Technology Needs Assessment (TNA) project

Workshop on
Technology needs of developing countries and
options to address them:
Focus on science and R&D capabilities
UN HQ, New York City
30 April 2013

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UNEP Risoe Centre (URC)

The TNA process

What is the TNA?

- A set of country-driven activities leading to the identification, selection and implementation of environmentally sound technologies to decrease CO_2 emissions (mitigation) and to decrease vulnerability to climate change (adaptation).

Origin

- Emanates from the Poznan Strategic Programme on Technology Transfer (14th UN Climate Change Conference, Poland 2008) leading to a new round of TNAs.

The TNA project

- It is implemented by UNEP/UNEP Risoe Centre and it is funded by the GEF.
- The project provides funding (USD120 thousand to each country) and targeted technical and methodological support to 36 countries to conduct Technology Needs Assessments (TNAs).
- Two rounds of countries (15 + 21) from Africa & Mediterranean, Asia & CIS and Latin America & the Caribbean started activities in early 2010
- Project ends in April 2013
- Countries will, in a participatory process involving local stakeholders, identify sectors, prioritise technologies, recommend an enabling framework for the diffusion of the technologies, and develop project ideas.

➢ Four reports: TNAs, BA&EF, TAPs and PIs

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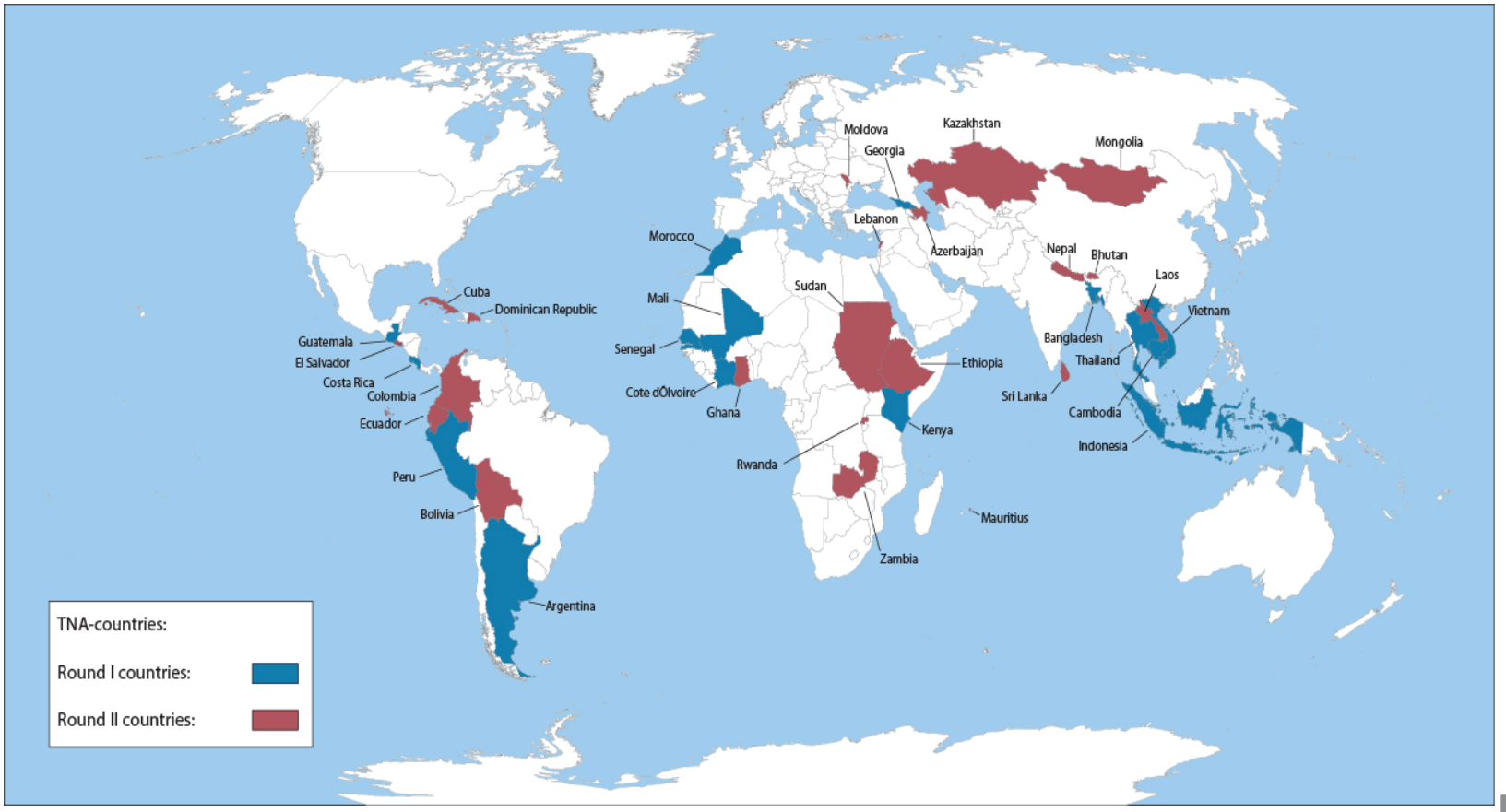
Participating countries



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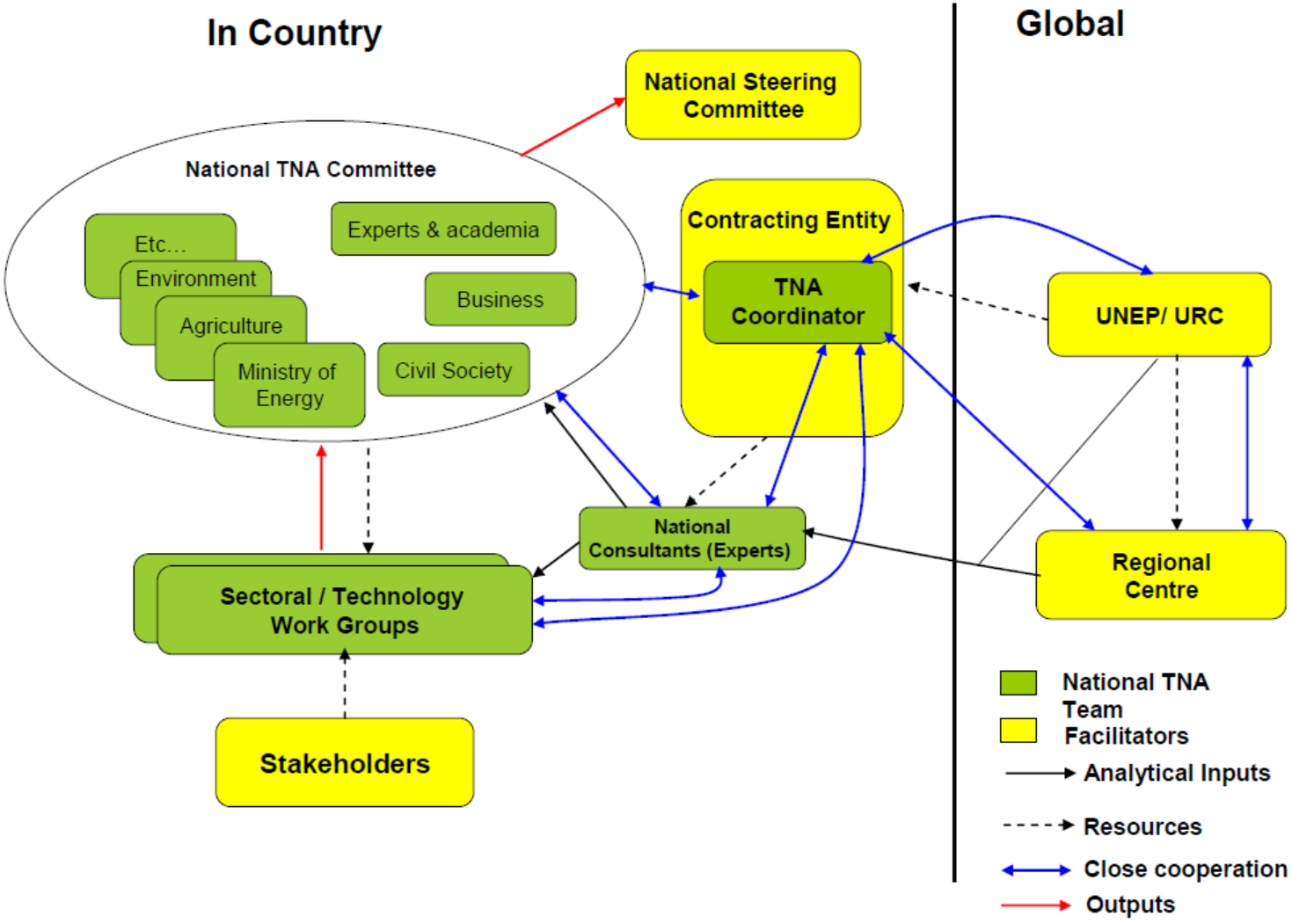
In Country
Global
National Steering Committee
National TNA Committee
Etc…
Environment
Agriculture
Ministry of Energy
Experts & academia
Business
Civil Society
Contracting Entity
TNA Coordinator
UNEP/ URC
National Consultants (Experts)
Regional Centre
Sectoral / Technology Work Groups
Stakeholders
National TNA Team
Facilitators
Analytical Inputs
Resources
Close cooperation
Outputs

Sectors prioritized by countries

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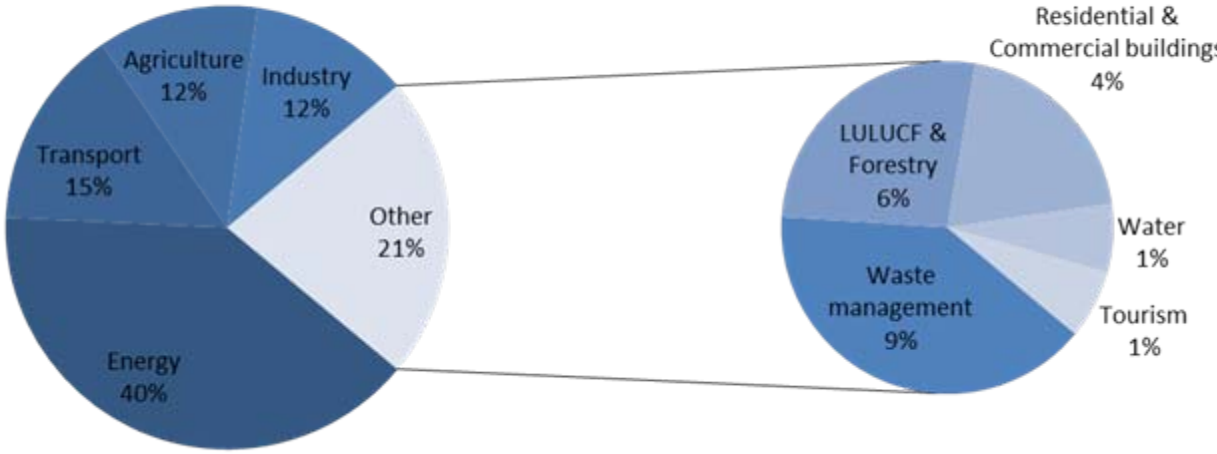
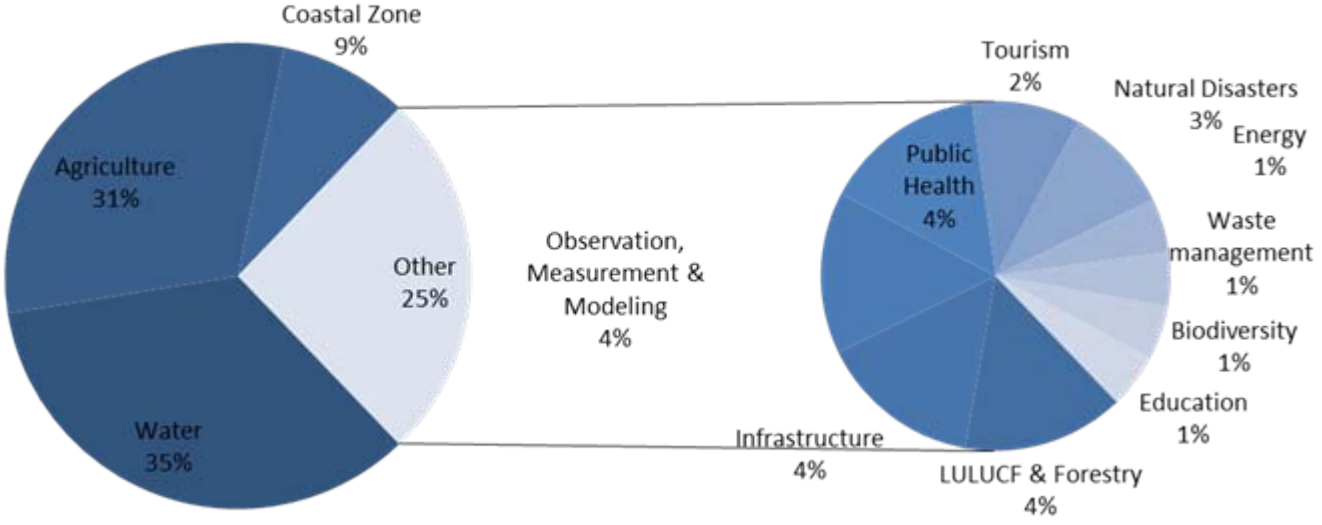
Mitigation Sectors



Adaptation Sectors



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Technologies prioritized by countries

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Most prevalent technologies for mitigation

- *Solar PV*
- *Hydro power*
- *Wind energy*
- *Combined heat and power*
- *EE lighting*
- *EE buildings*
- *Mode shifts (transport)*
- *Urban Mass Transit*
- *Biogas*
- *Tillage practices*

Most prevalent technologies for adaptation

- *Sprinkler and drip irrigation*
- *Rainwater harvesting*
- *Rainwater collection from ground Surfaces - small reservoirs and micro-catchments*
- *Wetland restoration*
- *Increased reservoir technology*
- *Sustainable livestock management*
- *Agro-forestry*
- *Biotechnology for climate change Adaptation of crops*
- *Crop diversification and new varieties*
- *Seasonal to inter-annual prediction*

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Current status of country outputs by region as per April 2013

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Asia and CIS

- ✓ 12 TNA reports completed (except Kazakhstan and Nepal)
- ✓ 11 TAP reports completed (except Kazakhstan, Laos and Nepal)

Africa and Mediterranean

- ✓ 11 TNA reports completed (except Ethiopia)
- ✓ 11 TAP reports completed (except Ethiopia)

Latin America and the Caribbean

- ✓ 8 TNA reports completed (except Bolivia and Guatemala)
- ✓ 8 TAP reports completed (except Bolivia and Guatemala)

In total: 31 TNA reports completed + 30 TAP reports completed + 30 BA&EF reports + 30 PI reports

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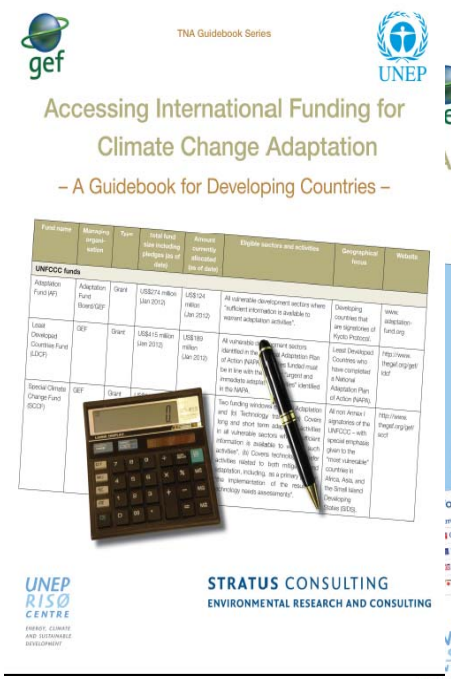
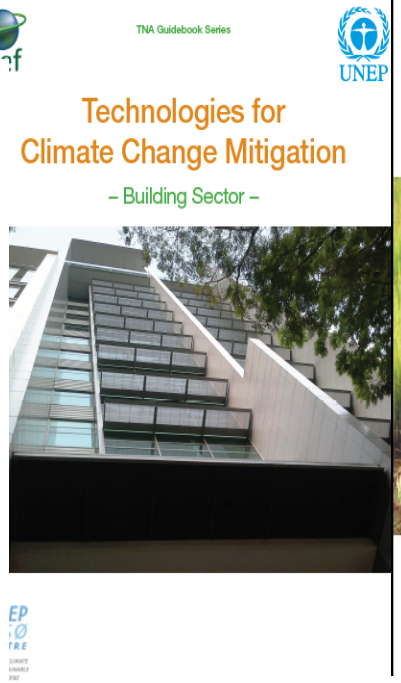
Other project outputs

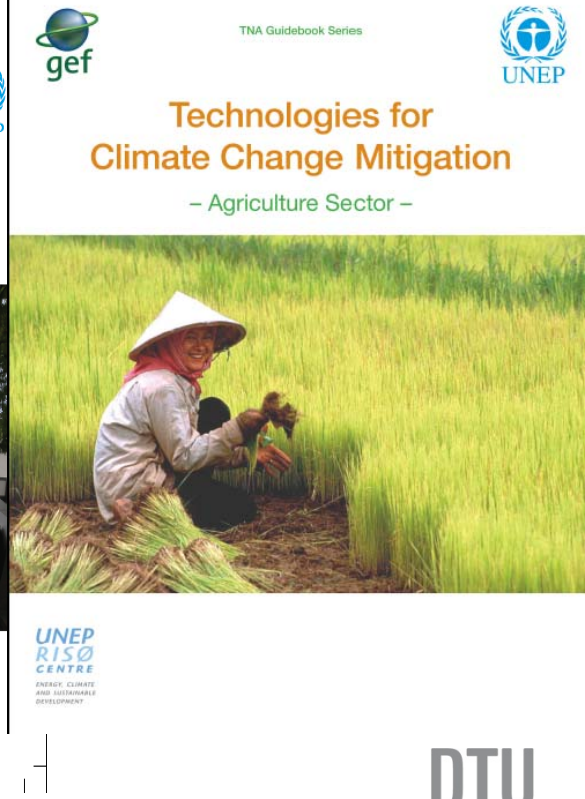
September 2012 Launching of 4 additional Guidebooks on:

Financing Adaptation, Financing Mitigation,

Mitigation Building Sector and Mitigation Agriculture Sector







Implementation of the Results

Ecuador

The results of the TNA project will be used in the preparation of the National Climate Change Strategy.

Indonesia

Emissions reduction measures and technologies identified in the TAP will help define an enabling policy/regulatory framework for growth of a domestic solar PV panels manufacturing industry.

Mauritius

The prioritised mitigation technologies in the TAP, namely utility-scale wind, PV and waste heat recovery from boilers are closely linked with the Long-Term Energy Strategy 2009 – 2025 - the blueprint for the development of the energy sector in Mauritius.

Thailand

Assessment results will be used to establish a baseline for specifying mitigation and adaptation targets for the country.

Integration of TAPs with other processes

Argentina

- the Secretary of Industry will develop a Nationally Appropriate Mitigation Action (NAMA) on co-generation for heat and power in industrial plants based on the TNA report;
- the Ministry of Science, Technology and Innovation will call for proposals to further analyse the development and/or implementation of innovative fertilizers to optimize the use of nitrogen in crop lands;
- the Secretary of Energy is developing a NAMA on the use of agricultural waste for power generation

Costa Rica

TAP will be used as a platform to design and structure sectoral NAMAs in Transport and Energy.

Vietnam

Using results from the technology prioritization, Viet Nam is promoting preparation and implementation of activities to mitigate GHG emissions in line with NAMAs.

Lessons learned

- *TNA process very useful to most of the participating countries*
- *Link the TNA process to national sustainable development plans*

- *Level of commitment varies tremendously among participating countries*
- *Identify key local partners and stakeholders*

- *Capacity level very poor in some of the countries*
- *Devote enough time, and if necessary, be intrusive in the identification and selection of local consultants*

- *Type of requested assistance to implement TNAs also varies*
- *Be flexible and adapt to the needs*

New TNA phase

PIF including 24 countries submitted by end of November – cleared by the GEF in April 2013.

Three main components:

- Facilitate the preparation of TNAs/TAPs
- Improvement of existing methodologies/guidebooks and development of new ones.
- Identifying/strengthening networking activities towards development and better use of TNAs and TAPs.

Beneficiary countries:

Armenia, Bolivia, Burkina Faso, Burundi, Egypt, Gambia, Grenada, Guyana, Honduras, Jordan, Madagascar, Malaysia, Mauritania, Mozambique, Panama, Philippines, Seychelles, Swaziland, Tanzania, Togo, Tunisia, Turkmenistan, Uruguay, Uzbekistan

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Thank you!

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