



# **NATIONAL SYSTEMS OF INNOVATION**

## **Kenya experience and lessons learned**

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# Outline

1. Background
2. Main Actors of NSI
3. Enabling environment
4. Lessons Learned
5. Next Steps

# 1. Background

- Kenya GDP per capita ~ 1,455 USD (2016)
- Economy highly dependent on climate-sensitive sectors - vulnerable to climate change
  - Increase frequency of extreme climate events (droughts and floods).
- Technologies in National Climate Change Action Plan include:
  - Energy sector
  - Agriculture sector
  - Industrial process sector
  - Waste sector
  - Forestry sector

## 2. Main actors of National Systems of Innovation

- NDE - Kenya Industrial Research and Development Institute
- Kenya Climate Innovation Centre - accelerate innovation and entrepreneurship ... renewable energy and agri-business
- Public institutions (academia and research institutions)
- Private sector (industry and corporate/entrepreneurs)
- Civil society organisations / NGOs
- Development Partners

### 3. Enabling Environment

- Kenya Vision 2030 - Blue print development agenda
- Constitution - a right to a clean and healthy environment;  
Stakeholder engagement in decision-making
- Science, Technology and Innovation Act, 2013
- Climate Change Act, 2016 and National Climate Change Framework Policy - strengthens climate governance and coordination
- National Climate Change Action Plan + National Adaptation Plan
- Nationally Determined contribution (NDC)
- National Policy on Climate Finance (draft)
- Green Economy Strategy and Implementation Plan

## 3.1 Kenya Vision 2030

- Competitive and prosperous nation with a high quality of life
  - Pillars - Economic, Social, Political
  - Enablers and macro-foundations: STI, infrastructure, Public Sectors reforms, macroeconomic stability
  - Implemented through 5-year Medium Term Plans (MTPs): MTP I (2008-2012), MTP II (2013-2017), MTP III (2018-2022), ..
  - MTP III priority agenda:
    - Expansion of manufacturing sector
    - Enhance food security and nutrition
    - Access to affordable and decent housing
    - Universal health care
- “Enhancing Public-Private Partnerships”

## 3.2 Science, Technology and Innovation Act, 2013

Establishes:

- a) National Commission for Science, Technology and Innovation - provides regulations and assure quality advise in STI
- b) Kenya National Innovation Agency - coordination, promotion and regulation of the National Innovation System
- c) Advisory Research Committees
- d) Research institutions
- e) National Research Fund

## 3.2 Climate Change Act, 2016

Establishes / provides:

- a) National Climate Change Council chaired by the President
- b) Climate Change Directorate - lead agency on climate change
- c) Climate Change Fund - financing mechanism for climate change actions;  
- provide grants for climate research & innovation
- a) Climate desks/units in all Ministries, Counties, Departments and Agencies;
- b) Mainstreaming of climate change actions into all sectors at national and county (sub-national) levels - Medium Term Plan III (2018-2022);
- c) Integration of Climate Change in education curricula;
- d) Promote low carbon technologies;
- e) Incentives to spur private sector investment in climate change initiatives.

\*At different stages of implementation



## 4. Lessons Learned

- Weak linkages among various levels of actors - need 'triple-helix' relationship
- Creation of networking platform - sharing of experiences
- Strengthening of capacity building and training
- improvement of innovation infrastructure and enabling ecosystem
- Inefficiency in diffusion of new technology, scalability and commercialization
- Political will enabling environment to investment
- Incentives to spur private sector investment
- Partnerships for sustainable development

## 5. Conclusion

- Technological Innovation key enabler to national development agenda and SDGs
- Delivery mechanism to national climate actions
- Enabling environment strengthens NSI
- Collaborative / Partnerships R & D to accelerate innovation

**Thank You**