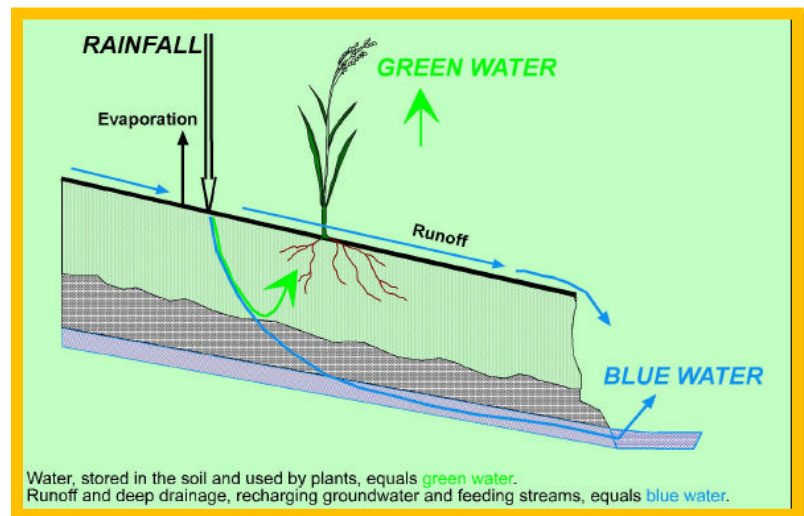


Call for Applications for IFS Research Grants on

Green Water Research available water in the soil for plant growth

Deadlines: December 31, 2008
 June 30, 2009
 December 31, 2009

Green water is the water that is stored in the soil, in the root zone and is available for plant growth. It originates as rain that infiltrates the soil, is taken up by roots and is used for photosynthesis and transpired by crops.



Rain water Partitioning
(adapted by Jacqueline Ringersma et al, 2003, after Rockström, 1997)

Rationale for supporting research on green water

- to increase food production despite scarcity of water
- to increase freshwater availability for food production, thereby increasing food security to a level set by, or exceeding the Millennium Development Goals

The majority of countries in need of increasing food security are located in Sub-Saharan Africa and South-East Asia. The farmers in many of these countries, especially in semi-arid areas, have to cope with highly variable and unpredictable rainfall, short rainy seasons, recurrent drought all

exacerbated by high evaporation rates. Yet, agriculture in these areas is essentially rain-fed. There is of course scope for using “blue water” (i.e. runoff water, water from rivers, ground waters, lakes) in these challenged countries but as these resources are finite and often over-committed, the exploitation of other water sources needs to be optimised. Green water is an important part of the solution to the problem.

More research on green water is necessary

Water from rain suffers losses through run-off, low infiltration, poor conditions of root development and soil erosion. Efforts need to be made to improve the efficiency of rainwater use to deliver more green water for use by the plants, especially for the benefit of small farmers in arid and semi-arid countries. To contribute to achieving this goal, IFS is making a call for research proposals in this area.

Call for proposals and eligible research

The International Foundation for Science (IFS) is pleased to invite young scientists to submit research proposals that address:

Good management, conservation and use of green water for increased food and biological production through

- Land management and soil water conservation i.e. soil management practices to increase soil moisture, to increase rain water infiltration in the root zone and water retention, as well as to reduce evaporation on the soil surface
- Soil practices to reduce soil erosion and impact on rain water infiltration
- Increase of infiltration through agriculture, rain harvesting or water conservation practices
- Soil fertility management and efficiency of water use for increased production
- Plant management impact on efficiency of rain water use, effects of plant density on rain water use efficiency, relationship between intercropping and run off
- Use and development of drought resistant plants thereby impacting positively on the water demand for food production and a sustainable environment
- Research on the socio-economic aspects of green water use and management

Who is eligible?

Candidates must be at the beginning of their careers, under the age of 40, hold at least an MSc degree, be citizens of developing countries and be carrying out their research in a national university, national research centre or a national research oriented NGO in a developing country. Researchers in Sub-Saharan Africa up to 45 years of age may apply, providing they obtained their last higher degree within the last 5 years.

For more details on eligibility, consult the IFS website: www.ifs.se

How to apply?

Proposals must be submitted using an IFS application form which can be downloaded from the IFS website here: www.ifs.se

The completed form should be sent to : applications@ifs.se

When can you apply?

There are three calls for this initiative with deadlines for submission set to

December 31, 2008

June 30, 2009

December 31, 2009

When will you know the results?

The applications will be evaluated according to the normal IFS process, whereby the results will be known for each session 6 to 7 months after the deadline.