

Terms of Reference Soil Fertility Exploratory Study

June 10, 2014

1 Introduction and reason for request

The Fertile Grounds Initiative (FGI) is an emergent network that addresses the problem of declining soil fertility. FGI is a follow-up of “Bodemvruchtbaarheid Mondiaal”, or “Soil Fertility at Global level”, a project financed by Dutch Ministry of Economic Affairs (at least) till end 2014. FGI has organized a start-up event end 2013 and is preparing a paper as follow-up.

Soil fertility could become a knowledge topic that is shared at – and supported by the Food & Business Knowledge Platform. First explorative meetings have been organized between FGI and the F&BKP early 2014 resulting in an agreement to start with an overview study. One of the priorities of the FGI is to further explore other networks and partners elsewhere in the world interested or already working on the topic of soil fertility. The study is important to allow the FGI network to further articulate and decide on choices for strategic partnerships with relevant international stakeholders, connect with networks based in LMICs and/or to include unknown actors and factors that are important to take into account. The present ToR provides details on the organization of the study.

2 Background and context

Improving soil fertility is critical to assure food security (UN World Food Day, 2013). Soil is one of the fundamentals of agricultural production and soil fertility is a high priority for most farmers. Currently about ten million hectares of fertile soils are lost each year in the world and there is an urgent need to reverse the negative trend of soil degradation. This is recognized by scientific organizations and implementing agencies, but we are still not capable of reversing the trend.

Soil fertility seems to be back on the international agenda and the year 2015 will be the international year of soil fertility. Representatives of the organizations preparing the International year of Soil Fertility can be important resource persons for the study and potential partners in the emerging network. The FGI initiative likes to develop business cases for local implementation of the FGI approach (see annex 1 on FGI Approach and more FGI background).

The study should therefore provide insight into

- i) active international, regional and local networks,
- ii) institutional ‘entrances’ (e.g. identification of situations with a high sense of urgency) and
- iii) other initiatives that are currently taking place elsewhere in the world to address the topic of maintaining soil fertility. Especially initiatives where private sector, producer organizations, civil society organizations, policy makers and scientists collaborate would be interesting to know.

Geographically the focus is mainly on Africa, as this is the region where the problem seems to accelerate but also a continent where there is potential to find solutions. Also developments in Europe and other global trends will be part of the study. The study will explore what type of interventions are currently taking place, including programmes to restore soil fertility, knowledge and innovation activities and nutrient brokering initiatives.

3 Expected results and documentation

The study should provide answers to the following **main research questions**:

1. Who are the leading international institutes and networks working on soil fertility? Include a power analysis of these networks (like importance-influence analysis, listing of annual budgets, number of staff/network members).
2. What are the key platforms/networks for engagement between these institutes and networks. Provide a summary of the dynamics in each platform (main goal, type of network, key actors, issues, ...).
3. Which partners and networks does the FGI network already identify as having a potential as strategic partner?
4. What are the leading themes of these networks related to soil fertility (key trends & issues)?
5. Who are the leading institutes and networks in Africa and other regions working on soil fertility; (with details applying similar questions as 1-2-3 for the specific continent).
6. What are the perspectives for the FGI to engage with these networks?

3.1 Output

The consultants are expected to provide a good draft report by the end of August and a final report by 15 September. Comments to the draft report will be provided by FGI and the F&BKP Office in the first two weeks of September.

Outline of the report:

- Synthesis (2 p)
- Introduction (1p)
- Problem statement and methodology (2p)
- Findings (10p including summary of situation Africa)
- Analysis (5p)
- Conclusions and recommendations (3p)
- (Annexes)

4 Timeframe

The ToR is expected to be finalized by early June. Afterwards the following time frame is scheduled:

- Contracting two consultants and start study: June
- Desk Study June - July – August
- First draft End August
- Inclusion of feedback and producing final report: 15 September

5 Methodology

The study will be a desk study combined with interviews of resource persons (like FGI representatives). Consultants are expected to be informed about the main networks and relevant documentation worldwide, but with an emphasis on Africa and Europe, in the areas of main policies, research programmes and findings by 2014 and practice areas of soil fertility. The Team Leader will integrate the contribution of the African expert and assure the production of a good draft report by End August. This draft will be discussed, revised and a final report produced by 15 September.

At the start of the study after contracting a Briefing will be organised by the F&BKP Office, inviting also representatives from the FGI. When needed also a meeting will be held to discuss the draft report end August/ early September.

6 Contact(s) at F&BKP and other resource persons

The contact persons at the F&BKP will be Nicole Metz and Jan Brouwers (contracting, main contact during study, assessment and feedback of draft report, discharge of final report).

Resource persons for documentation and linkage with networks: Christy van Beek and Niek van Duivenbooden (both at Alterra).

7 Profile of required consultant(s)

Two CVs will be selected:

- Team leader, international senior scientists, well informed about international and Netherlands networks, including trends and discussions within civil society, businesses, policy and research. Experienced writer of English reports, including succinct summaries and formulation of conclusions and recommendations that will allow the FGI and other interested actors to bring the soil fertility agenda forward. Available in June- July-August to carry out in total 20 days of desk study and report writing.
- International African Scientist, well informed about recent African developments on soil fertility programmes, policies, research programmes and activities of private sector. Experienced writer of English reports, including succinct summaries and formulation of conclusions and recommendations that will allow the FGI and other interested actors to bring the soil fertility agenda forward. Available in June- July-August to carry out in total 15 days.

8 Monitoring and evaluation

- Briefing at start (June)
- Check first draft last week of August
- Provide comments first weeks of September
- Discharge and provide final appreciation after mid-September.

9 Use of the study

The study will be uploaded at the F&BKP website.

The FGI partners will analyse the results and decide on elements to take into account for the FGI network and initiative.

The FGI partners and the F&BKP Office will decide on knowledge related strategic issues and identify opportunities for next steps

10 Budget

Senior scientist, Team Leader, 20 days at 800€/day: 16.000

International African Scientists, 15 days a 600 €/day: 9.000

Total: 25.000

Annex: FGI initiative

The Fertile Grounds Initiative: A new way to close nutrient flows at regional level resulting in better agricultural productivity and less environmental losses

Background

The threat of declining soil fertility levels is well known. Yet, and despite numerous efforts, we seem incapable of changing the current situation of sink areas in developed countries and depletion areas in developing countries. With negative consequences (i.e. loss in productive capacity and loss in environmental quality) in both areas.

A new time, a new approach

Due to globalization and urbanization nutrient flows become increasingly disconnected, while at the same time more actors are involved in reallocation of nutrients, especially in the energy and waste sector. Time has come for a new approach to bring together demands and supplies for nutrients. We therefore present the Fertile Grounds Initiative: a broker for nutrient supply and demand in the region.

Guiding principles

The Fertile Grounds Initiative is based on the findings that:

- Organic and mineral nutrients are required for increased and sustainable production;
- Nutrients have a value and should be treated as such;
- Due to globalization and urbanization nutrient flows are ever more polarized between depletion and concentration areas;
- The demand for energy poses new threats and opportunities for nutrient management.

The Fertile Grounds Initiative

In the Fertile Grounds Initiative nutrient suppliers from the energy sector, waste management, fertilizer companies, etc. and demands for nutrients from farmers are brought together in a dynamic platform. This platform acts as a nutrient bank and integrates different sources of nutrients into high quality crop nutrition products. A capacity building programme ensures proper application of the nutrients and optimal use of on-farm nutrients.

Partners: ZOA, Alterra (Wageningen UR), soils & more, Ministry of Economic Affairs