure 2).

**Figure 2. Flow chart of gazetting processes.**



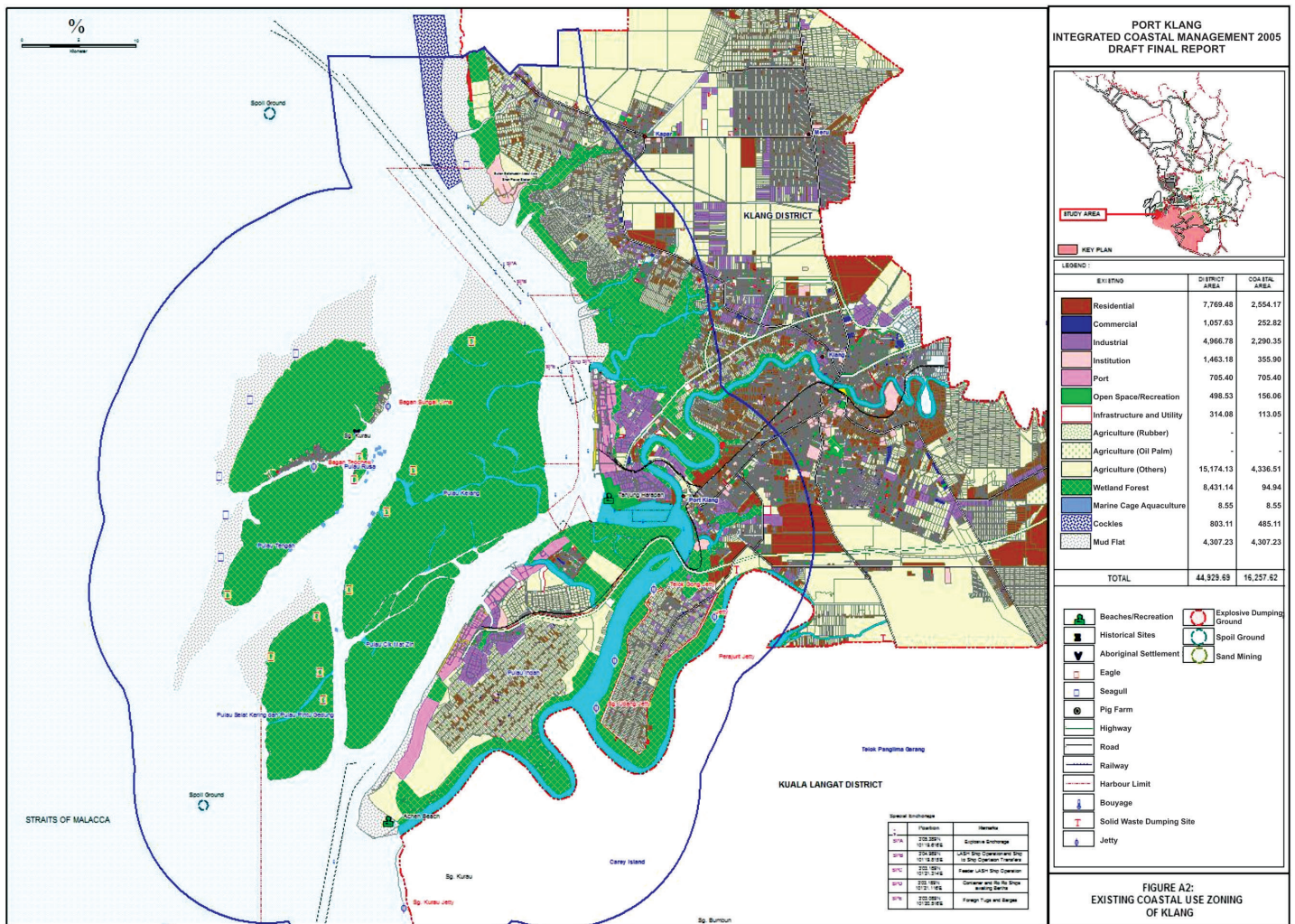
<sup>1</sup> For more discussion about the SDCA Framework, see Bonga and Chua (this volume).

The local government for each concerned district/council established the coordinating mechanism, developed coastal use zoning (Figure 3) and other action plans, and enhanced public awareness to facilitate the implementation of the ICM programs. Table 1 provides an overview of the activities accomplished by the local governments.

Since the gazettement of the ICM Plan was contingent on the LUAS Enactment, LUAS

served as the lead agency in coordinating the implementation in cooperation with all stakeholders. The necessary budget was allocated for local authorities and other stakeholders. LUAS also allocated an annual budget for ICM implementation covering the state's coastline, in addition to financial contributions from concerned stakeholders and local authorities. The budget for ICM implementation typically came from the State Economic Planning Unit under the development budget.

Figure 3. Integrated CUZP for Port Klang ICM site.



## Results

The ICM approach was proactive and equitable. It provided the needed sustainable development framework and processes for the State of Selangor to meet the needs of its coastal stakeholders through holistic and long-term socioeconomic and environmental planning. The implementation of an ICM program started in 2001 in Port Klang (Table 1), consisting of the Klang and Kuala Langat districts, with technical support from PEMSEA. The ICM approach was replicated in 2007 in Northern Selangor areas covering the entire coastline of Kuala Selangor and Sabak Bernam districts. In 2013, the ICM program was extended to Sepang, the last part of the state's coastal areas. The local governments of Sabak Bernam District Council, Kuala Selangor District Council, and Sepang Municipal Council were heavily involved in the development and implementation of their respective ICM programs. Thus, in over a span of 15 years, ICM coverage has expanded to include the entire 291-km coastline of Selangor.

In addition to ensuring that financing was made available for the implementation of the ICM

plans, the involvement of line agencies and other key stakeholders' was considered as one of the key indicators for the implementation of a successful ICM program and scaling up activities. Stakeholders played an important role in ICM plan development and implementation since the inception of the Port Klang ICM program (LUAS, 2005). They were actively involved in numerous workshops, trainings, and meetings. In addition, the Coastal Strategies for Port Klang, Northern Selangor, and Sepang ICM sites, which served as the framework plan for integration and implementation of various activities, were formulated based on stakeholder feedback and recommendations. The action plans provided the basis for the development of annual municipal and district council development plans; allocation of an annual budget; and the identification of roles and responsibilities of various concerned line agencies. The effectiveness of ICM as a tool for sustainable management of the Port Klang coastline helped resolve many coastal use issues. This convinced the state government to expand the implementation of ICM to Northern Selangor and Sepang District, thereby expanding ICM coverage to all its coastal areas.

**Table 1. Basic information on the implementation of ICM program in the State of Selangor.**

District	Klang	Kuala Langat	Kuala Selangor	Sabak Bernam	Selangor
Total land area (km <sup>2</sup> )	626.78	857.75	1,056.32	1,194.55	619
Total coastline (km)	76	80	60	60	15
Total population	110,000	21,000	52,302	50,901	28,300
Gross domestic product	5.8% (2013)				
Coastal Strategy	Port Klang Coastal Strategy Implementation Plan		Northern Selangor Coastal Strategy Plan		Selangor Coastal Strategy Action Plan
Coordinating mechanism	established/ functioning				
ICM program developed and implemented	2001-2007		2011-2013		2013-2014
Zoning plan established	2009 (gazetted)		2013 (gazetted)		2015 (gazetted)
Budget allocated	Average RM 200,000 (about US\$ 48,000) yearly				
Current status	continuous				

## Lessons Learned

Implementing ICM in Selangor in the past 15 years has provided many valuable lessons:

1. The integrated planning and management approach is in line with and is supported by LUAS Enactment of 1999, thus providing a **legal basis** for LUAS to facilitate and **promote ICM program development and implementation** and to play a lead role in scaling up to cover the entire coastline.
2. The success of Port Klang as the first pilot site of PEMSEA generated interest, confidence, and capacity to systematically undertake ICM practice, which provided the **local working model for ICM** scaling up to other coastal areas.
3. The **gazetting process ensures long-term implementation of ICM program** with opportunity to secure needed funds from the state government. It also ensures verification of the appropriateness and effectiveness of ICM program, a process that leads to internalization of ICM in planning and management of the coastal areas.
4. A **state lead agency** such as LUAS **plays a critical role** in coordinating, facilitating, and streamlining ICM practices into the state economic development program.
5. The scaling up of ICM practices throughout the entire coastline of Selangor demonstrates the importance of **continuous capacity development efforts at the local level**.
6. The **involvement of local government and collaboration from stakeholders are prerequisites for the successful implementation of ICM programs**. Strong political will and commitment, public awareness, and improved management capacity are important drivers, not

only for program achievements and sustainability, but also for addressing current and emerging challenges arising from continued degradation caused by anthropogenic activities and climate change.

7. **Continuous support and funds** from the state government have a positive impact on the implementation of the action plan to the entire Selangor coasts.

## References

- Chua, T.-E. 2006. The Dynamics of Integrated Coastal Management: Practical Applications in the Sustainable Coastal Development in East Asia. GEF/UNDP/IMO Regional Programme on Building Partnerships in Environmental Management for the Seas of East Asia, Quezon City, Philippines.
- LUAS (Selangor Water Management Authority). 1999. Selangor Water Management Authority Enactment of 1999. State Government of Selangor, Malaysia.
- LUAS (Selangor Water Management Authority). 2005. Port Klang Coastal Strategy Implementation Plan. State Government of Selangor, Malaysia.
- PEMSEA (Partnerships in Environmental Management for the Seas of East Asia). 2001. Guide to Developing a Coastal Strategy. RAS/98/G33/A/1G/19. GEF/UNDP/IMO Regional Programme on Building PEMSEA, Quezon City, Philippines.
- PEMSEA (Partnerships in Environmental Management for the Seas of East Asia). 2003. Sustainable Development Strategy for the Seas of East Asia. GEF/UNDP/IMO Regional Programme on Building PEMSEA, Quezon City, Philippines.