

## Adaptation in the United Nations Framework Convention on Climate Change (UNFCCC) – 1994 took effect

Objective: "...to stabilize greenhouse gases in the atmosphere within a timeframe sufficient to "allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner..."

Article 4: All Parties, taking into account their common but differentiated responsibilities and their specific national and ...development priorities, objectives and circumstances, shall:

1 (b) - Formulate, implement, publish and regularly update national...programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all GHGs..., and measures to facilitate adequate adaptation to climate change;

Article 4.4: The developed country Parties...shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.

## Adaptation on par with Mitigation

2007: Adaptation gets separate recognition apart from mitigation under Bali Action Plan (COP 13): International cooperation, Technology development and transfer, and Enhanced financial support for adaptation emphasized.

2007-2010: Financing adaptation continued to be stressed, with focus on the operational aspects of the institutions that were created

2010: COP 16 -

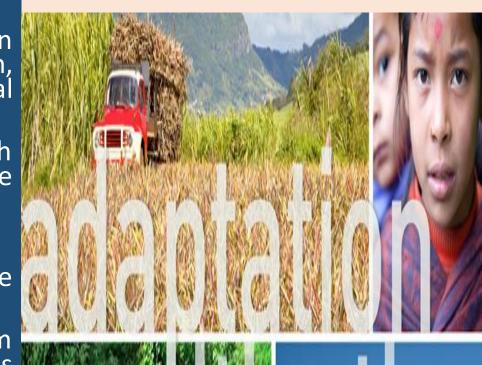
Cancun Adaptation Framework (CAF) accorded adaptation the same priority as mitigation.

National Adaptation Plans (NAPs) for LDC's medium and long-term planning also agreed to (and extended to all developing countries in 2011);

Technology Mechanism (to address both mitigation and adaptation.

Adaptation Committee established.

Decision to have Green Climate Fund which was established in 2011





## Adaptation in Paris Agreement (took effect in 2016)

Article 3: sets out Nationally determined contributions (NDCs) as a global response to climate change covering mitigation as well as adaptation.

Article 7.1: Established a 'global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change...'

Article 9.1: Developed countries "shall" provide financial resources to assist developing countries with respect to both mitigation and adaptation.

Article 14: Global stocktake "shall" "review the adequacy and effectiveness of adaptation and support provided for adaptation" as well as "review the overall progress made in achieving the global goal on adaptation...". This will take place in 2023.

## Cost of adaptation likely to rise



"The cost of adapting to climate change in developing countries could rise to between \$280 and \$500 billion per year by 2050, a figure that is 4 to 5 times greater than previous estimates," according to the Adaptation Finance Gap Report by UN **Environment Programme.** 

Source: 2016 Adaptation Gap

Report

#### Adaptation readiness in ASEAN

(Source: Stockholm Environment Institute, 2016)

"Adaptation readiness is defined as "the extent to which human systems (e.g. nations, regions, businesses, communities etc.) are prepared to adapt, providing an indication or measure of the likelihood of adaptation taking place. Its components include political leadership; usable science and data to inform decision-making.

Our review shows that readiness results, in a large part, from how governments perceive their country's vulnerability, and the priority given to responses by different actors. These priorities may be driven by internal constituencies, or by the concerns of bilateral or multilateral organizations.

We group the ASEAN countries in three categories: adaptation pioneers (Philippines and Vietnam), emerging champions (Cambodia, Indonesia and Myanmar), and wait-and-see adaptors (Laos, Malaysia and Thailand)."

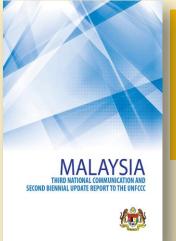
"The pioneers see adaptation as an urgent need and have implemented new institutional arrangements to address it.

The emerging champions are following close behind, taking new approaches to adaptation. In some countries – most notably the Philippines and Vietnam – disasters have acted as "focusing events" that stimulate policy engagement.

Conversely, countries with less exposure to disasters have tended to be complacent about adaptation, such that policies and programs in place are disjointed, weak or limited in impact.

This appears to be the case in Malaysia, where the government perceives climate change-related vulnerabilities as generally low compared with other countries in the region. As a result, the government has subordinated adaptation action to the pursuit of economic development."

Clearly, "usable science and data to inform decision-making" is necessary in M'sia, Laos and Thailand.



# Third National Communication to the UNFCCC - Sept 2018: Chapter 4 - Vulnerability and adaptation assessment

#### Focused on six sectors/areas

- 1. Water and coastal resources
- 2. Food security and agriculture
- 3. Forestry and biodiversity
- 4. Infrastructure
- 5. Energy
- 6. Public health

Assessment has been carried out for the 2030 and 2050 period based on the impacts of temperature increase, projected floods and dry spells and sea level rise.



# M'isa's NDC under the Paris Agreement – Adaptation included. Duration: 2021-2030.

Adaptation actions and policies communicated in the NDC includes:

- i. Enhancement of food security under the 11th Malaysia Plan. (Agriculture Sector-Food Security)
- ii. Improvement of water supply under the 11th Malaysia Plan. (Water Sector-Water Supply)
- iii. Development of National Coastal Vulnerability Index to address rising sea level issues. (Coastal Zone Sector-Sea-level Rise Protection)
- iv. Control and prevention of dengue transmission through early test kits, community behavioural intervention and exploratory research on alternative medicines. (Health Sector-Disease Surveillance and Control)
- v. Strengthening of flood mitigation programmes, disaster risk management and resilience of infrastructure under the 11th Malaysia Plan. (Disaster Risk Management Sector-Disaster Preparedness)

(Source: Scoping study for National Mitigation and Adaptation Action Plans, Nov. 2017)

## National Adaptation Plan - Urgent

Malaysia needs to expedite its current efforts at having a National Adaptation Plan.

The objectives of the NAP process are:

- (a) To reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience;
- (b) To facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate

(Decision 5/CP.17, paragraph 1; 2011, Durban).

## The financial landscape – International Funds

Under the UNFCCC, the Kyoto Protocol (KP) and the Paris Agreement (PA):

Developed countries are obliged to provide funds and technology transfer to developing countries for their climate actions:

- that includes mitigation (emissions reductions) and
- for adaptation
- as well as for their capacity-building
- and for their reporting obligations, such as for their national communications.

The financial mechanism under the treaties are:

- The Adaptation Fund
- Green Climate Fund
- The Global Environment Facility
- Special Climate Change Fund

## The Adaptation Fund: set up in 2001 under the KP

Established to finance concrete adaptation projects/programmes in developing countries that are parties to the KP and are particularly vulnerable to the adverse effects of climate change.

Since 2010, the AF has committed US\$ 720 million, including supporting 100 concrete adaptation projects with about 8.7 million direct beneficiaries.

Resourced by a share of proceeds from the Clean Development Mechanism and other voluntary contributions from developed countries. Interim trustee is the World Bank.



#### What does the AF fund?

Any proposal will need to identify an adaptation or resilience challenge that could be addressed with support by the AF through a project or programme.

It would need to be in accordance with the priorities laid out in national strategies and plans or in the NDC.

Some recent examples of projects/programmes that have been supported:

Indonesia - Building resilience to climate change impacts in Pekalongan City, in Central Java Province — about USD 6 million.

**Laos:** Building climate resilience in small towns along the east-west economic corridor in the central region of Lao PDR – USD 5.5 million.

**Vietnam** - Enhancing the resilience, inclusive and sustainable eco-human settlement development through small scale infrastructure interventions in the coastal regions of the Mekong Delta – USD 6.3 million.

India - Building Adaptive Capacities of Communities, Livelihoods and Ecological Security in the Kanha-Pench Corridor of Madhya Pradesh – USD 2.5 million

#### M'sia IS entitled to receive funds from the AF

Article 4.4 of the UNFCCC states that "developed country Parties....shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting their costs of adaptation to those adverse effects".

#### Preambular para 19 of the Convention states:

"Recognizing further that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change

Article 4.8 states: 'In the implementation of the commitments....the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing countries arising from the adverse effects of climate change..., especially on:

....(b) countries with low-lying coastal areas; (c) countries with arid and semi-arid areas, forested areas and areas liable to forest decay; (d) countries prone to natural disasters; (e) countries with areas liable to drought and desertification; ...(g) countries with areas with fragile ecosystems, including mountainous ecosystems...".

## The Penang case

In fact, the AF has approved a concept note in Sept 2020 for a USD 10 million project for 'Nature-based Climate Adaptation Programme for the Urban Areas of Penang Island' which is a collaboration between the State Government, UN-Habitat and Think-City. A full proposal is now under preparation.

The project aims to enhance urban resilience and reduce human and ecosystem health vulnerability to climate change impacts and extreme weather events by implementing nature-based solutions (NBS) to reduce surface temperatures and storm water runoff.



## Global Environment Facility (GEF)

Was established on the eve of the 1992 Rio Earth Summit.

The GEF's climate change adaptation strategy, which is financed through the <u>Least Developed Countries Fund (LDCF)</u> and the <u>Special Climate Change Fund (SCCF)</u>, aims at supporting developing countries to move to a climate resilient development pathway while reducing exposure to the immediate risks posed by climate change.

The GEF adaptation strategy hinges upon three main pillars:

- Reduce vulnerability and increase resilience through innovation and technology transfer for adaptation
- Mainstream adaptation and resilience for systemic impact
- Foster enabling conditions for effective and integrated adaptation.

The World Bank is the trustee of the GEF.



## Special Climate Change Fund – operated by the GEF

Established in 2001. Is operated by the GEF.

SCCF is open to all vulnerable developing countries. Adaptation is a top priority for funding. It funds adaptation related to water resources management, land management, agriculture, health, infrastructure development, fragile ecosystems, and integrated coastal zone management.

Also supports monitoring of diseases and vectors affected by climate change, and related early warning systems and builds capacity for disaster prevention related to climate change, including for droughts and floods, and also provides catastrophe risk insurance.

To date the SCCF has a portfolio of more than US\$350 million supporting 85 projects globally.

According to the GEF, each year it receives about US\$250 million in requests for adaptation support.

#### Examples of projects:

India has received support for 'Sustainable Rural Livelihood Security through Innovations in Land and Ecosystem Management'.

Coral Triangle Initiative SEA-Coastal and Marine Resources Management

# Green Climate Fund – the biggest and most recent climate fund

Governments agreed to set up the GCF in Cancun under the UNFCC in 2010 at the insistence of developing countries

In 2011, the GCF was launched as the operating entity of the financial mechanism of the UNFCCC

# The objective of the GCF

The Fund, "in the context of sustainable development" is "to promote the paradigm shift towards low emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change."

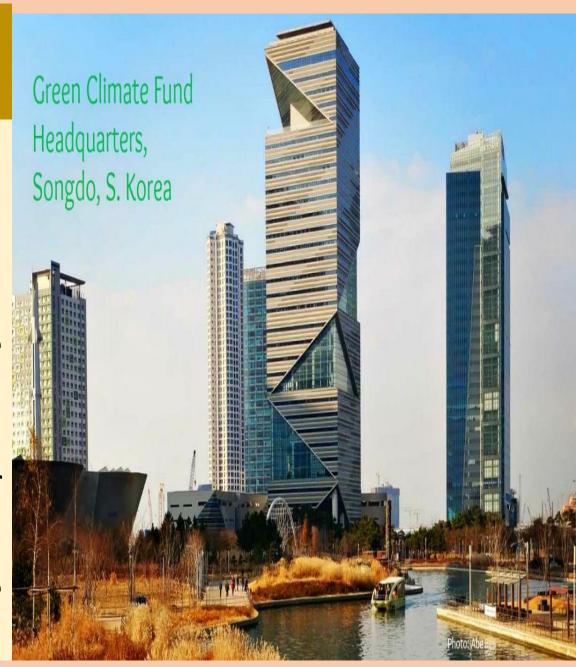
"The Fund will pursue a country-driven approach and promote and strengthen engagement at the country level through effective involvement of relevant institutions and stakeholders".

#### Current resources of the GCF

GCF's first replenishment (2020-2023) saw pledging of USD 9.9 billion equivalent from 31 contributors.

This does not include any pledge from the United States under Trump. In the initial resource mobilisation in 2014, USD 10.3 billion was pledged, with USD 3 billion from the US under Obama.

However, only USD 1 billion came through due to Trump.



## GCF- Fund level impacts

The strategic mitigation impacts are to reduce emissions from:

- (a) Energy generation and access;
- (b) Transport;
- (c) Buildings, cities, industries and appliances; and
- (d) Forests and land use.

The strategic adaptation impacts are to increase the resilience of :

- (a) Health, food and water security;
- (b) The livelihoods of people and communities;
- (c) Ecosystems and ecosystem services; and
- (d) Infrastructure and the built environment

#### Allocation of resources

The Board decided that the aim is for a 50:50 balance between mitigation and adaptation over time

Aim for a floor of 50% of the adaptation allocation for particularly vulnerable countries, including least developed countries, small island developed States and African States

Manage access to resources with a view to seeking geographic balance and a reasonable and fair allocation across a broad range of countries, while maximizing the scale and transformational impact of the mitigation and adaptation activities of the Fund

That sufficient resources should be provided for readiness and preparatory support

## Examples of projects adaptation approved

The UNDP obtained a US\$ 29.5 million grant for Vietnam, to strengthen storm and flood protection for coastal communities through provision of resilient housing, planting and rehabilitation of mangrove forests, and systematized climate risk assessments for the public and private sectors.

KfW, a German government owned development bank, obtained a grant of almost US\$ 110 million in grants for an adaptation project in Tanzania, safeguarding water supply and farming conditions in a particular region through building climate resilient water supply infrastructure, and agricultural practices.

## Examples of adaptation projects approved

Landbank obtained USD 10 million for 'Multi-Hazard Impact-Based Forecasting and Early Warning System' for the Philippines

UNDP obtained US\$ 39 million for a project in Colombia to reduce climate related vulnerability in an area through e.g. dissemination of information and early warning systems; improvement of water provision infrastructure and ecosystem restoration

#### Recent examples

UNDP obtained USD 30.2 million for 'Strengthening the resilience of smallholder agriculture to climate change-induced water insecurity in the Central Highlands and South-Central Coast regions of Vietnam.'

KfW obtained USD 33 million for 'GCF Ecosystem Based Adaptation Programme in the Western Indian Ocean (Madagascar, Mozambique, South Africa and Tanzania)'.

#### Funds for readiness and NAPs

The GCF provides financial support to developing countries for the formulation of NAPs and other adaptation planning processes.

Its **Readiness** Programme, offers developing countries a one-time grant of up to **USD 3 million** to support country-driven adaptation activities



## Accessing resources of these funds

Access to resources are through entities accredited to the respective Funds.

Projects and programmes can only go forward with the approval of National Designated Authority (NDA) or in-country focal point.

In the case of M'sia, the NDA for the various funds is the Ministry of Environment and Water (KASA).

Projects and programmes need to meet the various policies of these funds such as environmental and social safeguards, gender policy, policy on indigenous peoples etc.

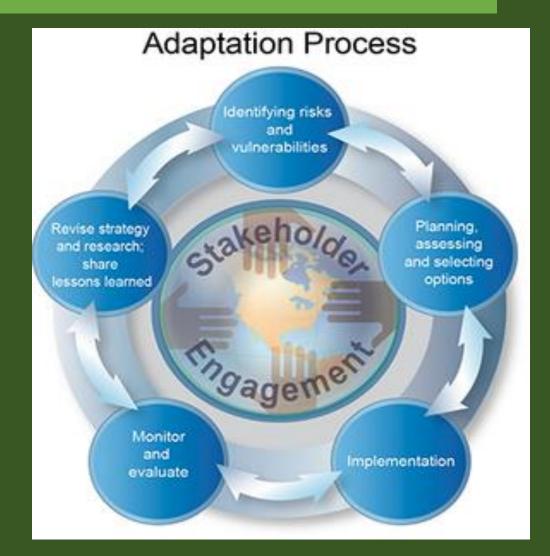


#### Action oriented research for good proposals

Clearly, what is needed are good ideas for projects and programmes that can form proposals for funding.

This should not be left to accredited entities for identifying what needs to be supported.

These ideas, backed by research and data can be channelled to the National Designated Authorities (government) to apply for funding, including through identifying possible accredited entities with whom there can be collaboration to develop the projects/programmes on adaptation.



#### For further information:



Contact:

meena@twnetwork.org

Visit TWN website:

https://www.twn.my/