UNIVERSITIES AS KNOWLEDGE GENERATORS IN THE FIGHT AGAINST POVERTY

La Granja de San Ildefonso

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(CEURI - CRUE: Conference of Rectors of Spanish Universities)
SUMMARY

- Consensus
  - Science and technology roles in "North's success"
  - Official Development Assistance failures
- "The limitations of the special case"
  - ... our limited knowledge about South's processes.
- Universities as research agents on poverty problems
  - spanish universities and development cooperation
- Need of strategy and incentives
- Conclusions
SCIENCE IN DEVELOPMENT

- R&D in Science and technology (1%..4% of GDP)
- High success of R&D system in promoting North's development... \textit{(knowledge economy)}
  - element of a wide \textit{open} system (economy, politics ...)
  - driven by benefits, incentives, and public support

OECD Factbook 2009
ODA "FAILURE"

- 2,3 trillion $ on last 50 years\(^1\)
  - Growing gaps...

- Growth success cases unrelated to ODA (*asian tigers,*...)  
  - harmonious labour-management relations  
  - *relative* equity... and stability  
  - Public investment on health and *education*...

- African stagnation in spite of Aid ...

\(^1\) William Easterly 2008: 2006 $
ODA FAILURE (lessons learnt)

- Economic growth is needed but is not enough
- Infrastructures are needed but aren't enough
- Institutional quality ... governance ... democracy are needed
- ... as health and education...
  - ... empowerment of poor women ...
- DEVELOPMENT, *highly correlated* with deployment of institutional and human capabilities and opportunities
- ... in the context of global economic conditions ...
- PRINCIPLES of 2005 PARIS DECLARATION
WEALTH GAPS

- Technological / Digital gaps

- Distance to the technological frontier related with current and future capacities and productivities
  - human capital as key factor on the technology diffusion process... via adaptation and innovation
  - tertiary education as factor of economic divergence
  - ... implies increasing or decreasing gaps

- Tertiary education and research capability are real needs on south’s societies
  - ... but attention to brain drain ...
The limitations of the special case

- (Dudley Seers 1963)

"... it is inherently implausible that a "general theory", or even propositions of any generality, can be derived from the experience of a few countries with highly unusual, not to say peculiar, characteristics. Teaching which concentrates on this type of economy is somewhat distorted, and the distortion is dangerous if those teaching fail to stress continually that they are dealing with what is a highly special case"

¡¡¡ABOUT ECONOMICS, BUT CAN BE APPLIED TO ALL KNOWLEDGE AREAS!!!

- Particular solution and general problem

- key examples
  - Urban concentrated <> rural dispersed populations
  - Poverty concentrates on tropics
    - Medicine, Agriculture, water management...
  - Duality of solutions in the world: rich-formal / poor-informal
    - self-employment, informal construction, apprenticeship, ...
Fig 10. Rate of maternal deaths (per 100,000 births), 2000

Presented by Andrés de Francisco in “Research to decrease inequities for mothers, neonates and children”.
Hunger example

Halving hunger: it can be done”, Millenium Project, 2005

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Health example

Tropical diseases and tuberculosis account for 12% of the global disease burden but only 1.3% of new drugs developed.

Presented by Robert Ridley and Yves Champey in "Neglected diseases: supporting the global framework on essential health R&D: a panel discussion"

Source: Chirac P, Torreele E. The Lancet. 12 May, 2006; 1560-1561

Research orientations

- Active research fields
- Current knowledge frontier
- North's needs
- South's needs
- Neglected research fields

Knowledge areas
Research focuses

- Tropical problems on health, agriculture, water ...
  - Crops, diseases, ... in a *climate change* context
- Informal (& disperse) economies and processes...
  - self and micro employment, local production, self-building... apprenticeship...
  - ...micro finance / micro assurance ...
- Improve COMPLEXITY and EMERGENT PROPERTIES on poor's processes and societies
  - Inclusive business, social entrepreneurship, ...
- cooperativeness versus competitiveness
- ... the *long (and insolvent) tail*, Base of Pyramid ...
  - how to make solvent the *insolvent* people (giving them decision-making power)
Evidence in poverty reduction:

DFID Research 2009–2010
Providing research evidence that enables poverty reduction
DFID Research 2009–2010

Allocation of the research programme budget by theme (2009–2011)

- **32%** Human development
  - Education
  - Health

- **27%** Agriculture

- **12%** Climate and environment

- **10%** Governance, conflict and social development

- **8%** Research uptake and communication (all research projects have additional research uptake funding)

- **5%** Growth

- **5%** Short-term policy research (an internal fund for DFID policy teams to commission short-term research on policy questions)

- **1%** Future challenges and opportunities (research into fast emerging issues and future ‘unknowns’, including how to make sure developing countries can make the most of new and emerging technology)

210 M£ R4D 3,7%

5.700 M£ DFID Total (0,9 from 0,43% GDP UK)

~ 1/150 of R&D investment in UK
R4D EXAMPLES

www.manhica.org

www.ehas.org

www.ies.upm.es

www.unavarra.es/grupos/agriculturadesarrollo/

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Universities as knowledge gen.

EXAMPLE: UPM 2009 figures

(UPM's budget was 422 M€)

- Research & Development
  - 15 Centers of R&D
  - 224 recognized research groups
  - 84 University&Enterprise chairs
  - 120 M€/year in R&D funding

- Development Coop. and Research for Dev: R4D
  - 1 M€ total UPM's contribution to Spanish ODA
    - about 33% could be accounted as R4D contribution
  - 24 recognized development groups
    - aimed to become research/action groups
UPM's development groups

- "Model" components:
  - Work on their own scientific area ... aimed at poverty related south's problems
  - field project as essential component in the experimental application of research results
  - Strong counterparts -> need to strengthen counterparts
  - academic rigour and precision

- ¡task for research groups!
  - difficulties: for young researchers, to shift group's traditional goals or research lines, ...

- development groups as initial wedges ...
- ... with an urgent need to scale up.
Universities and Dev. Coop.

- CRUE -> CEURI (CEURIC) -> C CUD
  - (coordinating ~ 40 spanish universities)

- Strategy:
  - ESCUDE 2000
    - more than 16 vice-chancellors with DC in its name
  - Conduct Code on Development Cooperation 2006
    - 46 universities adhered

- Workgroups
  - Instruments on Universitary Development Cooperation
  - Quality and Evaluation tools
  - Cooperation networks

- Common tools
  - CUD Observatory (OCUD): www.ocud.org
(OCUD) Activities and agents

**Education**

Promotion, management & coordination

Inter-university Cooperation (Institutional strengthening)

Dissemination & awareness (Education for development)

Projects and programs (...calls, technical assistance...)

**Other TAXONOMIES:** CRS, Director Plan

**ENTITIES**

Role in entity

**ACTIONS**

Role in action

**PERSONS**

Participation

**TYPE**

Education

Research

Inter-university Cooperation (Institutional strengthening)

Dissemination & awareness (Education for development)

Projects and programs (...calls, technical assistance...)

Other TAXONOMIES: CRS, Director Plan

Approximation (geography)

Digitalization (locations)

GML Codification (positions)
Map extract
RESEARCH ON POVERTY

- Put poverty and informal and underdeveloped societies under the science focus

- Drivers
  - financing, incentives, recognition, ...
    - ... objective indicators on R4D impacts, not relied only on JCR

- Strategic objectives
  - Establishment of research priorities (sect. & geog.)
  - Set-up of networks and alliances
  - Long-term and stable institutional support

- universitary normality with positive discrimination
NEED OF INCENTIVES

- To undertake research priorities of partner countries
  - and engage excellent and recognized groups...
- For the creation and stabilization of reliable research institutions in partner countries
- For the stabilization and strengthening of poverty oriented research institutions in north's countries
  - health / basic and social sciences / technology ...
- To stabilize strong specialized knowledge networks between
Need of strategies

- To agree R4D (or R&D) objectives with partner countries.
  - in the framework of the 2005 Paris Declaration and the European consensus on Development Cooperation...
  - aiming to long-term collaboration and making attention to excellence differences between research partners.

- To conceive and build pilot large-scale experiences and institutions

- To renew or invent financial/institutional instruments

- To develop objective impact measure tools and indicators
  - in agreement with Paris Declaration Principles
  - in accordance with current praised indicators in R&D
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#### EFICACIA DE LA AYUDA
- **Implementación**

#### MULTILATERALISMO ACTIVO Y EFICAZ
- **Implementación**

#### COHERENCIA DE POLÍTICAS
- **Implementación**

#### EDUCACIÓN PARA EL DESARROLLO
- **Implementación**

#### INVESTIGACIÓN, INNOVACIÓN Y ESTUDIOS SOBRE EL DESARROLLO
- **Implementación**

#### CAPACIDADES INSTITUCIONALES Y HUMANAS
- **Implementación**

#### CONSENSO, COORDINACIÓN Y COMPLEMENTARIEDAD
- **Implementación**
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North's needs

Current knowledge frontier

Active research fields

South's needs

Neglected research fields

Knowledge areas

Knowledge areas with specific incentives

South researchers activity

North's needs

without incentives
CONCLUSION

- Specific researches on poverty related problems are needed.

- R&D support system has a great experience on promoting research lines and institutions.
  - Many of its methods can be successfully employed

- R4D can open new trends and opportunities.
  - Both in north and south's countries

- Important resources and capabilities in universities and research centers... but not yet fully used

- We need urgently to boost incentives and launch strategies to efficiently deploy those skills.