Microgrid energy storage south sudan

Microgrid energy storage south sudan

The world"s newest country is now home to an innovative sustainable farming project powered by minigrids.

South Sudan, which earned its independence from Sudan in 2011, has a population of about 12 million people, most of whom live in rural areas. Thanks to ongoing civil unrest and the impacts of climate change, Unicef reports that hunger and malnutrition are common across the country, with upwards of two-thirds of the population facing food insecurity this year.

To combat this hunger crisis, Seeding Mercy International (SMI) has partnered with Sunnova Energy International to give rural communities the tools they need to feed themselves, including minigrid technology to power off-grid irrigation systems.

Established in 2017, SMI was granted 10,000 acres of land from the South Sudanese government to create what the nonprofit calls a "renewable and agricultural "micro democracy"" in the country.

To date, SMI has recruited 1,000 client farmers across five villages, providing them with the land, as well as the training and the tools necessary to manage the farms sustainably. Ninety percent of SMI"s client farmers are women.

One of the tools provided to the farmers is solar minigrid technology from Sunnova, which is being used to power off-grid irrigation systems at three newly established farms in Aweil, South Sudan.

Minigrids, which are sometimes referred to as remote microgrids, are typically used in remote areas that do not have access to a central grid.

Sunnova, a U.S.-based energy-as-a-service provider, donated portable solar systems and irrigation pumps. The company"s microgrid team designed the minigrid systems specifically for lowland and highland crop irrigation, as well as portability, durability and independence for the farmers.

"We worked with SMI to simulate, plan and execute a replicable farming program from site selection, planting, irrigating, harvesting to replanting," said Adam Miller, vice president of microgrids for Sunnova.

"This collaboration goes beyond merely providing solar solutions; it strives to empower the community itself," said Aken Tong, chief executive officer of SMI.

SMI utilizes what it calls a "feed-forward" business model. In exchange for the land, tools and training, the farmers share a portion of their profits with the organization. Those funds are then reinvested to expand the program into other communities.

Since December 2022, the three farms have planted, harvested and sold 370 baskets of crops, earning US$24,000 of income. Crops include onions, okra, kale, kusamawiki and kudhura.

Contact us for free full report

Web: https://www.kary.com.pl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346