FERTILE GROUNDS INITIATIVE:
A CONSERTED ACTION TO IMPROVE SOIL FERTILITY, INCREASE YIELDS AND ADAPT TO CLIMATE CHANGE

NEWSLETTER DECEMBER 2015

FERTILE GROUNDS INITIATIVE (FGI)

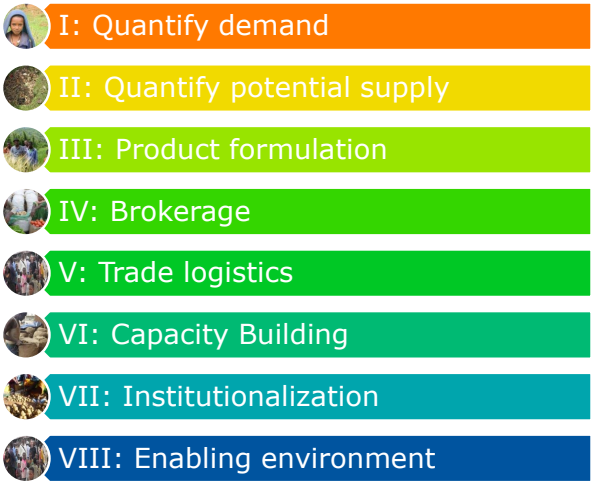
Welcome to the first newsletter of the Fertile Grounds Initiative! With this newsletter we would like to update you on the background and progress of the FGI project.

THE FGI APPROACH

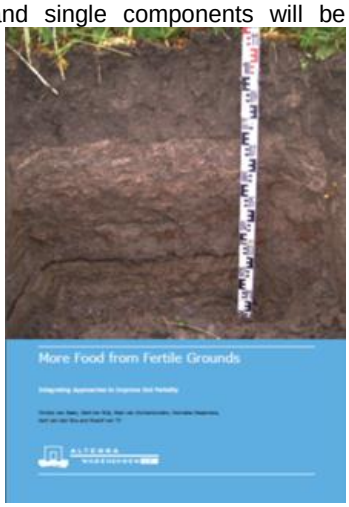
During the past decades plenty of different interventions concepts and approaches have been introduced and implemented to increase the productive capacity of soils and increase soil fertility. It has been more and more recognized that technology-centred intervention alone are not sufficient for sustainable soil fertility management, it should be one instrument in a more integrated systems approach. There are no silver bullet solutions to maintain and improve the soils productive capacity. Local conditions (farmer skills, resources availability, socio-economic conditions, and climate) determine the best sets of interventions. The way forward should be on the basis of Integrated Soil Fertility Management (ISFM), that includes the application of both mineral fertiliser and organic fertilisers to improve the soils' productive capacity. This has proven to give the highest nutrient use efficiencies. To halt and reverse the trend of soil degradation, it needs a multi-actor and multi-level approach.

Based on this, the *Fertile Grounds Initiative (FGI) was designed, which is a coordinated strategy of collaboration between actors in nutrient management to increase nutrient use efficiency at various spatial levels to maintain or improve soil health and productive capacity of land. Via a brokering process various sources of organic and mineral nutrients are brought together and redistributed to its optimum effectiveness thus increasing food security and reducing wastes.*

FGI is implemented in areas facing soil fertility constraints and targets preliminary smallholder farmers. FGI is best positioned in sites where diverse farming systems and processing industries are in relative proximity. FGI is jointly implemented by Wageningen University and Research Centre and local partners.



FGI comprises 8 components aiming at a better nutrient management with the intent to increase soil fertility and thus to enhance food and economic security (Fig. 1). This approach needs to be adapted to local conditions and single components will be executed simultaneously.

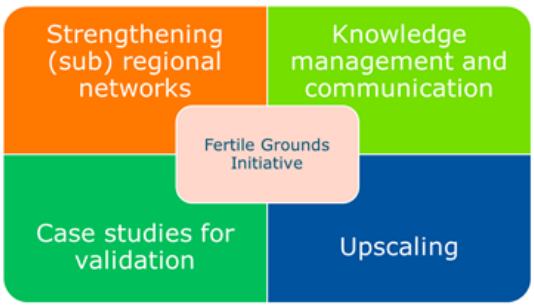


The basis of FGI was laid in this document; that concluded that we cannot continue working on soil fertility improvement in a fragmented way without connecting levels of scale. For those who are interested in the background of FGI, the review report is available online.

FOUR PILLARS OF ACTIVITY

The basis of FGI are four pillars of activities (see Fig. 2). To develop a successful FGI framework it is imperative to start with an analysis of existing cases in combination with strengthening networks and knowledge management that provide sufficient input along the entire chain of the FGI approach linking various stakeholders which also increases awareness among stakeholders.

After Inventory of existing projects and possible alignments, case studies based on relevance and willingness will be selected as they allow evaluation, implementation and provide proofing of the FGI approach.



Upscaling is facilitated trough lobbying and network building at higher scale organizations. This activity will gain more attention in the course of time (after proof of principle results have become available from the case studies).

These pillars are the basis of our work in Ethiopia, Burundi, and Uganda. Since one year, local taskforces, the FGI coordination unit and our partners in the three countries have been working on implementing the FGI principles.

Figure 2: Four pillars of activity that are required to lift FGI off the ground.

STRENGTHENING NETWORKS

The FGI includes enhancement of collaboration between different stakeholders at different scales. Strengthening existing networks and developing new collaboration is therefore of crucial importance for implementing the FGI approach.

National Stakeholders Consultative Workshop, Kampala

The ***National Stakeholders Consultative Workshop*** on the Fertile Grounds Initiative in Uganda was held on ***December 3, 2015 at the Imperial Royale Hotel in Kampala***. More than 45 participants from government, national and international organisations, NGO's, knowledge institutes, and private sector attended the workshop. The main objective of the consultation was to identify opportunities for potential synergies with and between stakeholders, and possible partnerships for cooperation and engagement in pilot projects (case studies) of the FGI pilot areas in Uganda. We thank all participants for attending the workshop and the fruitful discussions. *(For more information, see report on the website)*

Photo: Drake Rukundo (chair of the FGI Task Force) giving a presentation on "Opportunities for partnerships" at the National Stakeholders Consultative Workshop, Kampala.

KNOWLEDGE MANAGEMENT

Main aims of this activity is to ensure the development of a consistent system to collect, store and disseminate knowledge both on technical and socio-economic aspects related to the FGI approach. Activities under this pillar include supporting consistency and specificity in site-specific nutrient recommendations, developing and supporting training programmes and education (ISFM course, MonQI, etc.), and designing and maintaining of data sharing systems and network facilities that can be used for dissemination purposes as well as communication.

NUFFIC training, Hawassa

In the period 19-30 October 2015 a tailor-made training was provided to 15 participants of Hawassa University in Ethiopia. It was funded by the Dutch Science Organization (NWO-NUFFIC). The training was entitled "Innovative technologies and approaches to improve soil health for enhancing agricultural production in Ethiopia. Design your own FGI case study". Specific attention was paid to the role of nutrients in the soil, the crop demand for nutrients, the correct use of both organic and mineral fertilizers (4R approach: right amount, right type, right placement and right timing), and the use of the QUEFTS model (*for more information see QUEFTS brochure on the website*). The course consisted of lectures, group discussions, computer practical (QUEFTS), and visits to field sites: farmers, producers of organic fertilizers. During the field visits the course attendants worked out (parts of) their own FGI case.

Photo: Participants of the NUFFIC training.

The soil fertility toolkit

The digital soil fertility toolkit is developed to provide consistent site-specific nutrient recommendations for agro-ecological zones while taking into account local conditions. A first version of the digital soil fertility toolkit is ready and will be tested by the TAMASA consortium in extended field trials in 2016 in Tanzania and Ethiopia.

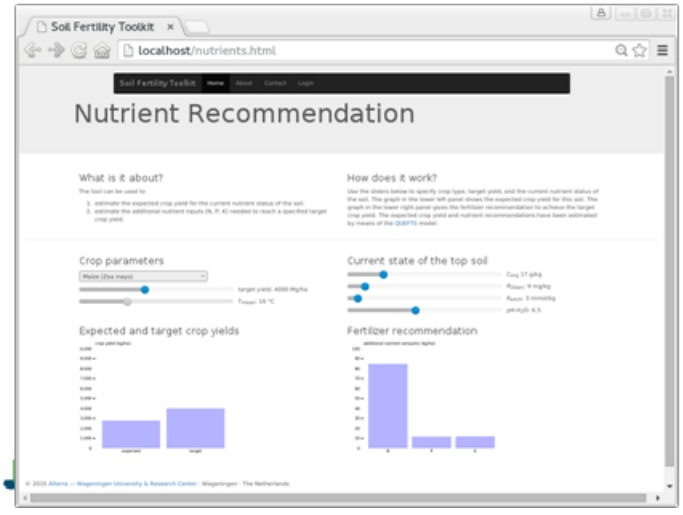


Figure 3: A screenshot of the soil fertility toolkit.

CASE STUDIES

Case studies (pilot projects) serve to validate and locally adjust the FGI framework. The case studies are additional to existing project or activities. Hence, the first activity of the task forces was to identify relevant 'host projects', i.e. projects that are somehow aligned to the objectives of FGI and to which FGI can make a clear contribution with regard to soil fertility and nutrient management. By using this approach best leverage is achieved between different projects. The first case studies are started in 2015 in Ethiopia and Burundi.

Adet and Ziway case study in Ethiopia

The case studies are located in Adet (Amhara) and Ziway (Oromia) (Fig. 4). The main aim of the Amhara wheat case as supported by DFID and implemented by the LIFT programme is to increase the access of farmers to (micro) credits through land certification, increase the production of high quality wheat to be supplied to the market, and improve the productivity of the land by increases access to organic fertilizers and reduced tillage and other technological improvements.

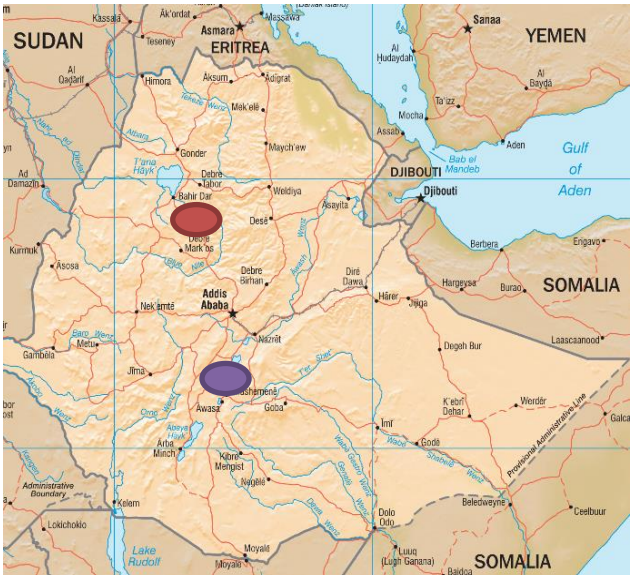


Figure 4: Locations of Ziway case study (purple) and Adet case study (red) in Ethiopia.

The main aim in the Ziway case study (main partner Soil and More Ethiopia) is to increase the (local) production, transport and use of compost by farmers through increased production using waste from local (rose plant) growers. (*For detailed information of the respective case studies see description on the website*)

Planned activities in 2016 will include:

- Assessment of nutrient balance at farm scale (input/output analysis)
- Assessment of nutritional value of compost
- Training of students and/or staff to use farm balance tools (MonQI) and soil fertility assessments (QUEFTS/Toolbox).

PAPAB (Projet d'Appui à la Productivité Agricole au Burundi), Burundi

The Theory of Change workshop on soil fertility, organized by FGI and IFDC in Burundi (January 2015) has been the basis for the development of an improved integrated subsidized fertilizer vouchers programme from IFDC. That includes a rolling out the PIP approach and together with other measure to increase the effectiveness and nutrient use efficiencies. The PIP approach, developed in the framework of the FDOV-project Fanning the Spark, is an innovative way of transforming small-scale subsistence farm households into more productive and sustainable farms (for more information see brochure on the website). The PAPAB is the basis for FGI in Burundi, and the WORTO-ARF project "Building on Fertile Grounds" is the first case study of FGI. In this way FGI makes optimum use of the scarce financial resources available, and we expect to address certain issues related to site-specific fertilizer recommendations and implementing ISFM at a larger scale. The PAPAB became operational in November 2015.

OTHER ACTIVITIES IN 2015

Event	Date, venue	Activity
Training and lectures	14th January, Addis Ababa, Ethiopia	Lecture on Integrated Soil Fertility Management (including FGI approach) for MSc students at Addis Ababa University
	2nd-6th February, Bomet, Kenia 2nd-6th March, Lira, Uganda	MonQI training
15 years anniversary of the Earth Charter	29th June 2015, Doorn, The Netherlands	Present banana balance (mobile equipment demonstrates nutrient trade and disconnection to create awareness on this topic).
Wageningen Soil Conference 2015	23rd-27th August 2015, Wageningen, The Netherlands	Presentation on "Fertile Grounds Initiative: it's not the soil that needs to change, it's the people who manage the soil"
Foodcamp	10th December 2015, Wageningen, The Netherlands	Stand at the Innovations market to present the FGI and Wise with Waste Game

We are constantly looking for ways to bring FGI further. If you have ideas, suggestions you can contact us by sending us an email. If you see new opportunities for rolling out a FGI case study, please let us know.

We wish you and your be loved ones a Merry Christmas and a Happy New Year!

FGI project management team