



NANYANG DANJIANG SOLAR COOKERS CHINA

Efficient solar cookstoves improve lives and protect the environment in China

Efficient solar cookers in the rural communities surrounding the Nanyang Danjiang River, China, reduce carbon emissions and deforestation as well as improving the air quality by providing a cleaner energy alternative to coal stoves.



The Context

In the rural area of Xichuan County, Henan Province it is estimated that 76.4% of local households use coal-fired stoves as the main energy source for their daily lives. Not only do these coal stoves create harmful carbon emissions, but the large amount of wood and coal fuel they require is in dwindling supply.

The Project

The Nanyang Danjiang Solar Cooker Project enables these rural households to substitute traditional coal stoves for a solar energy alternative. 48,000 of these stoves have been distributed to seven towns in the Xichuan County, Henan Province. They are 50% more efficient than traditional coal stoves and, with an energy capacity of 876.5 W per unit, displace the CO₂ that would have been generated by the fossil fuel consumption of coal fires.

The Benefits

With access to solar cooker methods, local residents now have a cleaner, practical and more efficient way to meet the energy demand of their daily cooking. By switching to solar power, health issues related to the excess soot and indoor smoke-pollution of coal fires have been abated. The solar cookers are distributed and maintained by the project for free, and because they no longer have to purchase coal fuel, villagers can use the money saved to buy things that improve their standard of living.

“By abandoning traditional coal stoves, there is far less carbon pollution inside homes, which reduces smoke-related eye and respiratory health problems.”



Gold Standard



1,728,061
people

benefit from the implementation of this project, which is a free service. This frees up household incomes for the improvement of living standards.



30
jobs

are expected to be created by the project implementation, directly contributing to the economic growth of the region.



48,000
solar cookers

are distributed, facilitating sustainable cooking practices across 7 rural communities.



105,138
tCO₂e

removed from the atmosphere yearly, directly contributing to climate change mitigation.