Story from the field Siak Pelalawan



Improving sustainable production practices on peatlands

With support from the Siak Pelalawan Landscape Programme, the Dayun village community in Siak district has developed a demonstration plot for sustainable agriculture on peatland.

To make the best use of the community's available land in a sustainable way, the Dayun community was introduced to paludiculture: sustainable agriculture on peatland. Farmers are often aware of the environmental problems of growing crops on peatland and may also be looking for ways to diversify their income sources beyond growing palm oil on peat, which can be challenging and costly. The development of a demonstration plot helps to show farmers and community members:

- which plant and crop species can be grown on peatlands, in order to diversify income sources.
- how maintaining the natural wet conditions of the peatland can prevent peat fires and reduce peat subsidence.
- how to grow agricultural crops without fewer fertilizers and pesticides.

The development of the demonstration plots was supported by Winrock International (advisor) and Elang (implementer). Kelompok Tani Semangat Baru, an oil palm farmer group consisting of fifteen members, manages the demonstration plot in the village. The establishment of the plot required active involvement of the community to encourage knowledge exchange, as well as strong coordination between stakeholders including the Siak district government, Dayun village government, farmers and companies.

The farmers who manage the demonstration plot plan to use it as farmer field school in the village.

Activities carried out so far include land preparation, cultivation, nursery, planting and canal blocking. The farmers plan to plant seasonal plants such as pineapple and lemongrass; perennial plants such as liberica coffee and sago; and tree species such as betel nut and eucalyptus.

26 facilitators, village representatives and farmers were introduced to paludiculture in Dayun

48 participants attended training in 2021 on agricultural practices, peat canal blocks and monitoring infrastructure

5 hectares of peatland in Dayun are being rehabilitated through canal blocking and best management practices

Results

Within a short period after the community training and the installation of canal blocks, changes are already visible. Biophysical changes show in wetter soil in the dry season, greener plant leaves and the presence of water stocks that were not there in other dry periods. There have also been changes at the community level: farmers collaborated to build a non-permanent canal blocking to prevent water from flowing back to the main canal.

Looking ahead

A senior district government official mentioned that sustainable management of peatland is only possible if all stakeholders (local communities, timber, oil palm and mining companies and the government) are engaged. He hopes that this approach can be replicated in other locations, which will assist in strengthening local knowledge about peat ecosystems and provide an example of practical collaboration.

Photo Credit: Ahmad Sahid, SPLP village facilitator

