#### United Nations Framework Convention on Climate Change

# Third synthesis report on technology needs identified by non-Annex I Parties: technologies for adaptation.

Workshop on Technologies for Adaptation, 04 March 2014, Bonn



- The SBSTA, at its 35 session, requested the secretariat to prepare an updated TNA synthesis report for SBSTA 37, including TNAs conducted by NAI Parties under the Poznan strategic programme on technology transfer.
- By July 2013, a total of 31 TNA reports were available and the information contained in these reports was synthesized into the "Third synthesis report on technology needs identified by Parties not included in Annex I to the Convention" to be presented to SBSTA 39.
- The SBSTA 39 welcomed with appreciation the information contained in the third synthesis report on technology needs and agreed to continue its consideration of the report at SBSTA 40.



# Participating countries:

Africa Cote d'Ivoire Ethiopia Kenya Ghana Mali Morocco Mauritius Rwanda Senegal Sudan Zambia	Asia & Eastern Europe Azerbaijan Bangladesh Bhutan Cambodia Georgia Indonesia Kazakhstan Laos Lebanon Moldova Mongolia Nepal Sri Lanka	Latin America & Caribbean Argentina Bolivia Colombia Costa Rica Cuba Dominican Republic Ecuador El Salvador Guatemala Peru
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### Technology needs assessments – deliverables:

Deliverable I: TNA report

#### Main elements:

- Sector identification and prioritization
- Technology identification and prioritization in each prioritized sector

Deliverable II: Barrier analysis and enabling framework report

#### Main elements:

- Barrier analysis for each technology and enablers addressing the barriers
- Enabling framework technologies

Deliverable III: Technology Action Plans

#### Main elements:

- · Action plan for prioritized technologies per sector
- · Action plan for each prioritized technology
- Cross-cutting issues

Deliverable IV: Project Ideas

#### Main elements:

Specific project ideas for each prioritized sector



# Methodology for compilation and synthesis:

Sectors - Mitigation	
Energy supply and consumption (except for industrial sectors)	
Energy Industries	
Manufacturing Industries and Construction	
Transport	
Solid Fuels	
Oil and Natural Gas	
Transport of CO2	
Injections and Storage	
Other	
Sectors as per 2006 IPCC Guidelines and Annex 4 of the TNA Handbook (UNDP)	

Sector - Adaptation	
Water	
Agriculture (Land use)	
Infrastructure/settlement (including	
coastal zones)	
Human health	
Tourism	
Transport	
Energy	
Climate observation and early warning	
systems	
Other	
Sectors as per IPCC Climate Change synthesis report 2007, pg. 57	



#### 1. General information, national circumstances, existing policies, measures:

Parties commenced their TNA reports with sections on :

- The national GHG profile (for mitigation reports),
- The vulnerability of the country to climate change (for adaptation reports),
- General country information, national circumstances, existing national policies and measures.

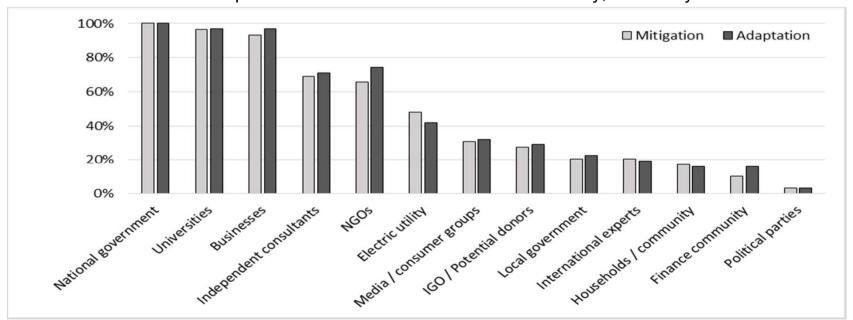
Parties referred to their national policies and measure:

- low emission development,
- national green growth and climate resilient strategies,
- climate change related measures and climate change scenario documents.



#### 2. Stakeholders:

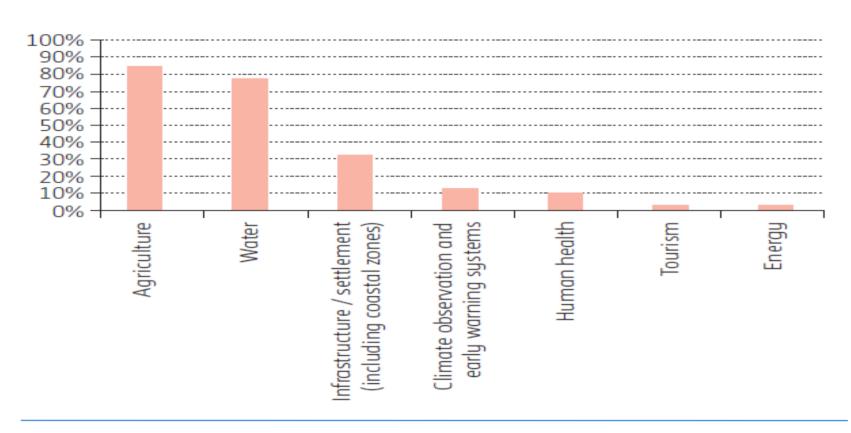
- Most of the reports were lead by the National Ministries of Environments,
- National government representatives, academia, private sector, consultants,
- Local governments, electric utility companies, news media and potential donors,
- NGOs commonly involved in the TNAs of the Eastern European, Asian and African Parties,
- Less than 15% of Parties reported stakeholders from finance community, in-country donors.





## 3. Prioritization of sectors - adaptation:

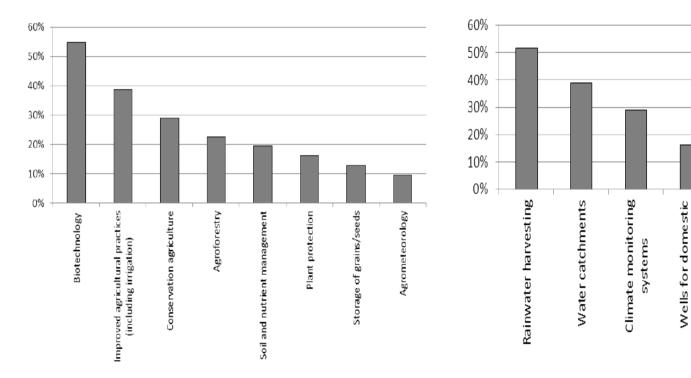
 The most commonly prioritized adaptation sectors were agriculture, water resources, infrastructure and settlements (including coastal zones)





## 4. Prioritization of technologies - adaptation:

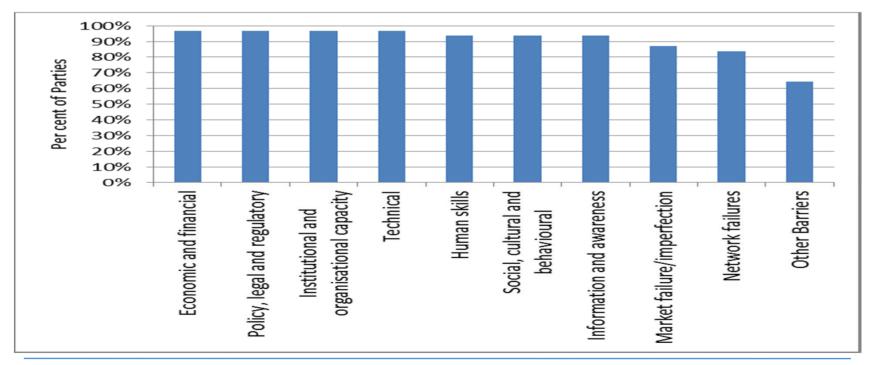
- **Agriculture** (including forestry)
- Water resources
- Infrastructure and settlement (including coastal zones)





#### 5. Barrier analysis - adaptation:

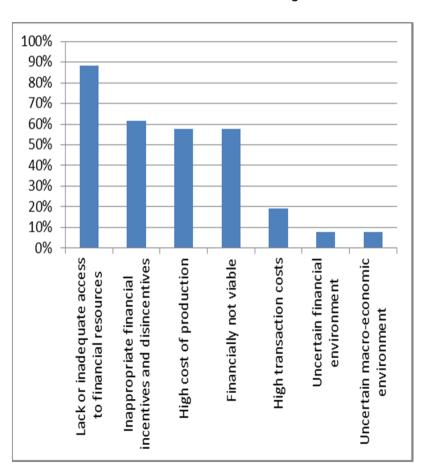
 The most frequently identified adaptation barriers were economic and financial barriers, followed by policy, legal and regulatory barriers, lack of institutional and organizational capacity, human skills, technical, social, cultural and behavioural, access to information and awareness.



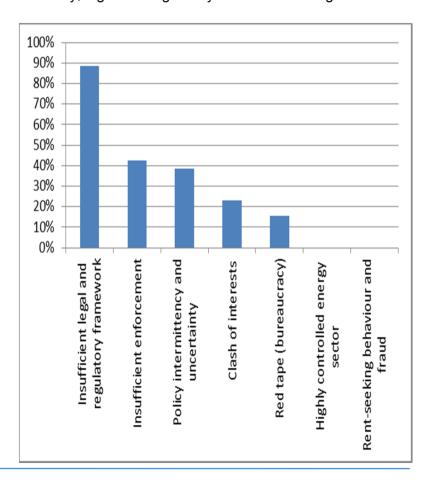


### 5. Barrier analysis - adaptation:

Economic and financial barriers for the agriculture sector



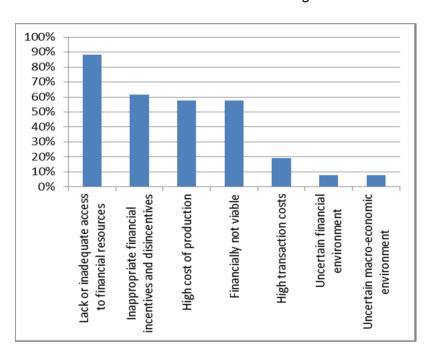
Policy, legal and regulatory barriers for the agriculture sector



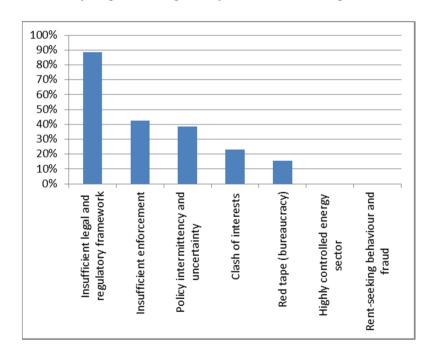


#### 5. Barrier analysis and enabling framework - adaptation:

Economic and financial barriers for the agriculture sector



Policy, legal and regulatory barriers for the agriculture sector



The most commonly identified enablers to address these barriers in the agricultural sector were the creation of national financial mechanisms or policies (65 per cent) and the creation of an allowance in the national budget for this technology (including promotion of R&D) (50%).



#### 6.Technology action plans

TAPs recommend an enabling framework for the development and transfer of prioritized technologies at the desired scale.

- TAPs contain actions for accelerating the development and transfer of a prioritised technology within the country.
- Parties grouped TAP actions in categories such as:
  - Policy and regulatory actions;
  - Economic and financial actions;
  - Infrastructure requirements;
  - Capacity building;
  - International cooperation actions.

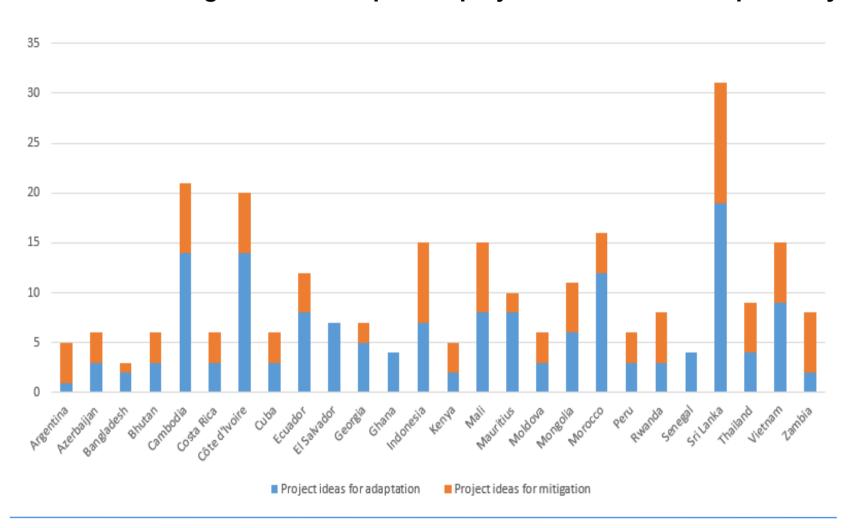


#### 7. Project ideas reports

- More than 87% of Parties developed concrete ideas, or proposals for projects or programmes based on their priority technology needs.
- For adaptation, most of the project ideas were for technologies in the agriculture and water sectors and to a lesser extent the infrastructure and settlement (including coastal zones) sector.
- Most of the project ideas developed as a comprehensive project or programme including the following areas: research, capacity building, financial schemes, pilot projects and technology demonstration.
- Some one fifth of the projects was specifically focused on capacity building and training, while some 17% of the projects ideas focused on technological research.

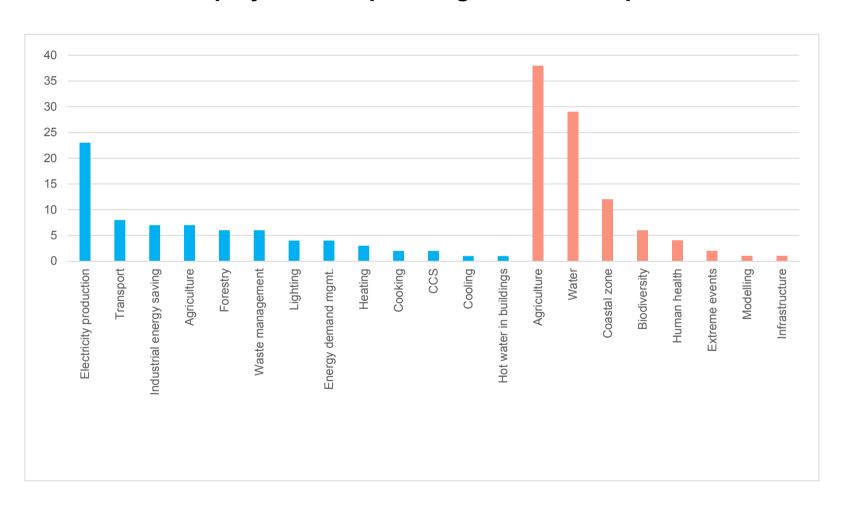


# 7. Number of mitigation and adaptation project ideas submitted per Party



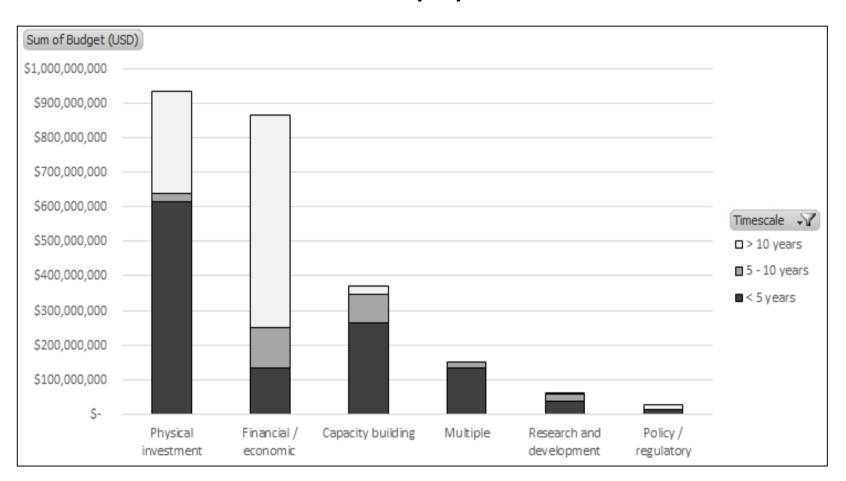


## 7. Distribution of project ideas per mitigation and adaptation sectors.



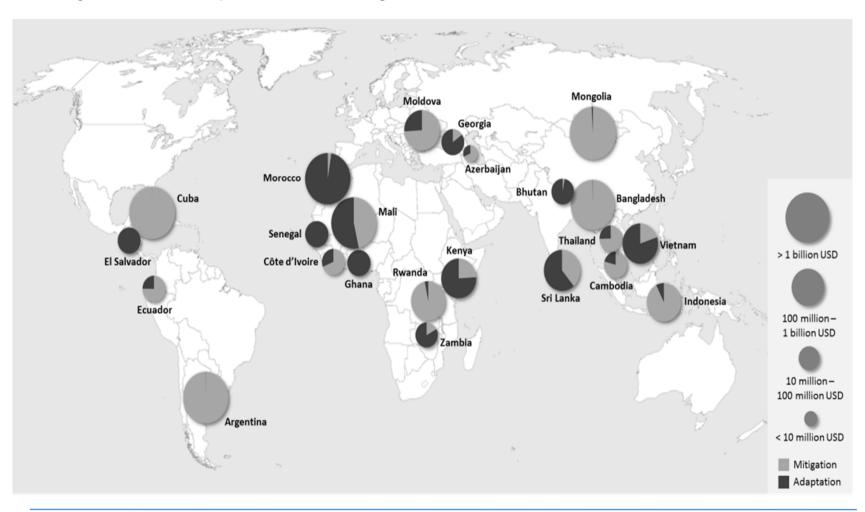


### 7. Overview of financial needs and proposed timescale:





# 7. Project ideas reports – country overview





### 8. Cross cutting elements

#### Linkages between TNAs and other processes under the Convention

- Over half of the TNA reports included consideration of possible inter-linkages between TNAs and other climate and development-related domestic processes under the UNFCCC,
- Approximately half of the Parties which considered possible inter-linkages noted that their TNAs are based on work on NAMAs and NAPAs,
- Parties, in their TNA reports, frequently referred to the first and second NCs,
- Some one fourth of Parties identified TNA outputs as inputs for work on national communications, NAMAs or national adaptation plans (NAPs).



#### 9. Regional analysis

- For adaptation, in all regions the agriculture and water sectors were dominant, however there were some regional differences reported:
- In Africa, agriculture and water sectors amounted to 95% of the chosen sectors,
- In Latin America and the Caribbean only 47% of the chosen sectors was either agriculture or water,
- Coastal protection technologies are prevalent in Latin America and the Caribbean and in Asia and Pacific,
- In the agricultural sector, the African Parties focused strongly on conservation agriculture,
- African and Asian Parties also prioritized technologies for the development of new crop varieties.



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# Thank you for your attention

