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Is Sustainable Tomato Production on Floating Gardens on the Inle Lake (Myanmar) Possible?

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Abstract

For over 100 years tomato production on floating gardens has a tradition on the Inle Lake in Southern Shan State, Myanmar, making up for a unique scenery with a touristic potential. Over the past decades, tomato production on the lake contributed to the national supply, especially during the dry season. During the phase of opening the country under a democratic government, agricultural production in Myanmar developed fast and due to the improved protected cultivation, more fresh vegetables became available on the domestic market. At the same time, concerns about the excessive use of mineral fertiliser and agrochemicals on the floating gardens were raised, which caused pollution of the lake and limited the touristic potential.

After the German Development Cooperation (GIZ) ran an analysis of the potentials to turn tomato production on the lake more sustainable, the establishment of a "Tomato Knowledge Center (TKC)" together with local farmers was initiated. The aim was to secure the livelihoods of local people belonging to the ethnic minority of Intha and at the same time promote environmental protection and touristic development. For the intervention four main areas were identified: a) Production of healthy seedlings, b) Apply improved cropping techniques, including placed fertilisation and IPM, c) promote varietal diversification and crop rotation, and d) Provide training on post-harvest techniques and management.

The TKC was established on a site on the lake and during one cropping cycle, all improved techniques were applied. Farmers substantially increased their yields and produced a level of fruit quality that allowed them to obtain tenfold price due to direct marketing, as compared to selling to classical brokers.

An outstanding aspect of the intervention is the fact that due to travel restrictions under the COVID19 pandemic no foreign expert was able to actually travel to the area of intervention. This case study shows the successful combination of classical teaching material, innovative communication tools, and social media to promote a small-scale rural development project in a remote area. Due to the political crises in Myanmar, project activities were ended. A return to military dictatorship will reverse Myanmar's economic development of the past years.

Keywords: IPM, remote teaching, rural development, vegetable nursery

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