**Digital Platform for Farmer- Extension Worker Interaction (DiPFEWoI)**

In 2016 I was lucky to participate in technology promotion aimed at ensuring production of healthy vegetables in three central districts of Uganda. In this project, we emphasized on reducing the use of pesticides and also promoted the incorporation of biocontrol agents in crop protection program. One other technology that was promoted included raising healthy and clean seedlings prior to transplanting and assessing their performance against the farmer nurtured seedlings. It should be noted that many farmers in developing countries nurture their own nurseries and this predisposes seedlings to soil borne diseases and pests such as nematodes which are transferred into the main field at transplanting. Meanwhile, other farmers attested practicing direct sowing of the seed in their gardens. The abovementioned farmers’ practices are convenient but costly in the long run due to the crop protection demands needed to maintain an already infected and weak crop, not forgetting the costs of replacing the aborted seedling as evidenced in some fields that accommodated our trial plots. Basing on the hypothesis that healthy seedling performs much better than the unhealthy ones, we were able to establish that healthy and clean seedlings is the first line of crop protection that a farmer need. We registered significant performance of healthy seedlings against the unhealthy ones that had been prepared by the farmer themselves. In the course of our interactions with the farmers, also we found that farmers were mis-using pesticides by applying them on ready to harvest vegetables such as tomatoes. They revealed that traders often showed interest in the sprayed tomatoes because the pesticides served to improve shelf life by their inhibitory effect on growth of bacterial and fungus on the harvested vegetables. This work was implemented by International Institute of Tropical Agriculture (<http://www.iita.org/>) and Volunteer effort for Development Concern (<http://www.vedcouganda.org/>) with the support from Austrian Development Agency. Based on this background, I contextualized that farmers’ challenges in Uganda like any other developing country are multifaceted including; limited financing, little knowledge on the right crop protection options, and diagnosis of the pests and diseases in order to administer the right crop protection options. However, the most important of all these that needed an innovative solution is streamlining the extension system to enable correct diagnosis of crop protection need and then advise on the right remedy. Therefore, we are working on **a Digital Platform for Farmer- Extension Worker Interaction (DiPFEWoI)** which is a mobile system serving a role of connecting farmers to extension service providers.With this platform, the farmers will be able to keep in touch with our extension workers for routine inspection and surveillance of pest and disease incidents on farm as well as give recommendations on the correct crop protection options and where they can be accessed. This idea is being incubated under Centre for Life Sciences which is a start-up company that was incorporated in 2015. At Center for Life Sciences, the farmers are at the focal point of our operation as we shall be assessing the crop protection needs of the farm and offering recommendations. In the process of developing this digital platform, we shall compile a database of farmers whom we shall first roll this technology and track its operation before extending it to a greater audience. Later, an app shall be developed for android or apple operating system to make it easy for the farmer to upload photos of the disease incidence and this will assist us to assess the case and we offer a response from our extension workers command centre (EWCC). This will also help the EWCC decipher a rough diagnosis of the disease or pest and have an idea before actual onsite inspection and assessment of the farm. Meanwhile, due to the limited internet connectivity, we shall also incorporate message (sms) system in which the farmers will be able to contact our extension agents by sending a message and a rapid response shall then take course to assist the farmer in need. In this system, we shall also capture the service providers offering various crop protection solutions so that the farmers can easily get to purchase particular chemicals or biocontrol agents as we shall have recommended after onsite assessment of the crop protection need.