

## JIMMA UNIVERSITY (JU): THE PROPOSED COLLABORATION

### The sustainable use of Soil Resources and the Gilgel Gibe dam

#### SOIL FERTILITY PROJECT TEAM

#### *Fact sheet*

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<b>Project leader:</b>	Abraham Bantirgu, Senior Lecturer, Department of Natural Resource Management (DNRM, Jimma University College of Agriculture and Veterinary Medicine).
<b>Faculties involved:</b>	Department of Natural Resource Management and Department of Crop Science, Jimma University College of Agriculture and Veterinary Medicine.
<b>Project capacity:</b>	Three senior and nine junior staff members are involved.
<b>Core needs/problems:</b>	A lack of committed international partners with reasonable financial backup to enable development of research competence, especially in terms of human capacity and infrastructure. MSc, PhD and short term training involved in the proposed areas.

#### *Specific objectives of the project*

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1. Establish the rate of siltation and the level of accumulation of major nutrient elements in the Gilgel Gibe dam and develop appropriate soil conservation measures.
2. Develop high yielding soyabean and other grain legumes cultivars with greater N<sub>2</sub>-fixation capacity and efficient use of phosphorus.
3. Evaluate the N<sub>2</sub>-fixation potential and green manure production of leguminous tree species and develop agroforestry practices for sustainable land productivity.
4. Establish suitable agroforestry practices for sustainable land productivity.
5. Strengthen the research capacity of the research unit of the Natural Resource Management department.

#### *An opportunity to collaborate*

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##### **General notions:**

Flemish colleagues will be involved in internationally relevant project areas and will benefit both directly and through the openings for research and cooperation which the project can offer to their masters and doctoral students. Flemish partners may also have opportunity to participate in other soil fertility-related consultation and research projects.

##### **Expertise required:**

<b>Specialisation:</b>	Soil physics and soil chemistry, plant breeding, crop/tree physiology, silviculture, and water shed management.
<b>Critical capacities:</b>	Project management, laboratory equipment, Human Resources Development, resource generation and inter disciplinary requirements which include interaction between soil physics and soil chemistry with plant nutrition and water shed management; crop/tree physiology with plant breeding.
<b>Nature of collaboration:</b>	MSc, PhD, and short term training involved in the proposed areas.