

**Submission by the Arab Republic of Egypt on behalf of the African Group of
Negotiators
On matters related to the financing of actions to address loss and damage**

This submission is made in response to the invitation, in paragraph 10 of decision -/CP.23, for *Parties, observers and other stakeholders to submit, by 15 February 2018, their views in the context of activity 1(a) of strategic workstream (e) of the five-year rolling workplan* of the Executive Committee of the Warsaw International Mechanism for Loss and Damage.

We understand the call for submissions by the COP in decision -/CP.23 as a further articulation of the call for submissions already established in activity 1(a) of strategic workstream (e) of the five-year rolling workplan of the Executive Committee of the Warsaw International Mechanism, on the *type and nature of actions to address loss and damage for which finance may be required*.

In decision -/CP.23, the COP further requested the secretariat to organize, in conjunction with SB48, *an expert dialogue to explore a wide range of information, inputs and views on ways for facilitating the mobilization and securing of expertise, and enhancement of support, including finance, technology and capacity building, for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, with a view to informing the preparation of the technical paper referred to in paragraph 2(f) of decision 4/CP.22.* (paragraph 9)

This submission therefore contains the following elements relevant to the upcoming processes:

- Identification of key impacts and challenges related to addressing loss and damage in African countries;
- Views on the type and nature of actions to address loss and damage for which finance may be required;
- Recommendations on the organization of the expert dialogue; and
- Views on the possible scope of the technical paper.

1. Introduction

The African Group of Negotiators (AGN) appreciates the opportunity to contribute its views on the financing of actions to address loss and damage in the context of *activity 1(a) of strategic workstream (e) of the five-year rolling workplan*¹ of the Executive Committee (ExCom) of the Warsaw International Mechanism for Loss and Damage (WIM).

The AGN understands the importance of this submission for the review of the WIM in 2019 and the ongoing work on action and support under strategic workstream (e). The AGN has previously communicated its views on the formulation of activities of the five-year rolling workplan of the ExCom of WIM including on finance, technology and capacity-building. The AGN believes that the views previously expressed should also be taken into consideration, as they are also relevant to the theme of this submission.

¹ Strategic workstream (e): Enhanced cooperation and facilitation in relation to action and support, including finance, technology and capacity-building, to address loss and damage associated with the adverse effects of climate change.

Activity 1(a): Excom to support the secretariat in determining the scope of the technical paper referred to in decision 4/CP.22, paragraph 2(f) and (g), with a view to making the paper available to Parties prior to the fiftieth sessions of the subsidiary bodies (SB50) (June 2019) for consideration in the review of the Warsaw International Mechanism.

For the AGN, the WIM is a very important institution. Because of its critical importance, its mandate, structure and effectiveness must be enhanced to enable it to adequately address its three functions. At this time, there is a very clear need to focus the efforts of the ExCom on the third function: “enhancement of support, including finance, technology and capacity-building, to strengthen existing approaches and, where necessary, facilitate the development and implementation of additional approaches to address loss and damage associated with climate change impacts, including extreme weather events and slow onset events.” For the AGN, an essential next step is the development of adequate institutional arrangements and mechanisms for mobilizing and providing adequate levels of finance and support to meet the needs of developing countries in addressing loss and damage.

2. Identification of key impacts and challenges related to addressing loss and damage in African countries

For African countries, loss and damage represents an outstanding economic and political challenge and a great concern that has been prioritized by the meeting of the Committee of African Heads of State and Government on Climate Change (CAHOSCC) and seriously considered by the African Ministerial Conference on the Environment (AMCEN).

The AGN is highly concerned about the level of loss and damage associated with the adverse impacts of climate change that affect the African continent. Current and projected costs to address loss and damage are enormous. Even if all cost-effective adaptation is realised, Africa will still suffer large “residual” damages, which are estimated to be double the adaptation costs in the period 2030-2050. These residual damages are already and will continue to undermine Africa’s development effort. The climate change challenge exceeds the capacity of the continent to respond to projected damages and impacts through domestic resources, even if the base to raise additional funding is broadened. Africa and the international community will need to find ways to cope with these residual damages, under any scenario of global mitigation and local adaptation efforts. Scaled-up international support for African countries is therefore critical.

Africa is a hotspot of vulnerability to the adverse impacts of human-induced climate change, and existing emission trends and mitigation pledges will only increase the frequency and severity of impacts already being experienced. In Paris, the international community agreed to a global goal of keeping the global average temperature increase to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above preindustrial levels. There are many valid concerns that current mitigation pledges will lead to temperature increases far above the agreed level. Even with the agreed 2°C or below level of warming, the impacts for Africa are expected to be enormous. Many studies demonstrate that under different warming scenarios and despite strong adaptation efforts in the region, considerable adverse effects of climate change will be felt in Africa, resulting in significant loss and damage. The scientific evidence shows that the future impacts on the continent are alarming and will likely include:

- Unusual extreme heat events are projected to increase rapidly, becoming the “new normal”. At around 1.5°C about 25% of Africa’s land area is projected to experience unusual heat extremes in summer.

- Significant increases in, and exacerbation of, water stress are projected with temperature increases under 2°C in many African countries; e.g. desert and dry-land areas are projected to increase in a 2°C warmer world.
- Sea-level rise along Africa's coastlines is projected to be approximately 10% higher than the global mean; many African countries e.g., Egypt, Mozambique, Nigeria, Guinea-Bissau, and The Gambia would be most affected by sea-level rise in terms of number of people at risk of flooding annually. Further, the Nile Delta is an example of the vulnerability of tourism to inundation and saltwater intrusion associated with sea level rise.
- Larger tropical cyclone-induced storm surges, in conjunction with sea-level rise, would place more people at risk of coastal flooding. Tunisia, Tanzania and Mozambique are among the most exposed in the developing world overall and in terms of proportion of land area, GDP, urban land area, agricultural area and wetlands.
- Increasing ocean acidification and rising temperatures would have severe consequences for coral reefs and ocean ecosystems generally. Most coral reefs are projected to be extinct above 2°C of warming, resulting in loss of associated marine fisheries, tourism, and coastal protection against sea-level rise and storm surges.
- At warming above 2°C, virtually all of the present maize, millet, and sorghum cropping areas across Africa could become unviable for the present current crop varieties. Maize and wheat productivity is projected to decline for a below 2°C warming by 5% and 17% respectively for sub-Saharan Africa by the 2050s.
- Rates of undernourishment in the Sub-Saharan African population are projected to increase by 25-90% compared to the present at a warming of around 1.5°C by 2050.

The AGN believes that higher ambition of both mitigation and adaption (in the pre- and post-2020 period) are required to reduce the adverse impacts of climate change and the associated loss and damage. As indicated by the Africa Adaptation Gap Report, "The best insurance against potentially catastrophic impacts of climate change and unmanageable adaptation and (residual) damage costs in Africa is effective and ambitious mitigation action leading to deep global emission reductions."

For African countries that have been able to carry out risk assessments for the current, medium and long-term period, there are identified actions and approaches to address loss and damage that represent priorities for financial support in order to overcome and/or avoid loss and damage associated with the adverse impact of loss and damage.

The African continent is exposed to diverse types of loss and damage which manifest most significantly in diverse sectors and are associated with certain events (both extreme and slow events) over different time scales *i.e.*, at present as well as in the future *i.e.*, anticipated in the medium and long-term.

The AGN believes that loss and damage is context specific. African countries are required to address a wide range of concerns associated with the adverse impacts of climate change, in different sectors and in relation to different types of impacts and events (both slow onset and extreme). Accordingly, this submission should not be seen as a complete representation of all African countries' concerns, as they are expected individually, when applying for funding, to elaborate more on issues that have specific relevance to them.

3. Issues of concern and views on the type and nature of actions to address loss and damage for which finance may be required

This section will present the AGN's views on the type and nature of actions to address loss and damage for which finance may be required 1) in relation to specific sectors and initiatives, and 2) in relation to follow-up activities by the ExCom and the SCF.

3.1 Recommendations in relation to specific sectors and initiatives

Floods

In many African countries, floods cause substantial losses of human life and property; severe crop loss; infrastructure destruction, including roads and the rail lines resulting in serious socio-economic disruptions; food insecurity; damage to communication; and diseases (such as diarrhea, cholera and malaria). Many African countries (*e.g.* Mozambique, Malawi, Ethiopia) in their national documents have indicated a high demand to undertake certain measures in order to overcome the adverse impacts associated with floods. Many actions were identified with the objectives of preventing human losses and minimizing the negative social and economic impacts of floods (such as the loss of goods, damage in public and private infrastructures and disturbances to the social and economic life).

Therefore, actions that are necessary to address loss and damage from floods, which have been identified by many African countries and for which finance may be required, include:

- monitoring systems of river water levels for a greater precision in forecasting drought and floods and improved system for information dissemination;
- promoting the improvement of the river water level control systems through technical capacity building of personnel linked to the collection and processing of hydrological data;
- improving and updating hydrologic infrastructure;
- improving the systematic control of river water quality;
- conducting rapid assessment of drought and flood risks, resulting in flood delineation and zoning maps;
- establishing flood early warning systems and developing and implementing flood mitigation measures;
- improving inter-sector coordination for the use and dissemination of warnings, and the deployment of emergency assistance for communities;
- capacity-building for rapid response to extreme climate change events;

The identified actions are expected to reduce loss and damage through ensuring sustainable livelihoods for citizens, and the reduction of:

- loss of human lives and damage to property and infrastructures, from floods in river basins due to climatic variability;
- the number of displaced people;
- the high social costs from the loss of livelihood opportunities in terms of employment, subsistence farming, and the separation of families due to death or migration;
- loss of crops and animal populations in regions prone to floods.

Drought

Negative impacts from variations in climate are frequent in Africa, whose societies and ecosystems have long been affected by droughts, floods and desertification. Loss and damage associated with drought has a fundamental importance to Africa whose communities (*e.g.*, in the Sahel and the Horn of Africa) and economies are trying to cope with losses for which they have limited capacity to respond. The current arrangements for the management of risks are limited in scope, while anthropogenic climate change is projected to bring Africa's climate far outside the range of historic climatic variations and result in very large damage. In addition to loss of human and animal lives, drought reduces crop productivity through associated heat and drought stress, with strong adverse effects on regional, national, and household livelihood and food security. Increased pest and disease damage and flood impacts on food system infrastructure compound the impacts on food and livelihood security.

African countries are struggling to increase community resilience to drought through adoption of diverse measures/actions. Therefore, actions that are necessary to address loss and damage from droughts, which have been identified by many African countries and for which finance may be required, include:

- increasing food security through diversification of livelihoods;
- downscaling climate forecasts to guide choice of crops planted and the timing of agricultural activities;
- mobilizing financial resources to support poor families in vulnerable communities to adopt weather index insurance to cover for loss and damage in related livelihoods;
- improving agronomic practices (*e.g.* fast maturing and drought-resistant crop varieties);
- building sand dams, shallow boreholes and drip irrigation systems to improve access to water for different uses;
- using early warning systems as risk reduction strategy for local communities;
- developing and implementing drought mitigation measures;
- implementing and enhancing social safety nets;
- providing and enhancing access to credit/finance;
- institutional strengthening; and
- knowledge and capacity-building.

Coastal zone sea-level rise

Sea level rise is generally higher along Africa's coastlines than the global average, particularly along the Indian and Atlantic Oceans. Sea levels are projected to rise at least 40 cm above 2000 by 2100 in a below-2°C scenario. More than 25% of Africa's population lives within 100 km of the coast and 30% of Africa's countries are at risk of sea-level rise and coastal ground water inundation. Concerns raised by many African countries include:

- reduction of productivity of coastal fisheries;
- salt-water intrusion into aquifers and productive coastal lands;
- migration;
- negative impacts on tourism;
- salt water intrusion and its negative impacts on water resources and their uses for domestic and agricultural purposes; and

- the loss of access to beaches for local communities and tourists.

Many measures and approaches to address risks that endanger coastal zones have been identified by vulnerable African countries. Therefore, actions that are necessary to address loss and damage from coastal zone sea-level rise for which finance may be required, include:

- protection of coastal communities and cultural sites and infrastructure against the consequences of climate change induced sea-level rise and groundwater salinization;
- construction of protection dykes, seawalls and revetments;
- ex-situ conservation of endangered species;
- beach nourishment;
- resettlement of people;
- enhancement of climate-resilient infrastructure and technology (based on ecological zoning and local sectoral plans and projects aimed at tackling short, medium- and long-term actions to control erosion) to limit damage of infrastructure which is considered as a primary threat to the livelihood of many coastal and inland communities as it contributes to impairment of ecosystem services and increasing food prices;
- early warning systems and improved forecasting;
- rehabilitation of damaged unique ecosystems such as mangrove areas; and
- strengthening the capacities of local communities, the private sector and other stakeholders on the effects of coastal erosion and its social and economic impacts.

Africa-wide initiatives

AMCEN worked closely with the AGN to develop an initiative, the Africa Adaptation Initiative, which identifies priority action areas highly required for addressing loss and damage on the continent. The initiative contains a number of relevant action pillars including:

1. Enhancing climate information services

African countries require climate information services in place that are adequate in quantity and quality to:

- Provide data to support decision making on loss and damage;
- Improve the quality and quantity of climate information services available to decision makers;
- Enhance the capacity to provide, analyse and use climate information services and develop models; and
- Increase the number of African countries that have undertaken risk, vulnerability and loss and damage and assessments and mapping.

2. Strengthening policies and institutions

Stronger policy and institutional frameworks play an important role in enhancing efforts to address the impacts of climate change in order to:

- Increase the capacity of the countries to undertake approaches to address loss and damage;
- Strengthen national policies and institutions to support decision making on addressing loss and damage;

- Enable African countries to develop and implement climate change strategies, policies, and plans and enhance their capacity to access international funding to support the development and implementation of effective planning regimes; and
- Enhance opportunities for the sharing of experiences and lessons learned between African countries and relevant stakeholders.

3. *Increasing access to and mobilising climate finance and investment*

The goal of this pillar is to significantly increase access to funding and mobilise additional support to enable the on-the-ground implementation of concrete activities across critical sectors such as agriculture, water, coastal protection, infrastructure etc., in order to increase the number of projects and programs being implemented to address loss and damage in Africa.

3.2 Recommendations in relation to follow-up activities by the ExCom and the SCF

a) **Establishing an expert group on means of implementation**

The AGN reiterates that African countries have limited capabilities to undertake the actions specified in decision 3/CP.18, paragraph 6. This decision provides that developed countries should provide support to developing countries to address loss and damage. The Annex to this submission presents some elaboration on the actions critically required by African countries for their effective efforts to address loss and damage.

The means of implementation to support developing countries in their efforts to address loss and damage should be prioritised. The AGN believes that the establishment of institutional arrangements on the means of implementation is critical for advancing the work related to the implementation of concrete actions on the ground. Developing countries need technical support in order to be better equipped to face the challenges of loss and damage. The ExCom must establish an expert group on the means of implementation (decision 2/CP.20 gives the ExCom members the mandate to establish expert groups). There are many areas that require technical support from the expert group which include assessments of risk/loss and damage, identification and implementation of appropriate approaches.

b) **Building on the previous work of the ExCom and the Standing Committee on Finance**

The AGN actively participated in the annual forum on financial instruments to address the risks of loss and damage associated with the impacts of climate change. The Forum focused on four types of financial instruments: risk transfer; risk retention, specifically social protection schemes; contingency finance; and catastrophe and resilience bonds (UNFCCC, 2016).

The information paper developed by the secretariat and the SCF forum to address the risks of loss and damage provided a range of opportunities to finance activities that address loss and damage. One of the key messages of the forum and the information paper is that there is no single financial instrument to address loss and damage.

For example, risk transfer schemes are more suited to address events that are of high severity and low frequency events and provide financial resources to communities and countries facing natural hazards. However, they are difficult to apply to slow-onset events and often inaccessible, including, due to insurance premiums which many developing countries cannot cover due to socio-economic challenges they are facing. Therefore, one question to look into could be subsidies for insurance premiums, i.e., opportunities, challenges, and current examples.

Two major cost factors are typically associated with insurance premiums, i.e.²

1. The risk -based part, which reflects the expected average annual loss, i.e. the actual costs, of insuring some percentage of the exposure. This is often determined by 1) A baseline risk for the geographical area to be insured; and 2) An add-on risk due to climate change.
2. The mark-up costs, i.e.,
 - Implementation costs, i.e., costs for setting up the insurance scheme (e.g. demand studies, product development, marketing, set-up of sales infrastructure)
 - Transaction costs;
 - Administration costs;
 - Capital/reinsurance costs.

In considering subsidies for insurance premium it can be considered which parts of the premium costs to subsidize.

Social protection schemes, for example, can increase adaptive capacity, prevent and reduce risks and enhance livelihoods. However, they often suffer from inadequate funding and it can be difficult to identify and reach the people in disaster situations.

Contingency finance instruments do not impose costs on countries until loans are called upon, and normally they allow for fast distribution and disbursement of finance resources because the money is already available. The latter is further enhanced, if combined with a disaster risk management plan as these help greater preparedness in a disaster situation. However, contingency loans can be difficult to access by some countries that already have significant debt and repayment periods can be a further challenge.

Another challenge that developing countries are facing, regardless of the financial instrument, is the lack of inadequate or insufficient information and data for climate modelling, or assessments such as vulnerability and impact assessments, and associated lack of capacity. Using available resources can help address these gaps. Supporting or developing regional initiatives like the AAI, which includes as one of its pillars climate information services, can further help to address these gaps.

Successful initiatives like the R4 Initiative or the ARC that combine different approaches are tailored to the specific contexts and needs of the countries. They require data for climate modelling and weather forecasting, early warning systems, infrastructure and capacity.

² http://www.climate-insurance.org/fileadmin/mcii/documents/20160916_key_messages_MCII_Expert_Workshop_on_Premium_Support.pdf

Therefore, a process allowing countries to assess the risks they are facing and develop adequate and affordable strategies and approaches to respond to them are necessary.

To reiterate one of the key outcomes of the forum: there is no one size fits all approach to addressing loss and damage. **A mix of approaches will need to be employed to address loss and damage and the mix will vary by country contexts.** It was also apparent that developing countries will require significant support to address loss and damage. For the AGN it is important that the SCF continues to engage in loss and damage through activity 1(b) of the strategic workstream on finance in the five-year rolling workplan of the ExCom. The urgency of addressing loss and damage in developing countries should be reflected. **Therefore, the AGN urges the SCF to agree on including these issues in its workplan and take these activities forward at its next meeting. The AGN further urges the SCF to provide guidance to the operating entities of the financial mechanism under the Convention, as per its mandate, to facilitate developing countries' access to grant-based funding to support projects related to loss and damage, including extreme weather and slow onset events, in line with previous COP decisions, in particular decisions 3/CP.18 and 2/CP.19.**

For Africa the following issues are critical:

- **Scaling up social protection measures**, including social safety nets, to help households and communities address loss and damage, specifically to the impact of droughts but also to a range of other impacts like floods and other extreme events as well as slow onset processes like sea level rise;
- **Developing and implementing comprehensive risk management** approaches to avert, minimize and address loss and damage. The AGN is keen to have the technical expert group on comprehensive risk management begin its work, as developing countries need guidance in implementing comprehensive risk management approaches. These services could be provided through a range of media, including through regional centers.
- **More information about the support provided through global, continental and regional initiatives.** A mapping of initiatives and programs by region including how to access the support provided by each and how they relate to one another would help African decision-makers better understand the landscape of initiatives and how to access support for addressing loss and damage.
- **Supporting both sending and receiving countries of migrants** to allow potential migrants to stay in their homes where possible through the provision of adequate livelihood opportunities and where not to ensure that migrants have adequate housing and livelihood opportunities in their permanent or temporary homes.
- **Supporting and establishing regional centers** to allow them to provide targeted support to African countries including support to implement comprehensive risk management approaches to avert, minimize and address loss and damage. This would include finance as well as technology and capacity building.

African countries are both least responsible and the most affected by the impacts of climate change. African decision makers are already saddled with developing and implementing sustainable development policies and plans. Climate change represents an additionality to

development and can also deter development progress. It is therefore not appropriate for support to be provided in the form of loans for addressing loss and damage.

4. Recommendations on the organization of the expert dialogue

The AGN believes that the expert dialogue is a very important event and has a lot of expectations related to its outcomes as the issues that will be discussed are very challenging and require a lot of efforts to make the diverse areas associated with it adequately addressed. The expert dialogue should be followed by other meetings and events, such as dialogues or workshops over the course of 2018-2019 which should be organised in collaboration with the SCF.

Decision 3/CP.18 is a relevant decision to be considered in the context of the expert dialogue and the technical paper. Paragraph 6 of the decision contains a list of actions that Parties are invited to undertake to enhance action on addressing loss and damage. For many members of the AGN these are actions that can only be implemented if countries are supported with adequate finance, technologies and capacity building.

Therefore, the AGN believes that the expert dialogue should give adequate background information as well as time for discussions particularly on:

- Actions and measures required to address loss and damage;
- Costing of actions required for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events;
- Examination of financial support available for the sectorial actions for which finance may be required, including those outlined in section 3.1 above;
- Examination of current financial support available through the Financial Mechanism and available outside the Financial Mechanism that would enable Parties to finance actions addressing loss and damage, as well as the difficulties and barriers that currently prevent Parties from accessing adequate support for these actions/how to enhance direct access; and
- How to resolve challenges/bridge gaps to secure and mobilize the required financial resources and to explore new/innovative, additional and predictable resources.

As the expert dialogue will be convened during a negotiation session, the AGN would like to underline the importance of coordination with relevant negotiation sessions to enable members of small delegations to participate and engage effectively in the dialogue as well as in the negotiations.

5. Views on the scope of the technical paper

For the AGN the technical paper to be prepared in advance of the review of the WIM in 2019 is critical. The AGN has the following views on the scope of the technical paper.

- **Meeting the needs:** The starting point for the technical paper should be an evaluation of the amount of finance that will be required to address loss and damage given realized emission scenarios. At present, the aggregation of mitigation commitments made by the Parties to the Paris Agreement translate into almost 3°C warming above pre-industrial levels and this is only if the NDCs are implemented fully. If not, the world is moving

towards 4°C warming. The AGN expects to see an evaluation of the potential losses and damages commensurate with 1.5°, 2°, 3° and 4°C warming and the level of finance which would be needed to avert, minimize and address those losses and damages. The recently held One Planet Summit focused on shifting the trillions to address climate change. Similarly, the technical support must start with a realistic assessment of the needs.

- **Type of instruments:** Addressing loss and damage will require a range of approaches. The technical paper should cover the full range of instruments that will need to be employed to address loss and damage. For the AGN, social protection measures are particularly important. While insurance is a useful tool, it is not a panacea and is most successful when implemented in tandem with other tools, like social safety nets. While insurance will invariably be included in the technical paper there should not be undue focus on insurance and descriptions of tools should also provide guidance on how to develop and implement them and connect with on-going programs and initiatives like the G7's Insure Resilience initiative.
- **Prioritizing the most vulnerable:** The mandate of the WIM is to address loss and damage in developing countries particularly vulnerable to the impacts of climate change. Therefore, the technical paper should focus on financial measures that can be provided to support developing countries in their efforts to address loss and damage.
- **Starting with a foundation of public finance:** African countries are not responsible for the impacts of climate change -- their contributions to global emissions is negligible. Thus the technical paper must focus on instruments that do not divert critical resources away from development efforts and should start first with potential sources of public support, particularly given the prior commitments of developed countries to provide support for developing countries to address loss and damage.
- **Enhancing access:** Accessing climate finance, particularly through the GCF, is a critical issue for developing countries. Thus, descriptions of potential sources of finance to address loss and damage within the Financial Mechanism must be accompanied by explanations of how to access support as well as potential sources of support to prepare proposals and build the capacity of developing countries to do so themselves. This will ensure that the capacity stays in the country as opposed to being imported by international consultants. The technical paper should provide recommendations including for how developing countries can be supported to access the sources of finance outlined. This could include through strengthening regional centers and delivering regional workshops to provide targeted support to developing countries, e.g. in the context of structured dialogues or the readiness week as organized by the GCF Secretariat.
- **Moving beyond business as usual:** Addressing loss and damage given increasing emissions will require moving beyond a business as usual approach to finance. The foundation of finance for loss and damage should come from public funds from developed countries. However, this will likely not be sufficient to meet the growing needs. Therefore, the technical paper should also cover a suite of innovative sources of

finance and should also include details of how they could be operationalized, including the role of the Convention in these processes.

The AGN looks forward to engaging in discussions on the scope of the technical paper as financing loss and damage is a critical issue for Africa.

Annex: Examples of actions pursuant to decision 3/CP.18, paragraph 6, for which finance may be required

(a) Assessing the risk of loss and damage associated with the adverse effects of climate change, including slow onset impacts.

- Technical and financial support for assessing climate-related risks for:
 - critical economic sectors, such as fisheries, agriculture and tourism
 - food security and livelihoods
 - water resources
- Technical and financial support for assessing climate-related risks for long-term planning horizons, for example for the next 30 years
- Mapping of historical and/or potential loss and damage geographically and according to sectors
- Tools and capacity (including data and capacity to manage data) for:
 - identifying both physical and livelihood assets at risk
 - estimating potential losses, including non-economic losses
 - developing and managing inventories of assets that are/will be exposed/vulnerable to loss and damage, either from extreme weather events, slow onset events,³ or both

(b) Identifying options and designing and implementing country-driven risk management strategies and approaches, including risk reduction, and risk transfer and risk-sharing mechanisms.

- Finance and technical support to identify approaches and design comprehensive risk management strategies that are appropriate to particular national and sub-national conditions
- Finance and technical support to identify, design and implement options focused on the most vulnerable regions and communities, for example:
 - to address loss and damage in the rural/agricultural sectors through activities such as soil and water conservation and land and productive infrastructure rehabilitation
 - adaptive social protection systems/social safety nets for vulnerable and food insecure communities that can be scaled up in response to extreme and slow onset impacts
 - options that address climate impacts on internally displaced populations, whether they are temporarily displaced because of, for example, extreme flooding, or those who will need permanent resettlement, for example due to slow onset erosion of productive capacities of their lands

(c) The systematic observation of, and data collection on, the impacts of climate change, in particular slow onset impacts, and accounting for losses, as appropriate.

³ For example, sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity, desertification.

- Establishing and maintaining weather and food security early warning systems and hazard analysis, including through the collection of appropriate data
- Maintaining a hazard database and metadata
- Improving hazard analysis and mapping tools

(d) Implementing comprehensive climate risk management approaches, including scaling up and replicating good practices and pilot initiatives.

- For example, the R4 Rural Resilience Initiative (World Food Programme and Oxfam America), which combines a set of four risk management strategies: improved natural resource management; agricultural insurance; microcredit; and savings. The Initiative is active in Ethiopia, Malawi, Senegal, and Zambia and is currently being piloted in Kenya and Zimbabwe.
- Financial support to access contingency finance mechanisms, such as Africa Risk Capacity
- Developing and implementing contingency plans (such as drought, flood, food security or plans developed in conjunction with Africa Risk Capacity insurance mechanisms), including developing national capacities to design and implement them

(e) Promoting an enabling environment that would encourage investment and the involvement of relevant stakeholders in climate risk management.

(f) Involving vulnerable communities and populations, and civil society, the private sector and other relevant stakeholders, in the assessment of and response to loss and damage.

- Building capacity of communities to implement comprehensive community risk assessments, including assessments of non-economic losses and impacts on local ecosystems (water, biodiversity, forests, etc.)
- Increasing capacity to translate technical data for use by non-technical audiences, such as vulnerable communities

(g) Enhancing access to, sharing and the use of data, at the regional, national and subnational levels, such as hydro-meteorological data and metadata, on a voluntary basis, to facilitate the assessment and management of climate-related risk.

- Increasing investment in national meteorological infrastructure and hydro-meteorological services
- Increasing climate data collection, storage, management, computational and analysis capacity

Other types of actions to address loss and damage for which finance may be required

- Establishing and building the capacity of a national loss and damage contact point (through the UNFCCC national focal point)
- Technical and financial support to build human capacity for all of the above (university and other training scholarships, etc.)
- Other approaches to reduce vulnerability and build resilience and adaptive capacity