



### **International Forum**

*Unleashing Science, Technology and Innovation for Food and Nutrition Security  
With special focus on Africa, Caribbean and the Pacific*

#### **Developing a road map**

15-17 October 2014

NH Rijnhotel Arnhem, The Netherlands

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### **Forum International**

*«Libérer la Science, la Technologie et l'innovation pour promouvoir la sécurité alimentaire et nutritionnelle  
Avec, comme axe prioritaire, l'Afrique, Les Caraïbes et le Pacifique »*

#### **Élaborer une feuille de route**

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The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

# Research on higher education and science policy

Implications for public policy

# PLAN OF ACTION

- ▶ Overview of state of the art: what are our most robust research findings
- ▶ Policy implications of findings
- ▶ Some suggestions as to the way forward

# STI RESEARCH: a summary of some of our most robust findings

- ▶ The switch to systems inspired policy approaches in STI has increased the level of knowledge required to manage STI and to create policies that can support STI investments.
- ▶ Innovation requires collaboration across societal sectors (university-business; university-public sector; public sector -business, etc.)
- ▶ The introduction of performance based allocation of funding to public research systems is an effort to pursue the two first insights more effectively.

# STI Research: Summary cont'd.

- ▶ Research is not a pre-requisite for innovation and economic growth in all sectors but it is necessary in order to introduce and maintain sustainable modern knowledge systems.
- ▶ Agriculture like other sources of growth is a sector in transition. Differentiation in markets and introduction of knowledge based technologies have created room for traditional small holder farming to increase value added and for industrial farming to improve quality and efficiency

# Implications for policy

- ▶ Invest in basic technologies of governance
  - ▶ Capacity to collect, prepare and analyse statistical data about population, activity, expenditure, etc. is a necessary prerequisite for good planning
- ▶ Create incentives for promoting inter sectoral collaboration.
  - ▶ Stable investments of time and money are imperative for the necessary trust to develop among actors

# Implications for policy

- ▶ Reduce the grain of resolution of policy for STI
  - ▶ Think sectorally STI policy for agriculture, energy, transport
  - ▶ Link sector policies
  - ▶ Prioritise from needs of each sector and give most priority to those investments that can meet several sector needs simultaneously
- ▶ Reduce the level of dependence on foreign investment in STI competence
  - ▶ Taking charge of development starts with spending one's own money

# Research on higher education: Summary of the most robust findings

- ▶ Higher education is an imperative for development but even more important is a strategy which covers the entire educational chain, primary, secondary and tertiary. An educated population is a necessary condition for innovation.
- ▶ Higher education is currently undergoing a paradoxal transition.
  - ▶ Exponential increase in participation rates due to new entrants from Asia and others
  - ▶ Changing conditions and rationale for commitment to higher education as an entitlement in OECD countries



# Higher Education research cont'd

- ▶ Increased internationalisation and pace of commodification of higher education
  - ▶ Countries such as USA, UK, Australia and Canada are lead exporters of higher education
  - ▶ Universities are increasingly being inserted into the global capitalist economy as knowledge producing corporations
- ▶ Organisational differentiation among higher education providers is a key component for increasing access in the population and maintaining quality.

# Implications for policy

- ▶ Promote diversity in higher education systems
  - ▶ Functional : not all universities need to be research active or do the same types of outreach (Outreach itself is a heterogeneous bundle of activities)
  - ▶ Gender diversity (Invest in education for girls and women)
  - ▶

# Implications for policy

- ▶ Education is an investment and not a social entitlement
  - ▶ This implies that each new generation of citizens needs to be empowered with access to primary, secondary and tertiary education
  - ▶ Over time population skills need to be updated, continuing education is an opportunity that is not yet fully exploited in most ACP states

# Implications for policy

- ▶ Embrace internationalisation as a means for promoting capacity in higher education
  - ▶ Note that there are several routes to achieving this
  - ▶ Increasing organisational capacity by promoting established universities to set up off shore campuses in one's country
  - ▶ Increasing competence through strategic recruitments in key sectors (diaspora and expatriate sources of competence should be leveraged in this respect)

# WAYS FORWARD

- ▶ APPROACH STI POLICY AT A SECTORAL LEVEL
- ▶ INVEST IN EDUCATION CONTINUOUSLY
- ▶ INVEST IN TECHNOLOGIES AND COMPETENCE FOR GOVERNANCE
- ▶ ONE MUST SOW BEFORE ONE CAN HARVEST, IF STI COMPETENCE IS LOW THEN IT IS A NO BRAINER THAT IMPACT IS LOW
- ▶ INVEST ONE'S OWN MONEY

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POLICY IS AN IMPETUS

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NOT A SUBSTITUTE FOR ACTION!