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Designing Innovation Policies to Meet Country Needs

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Contents

Country needs

- Innovation Systems, Development, Competitiveness and Intellectual Property: A look from the South
  - GDP
  - Human development index
  - Political, social, economic, environmental context

Where is Africa according to the innovation and competitivity models?

Measuring and benchmarking

Global Innovation Index

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INSEAD
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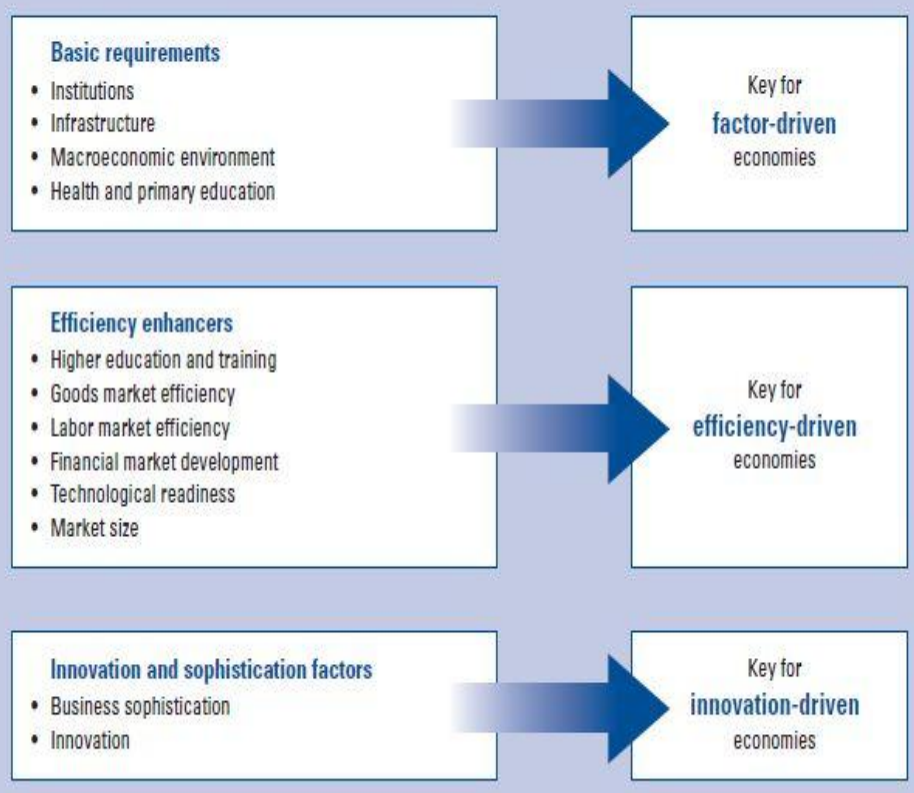
Global Competitiveness Index

WORLD ECONOMIC FORUM

Competitiveness Index model

Figure 1: The 12 pillars of competitiveness



1.1: The Global Competitiveness Index 2010–2011

Table 2: Income thresholds for establishing stages of development

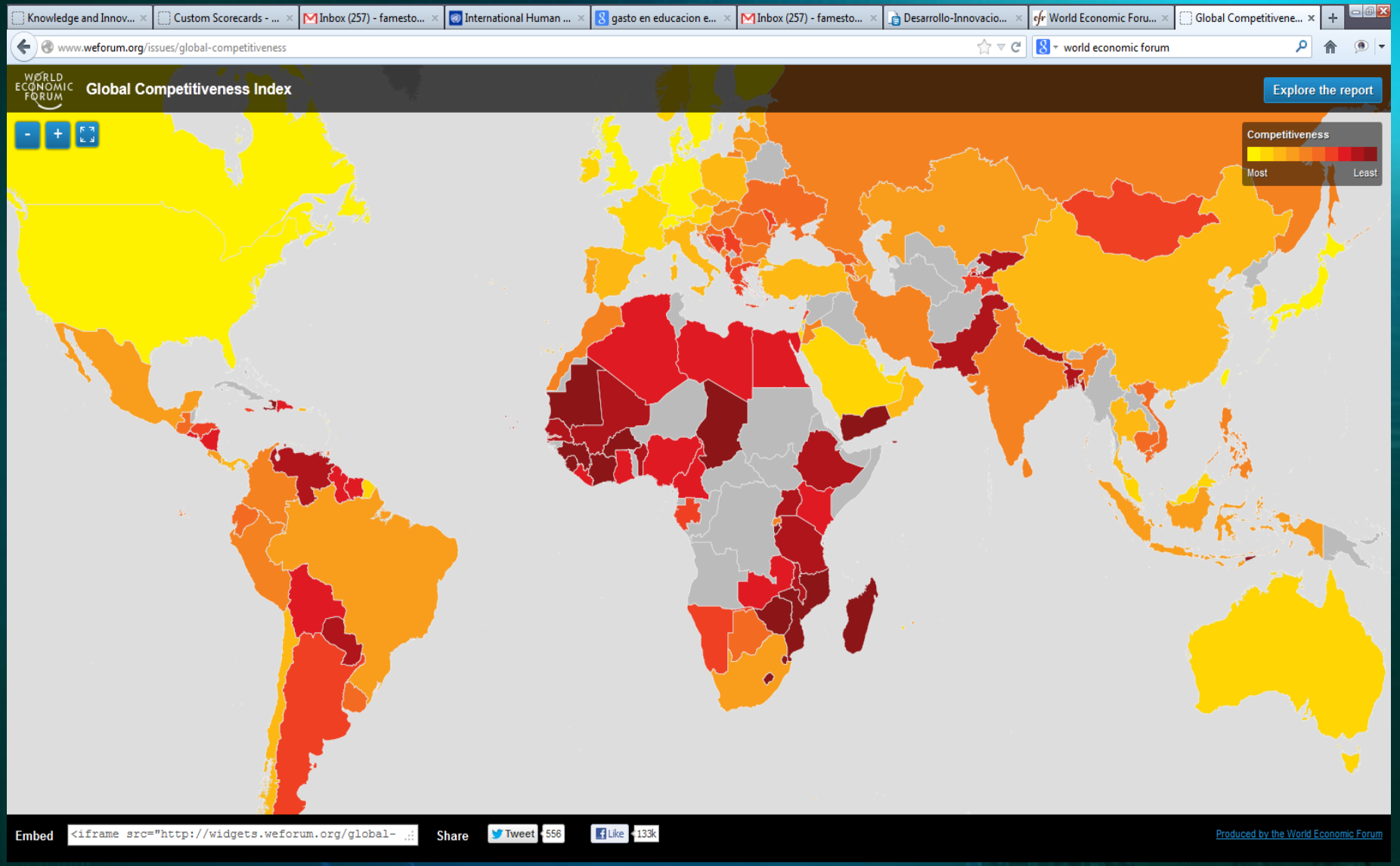
Stage of development	GDP per capita (in US$)
Stage 1: Factor driven	< 2,000
Transition from Stage 1 to Stage 2	*2,000–3,000*
Stage 2: Efficiency driven	3,000–9,000
Transition from Stage 2 to Stage 3	*9,000–17,000*
Stage 3: Innovation driven	> 17,000

b The weights are the following:

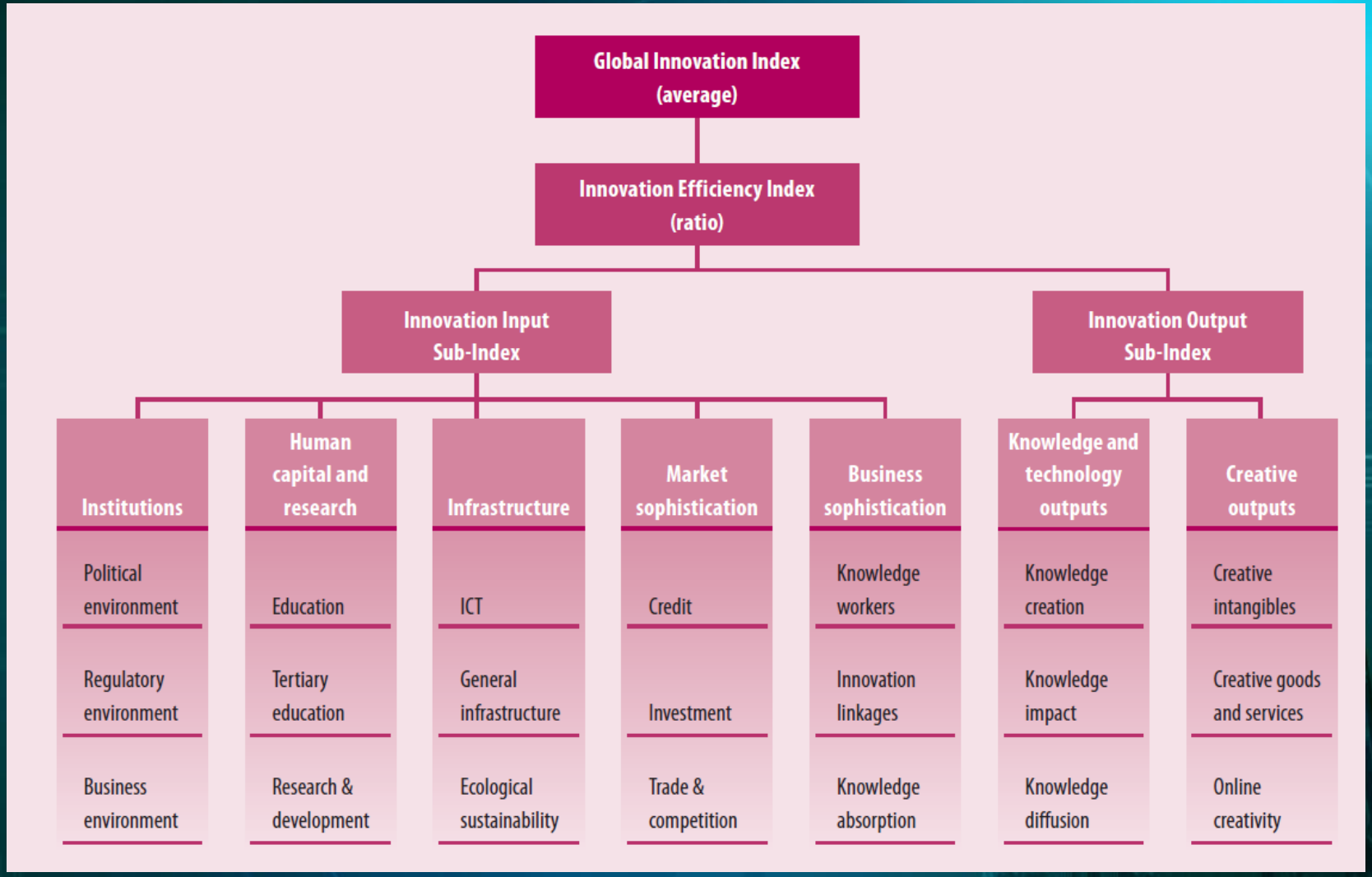
Weights	Factor-driven stage (%)	Efficiency-driven stage (%)	Innovation-driven stage (%)
Basic requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

For further information, see Chapter 1.1 of *The Global Competitiveness Report 2010–2011.*

Global Competitiveness

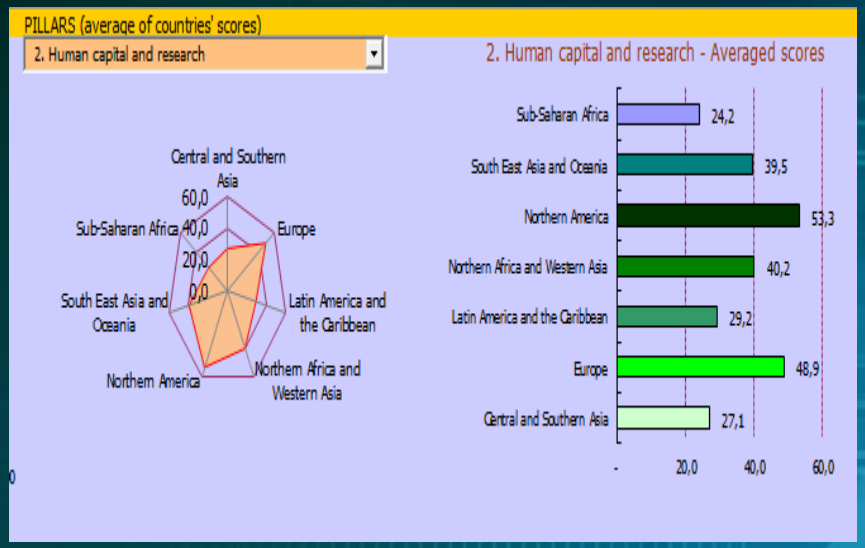


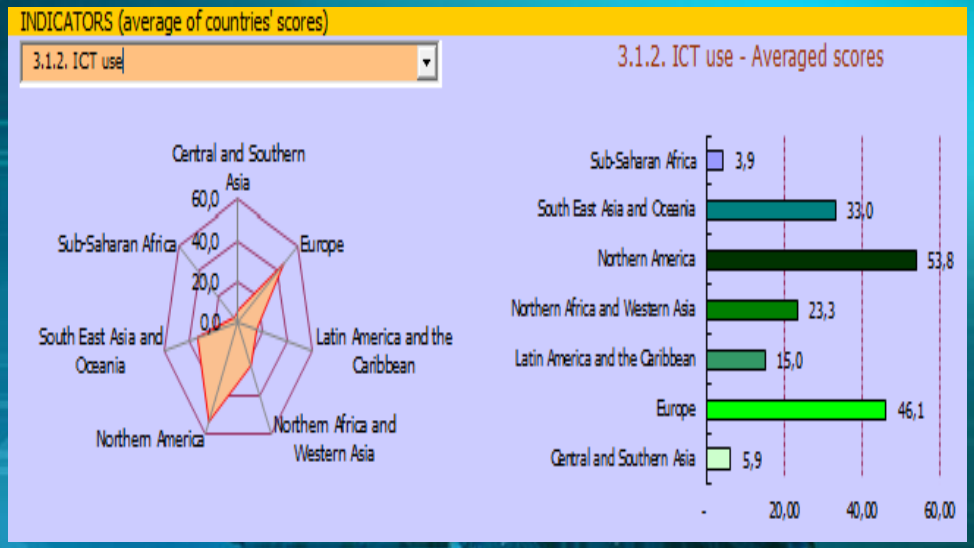
Innovation Index model

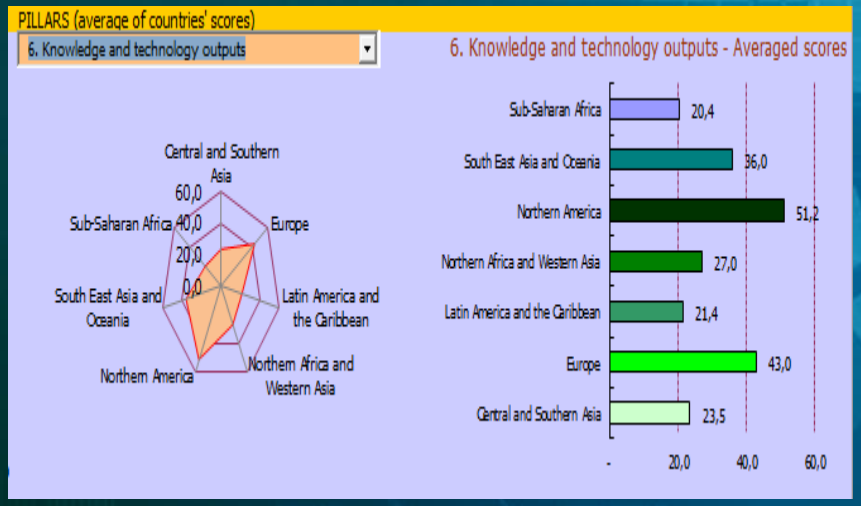


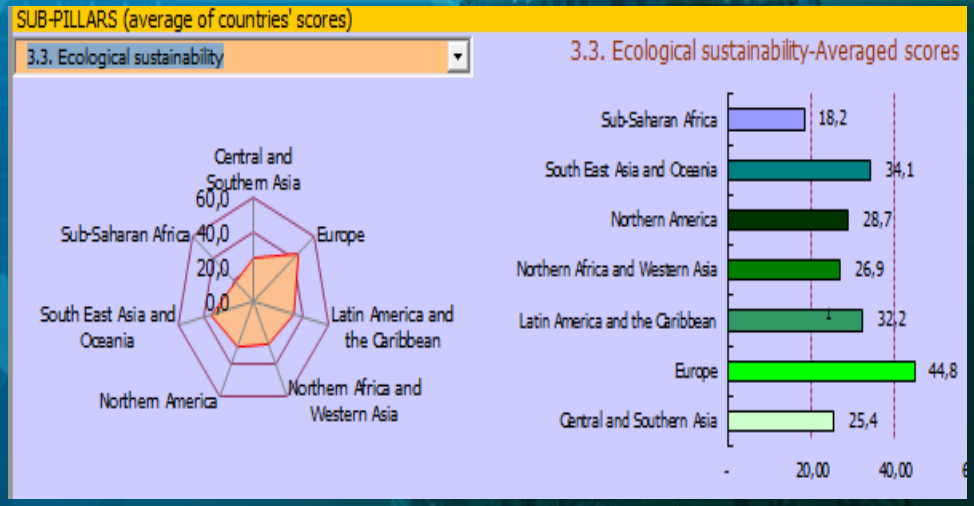
1: The Global Innovation Index 2012

Africa in the Global Innovation Index



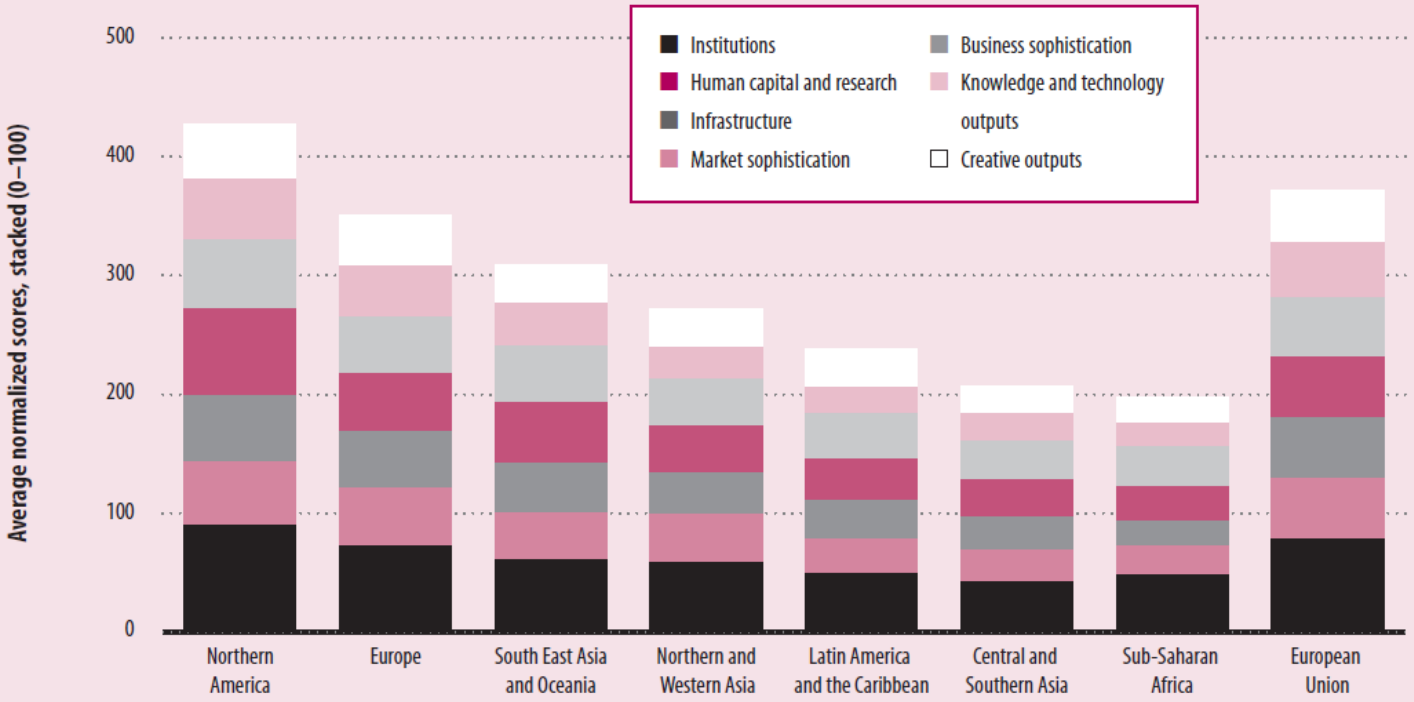






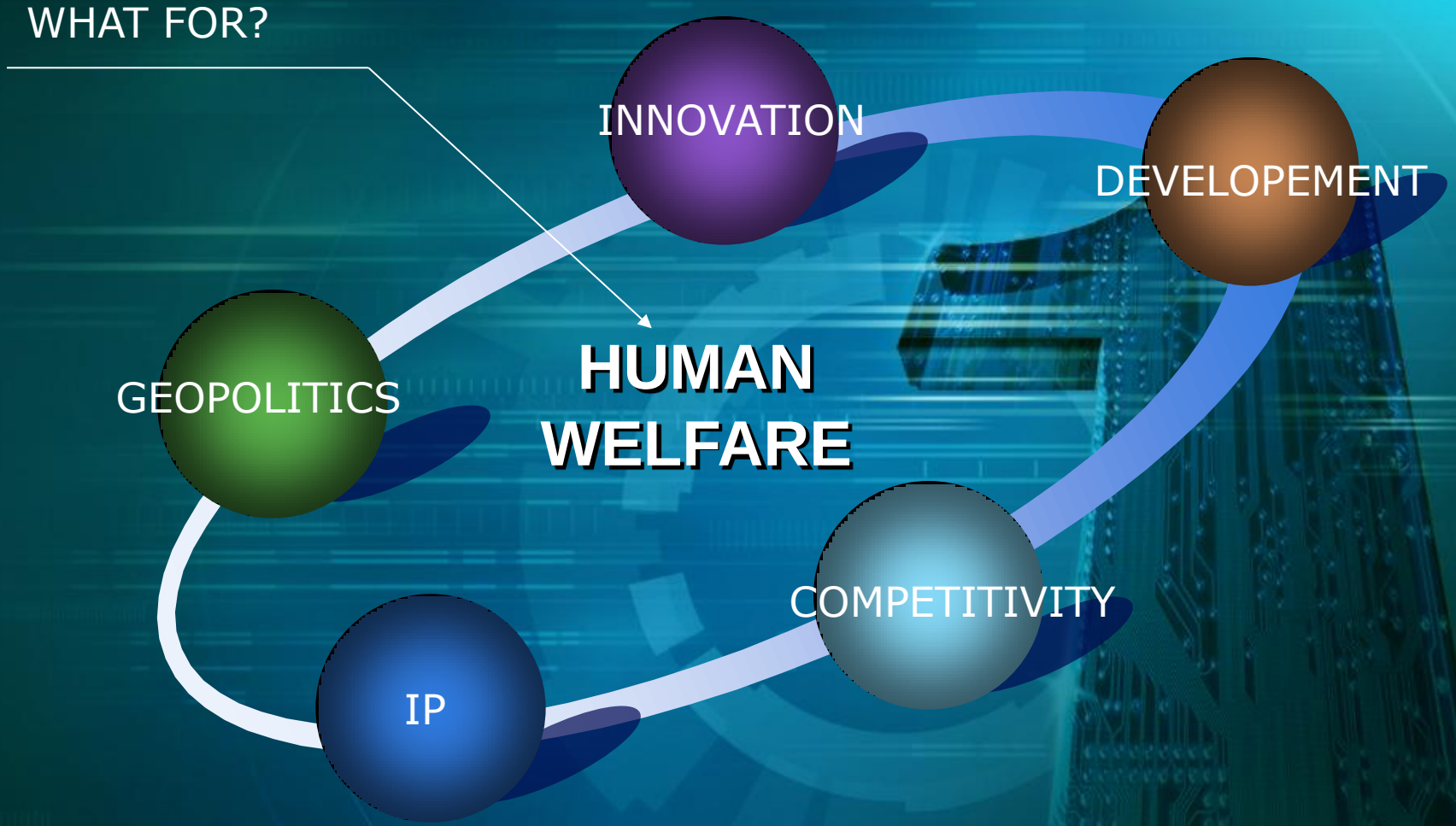
Innovation index: regional comparison

Figure 5: Average scores for selected country groups

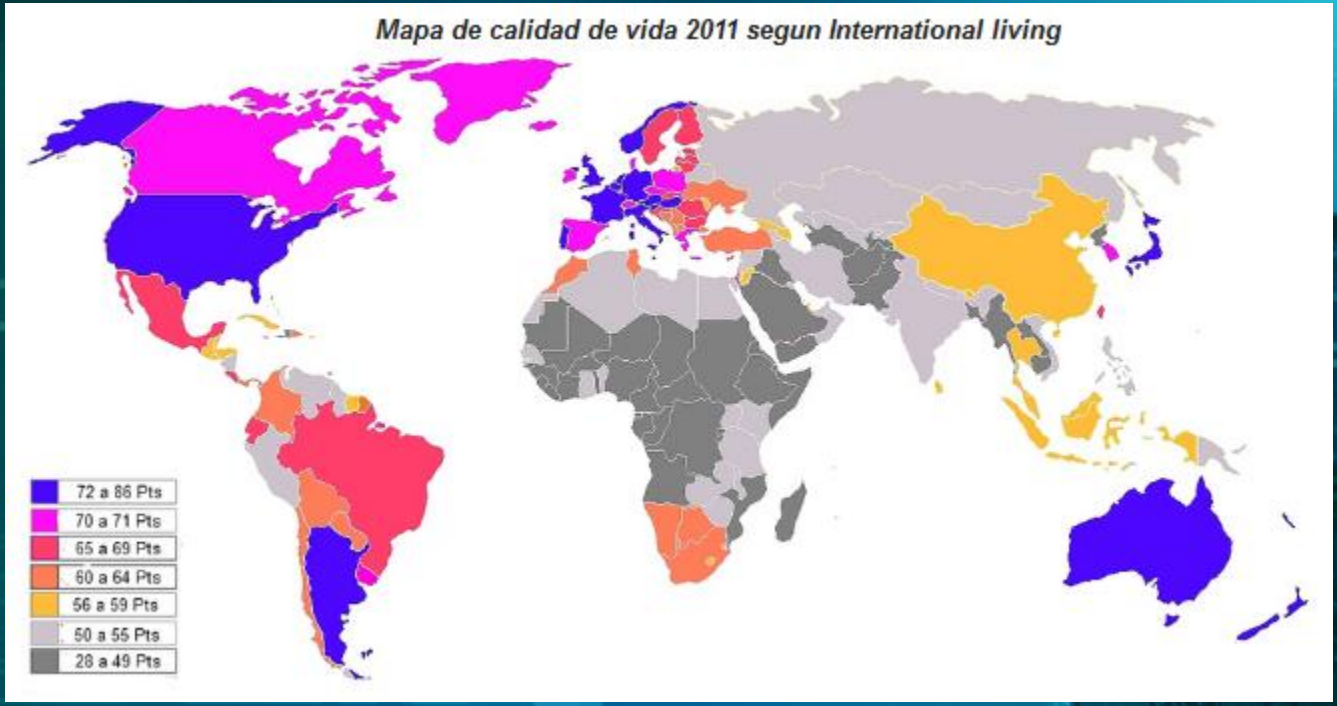


1: The Global Innovation Index 2012

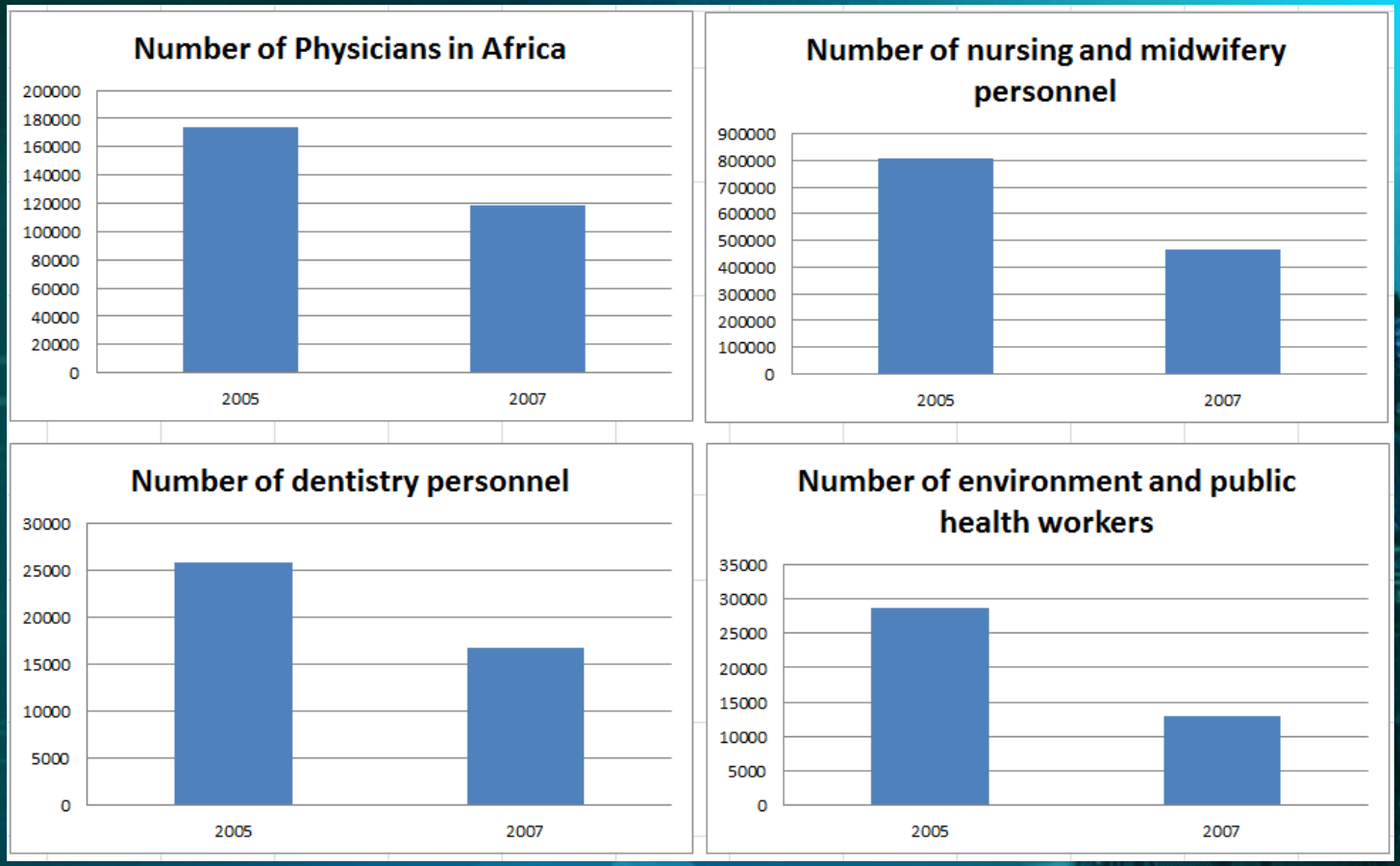
ECONOMY OF INNOVATION



2011 Quality of Life Index



Health indicators



Source: World Health Organization

2007:

2 Physicians per 10000 population, 9 nursing per 10000 pop,
0,2 Dentist per 10000 pop, 0,2 public health workers per 10000pop

Health indicators (II)

Children: environmental health: Water, sanitation and hygiene

Showing: data by country

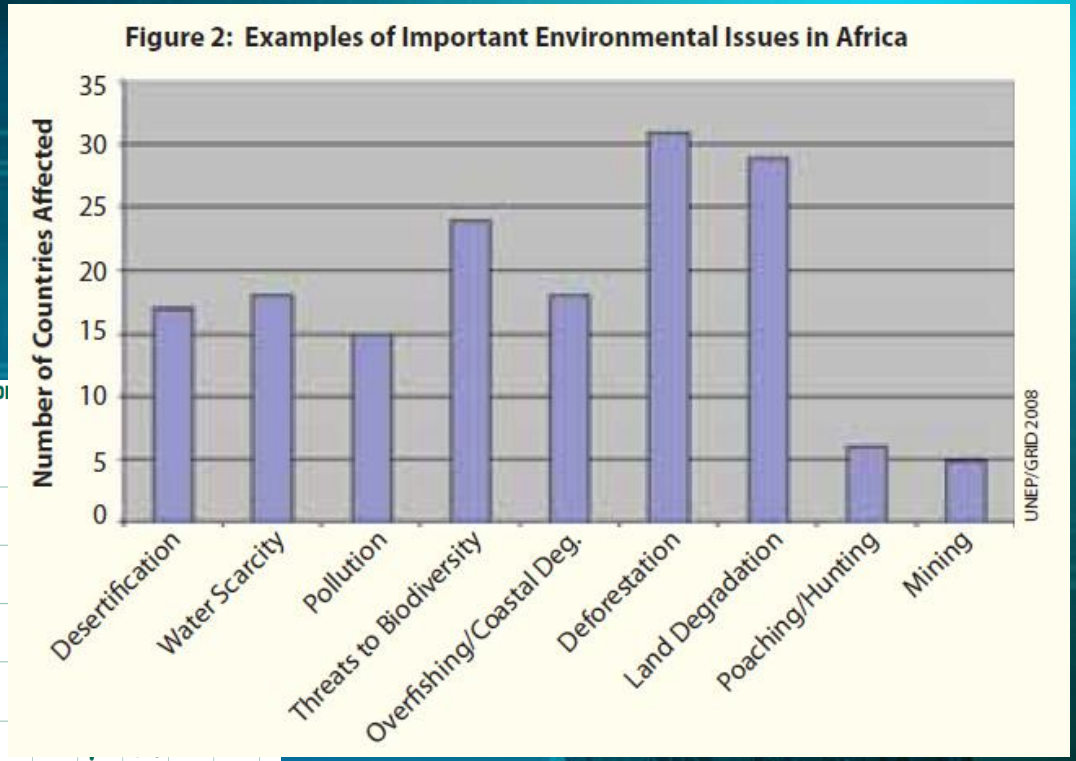
Show filters

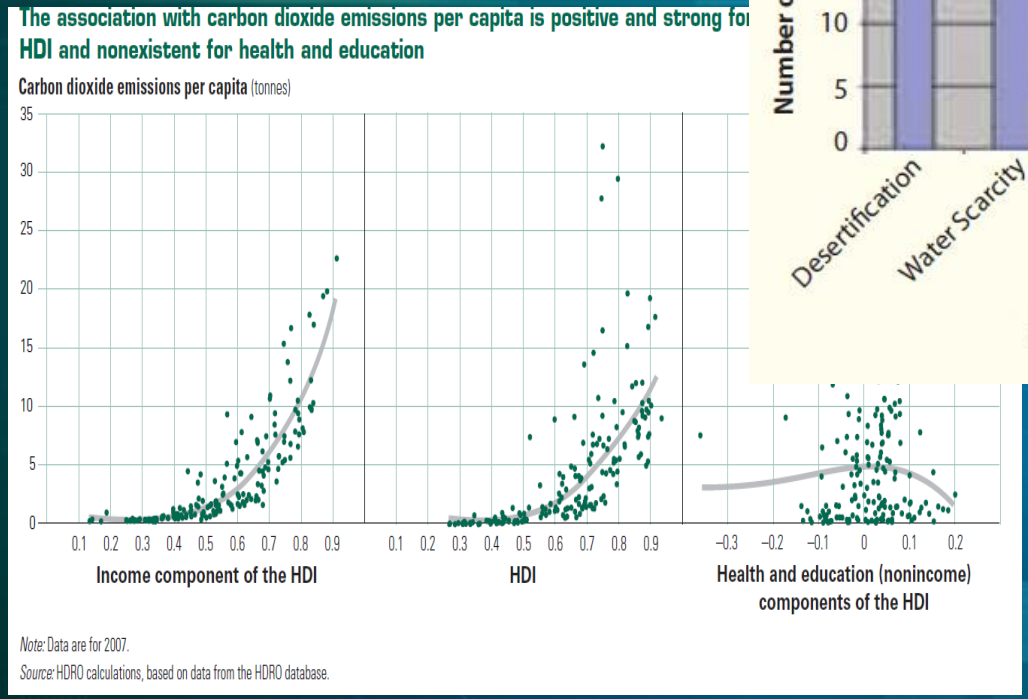
Download this data as
CSV (codes only) | CSV (text only) | CSV (text and codes) | Excel (SpreadsheetML) | HTML (flat table) | GHO XML

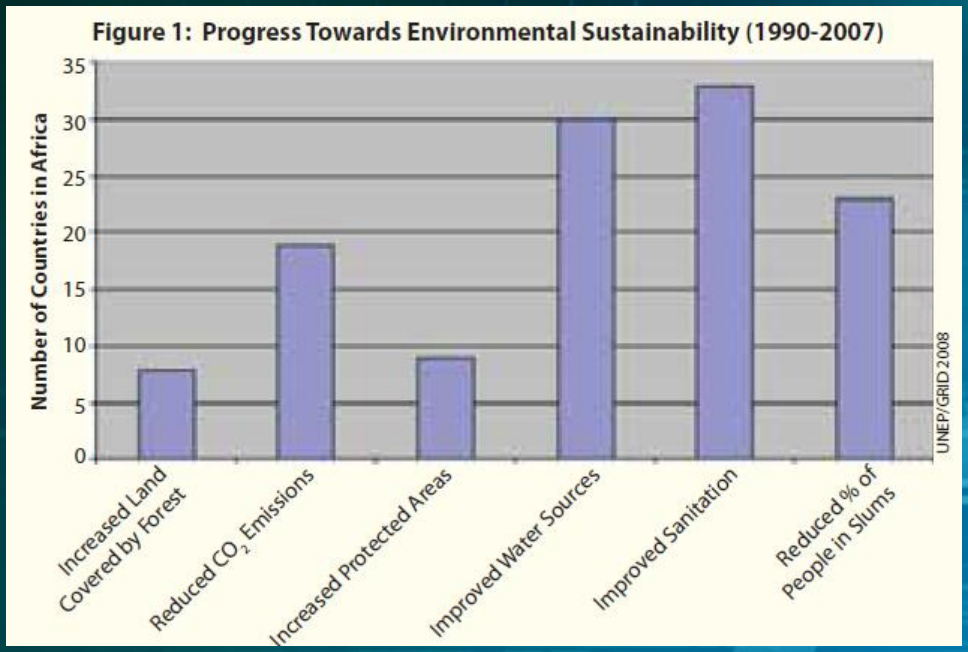
Details: off

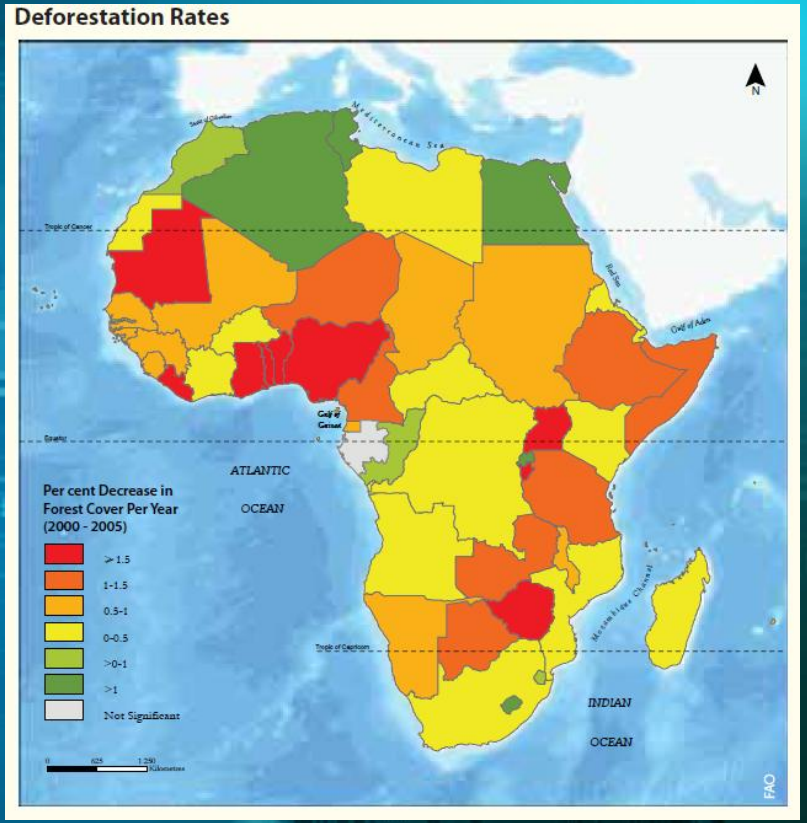
		Water, sanitation and hygiene attributable DALYs per 100'000 children under 5 years	Water, sanitation and hygiene attributable deaths per 100'000 children under 5 years	Water, sanitation and hygiene attributable DALYs ('000) in children under 5 years	Water, sanitation and hygiene attributable deaths ('000) in children under 5 years
Algeria	2004	3711	101	114938	3139
Angola	2004	43670	1266	1308451	37920
Benin	2004	18200	518	235888	6716
Botswana	2004	12100	341	25880	729
Burkina Faso	2004	27476	786	664022	18985
Burundi	2004	37668	1088	403464	11653
Cameroon	2004	17401	497	479153	13693
Cape Verde	2004	3471	93	2153	57
Central African Republic	2004	18024	511	115396	3273
Chad	2004	21527	618	387567	11123
Comoros	2004	6541	177	5720	155
Congo	2004	7854	220	40840	1142
Côte d'Ivoire	2004	19687	561	580373	16533
Democratic Republic of the Congo	2004	27258	786	3011743	86843
Equatorial Guinea	2004	17739	506	16837	480
Eritrea	2004	13309	379	93881	2673

Environmental indicators



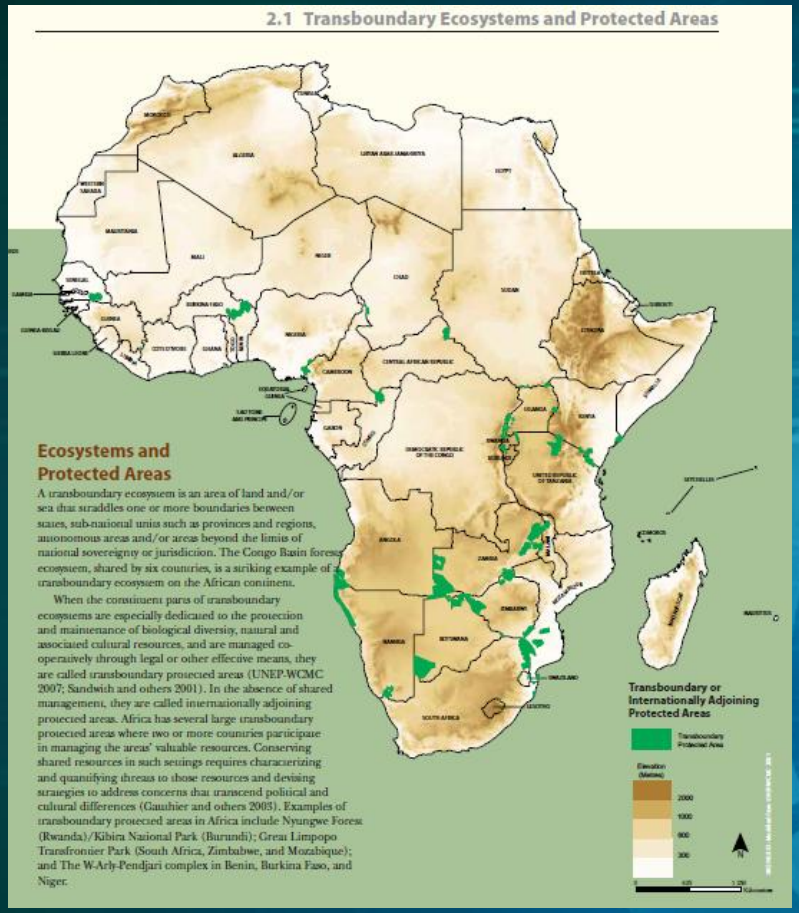


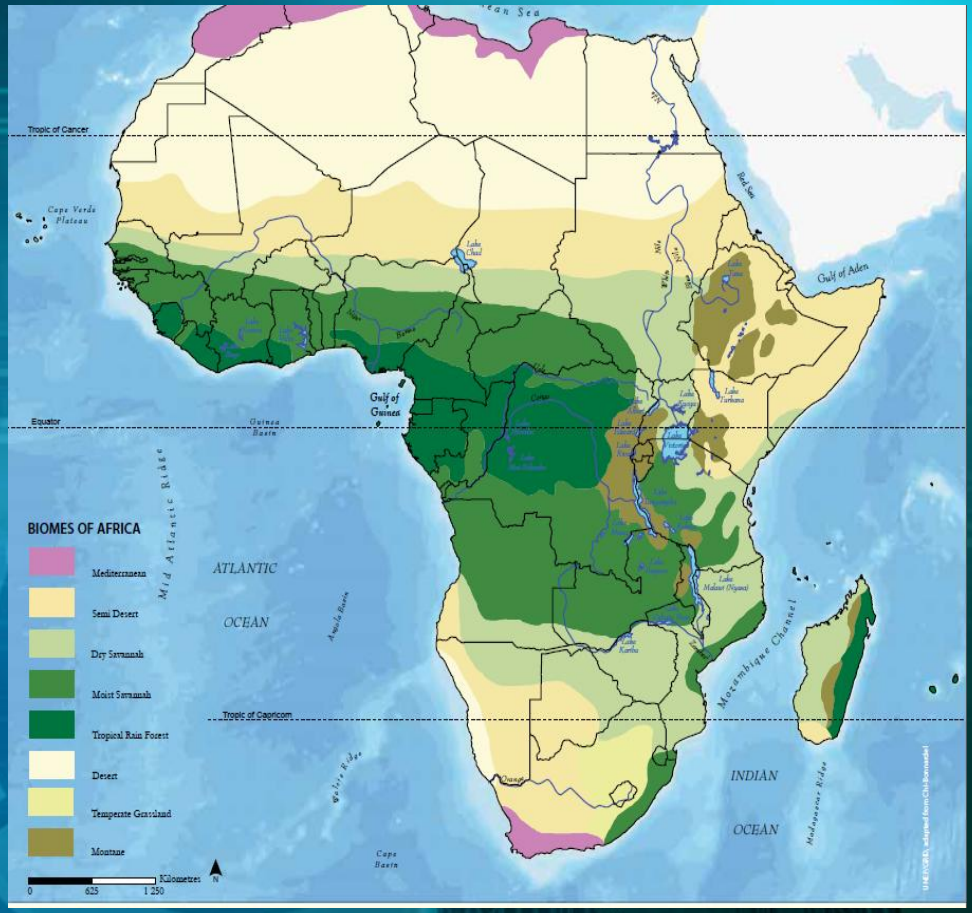




United Nations Environment Programme
Division of Early Warning and Assessment - Africa

Globally, deforestation continues at a rate of about 13 million hectares per year (FAO 2007).

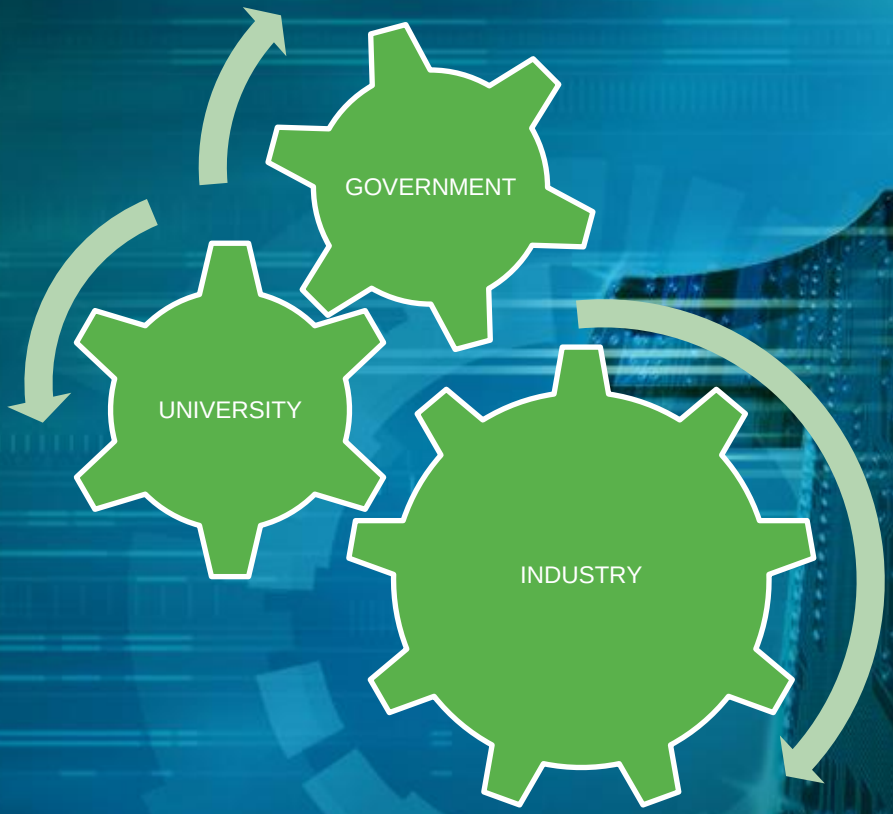




UNEP
United Nations Environment Programme
Division of Early Warning and Assessment - Africa

Designing Innovation Policies

The 'system of innovation' approach



The Triple Helix of University-Industry-Government Relations

The 'system of innovation' approach (II)

Innovation Environments

- emphasis on research and development nationally as well as in enterprises
- human capital becoming one of the most central factors of competitive ability

International and regional Innovation activities approach

- the presence of business partners
- the existence of legislation to promote business (copyrights, rights of ownership, etc.)
- Networking

Innovation policies focused in social and productive priorities

- Local Social and Productive Development
- *Clusters, Interlinked value-adding activities*
- Traditional knowledge, innovations and practices of indigenous peoples and local communities. Innovation and Social Inclusion

Creating value from knowledge

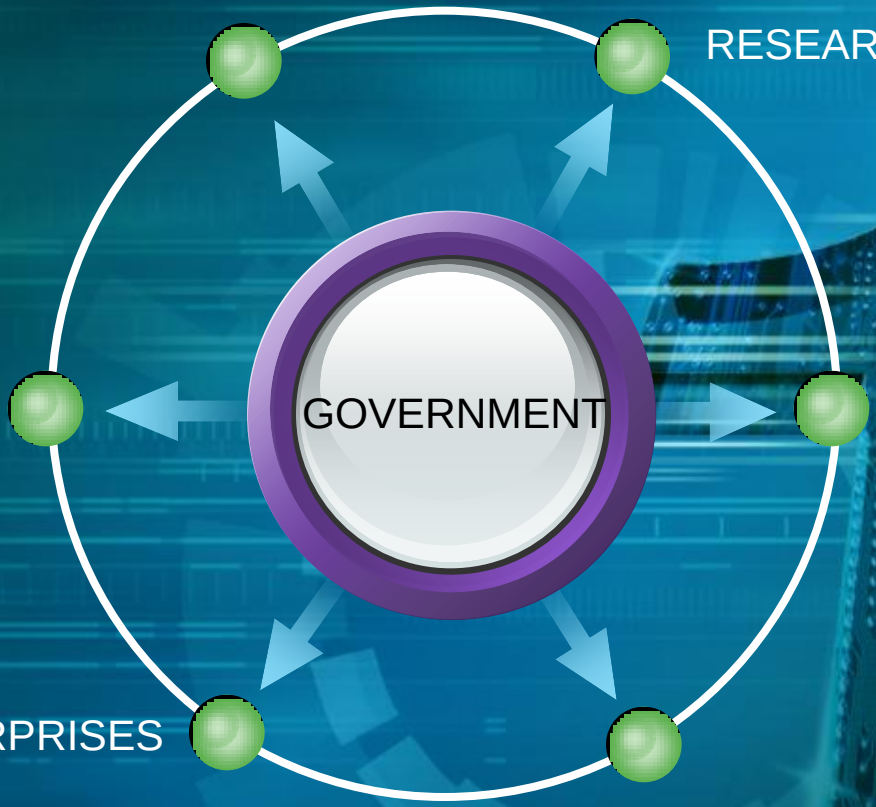
Creating capacities for producing endogenous knowledge

INNOVATION

SUSTAITABLE DEVELOPMENT AND SOCIAL INCLUSION

Public policies catalyzing the process

UNIVERSITY-INDUSTRY ARTICULATION



RESEARCH AGENDA

ENTERPREUNERSHIP

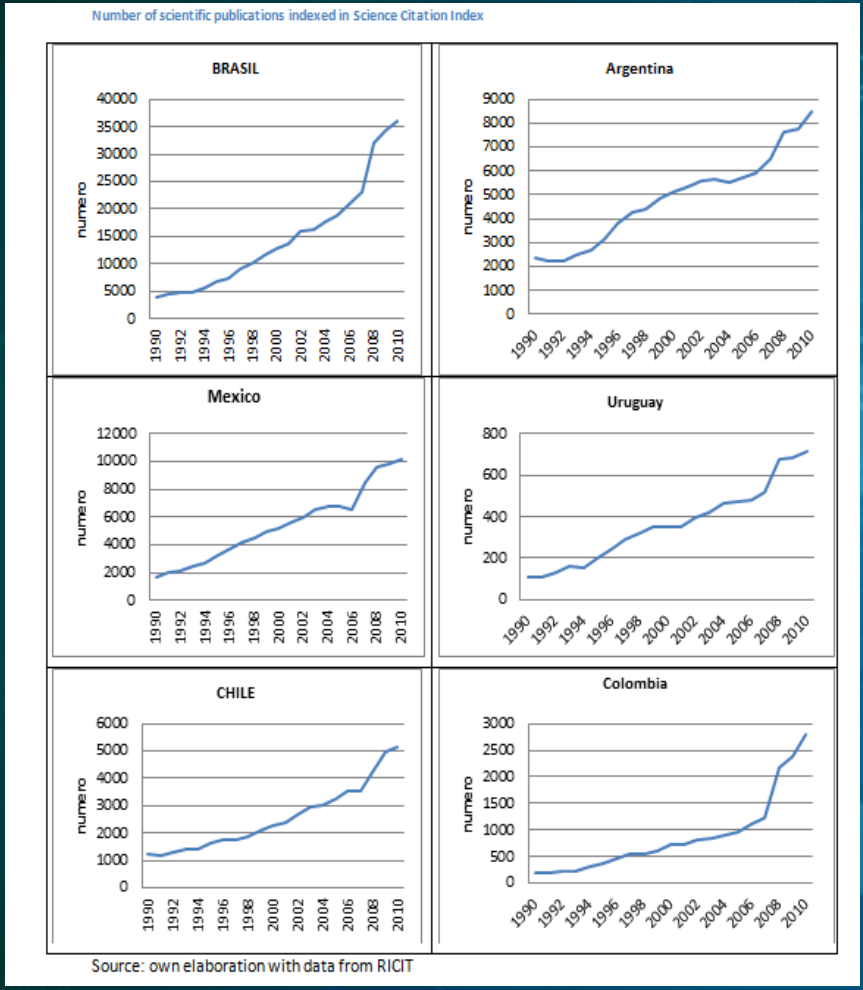
DEVELOPMENT
STRATEGIC AREAS

PUBLIC-PRIVATE ENTERPRISES

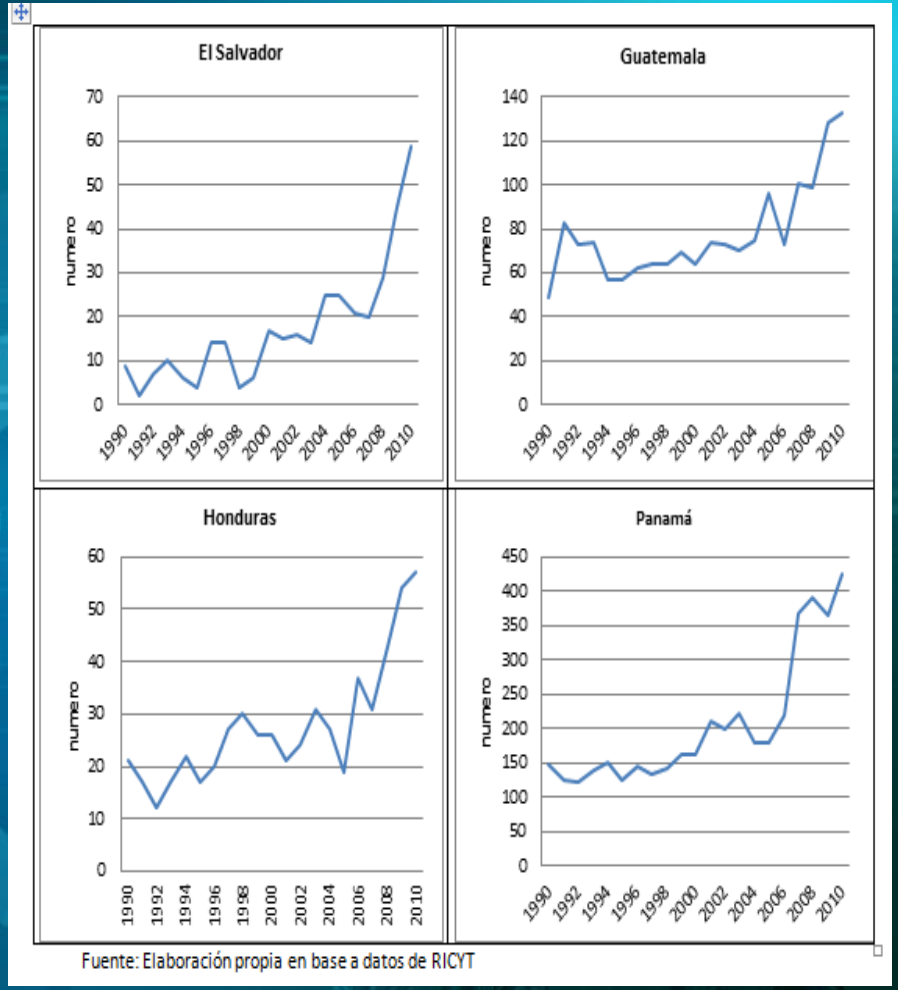
SOCIAL INCLUSION POLICIES
ENVIRONMENTAL SUSTAINTABILITY

SOME LEARNED LESSONS

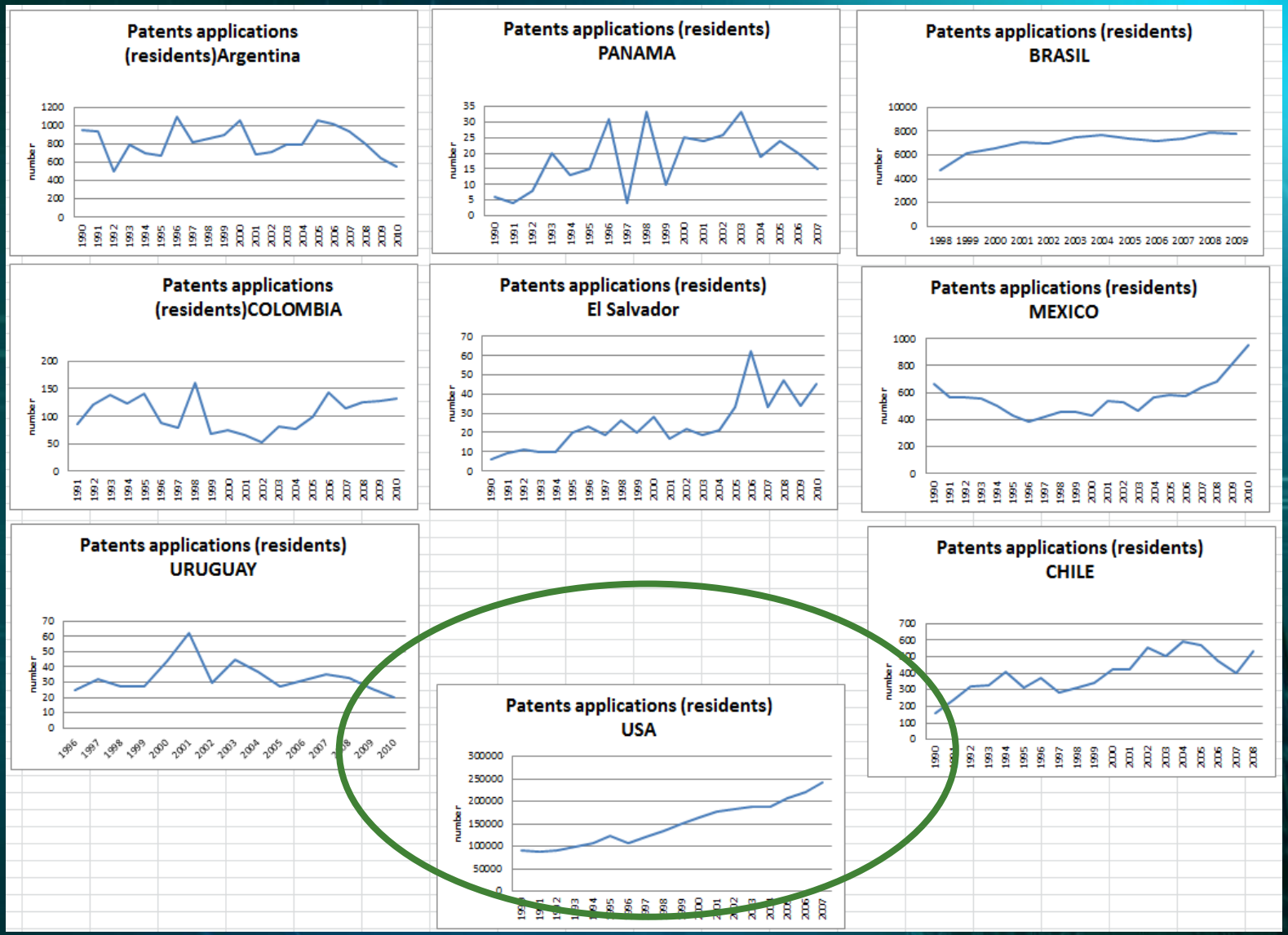
South America and Mexico



Central America



SOME LEARNED LESSONS (II)



Linking R+D and Government needs

- Private sector
- University-Industry interphases
- Education (creating capacities for endogenous knowledge creation and technology adaptation)
- Entrepreneurship and IP in tertiary education programs
- Information an Communications technologies
- Local development (decentralizing innovation processes considering territorial specificities)
- Local agents involvement. Regional innovation system
- Networking (locally, regionally and internationally)
- Measuring effects to rectify policies

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Our future growth relies on competitiveness and innovation, skills and productivity... and these in turn rely on the education of our people.
Julia Gillard

Thank You !