



# Coffee Innovation Fund – Myanmar

Supporting innovative and scalable solutions to increase profitability and market access of small-holder coffee farmers

## Solar drying dome system

**An innovative approach towards introducing a solar drying dome system for naturally dried coffee beans**

United Power is a family business working in coffee production and trading. The company is striving to develop a resource efficient standard process for the natural drying of coffee in a relatively cold and humid climate.

### Drying coffee under difficult climatic conditions

As the area is relatively cold, humid and shady, it is challenging to dry Shan Hills' Arabica coffee naturally. The climatic conditions stimulate fungus development and mould on the coffee beans. The current method of wet processing operates using large quantities of water and the effluent is discharged into surrounding neighbourhoods, causing pollution. Moreover, the farms and the wet processing units are far away from each other, resulting in high transportation costs especially during the monsoon season.

### Drying coffee more efficiently

Solar drying technology for coffee has significant advantages over wet processing methods: cost reduction, quality improvement and increased selling prices of green coffee beans, among other benefits. The pilot activities will be implemented on a 40-hectare coffee farm. The dome drying system will enable the company and other farmers in the Shan Highlands to dry coffee and other crops more efficiently. Farmers will benefit from this post-harvest technology as their naturally dried green beans will be of better quality, have a longer shelf life and yield higher prices than before. In addition, United Power is also offering to distribute coffee seedlings and shade trees to at least 200 farmers. The seedlings will enable them to replant their coffee plants and the shade trees will protect the plants.



## Project overview

Term: 2020  
Region: Naung Cho, Myanmar  
Partner: United Power Co., Ltd  
Volume: EUR 26,432 (supported by the Fund)  
EUR 55,480 (total volume)

## Goals

- ❖ Develop a standard process to produce coffee using solar dome drying technology.
- ❖ Improve process parameters and reduce costs and water input in comparison to the conventional drying process.
- ❖ Improve the quality and consistency of the Arabica speciality coffee green beans.

Contact: [coffeeinnovation@giz.de](mailto:coffeeinnovation@giz.de)



Implemented by:  
**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

