



# PEATLAND MANAGEMENT BASED ON LOCAL WISDOM IN GIAM SIAK KECIL LANDSCAPE IN RIAU PROVINCE, INDONESIA

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The work of rehabilitation of peatland ecosystems in Riau Province, Indonesia by Yayasan Gambut is partly supported by IFAD and GEC through TAKE-SMPEM Programme.

## Overview

The Giam Siak Kecil Peatland Landscape covers more than 700,000 ha in Bengkalis and Siak Districts, Northern Riau. 705,271 ha of the area has been declared as a Man and Biosphere Reserve (Giam Siak Kecil – Bukit Batu Biosphere Reserve) in 2009 and contains two significant government-designated conservation areas, i.e. Bukit Batu and Giam Siak Kecil Wildlife Reserve.

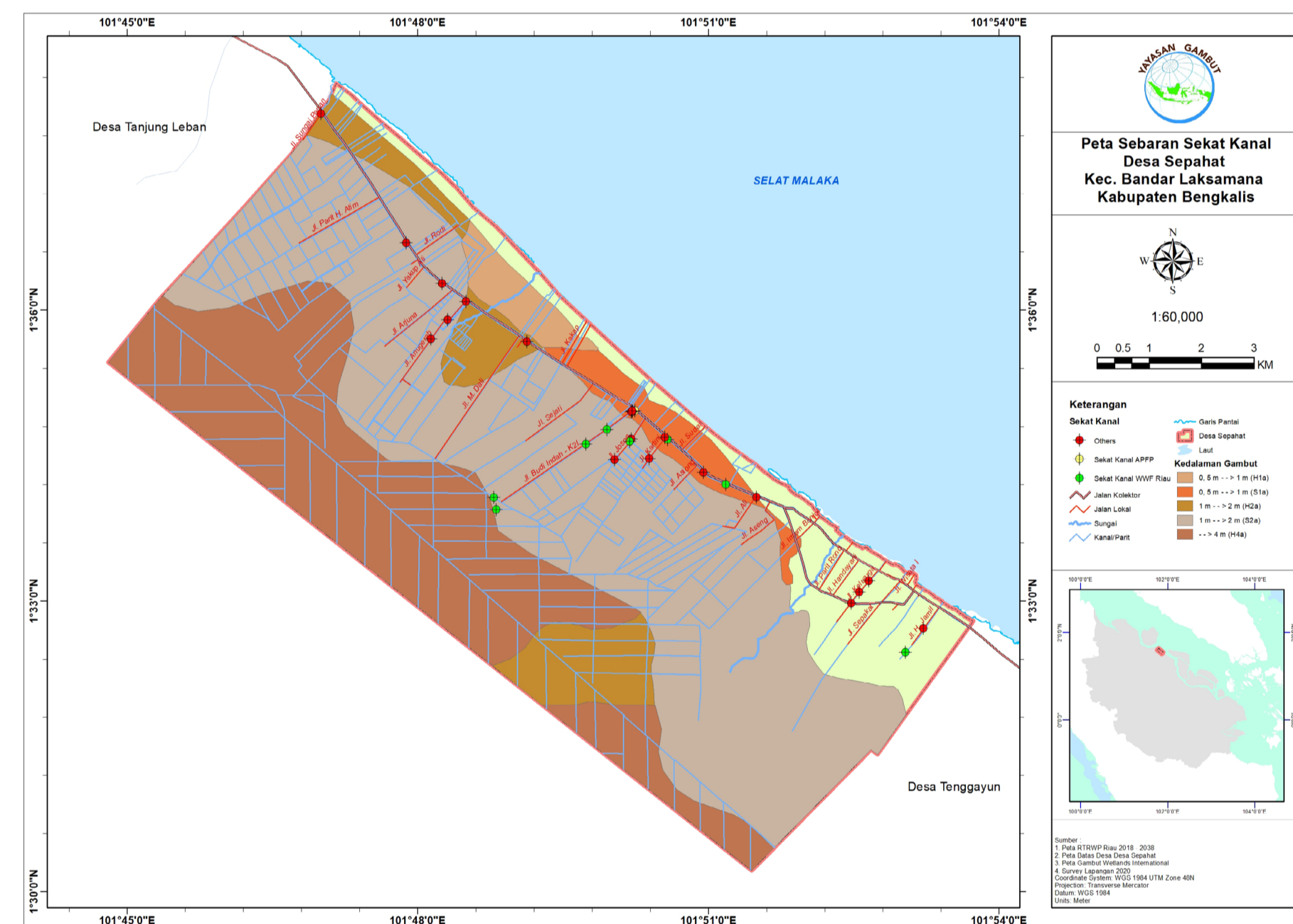
Sepahat Village, located in the Transition Zone of Giam Siak Kecil-Bukit Batu Man and Biosphere Landscape, faces almost annual challenge of peatland fires. The village has 90% of its administrative area on peatland, covering 9,056 ha, which has been degraded with massive canal construction within the area. There is a 360 km of drainage canals which has led to overdrainage and vulnerability to fire. From 2010 to 2018 there were 3,655 hotspots detected in the village.



## Peatland Rewetting

The community in Sepahat Village is aware of the importance of rewetting peatlands in an effort to prevent fire, so since 2010 various parties have been supporting the Sepahat Village by constructing canal blocks to rewet the fire-prone peat areas in the village.

To date, a total of 28 canal blocks have been built to restore est. 1,500 ha of degraded peat areas. Community awareness through rewetting the degraded peatlands has motivated the community and village government to develop commodities that are adaptive to the rewetted areas.



Map of Canal Blocking in Sepahat Village.

## Community Fire Patrol

The Sepahat village government established a fire-care community in 2009 with 20 members on duty:

1. Conduct patrols to fire-prone areas in the village;
2. Encourage farmers to practice non-burning agricultural cultivation; and
3. Establish partnerships with parties related to fire prevention and control efforts in Sepahat Village

Designed by Yap Ni Yan

## Paludiculture

Support by the village government to the community fire patrol by allocating 35 ha to be planted with forest trees. So far 15 ha planted with forest trees and 13 ha with sago palms. Paludiculture by planting sago palm is an initiative replicated from Giam Siak Kecil Wildlife Reserve, which is adaptive to inundated peatland and also an effort to improve sustainable livelihood in Sepahat Village.



Sago Planting.

## Zero Burning Agriculture

To tackle the ongoing disaster of fires and haze that harms human health and the environment, since 2014 the Indonesian Government has strictly banned the use of fire to clear peatland areas for agriculture. In Sepahat Village, zero burning agriculture has been implemented by pineapple cultivation.



Zero Burning Pineapple Cultivation in Sepahat Village.