

### Making the best use of the NAMA Registry

Side event at COP-21 in Paris, Observer room 04, Wednesday 2 December 2015, 13.15 – 14.45 PM

# NAMA Partnership support to development of technical materials

- Sustainable development and transformational change impact assessment of climate policies and actions

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## The NAMA partnership

### **Objective:**

To enhance collaboration and complementarity of the activities of multilateral, bilateral and other organizations to accelerate support to developing countries in preparation and implementation of their NAMAs.







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Website: www.namapartnership.org







## Two research projects





## Measuring SD in NAMAs

**Aim:** The sustainable development (SD) framework for Nationally Appropriate Mitigation Actions (NAMAs) aims to evaluate the SD impacts of mitigation policies and actions at any stage of NAMA implementation (ex-ante and/or ex-post).

Method: The framework is based on a literature review, a stakeholder survey, interviews and consultations with NAMA practitioners. The usefulness of SD and climate change tools and approaches are analysed in meeting the needs and expectations of NAMA practitioners to inform the design of the NAMA SD Framework.



















### Assessing TC in NAMAs

### Objective:

To improve the understanding of transformational change (TC) and how to Monitor, Report and Verify (MRV) Nationally Appropriate Mitigation Actions (NAMAs) that may facilitate TC for low emission and sustainable development to achieve the 2°C target

### Phases and outputs:

Phase 1: Understanding transformational change

Output 1: Conceptual paper

Output 2: Case studies

Phase 2: Methodological framework

Output 3: NAMA TC taxonomy

Output 4: Test of tool to 93 NAMAs submitted to UNFCCC Registry by 1 June 2015

Phase 3: Guidance on how to MRV TC potential and impacts (contingent on funding)



Output 5: Refined indicators & scoring applied to two NAMAs under implementation

Output 6: Guidance developed for application of the TC taxonomy to MRV of NAMAs





## NAMA SD framework

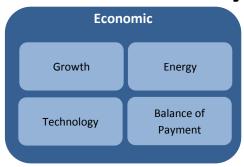


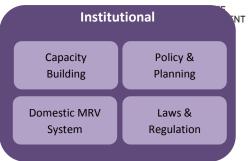
### NAMA Sustainable Development Taxonomy











#### Air

- SOx, NOx, GHG
- Odor, Dust, SPM, Fly ash
- Noise

#### Land

- Compost
- Manure nutrient and other fertilizer
- Soil erosion, Salinization, Acidification
- Minimum tillage
- End of life pollution
- Change access/lost access to land
- Other

#### Water

- Waste water
- Leaks & diesel dumping
- Drinking water quality
- Water extraction rate
- Conservation
- Supply, water access
- Ecological state
- Purification
- Other

#### Natural Resources

- Minerals
- Species diversity
- Plant life
- Land cover change



#### Jobs

- Long term jobs
- Short term jobs
- Sources of income
- Other

#### Health and Safety

- Accidents
- CrimeDiseases
- Number of hospital visits
- Sanitation
- Food safety
- Indoor air pollution
- No child labour
- Other

#### Education

- Green development related training
- Educational services for different groups
- Project related knowledge circulation
- Other

#### ■Welfare

- Traffic congestion
- Commuting times
- Income/asset distribution
- Women empowerment
- Municipal revenue
- Rural upliftment
- Energy security
- Other

#### Growth

- Investment
- Industrial/commercial activities
- Economic growth/higher income
- Quality of life
- Increased tax base
- Infrastructure
- Production cost
- Productivity
- Other

#### Energy

- Coverage/availability of supply
- Access
- Reliability, affordability
- Other

#### Technology

- Imported technology
- Local technology
- Adaptation and viability in local area
- Other

#### ■Balance of payments

- Dependency on foreign sources of energy
- Amount of energy produced from clean renewable sources
- Decrease in risk of political conflicts
- Economic savings for the government
- Reduction in energy subsidies
- Other

#### ■Capacity Building

- Land titling processes
- Mapping of natural resources and renewable energy potential
- Development of competitive procedures
- Workshops and trainings
- A technical help desk for project developers and other stakeholders
- Other

#### ■Policy & Planning

- Policy Framework for Sustainable, Low-carbon Urban Transport
- Comprehensive Urban Low carbon Mobility Plans
- Other

#### ■Domestic MRV System

- Sub-national reference levels and MRV systems
- Platform for the Generation and Trading of Forest Carbon Credits
- Other

#### Laws & Regulation

- Tariff reform
- Compliance with laws and regulation on
- Promoting and regulating production, sale and use of biofuels and biomass
- Decrees for tax benefits for renewable energy projects
- Conditions for competitive process for incorporation of new plants
- Other



### The NAMA SD Framework

Steps		Element	Description
A: Ex-Ante	Ħ	1. SD criteria & indicators	Identify and describe SD impacts - using the CDM SD taxonomy with one new dimension
	Assessment	2. Transformational change	Indicators of the processes of change for a paradigm shift to low carbon and sustainable development
		3. Quantification & Monetization	Units of measurement to track SD impacts towards SD goals are identified and methods to estimate their monetary value are applied
Procedural		4. Alignment with SD goals	SD impact analysis and contribution to SD goals at global, national, and other relevant levels
		5. Stakeholder Participation	Guidelines for stakeholder involvement throughout NAMA design
B. Pro		6. No-Harm Safeguards	Compliance with no-harm safeguards to avoid or mitigate negative impacts
Ex-post	ment	7. Monitoring & Reporting	Develop a monitoring plan; How are indicators monitored, by whom, how often? Describe quality assurance procedures. Report the monitoring data to relevant stakeholders at regular intervals.
EX-D	essu	8. Verification	Independent review of methods and data shall be provided when needed to ensure SD impacts are credible and transparent
ö	OD.	9. Certification	Public, private or civil society players may want to define standards for certification of units of GHG reductions with SD impacts





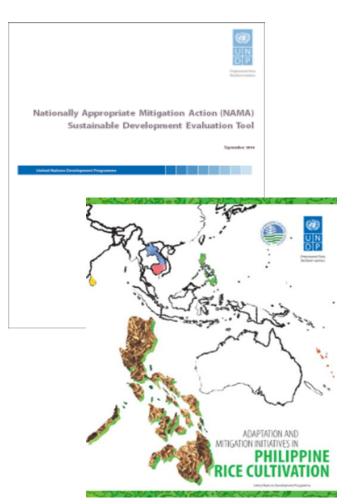
## **Example: NAMA SD Tool**





### NAMA Sustainable Development (SD) Tool





- The SD tool has been designed to evaluate the SD performance indicators for NAMAs and to evaluate the SD results achieved over the lifetime of the NAMA;
- Nationally Appropriate Improvements (NAIs) determine the ambition and success of the NAMA;
- NAIs are calculated for each intervention, the mean value is determined for each domain, and the overall ambition and success of the NAMA calculated as the mean value over all domains;
  - The SD tool is currently applied in 7 NAMAs and is available here: www.undp.org/content/undp/en/home/librarypage/environment-energy/mdg-carbon/NAMA-sustainable-development-evaluation-tool.html





### NAMA SD Tool - Domain Environment & Social

		Relevance to SDGs and	Selected			Effect on	Monitoring done
omain	Indicator	Targets	(Yes/No)	Identified Impacts	Explanation of Chosen Indicator	Indicator	(Yes/No)
Environment	Air pollution/quality  Water pollution/quality  Soil pollution/quality	Goal 11, Target 11.6 Goal 6, Target 6.6 Goal 11, Target 11.6 Goal 12, Target 12.4 Goal 2, Target 2.4 Goal 11, Target 11.6 Goal 12, Target 12.4	Yes Yes	Increased water savings Improved soil quality	AWD leads to sognificant water savings as a result of improved irrigation  AWD involves periodic aeration of the soil which results in higher zinc availability, as well as increased plant root anchorage and lodging resistance.	Positive Positive Positive	Yes No
	Others (Noise/visibility) Biodiversity and ecosystem balance	Goal 11, Target 11.6 Goal 14, All Targets Goal 15, All Targets					
		_					
	Health	Goal 3, All Targets					
	Livelihood of poor, poverty alleviation, peace Affordability of electricity Access to sanitation and clean	Goal 1, All Targets Goal 2, Target 2.1 Goal 16, Target 16.1 Goal 7, Targets 7.1 Goal 6, Tagets 6.1, 6.2,	Yes	Provide livelihood for poor/poverty alleviation. Decrease conflicts among farmers	Water savings from the implementation of AWD results in increased total irrigated land area. As a result, more farmers and farm helpers are required, providing additional livelihood for the poor farming communities;  Because of the availability of more irrigation water for downstream farmers due to AWD, irrigation conflicts between upstream-downstream farming communities are decreased.	Positive	No
	drinking water	6.4, 6.5					
Social	Food security (Access to land and sustainable agriculture)	Goal 2, All Targets Goal 12, Target 12.3	Yes	Increase in rice production. Increase in irrigated land	Water savings from the implementation of AWD results in increased total irrigated land area.  Proportionately, increase in total number of rice fields results in the increase in rice yield.	Positive	Yes
	Quality of employment	Goal 8, Targets 8.2, 8.3, 8.5, 8.6, 8.7, 8.8		g	4,		
	Time savings/time availability due	8.5, 8.0, 8.7, 8.8					
	to project	Goal 1					
	No child labour	Goal 8, Target 8.6					
	Provides vulnerable groups access to local resources and services	Goal 6, Targets 6.4, 6.5, 6.6, 6.a, 6.b	Yes	Increase access to water resources	AWD is a water management practice in rice cultivation promoting the efficient use of water resources. This provides vulnerable groups access to water resources and services which were not previously available to them, resulting in increased total irrigated land area.	Positive	Yes





## Understanding TC in NAMAs





### Analytical framework

#### Define:

What are the goals, means and barriers for TC through the NAMA?

(Operational definition)

Operationalize:

Does the NAMA steer transformational innovations right?

(Management approaches)

Set the scene:

What is the socio-technical context the NAMA takes place in?

(Multi-Level Perspective)

Assessment of NAMAs for Transformational Change

Check the timing:

Is the NAMA well suited to the transformation phase?

(Phase model)





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1. Dimensions	2. Factors	3. Indicators
1. Definition of TC	Goal dimension	□ Goal for a rapid large scale GHG reduction
		□ Sustainable development goals incentivice the transition
		□ Milestones/Key Performance Indicators
		□ Sectoral, system or sub-system changes
	Process of change dimension	Political vision and leadership
	-	□ Political and/or civil society interventions/innovations
		□ Actors connect innovention to day-to-day proctice
		□ Actors infuence multi-level system to adopt innovation
	Low-carbon lock-in dimension	High-carbon barriers are overcome
	Low-carbon lock-in dimension	Other
2. Multilevel context	Landscape level	□ Growth of international concern about Climate Change had an impact
		Political pressure generated by organized civil society important
	Regime level	National government incentives to change/disincentives to no change
		□ Improvement of regulation
		□ Existing infrastructure allow new sustainable actors/activities
	Niche level	□ New technologies owned by citizens & farmes
		□ Financial participation of citizens in local energy generation plants gives local ownership
		□ High local involvement in the project
	Interaction across levels	□ Multilevel interaction
		☐ Actors convince other actors with network building
		□ Other
3. Phases of transformation	Pre-development phase	□ Increased funding for technological R&D&D
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		□ Experimentation and innovation in the policy/project
		□ New testing facilities for technologies
		□ First of its kind project
		□ Increased public awareness on new technologies
	Take-off phase	□ The project will be replicated, model for similar projects in other areas of the country
		□ Enhanced capabilities of actors
	Accel eration phase	□ Change of status symbols and aspiration
		□ Extended high voltage grid
		□ The project is so large that is will transform a sector
		□ Impact beyond the project, or even beyond borders
	Stabilisation phase	Barriers to relapse to high-carbon practice
		□ Government policies and laws sustain the transformation
		□ Other
4. Management of Transition	Strategic	☐ The Parliament support the transition
		□ Increased awarenes on Climate Change in governmental/municipal institutions
		□ New institutions created or changed
		□ Information campain performed
	Tactical	
	rucucal	Government have made a long term vision with targets, that are enforced
		Strenghen enforcement of existing laws
		Risk minimization instrument introduced
		□ Tax reduction or price support for renewables and energy efficiency
		□ Financial support for renewables and energy efficiency
		□ Introduction or increase of carbon tax
		□ Negative incentives that discourage the continuation of business as ususal
		□ Prohibits import of inefficient technologies
		□ Introduction of technology standards/performance standards
	Operational	Reduction of subsidies for fossil energy
	1	□ Feed-in Tariffs with a purchase obligation, stable tariff over a long period of time
		□ Introduction of mandatory labeling or metering
		□ Introduction of write off policy for outdate d technologies
		□ Introduction of carbon market
		□ Introduction or fuel tax, traffic congestion tax, import/export tax etc.
	Reflexive	□ Le arning from ongoing policies and actions
		□ MRV frameworks informs transition management
		o Others



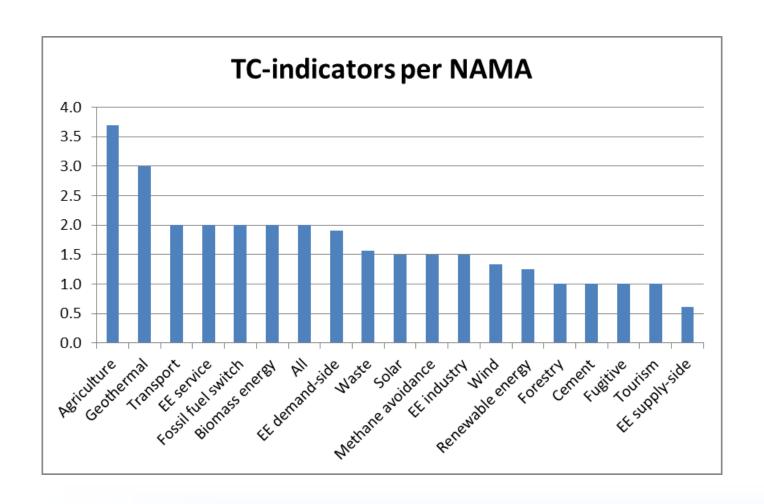


## Results of analysis of 93 NAMAs





## TC-indicators by type of NAMA







# Next steps for development of tools, guidance and support to countries

- Nationally appropriate SD Tools developed and applied in countries informed by the NAMA SD Framework
  - Develop standardized methods for quantification and monetization of SD impacts
- Guidance developed for use of TC-indicators and scoring of TC potential
- Capacity building for MRV of GHG, SD and TC impacts of NAMAs integrated in one framework for policies and actions

