

Establish primary and secondary reach of PW through social network analysis

Plantwise

The overall objective of Plantwise is to increase food security, alleviate poverty and improve livelihoods by enabling farmers around the world to lose less, grow more and improve the quality of what they grow. The Plantwise strategy focuses on strengthening systems for providing plant health advice to smallholder farmers through three core and inter-related interventions:

- 1) **Plant clinic networks at the core.** Working with existing extension providers in target countries to implementing networks of quality plant clinics in order to support farmers in solving biotic (pests and diseases) and abiotic (e.g. nutrient deficiencies, weeds) problems where there is the greatest need. Gender equity drives the efforts to support delivery of services to farmers in an equitable manner: women and men, young and old, as well as different social and ethnic groups.
- 2) **Systems for management and use of plant clinic data:** Supporting the establishment of appropriate systems and procedures for managing plant clinic data, which enable the pro-active use of data for operational and strategic purposes at local and national levels.
- 3) **A systems approach:** Working with key stakeholders to improve the capacity and responsiveness of national plant health systems by strengthening linkages between agricultural service providers, plant health regulatory bodies, research and training institutes and agro-input suppliers. The plant clinics and the associated data management systems constitute a strategic entry point for capturing and understanding farmer demand and identifying the needs for systems response.

The country interventions are under-pinned by Plantwise's efforts to strengthen global response systems in order to deal with plant health threats:

- Fostering diverse national, regional and international partnerships that underpin and sustain global efforts to remove constraints to agricultural productivity
- Developing a global Knowledge Bank that provides data collection and management tools; and through a crowd sourcing approach brings together existing and new information on plant health to support and inform stakeholders in national plant health systems, international bodies and the commercial sector, with long-term potential for effective global vigilance.

Background:

Plantwise operates in complex and dynamic settings where farmers access, use and share information from multiple sources and through multiple means. Social network analysis can be used to evaluate the initial reach and subsequent spread of knowledge amongst communities and whether the introduction of new sources of knowledge, such as plant clinics, farm radio, mobile information services and plant health rallies, influences knowledge flows and if so, how the knowledge flows change. Such analysis would not only provide information on how farmers access plant health knowledge in the presence or absence of plant clinics but also on perceptions and level of trust in the knowledge provided by clinic staff and therefore motivations to share the information. It will also

provide information on how far the knowledge from multiple information sources (plant clinics, plant health rallies, mass extension campaigns) is spread and shared within a community, and whether certain people within a community are key to ensure knowledge is widely disseminated.

Preliminary Objectives of the Study:

- To evaluate the spread of knowledge amongst communities and whether/ how the introduction of plant clinics influences knowledge flows
- To assess the motivation of farmers in sharing information (do they share because the advice worked, or did not work, or to check whether to try it etc.) and farmers' attitude towards and trust in plant clinics as a source of plant health information relative to other forms of agricultural advice through other channels e.g., radio, TV, mobile, posters etc.
- To establish primary and secondary reach of plant clinics, plant health rallies and other mass extension campaigns

Possible countries: Uganda, and China: We will confirm countries list during inception/study planning.

Deliverables:

- Individual country reports in English
- Overall synthesis report in English with a 500-1000-word summary
- A draft paper for a suitable peer-reviewed journal
- A short guide on how to frame primary and secondary reach through social network analysis in PW