Harnessing ICT to Reach Africa’s Development Goals

Valerie D’Costa
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Brussels, Belgium
infoDev in brief

infoDev is a partnership of international development agencies, coordinated and served by an expert secretariat housed at the World Bank, which is one of its donors.

infoDev helps donors and developing countries use ICTs to achieve economic growth, sustainable development and poverty reduction.

infoDev’s donors include:

- Brazil
- European Union
- Finland
- Germany
- India
- Ireland
- Japan
- Korea
- Sweden
- Switzerland
- UK
- World Bank
infoDev’s areas of focus...

+ ACCESS TO ICTs FOR ALL
Developing effective policy, regulatory and investment models to facilitate affordable competitive and sustainable access to ICTs.

+ MAINSTREAMING THE USE OF ICTs
Deploying ICTs as tools for meeting core development goals in such fields as education, agriculture and disaster management and responding to the challenges of climate change.

+ ICT-ENABLED INNOVATION & ENTREPRENEURSHIP
Facilitating ICT-enabled innovation and entrepreneurship as a driver for social and economic development through business incubation and SME promotion.
## Strategic Framework 09-11

<table>
<thead>
<tr>
<th>Access</th>
<th>Mainstreaming</th>
<th>ICT Innovation &amp; Entrepreneurship</th>
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<tbody>
<tr>
<td>Telecom Policy &amp; Regulation</td>
<td>Education</td>
<td>Entrepreneurship through Incubation</td>
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<tr>
<td>Broadband &amp; New Technologies</td>
<td>Food &amp; Agriculture</td>
<td>Enabling SME Start-up and Growth</td>
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<tr>
<td>Content &amp; Applications</td>
<td>Natural Disasters - Resilience &amp; Recovery</td>
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<td>Health</td>
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### Core program to scale
- Telecom Policy & Regulation
- Education
- Entrepreneurship through Incubation

### New programs to develop
- Broadband & New Technologies
- Food & Agriculture
- Green technologies

### Future areas to explore
- Content & Applications
- Natural Disasters - Resilience & Recovery
- Health

### IMPACT
- Access to Information and Communication
- Empowerment & Human Security
- Competitiveness & Inclusive Growth
Access for All
Enabling Access to Information and Communication
infoDev Regulatory Services

- **Telecommunication Regulatory Handbook**
  - Published in 2001
  - Available in six languages

- **ICT Regulation Toolkit**
  - Developed between 2004-09
  - Seven modules
  - Joint venture between ITU, infoDev and World Bank

- **ICT Regulatory Decisions Clearinghouse**
  - One-stop access point to regulatory decisions
  - Web search engine of regulatory bodies
The rise of independent regulators

Number of independent ICT regulators:

_In total (1990-2008)_:

By region (2008):

Source: ITU World Telecom Regulatory Database.
Access to ICTs in Africa

- **Broadband for Africa Backbone Policy**
  - Conducted a study reviewing current state of backbone infrastructure
  - [www.infodev.org/broadbandafrica](http://www.infodev.org/broadbandafrica)

- **ICT Regulation Toolkit**
  - Regulatory training provided at workshops with ECOWAS and COMESA

- **Global Capacity Building Initiative for ICT Regulators**
  - Study on Training African Regulators
  - New training initiative will kick off in Sub-Saharan Africa
The Global Capacity Building Initiative for ICT Regulators

- A new sustainable and targeted program of training opportunities for ICT regulators, based on a comprehensive needs analysis
- An initiative built on successful cooperation between World Bank, infoDev and ITU on the ICT Regulation Toolkit
- A global programme, with phased launch over four years
- A multi-stakeholder programme, engaging international agencies, the donor community, regional regulatory associations and the private sector
Africa needs assessment for regulatory training

A needs assessment and gap analysis for Africa, the Caribbean and the Pacific was completed in 2008 and a study on Training African Regulators in Nov 08

“The need for training amongst African policy makers, parliamentarians, regulators and judges is clear and accepted. However, it is less clear that the systems are in place to identify the true scale of demand and to ensure that those participating in training are not subsequently lost to industry or to the brain drain to developed countries. The challenge is to find mechanisms that are appropriate, cost-effective, scalable and anchored in Africa.”
Current provision of regulatory training in Africa

• Multi-sector regulatory training
  – e.g., PURC (Public Utility Research Center) course run twice yearly in USA

• Private sector training
  – e.g., Zain Group has own MBA programme at University of Witswatersrand, CISCO network academy

• Academic courses
  – e.g., African Technology Policy Studies, African Economic Research Consortium etc

• Donor-funded research
  – e.g., Research ICT Africa! (RIA), ITU Centres of Excellence

But, there are no regular training courses specifically aimed at ICT regulators in Africa
GCBI Delivery Model:

Sponsoring Partners

- World Bank
- Donors
- Private sector
- NGOs, civil society, Foundations

Executing Agency

Established regulatory agencies

Region A: anchor institution(s)
Region B: anchor institution(s)
Region C: anchor institution(s)

Beneficiaries

Developing country regulators and policy-makers, parliamentarians, judiciary, local private sector, students, journalists etc

Selection through competitive tendering process
GCBI next steps:

- **2009**: Securing core funding and launch in East Asia and Pacific and in Sub-Saharan Africa. Creation of High-Level Strategic Review Board

- **2010**: Delivery of first training courses and of specialised training and technical assistance

- **2011**: Launch of GCBI in Latin America and the Caribbean, Middle East and North Africa and Eastern Europe and Central Asia

- **2012**: GCBI runs globally in all world regions. Monitoring and Impact Assessment undertaken. Anchor institutions move towards longer-term sustainability
Mainstreaming
Enabling Empowerment and Human Security through Access to Information and Communication
Mainstreaming ICTs for Development

- **Survey of ICT use in Education in Africa**
  - 53 country reports
  - A single resource for all ICT4E initiatives in Africa

- **Monitoring and Evaluation of NEPAD eSchools initiative**
  - Demonstration project conducted jointly with Commonwealth of Learning

- **Enhancing the livelihoods of the rural poor**
  - Country case studies of South Africa and Tanzania

- **M-banking for the poor**
  - Knowledge map published
Opportunities for Collaboration: Mainstreaming

- **ICT and climate change**
  - Demonstrating how ICTs can be used to help with developing country adaptation

- **ICTs and agriculture**
  - Gathering examples of best practice to publish in ICT in Agriculture Sourcebook

- **ICT in Education**
  - Participating in community of practice website (Educational Technology Debate)

- **ICTs for Disaster Relief and Recovery**

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**Expected Impact**

- Development and dissemination of new tools
- Informed debate on development options
- Creating a practitioners forum
ICT Innovation and Entrepreneurship
Enabling Sustainable and Inclusive Growth
Business incubation is about nurturing **growth-oriented start-up enterprises** to grow and become competitive companies.

<table>
<thead>
<tr>
<th>Services</th>
<th>Value to the Entrepreneur</th>
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<tbody>
<tr>
<td><strong>Infrastructure:</strong></td>
<td><strong>Economies of scale decreases the cost of starting a business</strong></td>
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<tr>
<td>Office space, meeting</td>
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<tr>
<td>rooms, electricity, phone</td>
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<td>Internet, lab facilities,</td>
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<tr>
<td>etc.</td>
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<tr>
<td><strong>Business Services:</strong></td>
<td><strong>Help with non-core business activities saves time and money</strong></td>
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<tr>
<td>Registration, licenses,</td>
<td></td>
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<tr>
<td>accounting, strategy</td>
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<tr>
<td>advice, market research,</td>
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<td>export facilitation, etc.</td>
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<tr>
<td><strong>Financing:</strong></td>
<td>**Leveraging the credibility of the incubator &amp; the portfolio of</td>
</tr>
<tr>
<td>Brokering financial</td>
<td>entrepreneurs to overcome financing gaps</td>
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<tr>
<td>services and/or providing</td>
<td></td>
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<tr>
<td>them i.e. equity, credit,</td>
<td></td>
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<tr>
<td>guarantees, etc.</td>
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<tr>
<td><strong>“People Connectivity”</strong></td>
<td><strong>Learning, exchange of ideas, psychological support, partnerships,</strong>*</td>
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<tr>
<td>Mentoring, coaching and</td>
<td><strong>business relationships,</strong></td>
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<tr>
<td>interaction with fellow</td>
<td></td>
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<tr>
<td>entrepreneurs (a micro</td>
<td></td>
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<td>cluster), market linkages</td>
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It is an Innovation & Entrepreneurship Eco-System…

The Role of Government
- Enabling policies and regulatory frameworks
- Seed funding for business incubators
The Innovation and Entrepreneurship Program

<table>
<thead>
<tr>
<th>Country</th>
<th>Regional</th>
<th>Global</th>
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<tbody>
<tr>
<td>For incubators, technology parks and their stakeholders:</td>
<td>For incubators and technology parks:</td>
<td>For incubation and IT Park professionals and policymakers:</td>
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<tr>
<td>Tailored package of services including</td>
<td>Regional networks and knowledge exchange.</td>
<td>• Good practices, models</td>
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<tr>
<td>• seed &amp; innovation funding</td>
<td>Training</td>
<td>• Toolkits</td>
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<tr>
<td>• capacity building</td>
<td>For policymakers:</td>
<td>• Monitoring and evaluation tools and analysis</td>
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<tr>
<td>• feasibility and replication</td>
<td>Regional roundtables and awareness raising</td>
<td>• South-south working groups</td>
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<tr>
<td>• assistance with strengthening the national eco-system</td>
<td></td>
<td>• Bi-annual Global Forum for all stakeholders</td>
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Competitive SMEs
Jobs
Innovations
Empowerment
Sustainable development
infoDev’s Global Incubation Network Today

150 incubators in 70 developing countries

Enabling Innovation & Entrepreneurship Across Sectors…

- Manufacturing: 13
- Information & Communication Technologies: 40
- Mixed: 26
- Agriculture: 13

Creating Opportunities for Human Empowerment…

- Youth: 24
- The Poor: 19
- Women: 15

Nr. of incubators that target youth, the poor, and women: 58

Impact:
- 10,000+ small enterprises creating 104,000 new jobs
- 75% of the enterprises incubated continued to operate 3 years after graduating
- Incubators as ‘change agents’

Leverage:
- 70% leveraged the infoDev grant to secure funding from other sources (raising on average USD $150,000)
Innovations commercialized by infoDev incubators

• Cost-effective ATMs to enable secure access to cash in environments where this has never been possible (India)

• A UV light to make river water drinkable by using solar electricity (Ecuador)

• Software designed to enable financial institutions to better evaluate and reduce the risk associated with lending and microfinance institutions (Mexico)

• A hepatitis C vaccine which will be brought to market in 2006. This company is now listed on the NYSE with a capital base of $19mm (China)

• Software acquired by Synopsis, a large French company

• Fuel-efficient bread ovens (Rwanda)
While the mean age of the business incubators is only 4 years old, they have

- 2,874 current incubatees
- 14,532 employees in incubatee companies
- 666 companies that graduated
- 43,178 current employees in graduated companies

328 NETWORK MEMBERS in Angola
Ethiopia
Ghana
Kenya
Mauritius
Mozambique
Namibia
Nigeria
Rwanda
Senegal
South Africa
Tanzania
Uganda
AIN Focus

- African best practices and success stories
- Training for business incubator managers
- Awareness raising for policymakers
- University-industry linkages
- Development of national business incubation networks
- Sub-regional hubs in East, West, Central, North and Southern Africa

AIN Co-sponsor: South African Enterprise Development Agency
<table>
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<tr>
<th>Country</th>
<th>Current Projects w/ Opportunity for Scaling</th>
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<tbody>
<tr>
<td>Mozambique</td>
<td>• Establishment of ICT incubator under way. Opportunity for further work on innovation system.</td>
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<tr>
<td>Tanzania</td>
<td>• As per request from the Ministry of Industry infoDev is implementing a model incubator for replication across the country</td>
</tr>
<tr>
<td>Senegal</td>
<td>• Establishment of ICT incubator under way.</td>
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<tr>
<td>Angola</td>
<td>• Youth focused business incubator established. Opportunity to scale.</td>
</tr>
<tr>
<td>Rwanda</td>
<td>• University-based incubator established. Opportunity to scale.</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>• Establishment of incubator to start</td>
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<tr>
<td>Democratic Republic of Congo</td>
<td>• Establishment of incubator to start</td>
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<th>infoDev Assistance Requested</th>
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<tr>
<td>• Benin</td>
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<td>• Botswana</td>
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<td>• Ivory Coast</td>
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<td>• Kenya</td>
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<td>• Mali</td>
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<td>• Mauritania</td>
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<td>• Nigeria</td>
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<td>• Zambia</td>
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A new initiative under discussion with the AU Dep. of Human Resources, Science and Technology

Positioned as part of the implementation strategy of Africa's Science and Technology Consolidated Plan of Action

Leverages the AU’s reach to policymakers and convening power & infoDev’s experience in incubation and its Africa incubator network

The proposal outlines a six year program that sets out to:

- Establish five regional incubation hubs that will act as model centres
- Establish business incubators in African countries that have none;
- Create supportive policy frameworks through linkages between incubators, the private sector and government;
- Expand the Africa incubation network for knowledge transfer;
- Deliver capacity building programs to support the development of competent incubator management teams;
- Create awareness about the benefits of incubation as a tool for entrepreneurial development.
Opportunities for Collaboration

- Scale existing, promising business incubators
- Help start new business incubators
- Roll out an extensive Africa business incubation training program
- Support the strengthening of national innovation and entrepreneurship eco-systems
- Strengthen and scale the Africa Incubation Network
Thank You

www.infodev.org