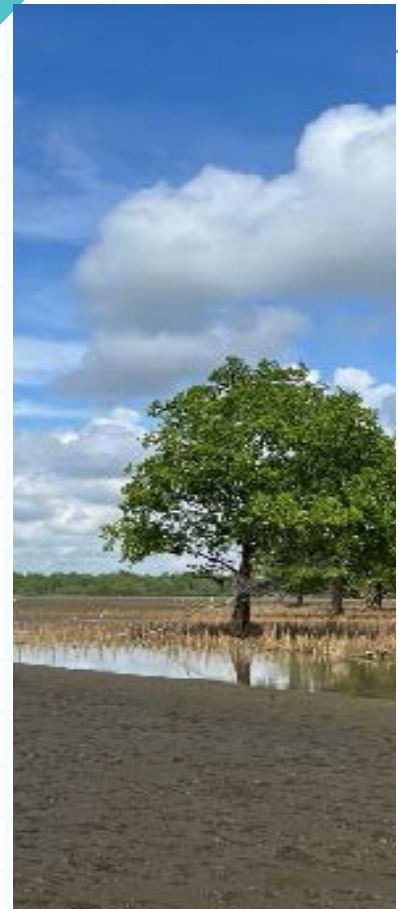
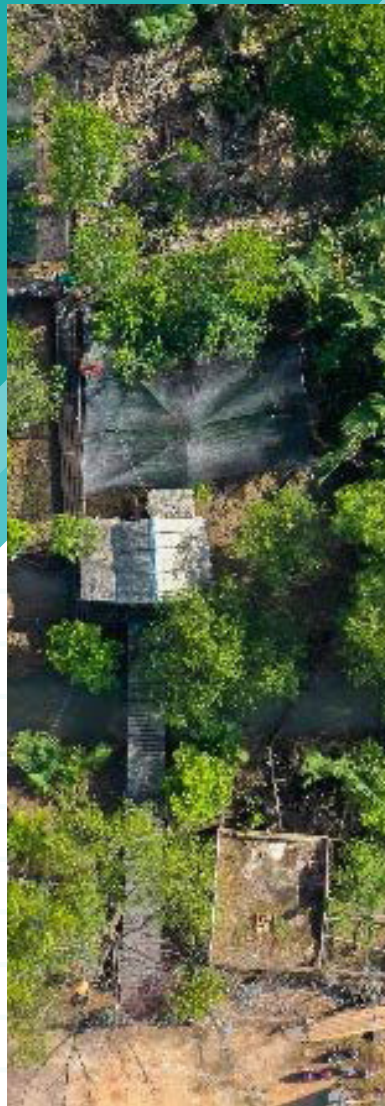


# Profile of Action Arena

## Sungsang Mangrove Restoration and Ecotourism (SMART)



Project Flyer #1 | June 2024

Implementing partners



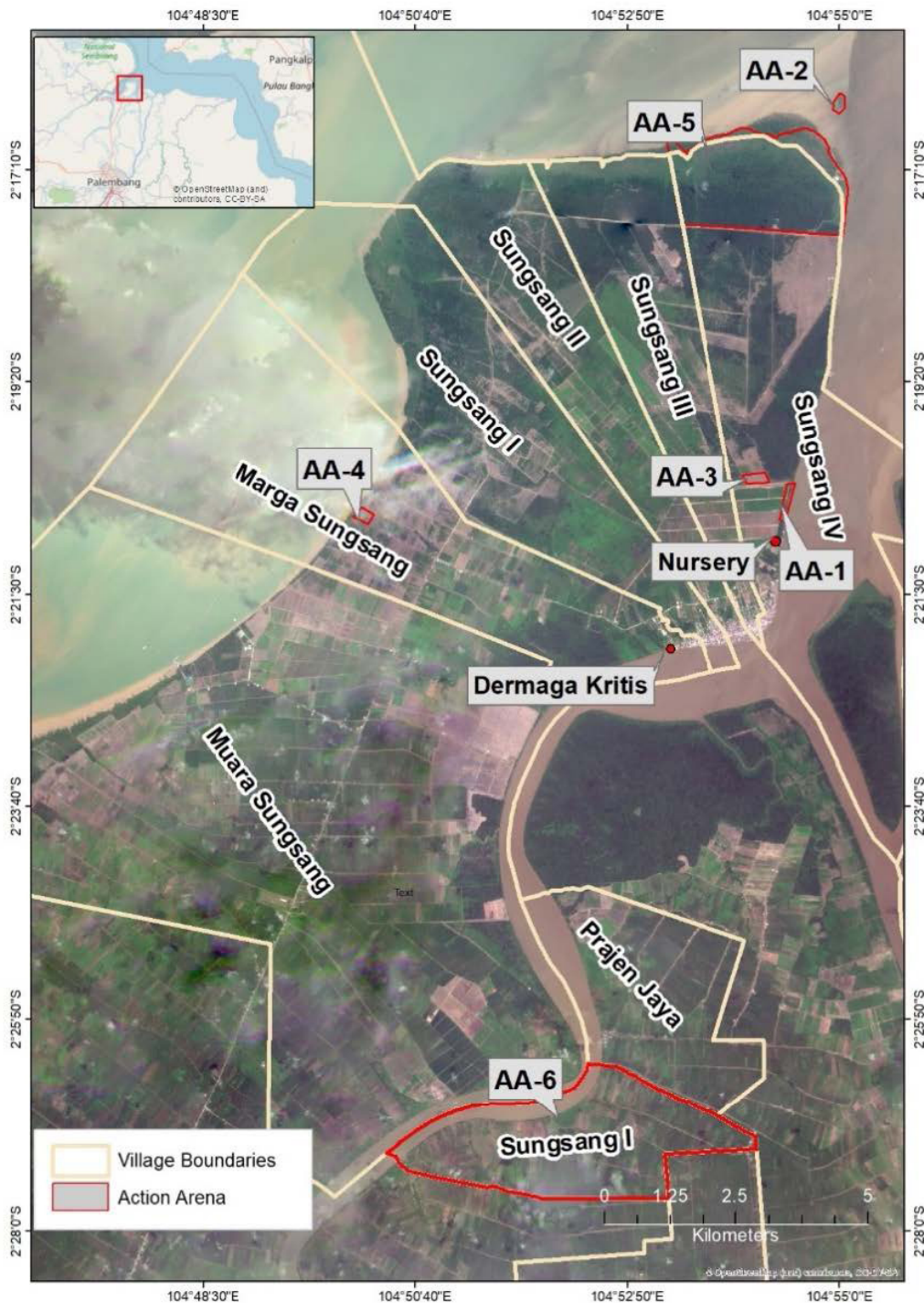
Supporting partner

**TEMASEK**  
FOUNDATION

## Profile of Action Arena

CIFOR-ICRAF and partners, Sriwijaya University and the South Sumatra Watershed Forum (*Forum DAS Sumsel*) are conducting participatory action research (PAR) to develop locally accepted and sustainable business models in the Sungsang area of Banyuasin District, South Sumatra Province. This PAR will eventually allow communities to generate sustainable incomes from mangrove restoration; strengthen local

policies for mangrove restoration; and contribute to national and global mangrove restoration agendas. The project, which runs from 2021 to 2025 in collaboration with the Banyuasin District Government, is supported by Temasek Foundation (TF), Singapore. As per June 2024, there are six action arenas in three villages and a community-based mangrove nursery (Figure 1).



**Figure 1. Action arenas in Sungsang**  
(Restoration arenas: AA-1, AA-2, AA-3, AA-4, AA-6); Protection arena: AA-5)

## Mangrove restoration arenas

### Action Arena 1 (AA-1)

#### • About AA-1

AA-1 is a degraded green belt area in Sungsang IV Village. The aim of mangrove planting in the arena is to strengthen the green belt to protect land from high tides and abrasion. The landward part of the area will be developed to establish Sungsang Mangrove Arboretum as part of an 'ecoedutourism' site integrated with the arena's nursery area.

#### • Action arena manager

A tree adoption group under the Community Village Forest Management Institution or *Lembaga Desa Pengelola Hutan Desa* (LDPHD)

#### • Restoration status as per June 2024

- » A total planted area of 1.7 hectares in 41 monitoring grids
- » 2,916 local mangrove seedlings planted
- » Planted species: *Bruguiera gymnorrhiza* (BG), *Rhizophora apiculata* (RA), *Sonneratia alba* (SA) and *Sonneratia caseolaris* (SC)

#### • Business model development status as per June 2024

- » The LDPHD has established a tree adoption collaboration scheme with a private company, and activities will be implemented in July 2024



Figure 2. Initial conditions in AA-1 prior to mangrove planting



Figure 3. Current conditions in AA-1 after mangrove planting



Figure 4. Monitoring grid in AA-1

### Action Arena 2 (AA-2)

- About AA-2**

AA-1 is a sand bank island in Sungsang IV Village. Known locally as *Pasir Hitam*, it is a mangrove ecotourism attraction promoted by the community.

- Action arena manager**

A tree adoption group under the Community Village Forest Management Institution or *Lembaga Desa Pengelola Hutan Desa* (LDPHD)

- Restoration status as per June 2024**

- » A total planted area of 0.08 hectares in two monitoring grids
- » 350 local mangrove seedlings planted
- » Planted species: *Avicennia marina* (AM), *Rhizophora stylosa* (RS), *Sonneratia alba* (SA) and *Sonneratia caseolaris* (SC)

- Business model development status as per June 2024**

- » The project is supporting the development of ecotourism through enrichment planting of mangroves, and tourism infrastructure with the construction of wooden tree houses.



Figure 5. The sand bank island in AA-2



Figure 6. A wooden tree house as part of the mangrove ecotourism development in AA-2



Figure 7. Monitoring grid in AA-2

### Action Arena 3 (AA-3)

**About AA-3**

AA-3 is an abandoned degraded area of former agricultural land in Sungsang IV Village.

**Action arena manager**

*Pembibitan Sejahtera* group under the Community Village Forest Management Institution or *Lembaga Desa Pengelola Hutan Desa* (LDPHD)

**Restoration status as per June 2024**

- » Total planted area of 7.7 hectares in 177 monitoring grids
- » 31,089 local mangrove seedlings planted
- » Planted species: *Bruguiera gymnorrhiza* (BG), *Kandelia candel* (KC), *Rhizophora mucronata* (RM) and *Rhizophora apiculata* (RA)

**Business model development status as per June 2024**

- » The project is supporting collaborative planting and mangrove management with stakeholders in Sungsang and beyond (planting with the local branch of the national police, and air and water police corps (*Polairud*))



Figure 8. Initial conditions in AA-3 prior to mangrove planting



Figure 9. Current conditions in AA-3 after mangrove planting



Figure 10. Monitoring grid in AA-3

### Action Arena 4 (AA-4)

**About AA-4**

AA-4 is a privately owned area of degraded failed coconut plantation land in Marga Sungsang Village.

**Action arena manager**

A community mangrove forest farmer group called *Kelompok Tani Hutan Mangrove Parit 2 Dusun IV*

**Restoration status as per June 2024**

- » Total planted area of 5.8 hectares in 122 monitoring grids
- » 13,998 local mangrove seedlings planted
- » Planted species: *Bruguiera gymnorrhiza* (BG), *Kandelia candel* (KC), *Rhizophora mucronata* (RM) and *Rhizophora apiculata* (RA)

**Business model development status as per June 2024**

- » The project is facilitating a community enterprise cultivating crabs using silvofishery techniques. Crab cultivation is ongoing in two ponds covering 0.319 hectares, with estimated production of around 240 kg for the first harvest.



Figure 11. Initial conditions in AA-4 prior to mangrove planting



Figure 12. Current conditions in AA-4 after mangrove planting

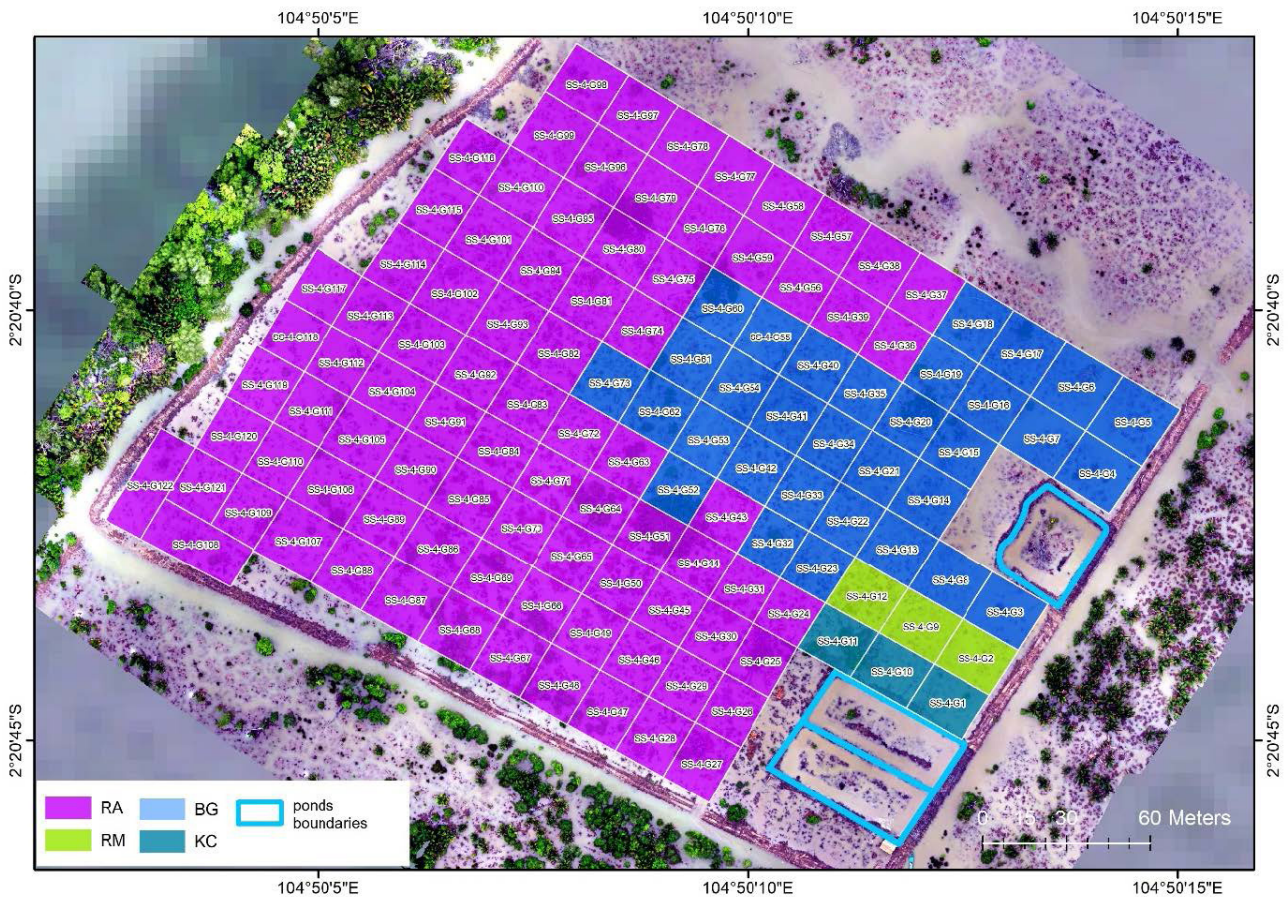


Figure 13. Monitoring grid in AA-4

### Action Arena 6 (AA-6)

- **About AA-6**

AA-4 is home garden area in Teluk Macan Hamlet, Sungsang I Village.

- **Action arena managers**

The Teluk Macan Hamlet, consisting of 237 households.

- **Restoration status as per June 2024**

» This action arena is currently undergoing preparations for implementation. The community plans to plant *sengon*, a softwood tree species (*Sengon*) along approximately four kilometres of river side and fruit trees (sapodilla and mango) in home gardens belonging to 237 households.

- **Business model development status as per June 2024**

» Fruit production from home gardens



Figure 14. Community sengon nursery in Teluk Macan Hamlet

## Protection arena

### Action Arena 5 (AA-5)

- **About AA-5**

Mangrove protection is ongoing in AA-5, an area of state-owned protection forest estate or *kawasan hutan*. With support from KPH Unit III Banyuasin, a provincial-level technical unit under the Ministry of Environment and Forestry (MoEF), the community of Sungsang IV Village received facilitation and support in submitting an application for a Village Forest management permit to the Directorate General of Social Forestry and Environmental Partnerships (PSKL). An application was submitted on 28 May 2022, followed up with a technical verification by PSKL on 17 March 2023, and PSKL Decree No. SK.6219/MENLHK-SKL/PKPS/PSL.0/6/2023 granting approval to the Community Village Forest Management Institution or *Lembaga Desa Pengelola Hutan Desa* (LDPHD) to manage 553 hectares of protection forest estate for a period of 35 years. CIFOR is providing capacity building to LDPHD members on mangrove management (seedling production, planting and monitoring techniques) and planning through a business model canvas workshop. In 2023, the LDPHD signed a collaboration agreement with a private company for social forestry development in AA-5.

- **Action arena manager**

The LDPHD in Sungsang IV Village



Figure 15. AA-5, the village forest for social forestry site in Sungsang IV





## Beyond the action arenas

### Support for youth and women group for home enterprises

The project is also actively engaged in supporting local youth and women's groups in mangrove-based home enterprises and participating in local exhibitions and events. Training and follow-up activities are being planned for micro and small food enterprises in the villages, and will be conducted in collaboration with the regional development bank.



Figure 17. Support for local businesses beyond the action arenas

## Local policy engagement

The project is also actively engaged with local policymakers to promote enabling conditions, sustainability and scalability of the programme by:

- Engaging with village administrations to support the development of village regulations as legal frameworks for mangrove ecosystem management and protection on the ground, including zonation and activities for protection, utilization, planting and maintenance of mangroves in villages;
- Engaging with the Banyuasin District Government to establish a regional mangrove working group or *Kelompok Kerja Mangrove Daerah* (KKMD) as a platform for multistakeholder collaboration in supporting mangrove management in the District;
- Engaging with the provincial government to integrate mangrove restoration activities into existing development and environment programmes.



Figure 18. Local policy engagement activities at the village and District level

 **Contact person**

**Sonya Dyah Kusumadewi**  
CIFOR-ICRAF

 [s.dyah@cifor-icraf.org](mailto:s.dyah@cifor-icraf.org)

 **Project website**

For further information on this action research,  
visit our website

[cifor-icraf.org/community-business-mangrove/](https://cifor-icraf.org/community-business-mangrove/)



**CIFOR-ICRAF**

The Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) harnesses the power of trees, forests and agroforestry landscapes to address the most pressing global challenges of our time – biodiversity loss, climate change, food security, livelihoods and inequity. CIFOR and ICRAF are CGIAR Research Centers.

