Tropentag, September 9-11, 2020, virtual conference



"Food and nutrition security and its resilience to global crises"

## Developing Agroforestry Around Myanmar's Inle Lake, Supporting Small-scale Farmers and the Local Ecosystem

THERESA DUNKEL<sup>1</sup>, CHRISTOPH STUDER<sup>2</sup>, ALESSANDRA GIULIANI<sup>2</sup>

<sup>1</sup>School of Agricultural, Forest and Food Sciences (HAFL), Bern University of Applied Sciences (BFH), Switzerland

<sup>2</sup>School of Agricultural, Forest and Food Sciences HAFL, Bern University of Applied Sciences BFH, Switzerland

## Abstract

Myanmar's Inle Lake is located in the heart of the Shan Plateau and described as a magical place. The lake matters profoundly to the livelihood of the local communities, by being a vital source of income. However, the combined effects of unsustainable use of resources, increasing population, climate change and rapid tourism development have led to environmental degradation of the lake and its watershed. Reversing degradation and conserving the lake's ecosystem have become a main concern.

A local community-based organisation called "PweHla Environment Conservation And Development" (PHECAD) continuescca the UNDP Lake Conservation and Rehabilitation Project, launched in 2015 with the overall goal to reduce environmental degradation and uplift the livelihoods of the local communities. As tree coverage has a direct impact on the lake downstream, PHECAD focuses on reforestation and biodiversity conservation, by developing on-farm tree cultivation with small-scale farmers. A master thesis project has been engaged to support the local farmers in adopting agroforestry practices in the Northern watershed area of the Inle Lake.

This study investigates whether and how agroforestry practices can benefit small-scale farmers and their households as well as the environment in the Inle Lake watershed area. The project focuses on three main outcomes: (i) participatory identification of agroforestry options that suit the socio-economic and environmental situation in the area; (ii) piloting of agroforestry practices together with local smallholder farmers; and (iii) identification of the best way to support them in the implementation of agroforestry practices. The first part of the research work has been accomplished during a field visit between November 2019 and January 2020. Existing farming systems and the socio-economic situation of the small-scale farmers were analysed through individual and key informant interviews. In focus group discussions farmers identified agroforestry practices that are attractive to them and organised the implementation of pilot plantings. The use of a participatory approach assures that selected options fit well the needs and expectations of the local population.

Piloting and implementation of agroforestry practices are planned for the upcoming rainy season, combined with in-field trainings and field schools, and possibly a second field visit.

**Keywords:** Agroforestry, environmental conservation, Inle Lake, livelihood, myanmar, small-scale farmers

**Contact Address:** Theresa Dunkel, School of Agricultural, Forest and Food Sciences (HAFL), Bern University of Applied Sciences (BFH), Länggasse 85, 3052 Zollikofen, Switzerland, e-mail: theresa.dunkel@students.bfh.ch