



Supporting Mushroom Cultivation in the Developing World through the Farmer-to-Farmer Program



Khalid M. Hameed and Henry Van T. Cotter

Biology Department, Vilgalys Mycology Lab, Duke University, Durham, NC 27708 USA kmhameed@hotmail.com and hvtcotter@gmail.com

The Farmer to Farmer Program

The Farmer-to-Farmer (F2F) program funded through the United States Agency for International Development (USAID) and managed through various non-governmental organizations provides volunteer technical assistance to farmers in the developing world with multiple objectives including improving food production and increasing rural incomes.

Summary

Our Farmer-to-Farmer assignments supporting mushroom cultivation in developing countries are an example of the technical outreach provided by the United States government through the NGO's to support and empower people in developing nations. During the past five years, we served on 7 missions in 5 countries, with more trips planned in the future. In each country, we focused on identifying and utilizing local resources to build infrastructure to support spawn production and mushroom cultivation. Examples include utilization of local ingredients to lower the cost of growing media, and construction of transfer hoods using local materials. Through continued our continuing contact and communication with our hosts, our F2F assignments have increased the capability and confidence of spawn and mushroom producers of these countries.



Bangladesh, Egypt and Nepal

In addition to these joint F2F assignments, individually we have also served on solo F2F assignments in support of mushroom cultivation: Khalid in Bangladesh (oyster mushroom) and Egypt (white button mushrooms), and Van in Nepal (shiitake mushrooms). These assignments were conducted through WinRock (Bangladesh and Nepal) and Land O'Lakes (Egypt) and locally supported by Church of Bangladesh Social Development Program (CBSDP) and CBSDP-Youth, SEKEM of Egypt Beneficiary and Nepal Ministry of Agriculture.



Ghana and Guatemala

In 2016, we served on two joint F2F assignments in Ghana and in Guatemala. The assignments were conducted through ACDI/VOCA and Partners for the Americas respectively. The purpose of our assignment in Ghana with mushroom farmers in Kumasi, and Haatso was to provide training in spawn production for oyster mushroom (*Pleurotus spp.*) cultivation, in oyster mushroom production and in marketing mushrooms. The Frances Mueller and Virginia Lageschulte Training Centre (YATC) and The Mushroom Growers and Exporters Association of Ghana (MUGREAG) provided local support. The purpose of our assignment in Guatemala with the Vision Maya Association, a group of mushroom farmers in San Juan near Lake Atitlan was to follow up their progress in establishing spawn production since our earlier visit and to explore with them the potential to broaden their mushroom cultivation to include button mushrooms (*Agaricus spp.*).



We acknowledge the help and support of USAID, the NGO organizations notably their fine local staffs, and the Vilgalys Mycology Lab at Duke University for their support of our Farmer-to-Farmer assignments