**Newsletter #1** February 2024







Photo by Ricky Martin/CIFOR-ICRAF

# **Sungsang Mangrove Restoration and Ecotourism** (SMART)

Implementing partners









In collaboration with

Supporting partner





Figure 1. The welcome gate built by the community in Sungsang IV Village

### About the project

CIFOR-ICRAF Indonesia, University of Sriwijaya, and South Sumatra Watershed Forum (Forum DAS Sumsel) are undertaking a Participatory Action Research (PAR) to develop locally accepted and sustainable business models in Sungsang Area, 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 Government of Banyuasin District in South Sumatra Province, is supported by Temasek Foundation, Singapore. This newsletter provides updates on the project in 2023.

# Progress in action arenas and the mangrove nursery

In 2023, alongside communities, the action research progressed in five action arenas (AAs), as well as

a community-based mangrove nursery in Sungsang IV and Marga Sungsang Village. The five AAs are divided into four restoration arenas and one protection arena. The research team from CIFOR-ICRAF and Sriwijaya University support the community to develop a systematic planting and monitoring system for mangrove restoration in AAs using a grid system.<sup>1</sup> They also provide relevant capacity building for mangrove management and business model development. Together with Forum DAS Sumsel team, CIFOR-ICRAF strengthens community institutional capacity, especially related to local policy development, to support sustainable mangrove management in the research site. In the mangrove restoration arenas, mangrove replanting or enrichment planting are the major activities. Conversely, the Village Forest Management Group (LPHD) will develop a sustainable ecotourism business model in the protection arena. The restoration AA is protected and monitored by the community to ensure mangrove growth. In addition, the protection arena supports conservation of the remaining natural mangrove covers.

<sup>1</sup> The action arena is divided into 20m x 20m grids.

### Table 1. Action arenas and progress of activities

| Action arena   | Mangrove restoration  | Area protection and monitoring   | Business model development  |
|--|---|--|---|
| Restoration arena  |   |  |   |
| AA-1: Degraded<br>greenbelt area in<br>Sungsang IV, 0.45 ha<br>(coastal) and 1.25 ha<br>(land).      | Replanting degraded area with over 2,900 local mangrove seedlings (equal to 1.7 ha).  | Replanting for<br>strengthening green<br>belt to protect land from<br>coastal erosion;<br>41 mangrove replanting<br>grids are monitored. | A community group will manage<br>it as a mangrove ecoedutourism<br>attraction site, mainly as<br>Sungsang Mangrove Arboretum<br>linked with mangrove nursery.<br>The arboretum will showcase all<br>mangrove species in Sungsang.<br>The Tree Adoption Programme<br>also plans to promote AA-1. |
| AA-2: Sand Banks<br>(Pasir Hitam Island), in<br>Sungsang IV, 6.16 ha.                                | Enrichment planting of 350 local<br>mangrove seedlings (equal to 0.08<br>ha).   | Mangrove enrichment<br>planting to optimize<br>natural regeneration;<br>two mangrove replanting<br>grids are monitored.                  | A community group will manage<br>it as a mangrove ecoedutourism<br>attraction site. The Tree Adoption<br>Programme also plans to promote<br>AA-2.   |
| AA-3: Degraded<br>land adjacent to the<br>protected forest within<br>Sungsang IV Village,<br>7.7 ha. | Replanting with over 20,000 local mangrove seedlings.   | 173 mangrove replanting grids are monitored.   | A community group will manage<br>the replanting and monitoring<br>activities, and a payment for<br>environmental services (PES)<br>scheme will be developed.  |
| AA-4: Coastal area<br>in Marga Sungsang<br>Village, 5.8 ha.  | Replanting with 14,169 local<br>mangrove seedlings with<br>silvofishery technique.  | 122 mangrove replanting grids are monitored.   | A community group will manage<br>it as a mangrove crab business<br>using a silvofishery approach.   |
| Protection arena   |   |  |   |
| AA-5: Village forest<br>of ± 553 ha (social<br>forestry licence) in<br>Sungsang IV Village.          | N/A   | The community has been<br>licensed to manage ±<br>553 ha of mangrove<br>forest for conservation<br>and sustainable<br>ecotourism.        | The Village Forest Management<br>Group (LPHD) will develop a<br>business model.   |
| Mangrove nursery   |   |  |   |
| Community-based<br>nursery with<br>production capacity<br>>50,000 of local<br>mangrove seedlings.    | Supporting mangrove restoration<br>and community business by<br>producing local mangrove<br>seedlings such as Kandelia candel,<br>Rhizophora apiculata, Rhizophora<br>mucronata, Bruguiera gymnorrhiza,<br>Avicennia marina, Sonneratia sp. | A small community<br>group is in charge of<br>operations, maintenance,<br>and monitoring of this<br>semi-permanent facility.             | Mangrove seedlings will be<br>produced as a business and<br>be integrated into the Tree<br>Adoption Programme.  |



Figure 2. Map of action arena in Sungsang IV and Marga Sungsang Village

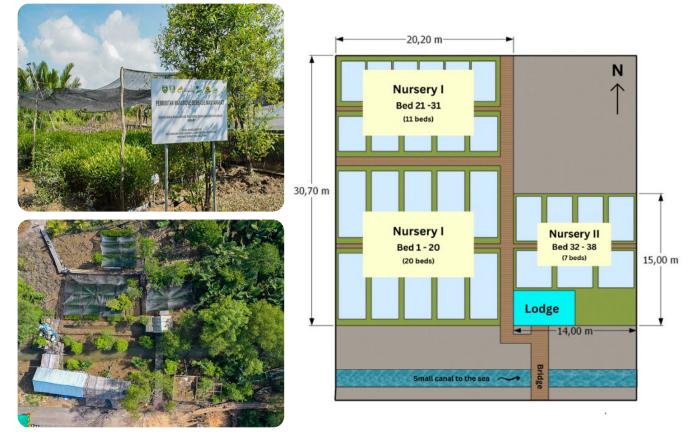


Figure 3. Layout and facility at community-based mangrove nursery in Sungsang IV Village

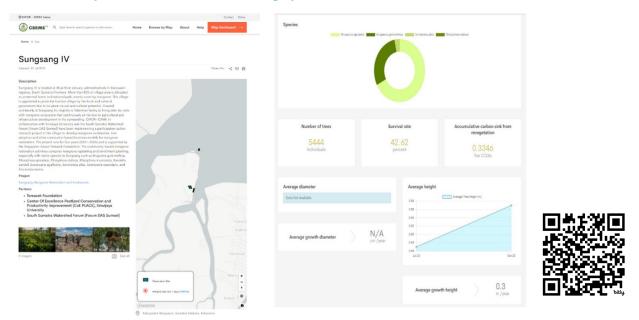


**Figure 4. Mangrove replanting and business model development activities in action arenas** (clockwise from top left: AA-1, AA-2, AA-3, and AA-4)

## **Highlights from 2023**

Apart from mangrove restoration and business model development at AAs in the villages, the project had several other highlights:

### 1. Community-Based Restoration Monitoring System (CBRMS)



#### Figure 5. Display of CBRMS platform on the website

CIFOR-ICRAF developed an innovative mobile application and online dashboard to support community-based restoration activities, especially for monitoring. The SMART project adopted a Community-Based Restoration Monitoring System (CBRMS) to monitor mangrove restoration. Visit the CBRMS website through this link or the QR code for updates on mangrove restoration in the Sungsang Area.

#### 2. Visit from the Minister of Tourism and Creative Economy to SMART project site

Sungsang IV was selected as one of the 75 best tourism villages in Indonesia for 2023. As part of the award selection, Sandiaga Uno, Minister of Tourism and Creative Economy, visited the village in May 2023. His visit included mangrove planting with the community and observation of the community-based mangrove nursery. To learn more, click here for our blog article or scan the QR code below.



Figure 6. Visit from Minister of Tourism and Creative Economy to Sungsang IV Village

# 3. Policy workshop and supporting local policy development in Sungsang IV Village with South Sumatra Watershed Forum

Forum DAS Sumsel, in collaboration with CIFOR-ICRAF, successfully implemented three levels of policy workshops (village, district, and province) for sustainable mangrove restoration and management in February-March 2023. They led to a recommendation to mainstream mangrove management as a policy priority at local level. These workshops will be followed up with development of Sungsang IV Village Regulation and establishment of a regional task force at district level. The facilitation process for the Village Regulation development began in October 2023.



Figure 7. Three level workshops (village, district, and province) were implemented to support local policy development on sustainable mangrove restoration and management

# 4. SMART action arena as potential tourist attraction and "natural laboratory" for local students and researchers

In 2023, the SMART AA, especially the community-based nursery, received more than 1,300 official visitors. These included national and local university students around Palembang for field courses, group activities and research. In 2023, there were 10 ongoing student theses based on research field work. The visits can hopefully help promote ecotourism development in the Sungsang Area and stimulate the local economy.



Figure 8. SMART action arena becomes a "natural laboratory" for university students for field visits and research

### 5. Supporting planting activities of other stakeholders

As part of the action research's contribution, the community-based nursery supplied mangrove seedlings to support planting activities conducted by other stakeholders. In 2023, the nursery provided more than 12,000 mangrove seedlings for planting activities conducted by village government, military and police, forest agencies, local universities, etc. around Sungsang Area.



Figure 9. The mangrove planting event by Water and Air Police and the handover of mangrove seedlings from the community to the National Army

# Plan for 2024



Continue planting and monitoring mangroves in the action arena

02

Continue development of community-based business models



03

Facilitate development of local policies related to sustainable mangrove management

Increase community capacity in

sustainable mangrove management

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## Project website

For further information on this action research, visit our website

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.

