Food & Business Applied Research Fund: Building on Fertile Ground in Burundi (BFG)

Project Duration: February 2014 – February 2017

Aim: Optimize the dosage of organic and inorganic fertilizers. The best assessed propositions – in terms of improved access to food/income, improved land and labor productivity, sustainability and adaptation to climate change – will be embedded in ZOA's agricultural programs and in the government rural extension services. Embed innovations in local rural agriculture extension services.

Objective: Contribute to food security of vulnerable smallholder farmer communities.

Method: Identify different areas as identified by local farmers Understand traditional methods for assessing soil fertility. Trial fertilizer recommendations as applied in normal local farmer practices. Provide tailored advice on dosage of fertilizers to farmers and extension services.

Members research Group

ZOA (NL): Dr Geoff Andrews (BFG Project Coordinator); Roelof van Til
Alterra Wageningen WUR (NL): Dr Niek Van Duivenbooden; Dr Christy van Beek
Centre for World Food Studies (NL): Roelf Voortman
Agrifirm: Harry Roerink
University of Burundi: Faculty of Agronomy and Bio-Engeenering: Dr Salvator Kaboneka (+ students)
Food security pillar of Dutch Ministry of Foreign Affairs: Increase sustainable food production

Diversified Collaboration

(i) **Ministry of Agriculture and Livestock** (MAL): support in inputs (fertilizers) import (Uganda). .

(ii) **Ministry of Environment -IGEBU** (Burundi Geographic Institute): Climatic data (rainfall, temperature). Rain gauges installed in 7 locations by the BFG project in December 2014. Data will be shared with IGEBU + extension of IGEBU meteorological stations.

(iii) **IFDC** (International Fertilizer Development Company): Co-organization of a national workshop on **Theory of Change** as a new planning tool in Bu rundi (January 14th, 27-28 th2015). Over 50 partici pants from broad horizons: government (Ministries of Agriculture and Livestock, Ministry of Environment) Dutch Embassy, Belgium Cooperation, Suisse Cooperation, German Cooperation, European Union, major national and international non-governmental organizations CRS, GIZ, YARA…), IRRI (International Rice Research Institute), IITA (International Institute for Tropical Agriculture).

(iv) **ISABU** (Burundi Agriculture Research Institute): soil map and soil analyses.

Major BFG project results:

(i) Annual report 2014 finalized and agreed for submission to WOTRO in March 2015.

(ii) Little or no visible effect of micronutrients (Cu, Zn and B).

(iii) Project research results during 2 growing seasons (2015 A&B) seem to have a greater impact than current recommendations (IFDC, Government).

(iv) Visible effect of TSP in combination with lime and manure on climbing beans (vegetation and pod formation). **Photos 1a to 1d**.

(v) Agro-ecological zones defined based on altitude , rainfall and temperature.

Photo 1a. TSP+Lime+Manure

Photo 1b. TSP+Lime

Photo 1c. TSP+Lime+Manure

Photo 1d. TSP+Lime

Workshops and meetings

- Bujumbura, 12th February 2014. Focus: briefing main stakeholders in Bujumbura including Burundian state services, the Dutch embassy, and international organizations involved in agriculture and food security.
- Makamba (BFG zone of intervention), 22th July 2014. Focus: Brief and engage local stakeholders including local farmers.
- Planning workshop for season 2015A (Makamba):25-26 August 2014
- Consortium meetings (NL): March and November 2014, March 2015. Planned Consortium meeting: November 2015.
- Theory of Change (see above).
- Participation of Dr Salvator Kaboneka (University of Burundi to EGU 2015, Vienna, Austria).