



## The Fertile Grounds Initiative: Working first with people to improve soil fertility as step towards increased food security

Soil is precious, it needs protection, that much is clear. But how to achieve this? Soil is used to feed billions of people each day, and each day we lose valuable fertile soil around 12 million ha of land are still lost each year because of mismanagement. Despite ample evidence of this alarming trend, mankind seems incapable to halt or reverse this trend. This somehow paradoxical situation made us, applied soil scientists from Wageningen, realize that some key elements of the solution are still missing, urging us to develop a different approach. An approach that starts with people instead of soil!

One of the key components, and in fact one of the few things that can be actively managed, is the correct use of both organic and mineral nutrients. Extensive literature review and local experiences show that proper (i.e. right amount, right type, right placement and right timing) application of organic and mineral nutrients is the best way to restore and recover fragile soils. However, true implementation of this integrated soil fertility management (ISFM) is hampered by fragmented activities and isolated approaches from various stakeholders active in a given region.

The paradigm behind FGI is that there are additional sources of nutrients available in a specific area than currently being used. This results in low nutrient recoveries and valuable losses. However, in order to make use of these 'hidden' resources a new way of thinking in soil management is required. One of the goals of FGI therefore is to bring together actors in nutrient management to facilitate an optimal arrangement for nutrient trade. This will result in:

- Higher efficiencies of nutrient use at various level of scale with less waste and spillage.
- Higher yields for less costs.
- True valuation of, indeed valuable, nutrients derived from various sources.
- Increased soil health and reduction of land degradation rates.

### THE 8 FGI-STEPS

- I: DETERMINATION OF NUTRIENT **DEMAND**
- II: DETERMINATION OF NUTRIENT **AVAILABILITY**
- III: **PROCESSING** OF ISFM PRODUCTS
- IV: **BROKERING** BETWEEN DEMAND AND SUPPLY
- V: NUTRIENT EXCHANGE FACILITY FOR NUTRIENT **TRADE**
- VI: **CAPACITY BUILDING** OF DIFFERENT TARGET GROUPS
- VII: **INSTITUTIONAL ARRANGEMENTS** FOR SCALING UP AND SCALING OUT.
- VIII: STIMULATING GREEN **GROWTH**

FGI has developed a 8 step approach for better nutrient management based on a match-making approach (see text box). For steps I to VI guidelines are developed which are geared towards local conditions. Steps VII and VIII are tailored towards local contexts.

In short, **FGI is a coordinated strategy of collaboration between actors in nutrient management at various spatial scales.** FGI is targeted, but not limited to, areas prone to soil fertility depletion. It is based on bringing together people who have a supply and demand of nutrients within a specific geographical area, to process these and to make optimum use of site-specific interventions and available nutrients, supplemented with external imports.





## How to set up projects according to the FGI principle?

FGI specifically targets those farming systems and areas prone or vulnerable to soil nutrient depletion. In order to be successful, i.e. to generate sufficient additional sources of nutrients areas close to urban areas are considered the most promising. In such settings FGI has the highest potential but needs a few targeted actions:

- To develop a joint vision on, and pathways towards change regarding food production and sustainable soil management *Theory of Change workshops on agricultural productivity and soil fertility* are organized. .
- National embedding of the project is achieved through the Installation of local taskforces.
- To make best use of existing activities screening of existing projects as well as the institutional setting is required resulting in the selection of case study sites,
- Implementation and evaluation of the case study.
- Implementation of 8 step approach.

### The FGI kit

Although each FGI project has its own characteristics, they also share similar functionalities:, e.g.

- Training: setting up your own FGI project (10 days training)
- Toolboxes for determining nutrient requirements and farm management
- Monitoring equipment and guidelines for environmental parameters.
- Guidelines for implementation and backstopping

### Get involved

Based on the determination of the potential supply and demand of nutrients a gap analysis is made, which forms the basis for supplementation with mineral fertilizer. Crucial for FGI to succeed is the active involvement of nutrient suppliers, i.e. waste industry, processing industry, organic and mineral fertilizer sector. Working with projects that investigate alternative types of fertilizers (e.g. based on water hyacinth) could increase our quest for improved and sustainable soil fertility. Only together we can make FGI work! FGI started in 2015 but already farmers and other stakeholders welcome the approach and case studies are launched in Ethiopia and Burundi.



Share your ideas on [www.fertilegroundsinitiative.info](http://www.fertilegroundsinitiative.info).



[www.fertilegroundsinitiative.info](http://www.fertilegroundsinitiative.info)

