



INTERNATIONAL  
FOUNDATION FOR  
SCIENCE

Building Scientific Capacity in  
Developing Countries  
Over 30 years' experience  
*Nighisty Ghezae*

**Regional Initiative in Science and Education (Rise)  
Inaugural Meeting  
Hilton Hotel  
Nairobi, Kenya  
October 6th-7th, 2008**





**IFS exists.....**

..... to support young researchers in  
developing countries



# International Foundation for Science

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- ◆ **Founded 1972**
- ◆ **International Research Council**
- ◆ **Non-Governmental Organisation**
- ◆ **International Board of Trustees**
- ◆ **Secretariat in Stockholm**
- ◆ **1,000 Scientific Advisers**



# Mandate

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The IFS Mandate is to contribute to the strengthening of capacity in developing countries to conduct relevant and high quality research on the **management, use, and conservation of biological and water resources.**

# IFS Research Areas

- Crop Science
- Aquatic Resources
- Animal Production
- Food science
- Forestry, Biodiversity and Conservation, environmental ecology
- Natural Products
- Water Resources
- Social Sciences



- ◆ Identify, through competitive grants and careful screening, young promising scientists;
- ◆ Support them in their early careers to enable them to get established and recognised as scientists;
- ◆ Not just a research grant: support is given throughout the granting period.



# IFS Supports Research

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- ◆ Focus is mainly on the individual  
*(though some teams are also supported)*



# Research Grant

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- ◆ Maximum amount USD 12,000
- ◆ Research project 1-3 years
- ◆ Two renewals
- ◆ Equipment, supplies, literature, local travel, extra manpower





# Granting Process

- Simple
- Rapid



# Granting Process

- ◆ Two granting sessions per annum
  - ◆ *June and December*
- ◆ 1500 applications

# The Granting Process

- ◆ Each application is evaluated on a competitive basis



# Granting Process

## ◆ Pre-screening



# Granting Process

- ◆ Pre-screening
  - ◆ Eligibility criteria



# Criteria for Eligibility

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- ◆ Citizen of a developing country
- ◆ Younger than 40
- ◆ Beginning of research career
- ◆ Usually MSc or equivalent degree
- ◆ Working at a university or research institution in a developing country
- ◆ Carrying out research project in a developing country



# Granting Process

- ◆ Pre-screening
  - ◆ Eligibility criteria
  - ◆ "light" scientific screening

# Granting Process .... Next stage of evaluation process

- ◆ Pre-screening
- ◆ Expert Advisors – in depth evaluation of proposal



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# Granting Process ....

## Advisors

- ◆ Expert Advisors (>1,000) provide in-depth evaluation of proposal
- ◆ Provide comments which are sent to all applicants



# Granting Process

- ◆ Pre-screening
- ◆ Expert Advisors
- ◆ Scientific Advisory Committee



# Granting Process

- ◆ Pre-screening
- ◆ Expert Advisors
- ◆ Scientific Advisory Committee
- ◆ Recommendation of grants  
(300 in 2007)

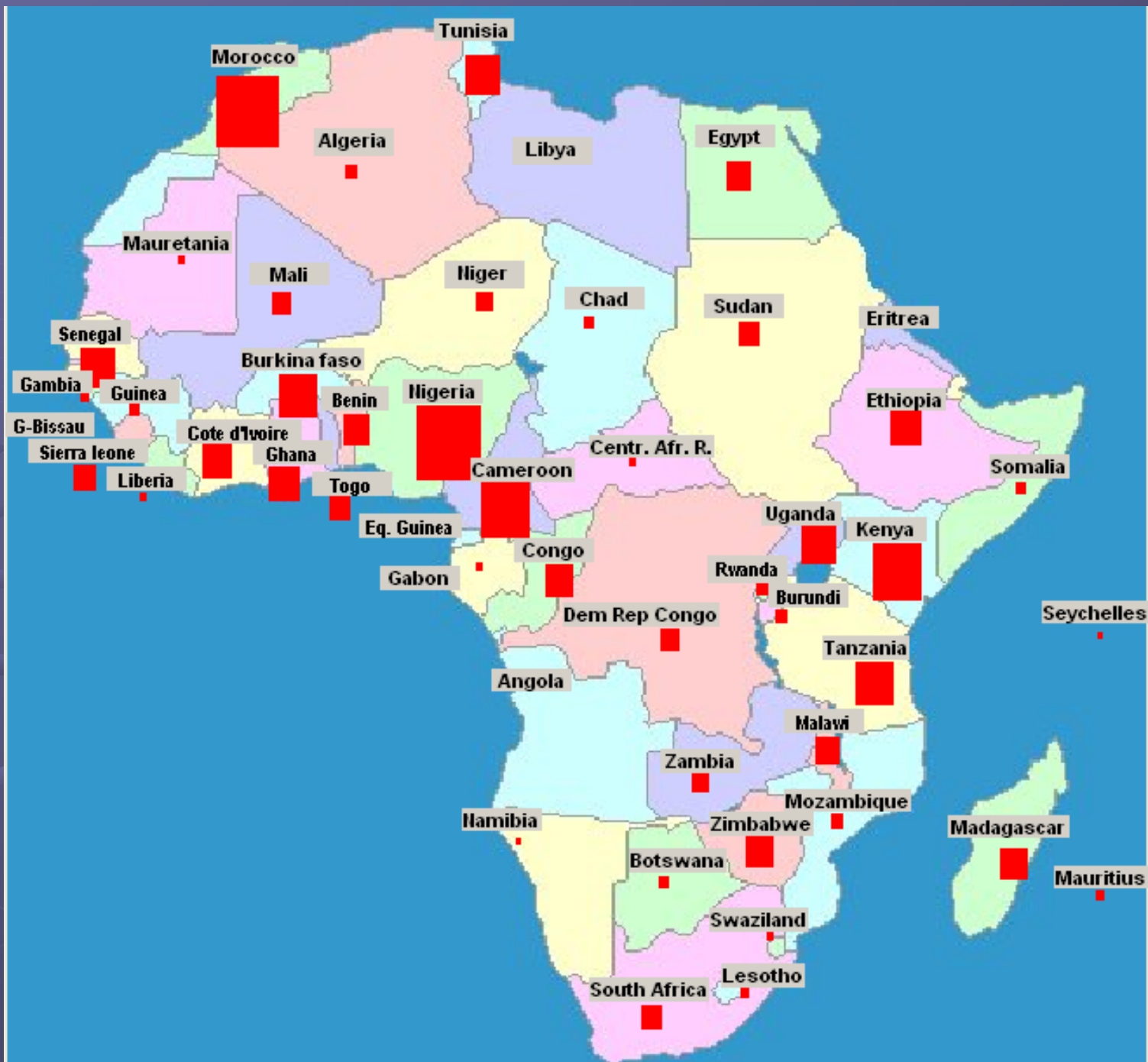
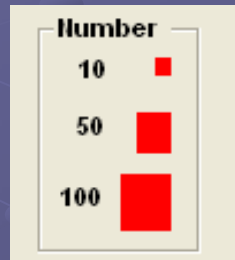
## **Applicant and feasibility of project**

- ◆ Applicant's training and experience
- ◆ Available and requested resources
- ◆ Realistic goals and time plan

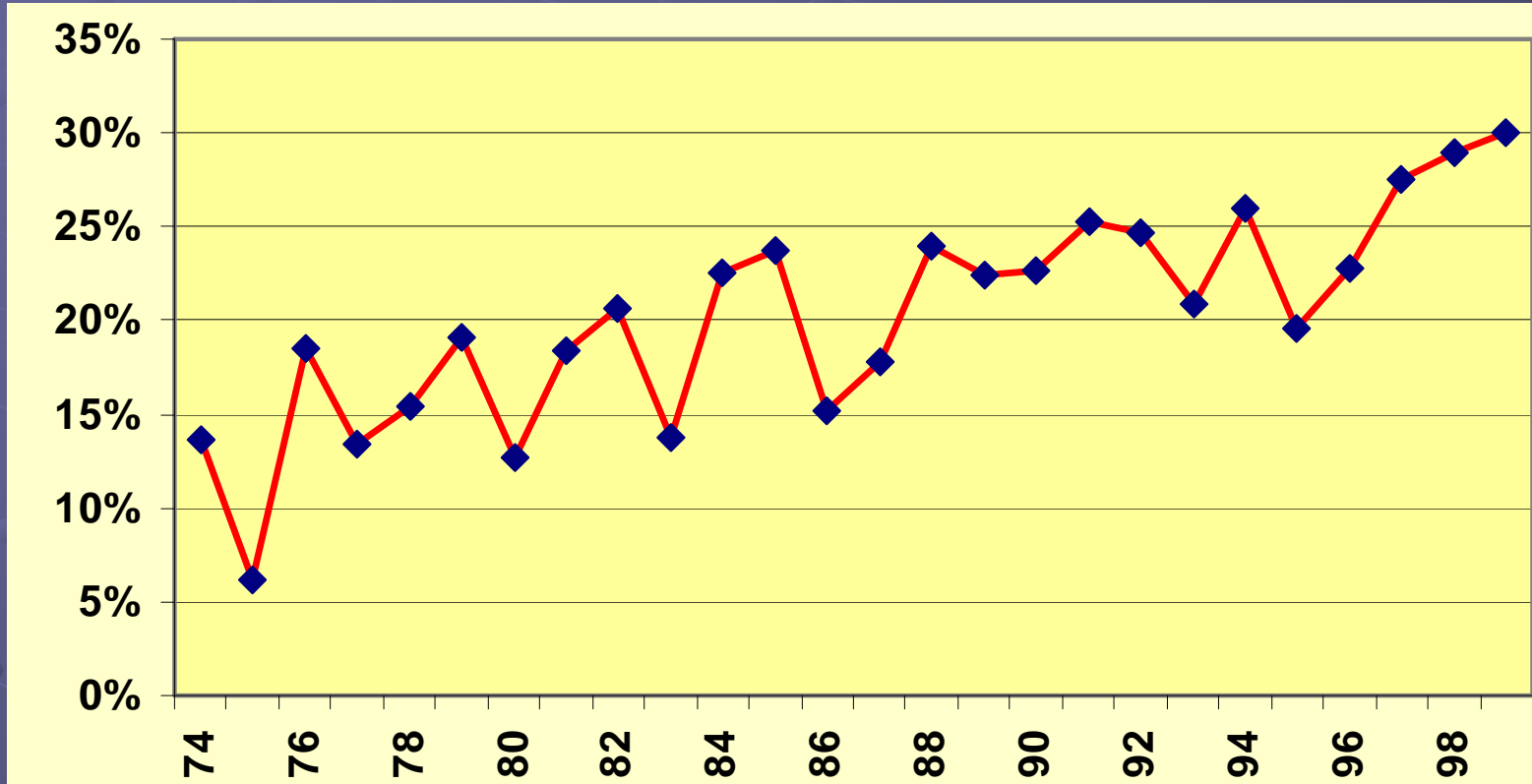
## **Scientific quality**

- ◆ Well-formulated hypothesis/up-to-date knowledge
- ◆ Sound experimental design
- ◆ Relevant methods
- ◆ Developmental applicability
- ◆ Generation of Scientific knowledge
- ◆ National priorities

# Number of IFS Grants given by Country in Africa



# Grants to Women





# Adding Value to the Grant

**Scientific Capacity Enhancing Support**

# Capacity Enhancing Package for grantee

- Mentorship

- Travel for capacity activities

- Scientific paper writing courses

- Thematic workshops





# Capacity enhancement for non-grantees

● Project proposal writing  
courses

● Pre-grant to identify  
research questions

*-survey work or*

*-provide a firmer foundation for asking a  
research question*



# Scientific Capacity Enhancing Support in detail

## Conceptualizing research

- *identifying research needs;*
- *stating the nature of a problem and why it requires new scientific knowledge;*

# Scientific Capacity Enhancing Support cont.

## Stakeholder Analysis

- *who will be the potential beneficiaries of the research proposed?*
- *principles of stakeholder analysis;*
- *how will proposed research integrate into institutional resources*

# Scientific Capacity Enhancing Support cont.

## Literature Survey

- Sourcing the literature to adequately assess the extent of current information on a chosen topic of research

# Scientific Capacity Enhancing Support cont.

- Appropriateness of experimental designs and structured surveys
- Overview of statistical methods used in field and laboratory experimentation and the use of statistical software packages: main pitfalls and limitations
- Overview of requirements and main considerations when designing and carrying out rural survey work (exercises from sample of proposals)

# Scientific Capacity Enhancing Support

- Log frame approach to formulating goals, aims, objectives and activities
  - Basics of problem trees and log frames:
  - how these are structured and why they can be useful in
    - clarifying research ideas, formulating scientific hypotheses and objectives and
    - determining the main research activities required to meet objectives set

# Results of IFS Support



- IFS grantees remain active researchers in their own country



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- IFS grantees publish more frequently in mainstream journals





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- Increased collaboration with other scientists
- Internationalisation of many grantees' careers



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- IFS grantees publish more frequently in mainstream journals
- Internationalisation of many grantees' careers
- Increased collaboration with other scientists
- More success accessing further funding





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**Thank you.**  
**IFS Look forward to**  
**partner with all of you**  
**[www.ifs.se](http://www.ifs.se)**

