



**INTERNATIONAL
FOUNDATION FOR
SCIENCE**

The IFS approach to scientific capacity strengthening

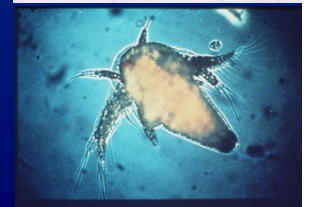
Ingrid Leemans

Bremen, August 2010



Science for development

New technology underpinned by
Science is the basis for
Sustainable development



Technology for development

- Knowledge-intensive
- Location specific
- Requires interaction between
 - Scientists
 - Innovators
 - Entrepreneurs
 - Users



Research landscape in less developed countries



- Positive attitude to science
- Expansion of universities
- Post graduate programmes
- Regional research networks
- Large cohorts of M.Sc., M.A.



The challenge

- How to encourage the new generation of academics to choose a scientific career?
- How to transform academic degree holders into creative scientists?



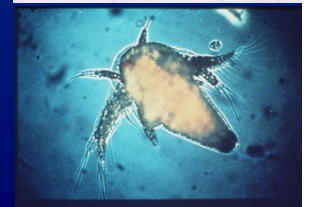
Donor's perspective – where to invest resources:

- University department
- Research institute
- Faculty
- University
- Regional research network
- International consortium
- Individual scientist



The individual scientist

- IFS puts the individual scientist in focus
- Why?
- Intellectual capital stored in individuals
- Science progresses through innovative thinking and creative interaction among the individual scientists



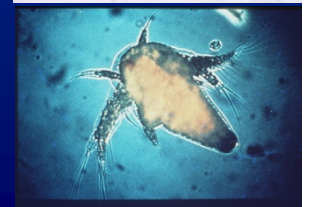
The challenge

How transform an academic degree holder to an innovative scientist ?

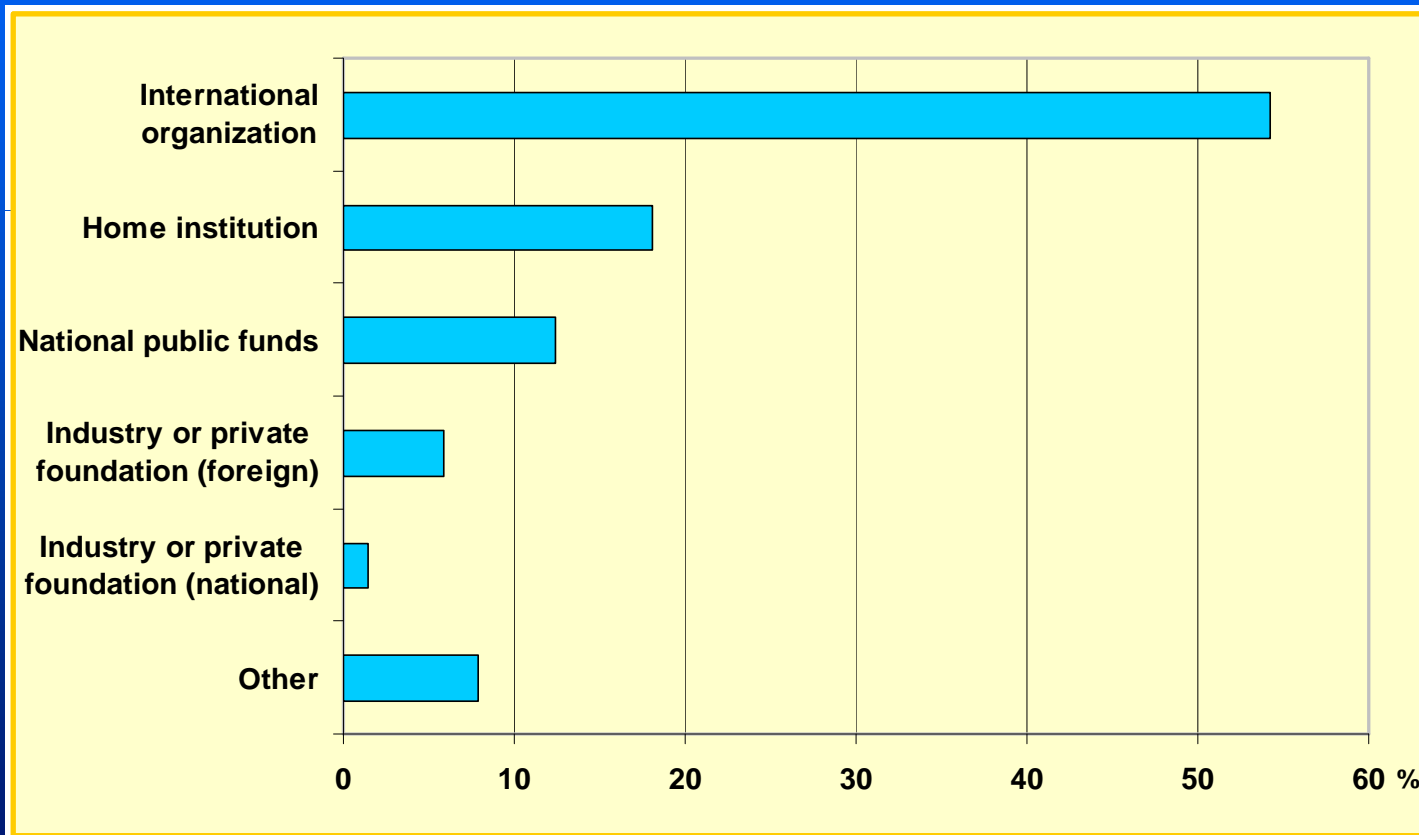
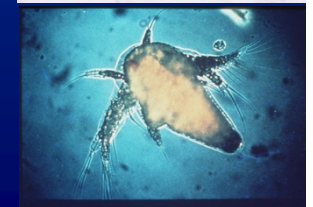


The predicament of young scientists

- Universities concentrate on teaching
- Research tradition is short
- Slow and insufficient access to scientific information
- Lack of research funds
- Limited encouragement by superiors
- Insecure career path
- Unattractive salary
- Women academics especially vulnerable

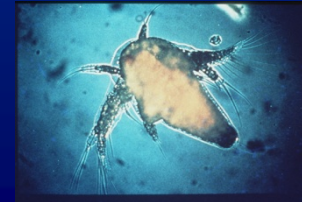


Funding Opportunities for African scientists



What kind of support is needed?

- Competitive grants and targeted support can make the transition from a degree holder to a fully fledged scientist
- Acquiring a grant on competitive terms boosts research drive and morale
- IFS fills a function here!



The Role of IFS



IFS helps institutions to transform their degree holders to scientists who are:

- competent
- creative
- innovative
- independent



How?

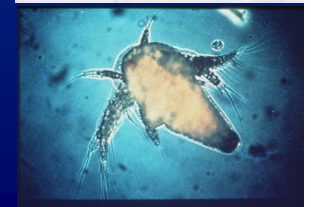
- A competitive research grant scheme
- A supporting package adding value to the grant



The International Foundation for Science (IFS)

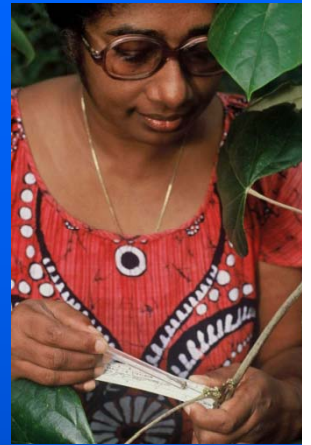


- International research council (NGO) founded 1972
- Mission: strengthen research capacity for development in poor countries
- International Board of Trustees
- Secretariat in Stockholm



IFS (cont.)

- Research projects addressing the sustainable management of biological and water resources
- 1,000 scientific advisers
- 130 affiliated organisations including science academies
- Close to 7,000 grants in more than 100 developing countries



The IFS strategy



- Identify young promising researchers
- Competitive grants
- Careful screening process
- Support researchers' early career
- Support them at home



IFS Grantees in Africa

Grants to be closed

Run Selection

Show Figures

Remove Figures

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Rightclick to decrease, leftclick to increase.

Number

10

50

100

Grantees

Female Gr

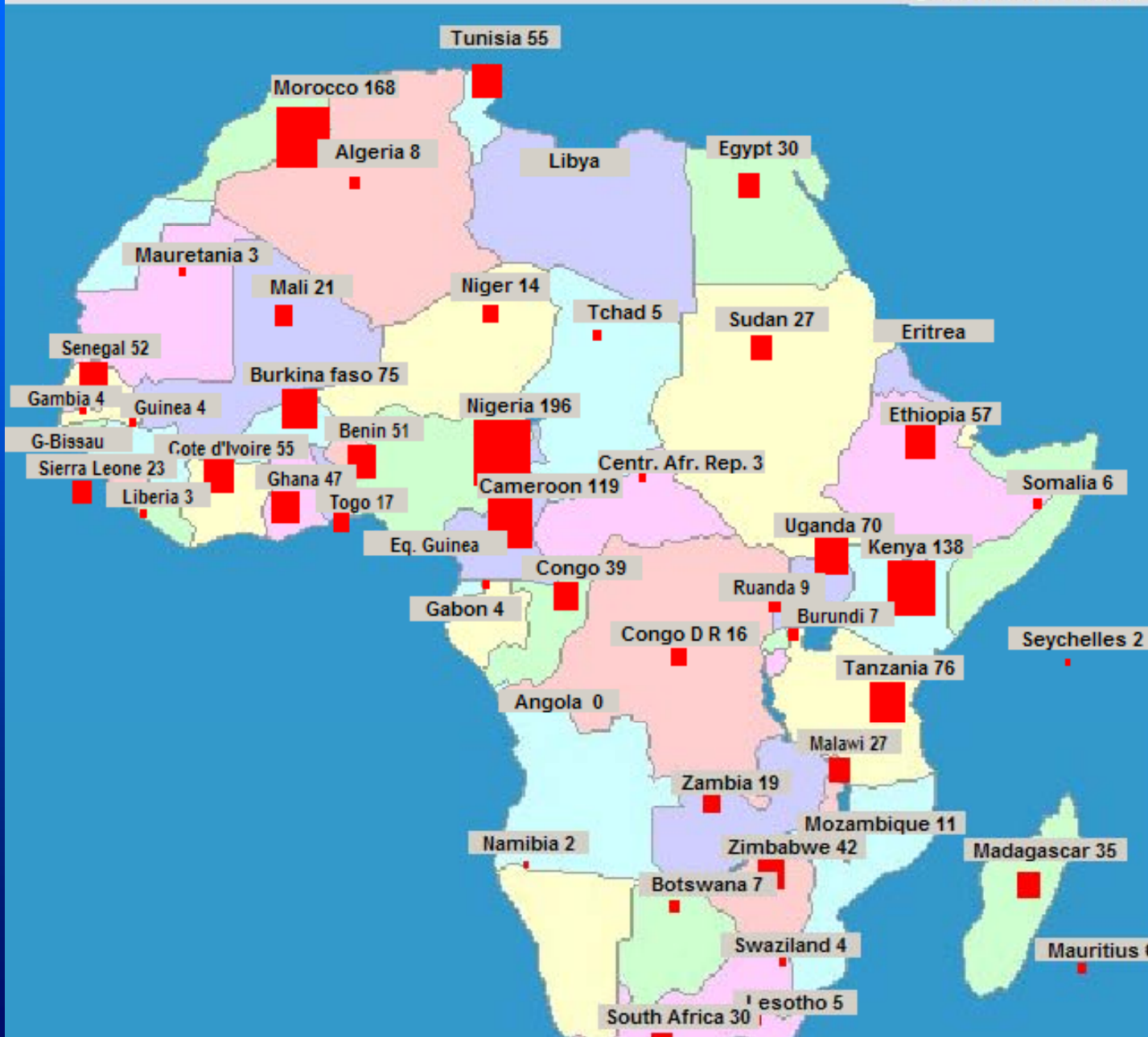
2000 - today

4 - 10 years

2004

Grants

Open grants



The research grant



- Maximum USD 12,000
- Scientific equipment, supplies, literature, fieldwork
- Salary not included
- Supporting services
 - - purchasing sc. equipment
 - - workshops, networking, mentorship
- Research project 1-3 years
- Grant can be renewed twice



Results of IFS Support

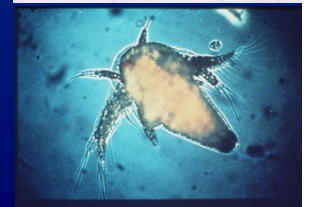
- IFS grantees remain active researchers in their own country
- IFS grantees publish more frequently and more often in mainstream journals
- Internationalisation of many grantees' careers
- Increased collaboration with other scientists
- More success accessing further funding



Five Year Programme 2006 - 2010



- Focus on vulnerable research environments
- A grant alone is not enough
- Grant + value adding package = research success
- Collaborate with regional partners
- An IFS organizational presence in priority regions



Problems faced by young scientists

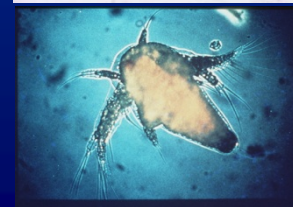


- Formulate a scientific hypothesis
- Link hypothesis to methodology and research plan
- Relate project to current research frontier
- Peer review during research
- Write a scientific paper



Collaboration

- IFS network of scientific advisers
- Affiliated and other partner organizations and links with sectoral networks
- Organizational presence in regions with large grantee populations





Thank you for your attention

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