

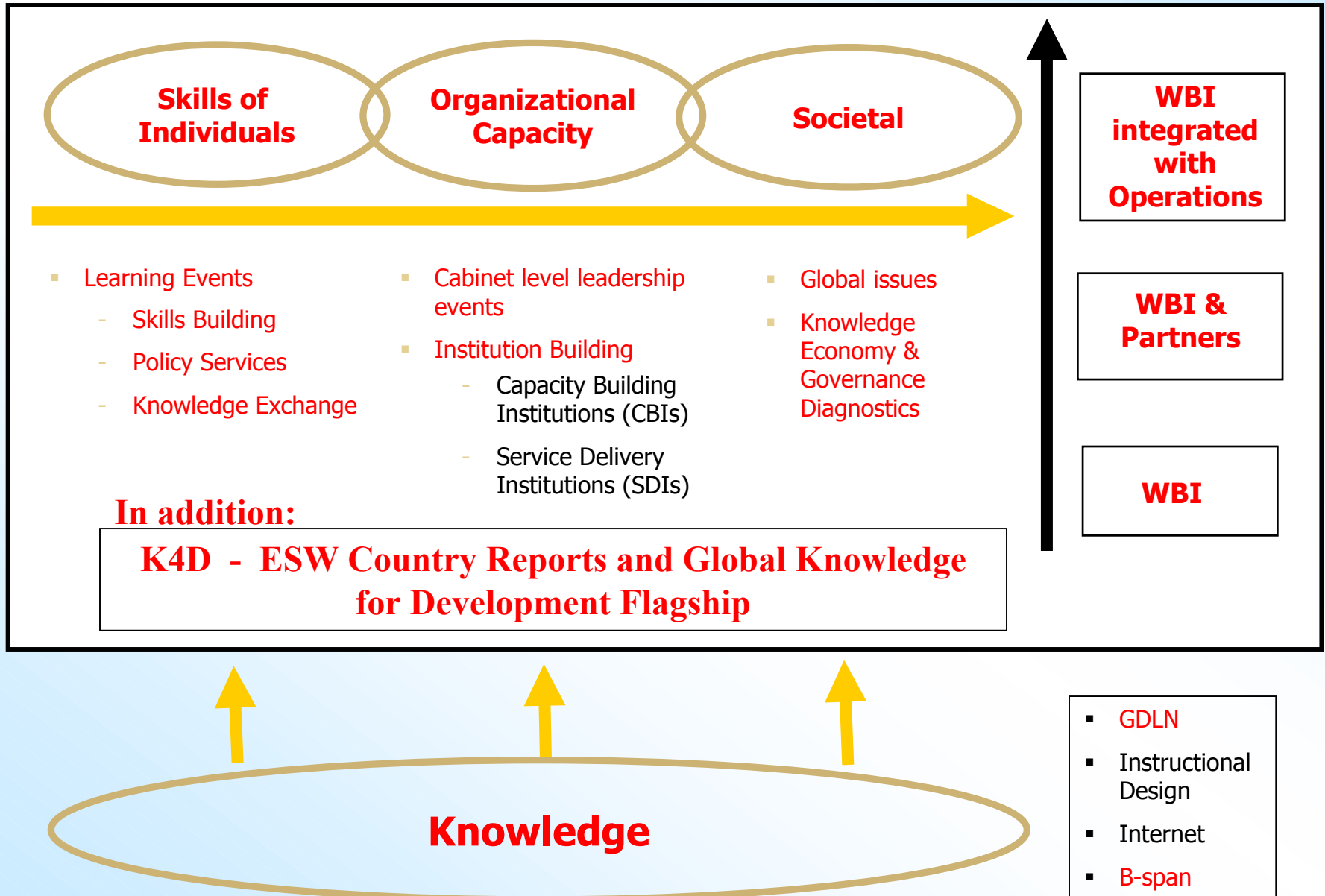
Technical Briefing to the Board

Knowledge for Development Program

WBIKD

November 9, 2004

WBI Building Capacity – K4D



Knowledge for Development Program: Menu of Activities

Since 1999, the K4D Program has pioneered a new line of business for the Bank in the KE area. This work is highly regarded by OECD, APEC, KDI, the British Council and other partners working in this area

The K4D program offers:

- Policy forums and conferences that prepare participants to develop strategies to make more effective use of knowledge for their development.
- Policy services to help client countries develop concrete knowledge strategies.
- Training for Bank staff to do this kind of work.
- Knowledge Assessment Methodology (KAM) to benchmark how an economy compares with neighboring countries, models, or competitors and to initiate policy dialogue.
- A Community of Practice for knowledge economy issues.

What is the Knowledge Economy?

- Many definitions of the **Knowledge Economy** - many focusing on ICTs or high technology industries.
- We use **knowledge economy** as a macro framework for assessing how well placed economies are to take advantage of domestic and global knowledge for their economic and social development.
- KE is relevant not just for middle income countries.
- KE is not just about high-tech or ICTs; its about using knowledge by mothers, farmers, in their everyday life
- KE is different from **knowledge management** or **knowledge sharing** which looks at techniques and practices to make effective use of knowledge at the firm or organizational level.

The “Knowledge Revolution”

We are in the midst of a “knowledge revolution” distinguished by:

- Speed up in creation and dissemination of knowledge.
- Increasingly competitive global environment.
- Increased importance of knowledge and innovations for economic performance and improvement in welfare
- Increased importance of education and updating skills to keep up with and make effective use of knowledge

There is risk of a growing knowledge divide between advanced and developing countries

Developing countries need to develop explicit strategies to make effective use of knowledge for their development

The Four Pillars of a Knowledge-based Economy

The framework consists of looking at four key pillars:

- An **economic and institutional regime** that provides incentives for the efficient creation, dissemination, and use of existing knowledge.
- An **educated and skilled population** that can use knowledge effectively.
- An efficient **innovation system** consisting of research centers, universities, think tanks, consultants, firms and other organizations that can tap into the growing stock of global knowledge, assimilate and adapt it to local needs and create local knowledge
- A dynamic **information infrastructure** that can facilitate the effective communication, dissemination, and processing of information.

Making effective use of knowledge for development requires developing appropriate policies, institutions, investments, and coordination across these four functional areas

Evolution of K4D Program since FY00

	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05 (Plan)</u>
Policy Forums	•Baltics/ Poland* •SE Asia*	•China, Brazil, India*	•Africa (GDLN) •Latin America*		•Franco- Africa GDLN	+ Global Knowledge Flagship
Conferences	Vietnam Thailand	WKF I	WKF II ECA I* MNA I	WKF III ECA II* Singapore*	WKF IV ECA III* MNA II* El Salvador	ECA IV* Global Innovation
Major Country Reports	Korea	China		Argentina Russia	MNA Chile India I	China LLL Mexico India II Tanzania Finland* Korea* Japan*
Other country Reports					8	6
Client training	2		8	6	9	4
Staff Training		AFR MNA	ECA	ECA	PREM x 2	
KAM	Countries	75	100	109	121	128
	Indicators	61	69	76	76	80

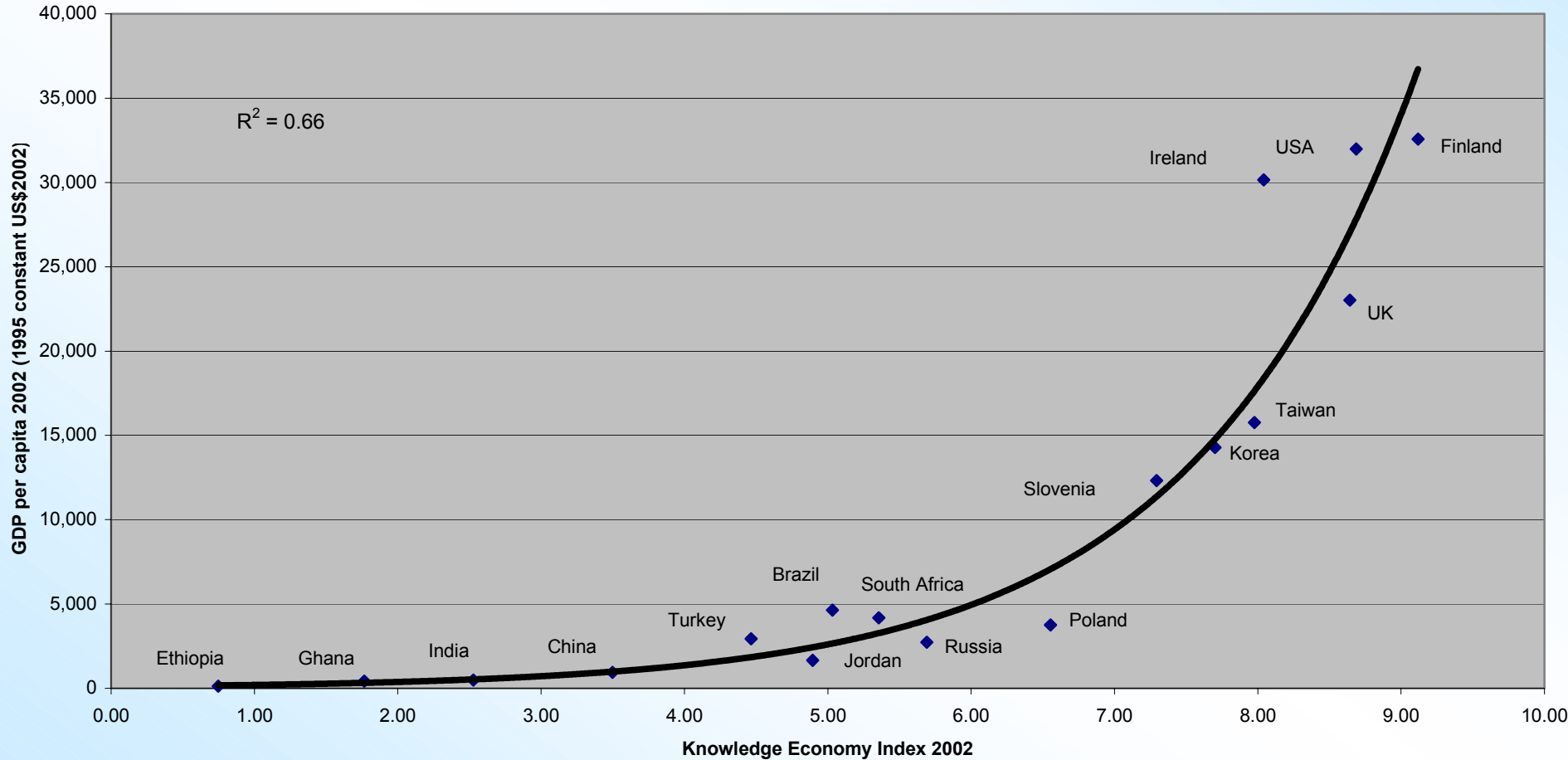
* In close collaboration with other WB Departments or external partners

K-Assessment Benchmarking Methodology

- **KAM: 76 structural/qualitative variables to benchmark performance on 4 pillars**
- **Variables normalized from 0 (worst) to 10 (best) for 121 countries and nine regional groups.**
- **www.worldbank.org/kam**
- **Basic scorecard for 14 variables at two points in time, 1995 and most recent available**
- **Aggregate knowledge economy index (KEI)**
- **Innovation : Weighted and non-weighted (by pop.) versions**

KEI and GDP per capita

Regression KEI 2002 and GDP per capita 2002



India and the Knowledge Economy: Leveraging Strengths and Opportunities

- Report prepared at the request of Michael Carter, WB India Country Director for GOI
- Used our KAM benchmarking methodology as start. Supplemented by drawing on numerous studies, and consulting with key experts in India and abroad
- Used report to structure high level workshop which took place today in New Delhi, co-hosted by the WB and the Confederation of Indian Industry

Messages of India Report

- India has tremendous strengths to leverage knowledge for its development
 - Large critical mass of highly trained persons
 - Great strengths in ICT
 - Great potential in innovation
- However, it is not fully realizing this potential
 - Problems with the enabling environment
 - Lack of unifying vision and coordination to move on multiple fronts together to exploit potential

Structure and Purpose of India Workshop

- Presentation of report as launching pad for discussion among
 - High level policy makers from central and state government in education, ICT, innovation
 - Minister of State from Prime Minister's Office
 - Industry representatives (Nasscom, Infosys, TCS)
 - Academics, think tanks and consulting firms
 - World Bank staff including India Country Director
- Objective was to move from analysis to identification of concrete key areas for action by different stakeholders on the KE

Key Conclusions of India Workshop

❖ Economic and Institutional regime

- ❖ Endorsement that the knowledge economy is a critical element of India's reform agenda
- ❖ Requires cross sectoral coordination and partnerships among government, private sector and civil society

❖ Education and Training

- ❖ Major reform and improvement of formal and informal education is critical for India's future
- ❖ Education needs to be more responsive to market needs
- ❖ Expanded access to education fostering critical thinking and learning skills are essential for all, not just elites
- ❖ To provide increased education, government should embrace the contribution of private providers (accreditation and relaxation of bureaucratic hurdles)
- ❖ Effective ICT use is essential to accomplish these goals

Key Conclusions of India Workshop (Continued)

❁ Innovation

- ❁ Necessary to improve efficiency of public R&D and to increase private R&D
- ❁ Identification of new model to produce innovations in more cost effective way based on
 - Leveraging traditional knowledge with modern science
 - Exploiting public private partnerships

❁ ICTs

- ❁ Tremendous revenues to be had from continuing to expand provision of distance services
- ❁ But high fees from foreign services preempts application to domestic needs
- ❁ Important to share successful applications of ICT to e-government among Indian states
- ❁ Need to scale up successful ICT initiatives to bring benefits to rural communities

Follow up Actions India Workshop

- Press conference with national and foreign media tomorrow
- AAA Report to be finalized with inputs of workshop and disseminated broadly
- WB to discuss menu of possible follow up activities including
 - Possible loan for micro finance and for rural sector to extend knowledge to rural areas
 - Possible loan to support roll out of successful e-government applications
 - Possible project to roll out telecom connectivity to rural areas by ability gap financing to allow private entrants
 - Possible program on education reform and life long learning

K4D Actions for Awareness Raising, Capacity Building and Learning

- Awareness Raising and Capacity Building within WB Regions and in Countries
- Global Learning Activities

Awareness Raising

- **Opening minds: discussing main issues, offering new development strategies, presenting success stories to emulate, monitoring progress, through...**
- **...Multi-country conferences made with WB regional departments**
 - **ECA (Paris, 2002, Helsinki 2003, Budapest 2004)**
 - **MNA (Marseille 2002, 2004), Tunis (2005, Maghreb)**
 - **Africa (GDLN workshops 2002, 2004) and plans for a KE conference (2005)**
 - **Global Innovation Policy Dialogue (multi-regions with GDLN, 2005)**

Materials presented at Conferences and Awareness Raising Events

- ❁ Countries' development strategies with knowledge dimension (e.g Tunisia, Jordan, Malaysia in MNA conferences)
- ❁ Success stories at sector or city level (use of videos e.g on Morocco cities)
- ❁ Role models for institutions: e.g. for innovation promotion, life long learning

Building Capacities within the World Bank and within Countries

- Within the WB Regional Departments: in ECA through Knowledge Economy Assessments on request of countries: e.g Lithuania, Poland, Latvia, Turkey (the latter jointly made with WBI), and through KE project preparations (Romania)
- In MNA countries through guidance of governments and academics preparing KE reports (Tunisia and Morocco) analyzing their own situations and policies
- In (Francophone) Africa countries in mobilizing universities with policy makers, using GDLN, to reflect on innovation and knowledge strategies

South-South Capacity Enhancement Program in Innovation

Provide first-hand access of key policy makers in Science and Technology to best practice in innovation policy and institutions.

- Strong demand from ST and education ministers: ‘We don’t want recipes, we want to see how new ideas work in practice of our countries’**
- Focus countries: Currently, Mexico, Argentina, Chile, Russia, Brazil, Korea. In the future also: South Africa, Kazakhstan, Indonesia, New Zealand, Israel**
- Events of this year**
 - Study tour and workshop ‘Turning Technology into Business’, Chile, March**
 - Study tour to Finland, September**
 - Study tour and workshop in Korea, December**

Diasporas for Knowledge Transfer Learning Program

Objective

- To pilot policies and institutions to create Diaspora networks: transform 'brain drain' into 'brain gain'

Focus countries

- Armenia, South Africa, Colombia, Chile, Argentina, Mexico, India (for best practice)

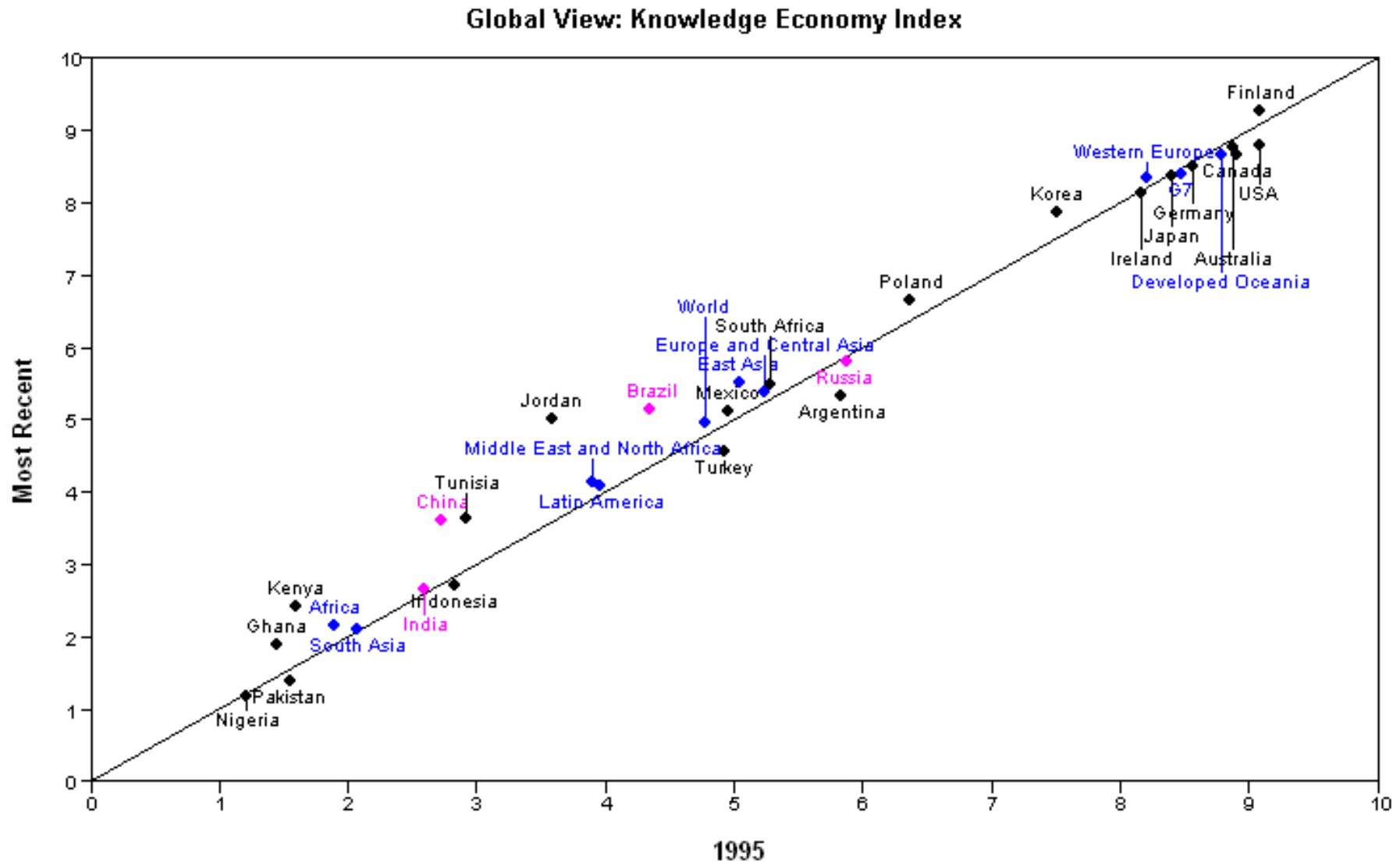
Components

- Book (to be published in May 2005) on best practices of Diaspora mobilization
- Action learning pilots in focus countries
- Global learning events to share emerging best practice

Financing

- Donors (DFID), Development Market Place (2002), President's Contingency Fund, fee-for-service from client governments

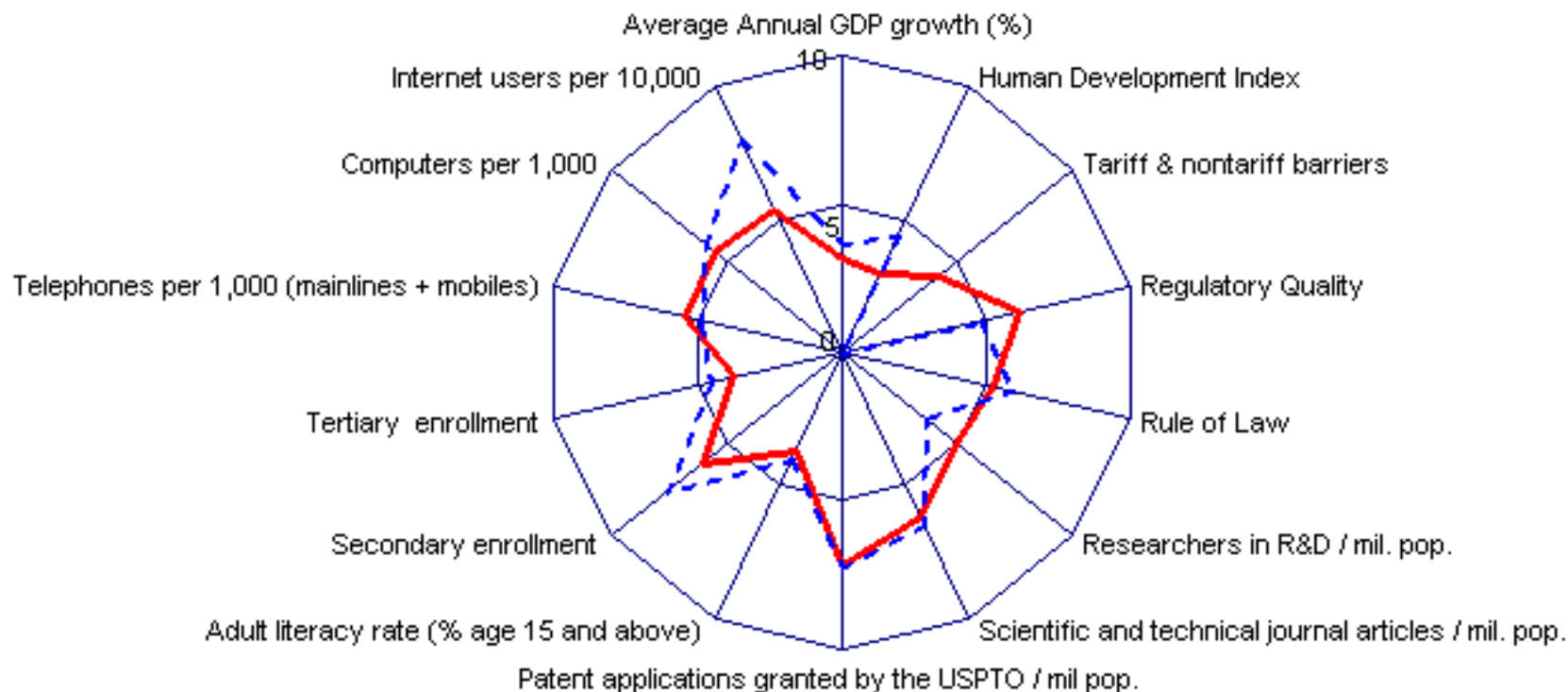
KAM Demonstration – Knowledge Economy Index



Source: www.worldbank.org/kam

KAM Demonstration – South Africa Regional Approach World Normalization

South Africa (most recent and 1995)

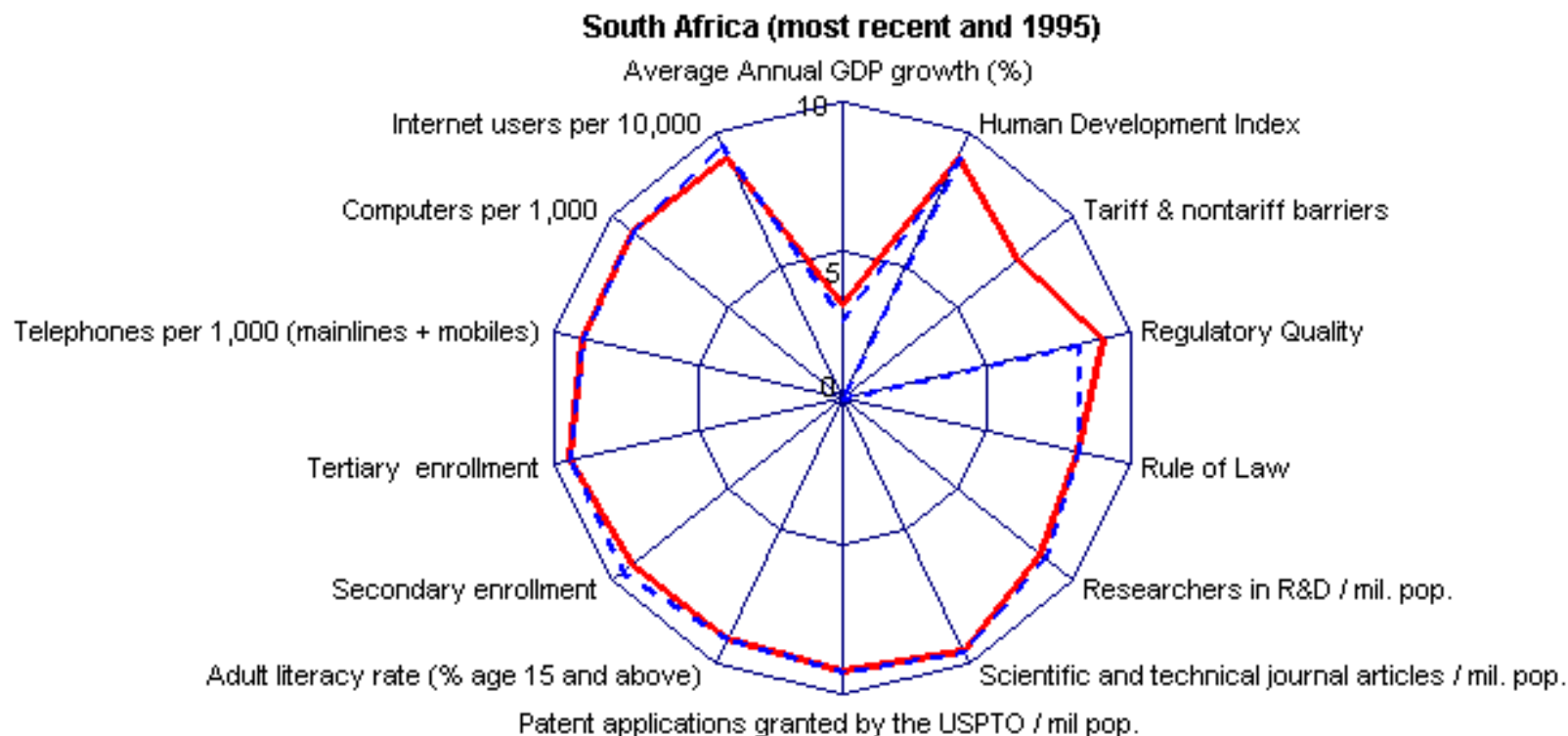


Normalization Group: **All**

— most recent
- - - 1995

Source: www.worldbank.org/kam

KAM Demonstration – South Africa Regional Approach Africa Normalization



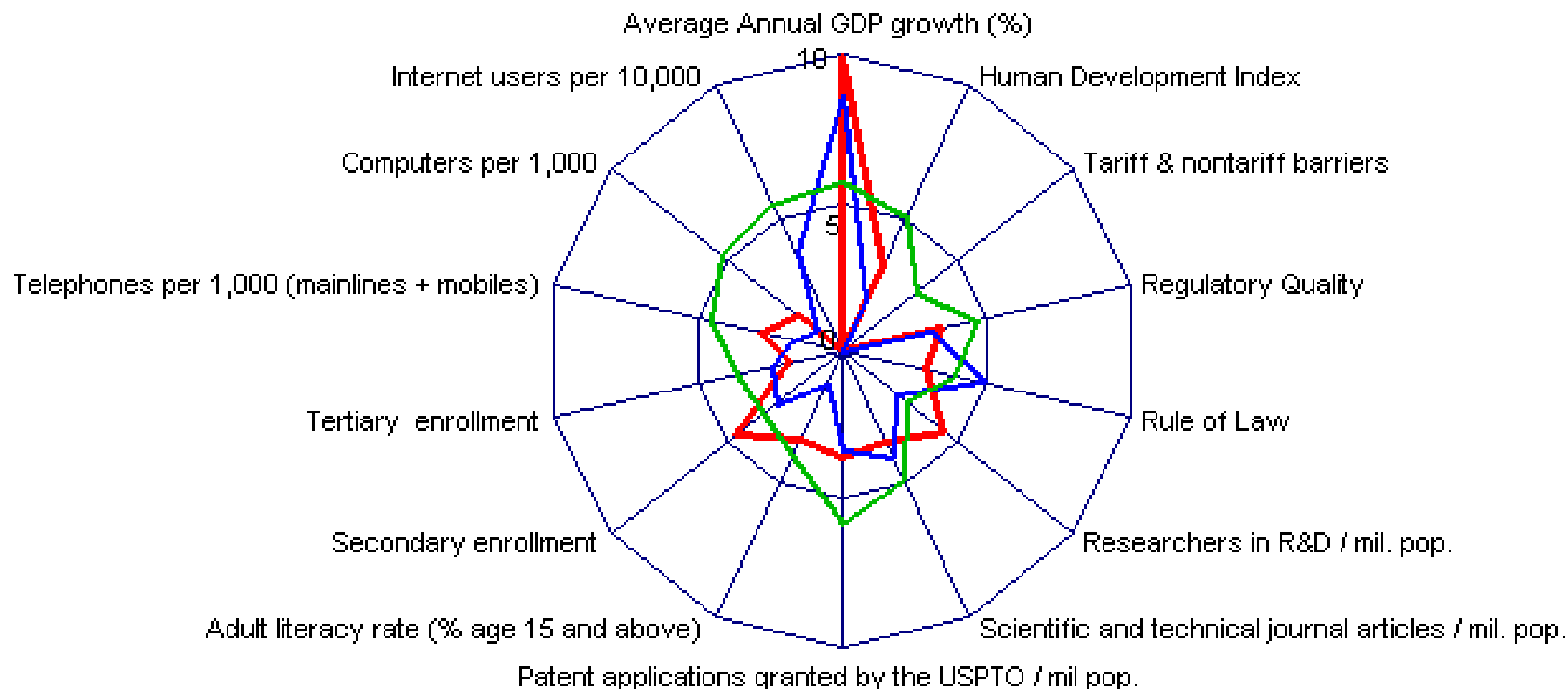
Normalization Group: **Africa**

- most recent
- - - 1995

Source: www.worldbank.org/kam

KAM Demonstration – Country Comparison over time China, India, Brazil - 1995

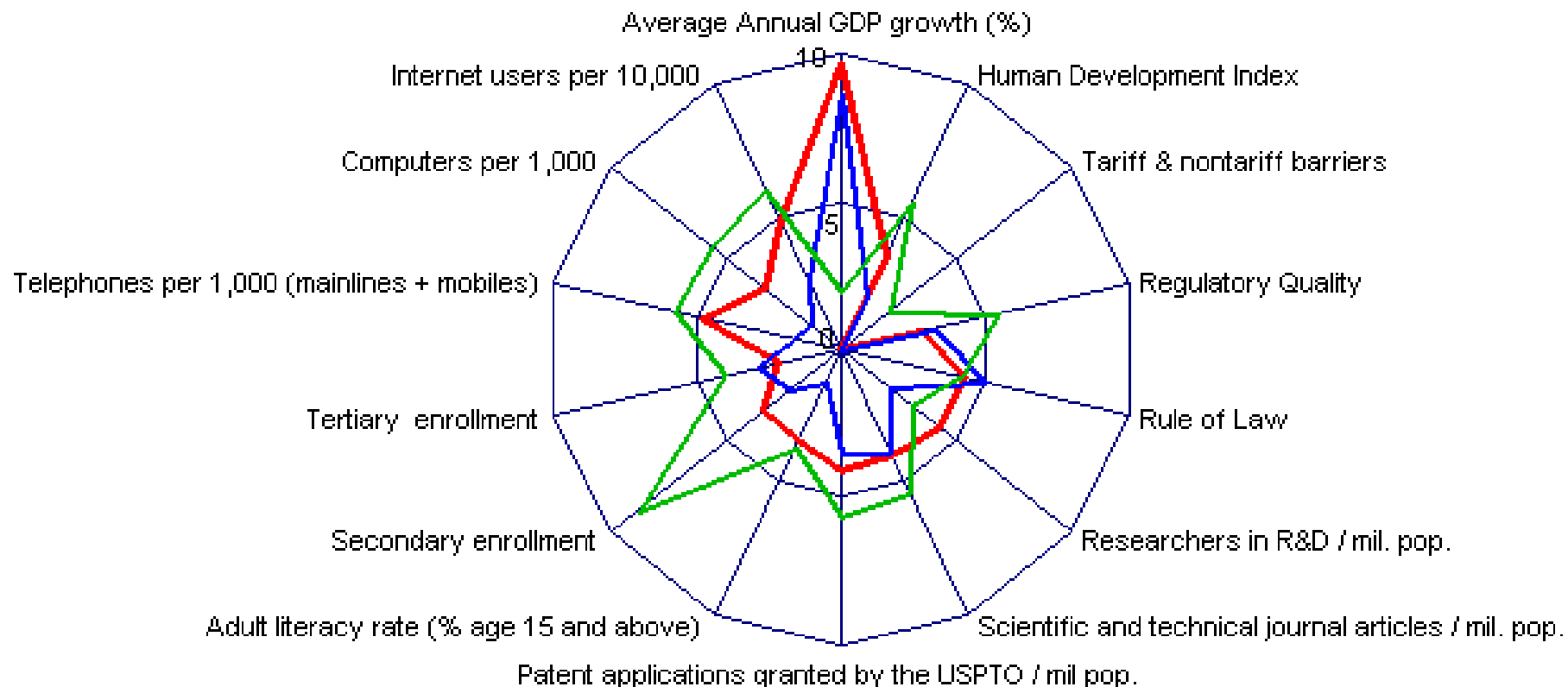
China, India, Brazil (1995)



Source: www.worldbank.org/kam

KAM Demonstration – Country Comparison over time China, India, Brazil – Most recent

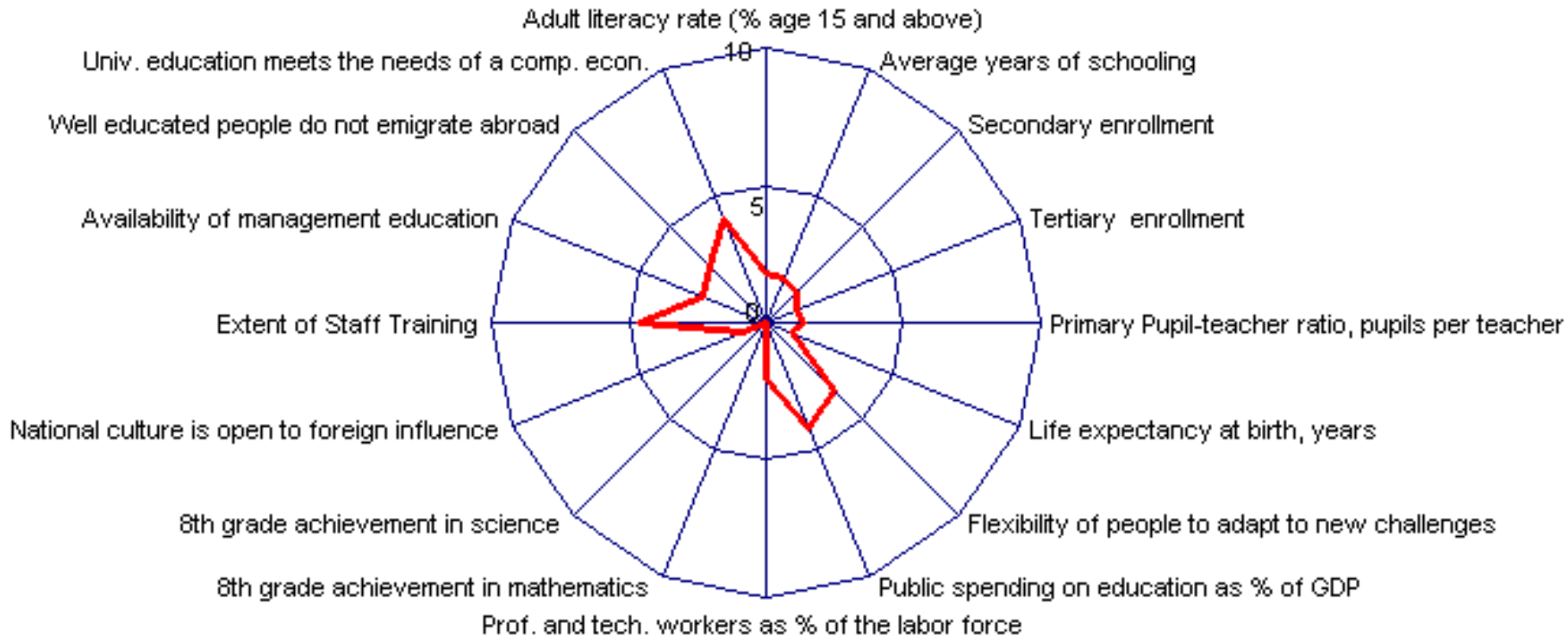
China, India, Brazil (most recent)



Source: www.worldbank.org/kam

KAM Demonstration – Pillar Performance ***AFRICA REGION - EDUCATION***

Africa (most recent)

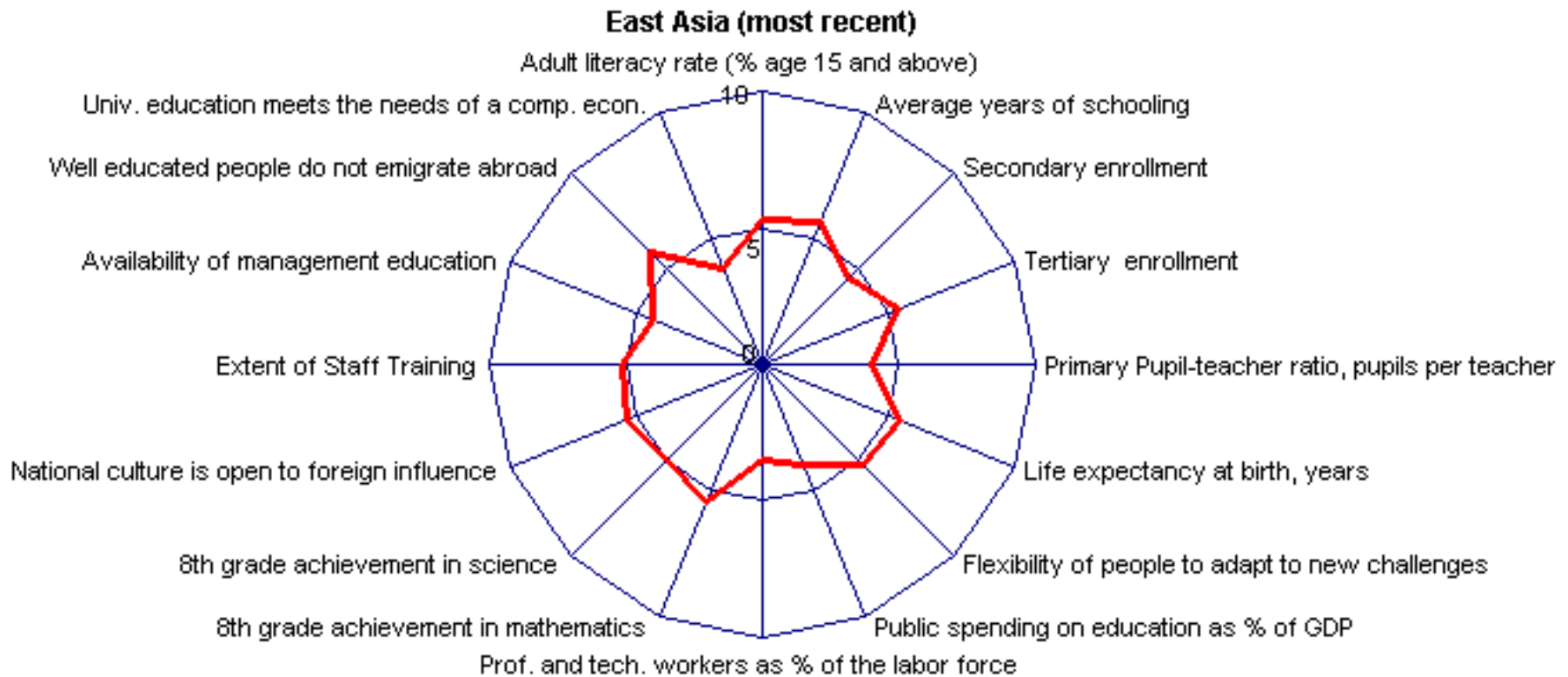


Normalization Group: **All**

Variables for education

Source: www.worldbank.org/kam

KAM Demonstration – Knowledge Economy Pillar Performance EAST ASIA PACIFIC REGION - EDUCATION



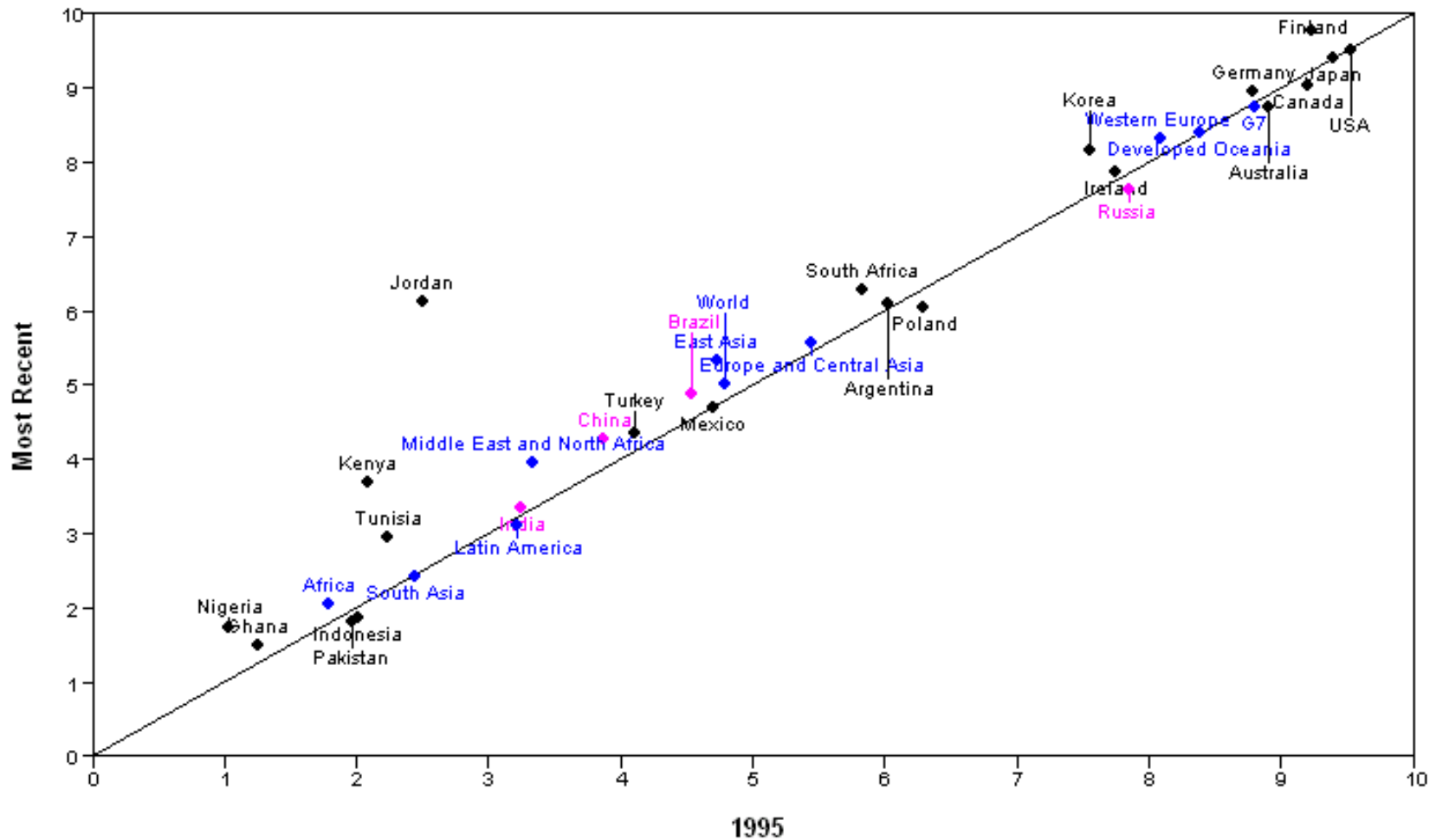
Normalization Group: **All**

Variables for education

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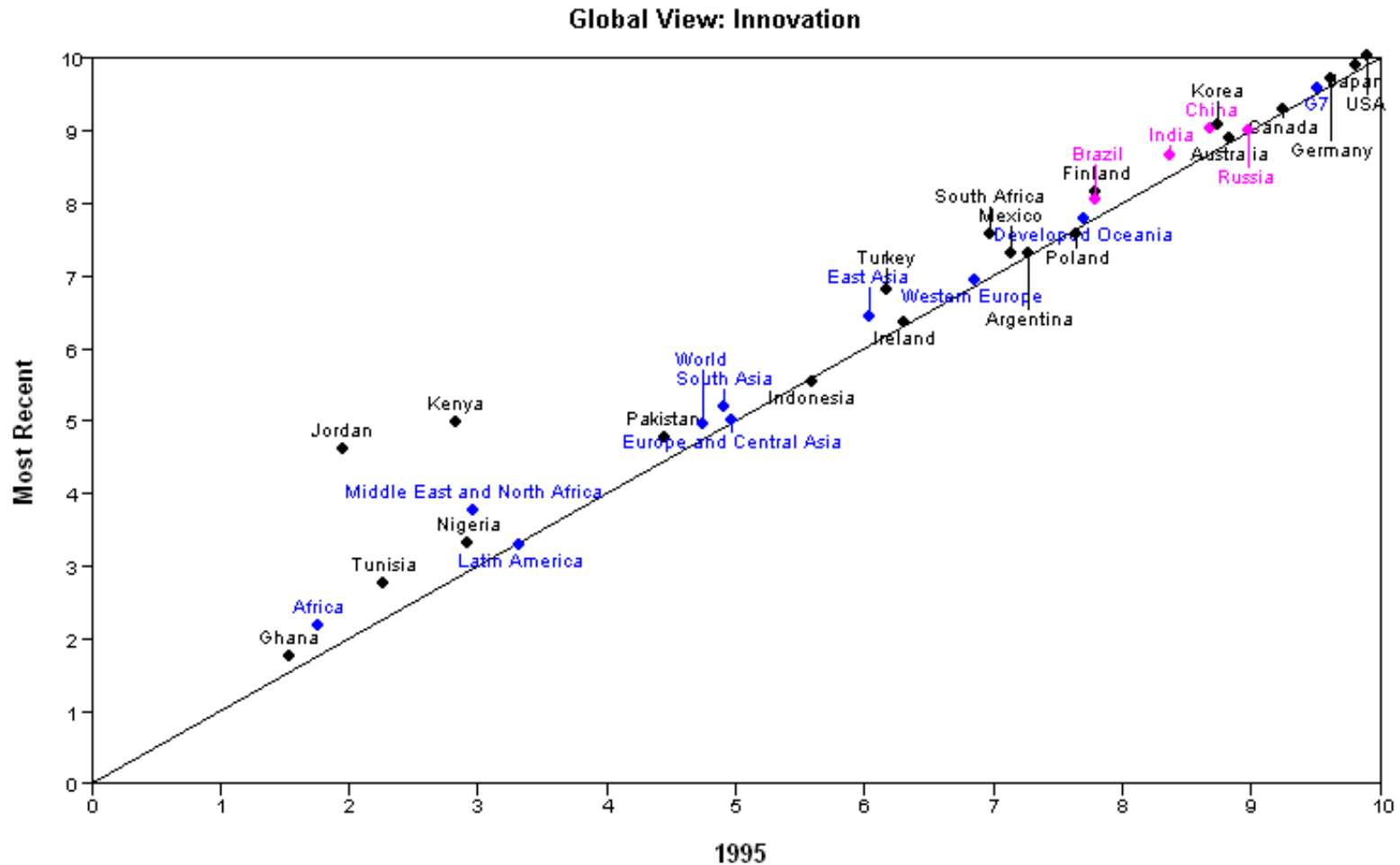
KAM Demonstration – Innovation Pillar weighted version

Global View: Innovation



Source: www.worldbank.org/kam

KAM Demonstration – Innovation Pillar unweighted version



Source: www.worldbank.org/kam