

Loss and damage: Some key issues and considerations for SIDS expert meeting

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The series of expert meetings under the UNFCCC on a range of approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events, is a significant element of the SBI work programme on loss and damage. Building on previous meetings, the discussions at the regional meeting for SIDS should provide substantive input to the decision on loss and damage to be adopted at COP18 in Doha in December. In this brief we identify lessons learned from previous regional meetings, discuss key issues for the work towards Doha, and provide recommendations for future action on loss and damage.

I. Loss and damage – A new reality for developing countries

The phrase “loss and damage” refers broadly to the entire range of damage and permanent loss “associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change” that can no longer be avoided through mitigation nor can be avoided through adaptation. The loss and damage associated with climate change is expected to increase over time, due to increase in frequency and magnitude of extreme events, as well as impacts of slow-onset events. With current levels of committed warming we also face the risk of passing tipping points of important climate system elements that may trigger a process of abrupt and non-linear climate change. All vulnerable countries as identified in the Convention are currently at risk from levels of loss and damage that will have significant impacts on lives, livelihoods and the prospects for sustainable development.

Recent climate change events in SIDS countries provide vivid examples of loss and damage. These events have affected lives and livelihoods, with massive social, environmental and economic costs. For example:

- The 2010 hurricane season in the Caribbean was the third most active hurricane season on record, with most number of named storms¹. The economic impact on the region became unmanageable, requiring countries to look for support outside existing regional risk management mechanisms, such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF). In the case of St. Lucia, for example, total damage after Hurricane Tomas was estimated at about 34% of its total GDP,² and the country sought immediate assistance nearing US\$8.2 million in the form of loans through the Rapid Credit Facility and the Emergency Natural Disaster Assistance of the International Monetary Fund.
- Salinization in Marshall Islands and the associated decline in agricultural yields have been reported over the last decade. Extreme events such as droughts and tropical cyclones can lead to increased salinity of soils and freshwater lens, thus impairing food production. Higher rates of erosion and coastal land loss are expected in many small islands as a consequence of the projected rise in sea level. In the case of the Majuro Atoll in the Marshall Islands, it is estimated that for a 1-m rise in sea level as much as 80% of total land could be lost to production.³ Production of key staple crops has been disrupted by climatic extremes such as typhoons and droughts, shifting consumption to imported foods, putting pressure on the national economy and with

¹ NOAA, 2012. 2010 Atlantic Season Hurricane Database. NOAA, Maryland.

² IMF, 2010. Request for Disbursement Under the Rapid Credit Facility and Emergency Natural Disaster Assistance – St Lucia. International Monetary Fund, Washington, DC.

³ IPCC TAR, 2004.

implications for nutrition and health.⁴ FAO also reports increasing pressure on coastal and marine environments, a particular concern given the role of seafood in the diet.

- Three different slow-onset processes threaten coral reefs around the world – sea level rise, an increase in ocean temperatures and ocean acidification – as well as extreme warming periods of shorter duration. Potential long-lasting or permanent impacts on coral reefs from climate change are immensely troubling, as reef fish provide fundamental food security for millions, and developing countries earn substantial amounts of foreign exchange from reef tourism. Extreme heat in 2010 put the world’s coral reefs under such severe stress that scientists feared widespread die-offs, endangering not only the richest ecosystems in the ocean but also these extremely important fisheries.⁵

The role of the regional meetings

The regional meetings under the UNFCCC are important to contextualize and deepen our understanding of the needs of developing countries at multiple levels so that the next steps on loss and damage under the Convention and with other relevant bodies (like the World Meteorological Organisation) will be consistent with their needs. The meetings should enable an understanding of the regional perspective of the direct harms (i.e., the direct economic and non-economic losses of actual (unavoidable) harms, which should be addressed and/or compensated at full costs) and to also understand foregone development opportunities (i.e., the costs of lost and diminished opportunities in developing countries, caused by having to forego development pathways followed by the developed countries).

According to the mandate from COP decision 7/CP.17, the expert meeting is to examine a range of approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather and slow onset events. At a minimum, the meeting should consider broadly the types of loss and damage that will occur, as well as the breadth of approaches necessary to address the diversity of loss of damage. Developing a typology of the types of approaches that have been most effective and how these have been supported would be a useful outcome, especially if these approaches to address loss and damage are considered and contextualized in the context of sustainable development. The meeting should pay particular attention to gaps in what types of loss and damage can be addressed by current approaches, as identification of gaps can help define the role of the Convention in this area.

II. Relevant lessons learned from the work programme and past regional meetings

Participants at the past regional meetings (Africa, Latin America, and Asia and Eastern Europe) have discussed multiple approaches to address loss and damage. They recognized that some approaches to address loss and damage might have synergies with adaptation efforts, while others will require taking action through new arrangements and stand-alone approaches. Many have concluded that obligations under the UNFCCC related to loss and damage require attention by the Parties, and the regional meetings so far have provided a unique window to contextualize local, national and regional challenges in a manner whereby the Parties to the Convention can decide adequate next steps at COP18.

A number of key lessons have already been learned through the work programme and regional discussions:

1. There are limits to adaptation. The continuing accumulation of greenhouse gases in the atmosphere, the denial of historical responsibility by developed countries, and the limited support that has been forthcoming for adaptation, limit how much developing countries can do. Moreover, there are real physical limits to adaptation, particularly to the impacts of slow-onset processes. As temperatures and sea levels rise, territories will become uninhabitable and unproductive. Soil moisture levels will decrease to the point that cultivation of crops is no longer viable in entire regions. Groundwater sources in coastal areas will become too saline to provide drinking water for people living there. Adaptation will become impossible on low-lying islands and in the most arid regions, this will lead to permanent loss of lands, livelihoods, and cultural resources.

2. There are limitations to risk reduction, risk retention and risk transfer approaches to loss and damage. *Risk reduction*, like adaptation, becomes impossible after a certain point, for example, when a territory becomes uninhabitable. Migration and planned relocation are only coping mechanisms in that situation. *Risk retention*, when countries assume the costs of damage and loss in national accounting is not an option for many countries. *Risk transfer* is a broad category of mechanisms to transfer the cost of damage and loss to a third party, usually through some form of insurance. There is potential for risk transfer and other risk-sharing mechanisms like insurance to

⁴ FAO, 2008. Climate Change and Food Security in Pacific Island Countries. *Food and Agriculture Organization of the United Nations*, Rome

⁵ Gillis, J. 2010. Extreme heat bleaches coral, and threat is seen. *New York Times*, 20 September.

address a subset of losses and damage; however insurance works best for low-probability, high-impact events. Insurance is not appropriate for events of 100% certainty, such as sea-level rise and increased temperatures.

3. Both economic and non-economic shocks must be considered in both the assessment of loss and damage and in the analysis of approaches to address loss and damage. Examples of economic losses include structural damage from floods or hurricanes, or crop loss due to drought or extreme heat. Non-economic losses include cultural loss, loss of livelihoods or territory, or species extinction. Some damage can be rehabilitated (such as damage to infrastructure), while other damage and loss cannot (e.g., cultural loss, loss of ecosystems, melted glaciers, loss of human life). Traditional approaches to risk management to address economic losses have been considered extensively both in the context of climate change and other natural hazards. The work programme needs to expand efforts to understand new approaches, including approaches to address non-economic losses. The Convention, as the policy-relevant forum, must drive discussions on possible financial measures to assist countries in coping with loss and damage, for example deferral of payments to international institutions, debt relief, and other similar measures, as well as measures to strengthen social safety nets to support vulnerable groups and cope with non-economic losses.

4. Loss and damage is an issue of equity. The countries most vulnerable to loss and damage are not responsible for the climate change that is destroying lives and livelihoods. Equity as the basis for defining action is operationalized in Principle 3.1 of the Convention: *“The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”*

5. Distinctions can be made between avoidable and unavoidable losses. Avoidable losses, as the name implies, can possibly be prevented with anticipatory action. Avoidable losses are not always avoided, as countries may decide to not act, or limited capacity may prevent action. But many climate change impacts are unavoidable, including many slow-onset changes. Examples of unavoidable losses are coral bleaching, sea level rise, and temperature rise that leads to land being taken out of production. For a more detailed discussion on slow-onset events, please see *TWN Loss and Damage Briefing Paper #3* defining slow-onset events.

6. Loss and damage are fundamentally the result of climate impacts, not inherent vulnerabilities. Vulnerability and risk drivers are not the cause of losses: loss and damage result from climate impacts. Damage and loss can be exacerbated due to underlying vulnerabilities, but vulnerability is not the cause of drought or sea level rise. If an old person slowly crossing a street is hit by a car, she is hurt by the car, not by her underlying vulnerability of being old and walking slowly. As codified in international law in Principle 2 of the Rio Declaration on Environment and Development (1992), States have *“the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”*

The duty of States to abide by the ‘no-harm’ rule applies to the harm caused from the historical accumulation of greenhouse gases. This duty is not exonerated by the vulnerability of those affected, especially when some of those vulnerabilities are due to uncontrollable or historical circumstances, such as geophysical conditions, unfair global economic conditions, structural conditions created under colonialism, etc. In this context, it worth noting that no group or country-category is defined as more vulnerable to adverse impacts of climate change than another under the Convention. Vulnerability is defined according to geophysical conditions identified in the preamble of the Convention, while some articles identify the special needs that groups or country-category may experience arising from other issues.

7. There is a need for specialized support for addressing impacts from slow-onset processes. With Decision 1/CP.16, Parties agreed to consider slow-onset events in the work programme on loss and damage. Decision 1/CP.16 includes a footnote that lists categories of impact that negotiators considered to be “slow onset events”: sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification. Slow onset-events are further discussed in section IV of this paper.

There are still some gaps to respond to the fullest extent to the questions mandated by COP17 to better understand the full range of approaches and tools that can be used to address the risk of loss and damage, at all levels and for a broad range of sectors and ecosystems, considering both extreme weather events and slow-onset events. COP17 suggested that such approaches and tools include, *inter alia*, conventional, non-conventional and innovative instruments to address specific types of loss and damage in the context of this thematic area, especially those driven by the multiplying, magnifying and intensifying effects of climate change at the national, subnational and local levels. Approaches such as national social safety nets, approaches drawing from social capital, and others that could address concerns related to non-economic losses need to be discussed in much more detail.

III. Key topics for consideration at the SIDS regional meeting

As the last regional meeting before COP18, the SIDS regional meeting can be instrumental to focus on certain key issues that help answer important questions needed for a successful COP18 outcome: understanding approaches to address non-economic losses; the challenge posed to sustainable development due to lost development opportunities; the challenges and opportunities to support particularly vulnerable countries through providing safety nets in the context of loss and damage; and a contextualization of the challenges and opportunities of insurance and insurance-like mechanisms are among the most important issues. Specific topics that should be addressed by the expert meeting include the following:

1. Loss and damage needs to be considered in the context of lost opportunities to achieve sustainable development. Added to the existing challenges of development are the challenges of mitigating and adapting to climate change, and now of addressing loss and damage. Therefore, discussions on loss and damage go beyond traditional approaches to disaster risk management and adaptation, and in fact are principally concerned with the *additional burden* to sustainable development caused by the failure to reach the objective of the Convention to stabilize greenhouse gas emissions. Therefore, discussions must include *direct harm* (i.e., the direct costs of actual (unavoidable) harms and forgone development opportunities) and *forgone development* (i.e., the costs of lost and diminished opportunities in developing countries, caused by having to forego development options) from extreme events and slow-onset events.

2. Further consideration should be made of the limitations to risk reduction, risk retention and risk transfer approaches to loss and damage and alternatives. Over the past decade, policymakers and negotiators have discussed a range of approaches to address loss and damage, from disaster risk reduction to risk transfer and insurance. The current round of expert meetings should further evaluate these existing approaches with a view to identifying gaps in addressing the range of loss and damage.

For example, a number of organizations are trying to design insurance products that can reach and benefit the poorest agriculturalists, such as weather index-based insurance. However as noted above, insurance works best for low-probability, high-impact events. Insuring climate risks becomes less and less tenable when events become more frequent (non-stationary), as premiums will rise accordingly. More frequent droughts, or high temperatures that kill crops or livestock, will become less and less insurable as these events increase in frequency with the rise in global temperature. Insuring climate risks is also inappropriate for slow-onset events that will occur with 100% probability, as mentioned above. All these limitations to risk transfer approaches must be further considered in the context of the work programme.

3. The analysis of approaches to address loss and damage need to consider economic and non-economic dimensions, particularly in the context of slow-onset events. Much attention has gone into the traditional approaches to risk management to address economic losses, but the work programme needs to redouble efforts to understand approaches to address non-economic losses. The work programme needs to identify actions to strengthen existing or identify new approaches to address non-economic losses. Non-insurance mechanisms can provide the liquidity needed for recovering from disaster shocks and provide capital for prevention.⁶ However, the work programme still has not explored the full potential of approaches to address non-economic losses at micro-, meso-, and macro-scales.

4. Loss and damage requires consideration of approaches to address economic shocks. Conventional insurance is generally not appropriate for slow-onset climate impacts. Other instruments may be needed in this case. The Convention, as the policy-relevant forum, must drive discussions on how financial measures could be fostered to assist countries in coping with loss and damage, for example deferral of payments to international institutions, debt relief, and other similar measures. Economies in particularly vulnerable countries rely on climate-sensitive sectors, such as agriculture, fisheries, and forests. Limited resources for coping with and recovering from climate and socio-economic shocks and stresses threaten to derail efforts for sustainable development.⁷

⁶ FCCC/TP/2008/9, 2008. Mechanisms to manage financial risks from direct impacts of climate change in developing countries- Technical Paper. United Nations Framework Convention on Climate Change Secretariat, Bonn.

⁷ FCCC/TP/2008/3, 2008. Physical and socio-economic trends in climate-related risks and extreme events, and their implications for sustainable development- Technical Paper. United Nations Framework Convention on Climate Change Secretariat, Bonn.

IV. Managing and addressing long-term challenges associated with slow-onset processes

Slow-onset events, as noted in decisions 1/CP.16,⁸ include sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification. These slow-onset “events” – more appropriately termed slow-onset *processes, hazards, or impacts* – are an important element in the conversation on loss and damage, distinct from extreme events. For a more detailed background on slow-onset events, please see *TWN Loss and Damage Briefing Paper #3*.

Much of the discussion on approaches to address loss and damage has focused on extreme events, e.g., floods, drought, and heat waves. As already mentioned, risk transfer approaches are particularly appropriate for certain types of extreme events, albeit taking into consideration the limitations of such approaches.

Slow-onset events will have significant and wide-ranging impacts on people’s lives and livelihoods and are irreversible in our lifetimes if temperatures continue to rise. The losses that result from slow-onset processes will affect many more people than extreme events over a long period of time. As already discussed, because of the certainty of their occurrence and because they are persistent and develop over time, they are not amenable to many of the approaches currently under consideration for addressing extreme events, such as index-based insurance. Moreover, because these “events” progress and increase in impact over time, “adaptation” is a decreasingly viable option, as we noted earlier.

Parties will need to undertake further work under the Convention to enhance the understanding of slow-onset processes, the types of loss and damage associated with various types of slow-onset impacts, and how these impacts might be addressed in multiple contexts. Moreover, the need to enhance coordination and cooperation in assessing and addressing slow-onset impacts points to the need for special consideration both under the governance mechanisms of the UNFCCC and within other regional and multilateral institutions. The mandate of the work programme requires Parties to look at both approaches for dealing with climate change-related extreme weather events and slow-onset hazards. However, up to this point, the work programme has given much more consideration to the issues raised by extreme events. This deficiency in identifying and evaluating approaches to address slow-onset events must be recognized in the work moving forward under the Convention after COP18 and systematically addressed.

Additional to slow-onset events already identified, there is also a need to better understand permanent state shifts and tipping points. For example, long-term extreme droughts may actually signal a shift to states of permanent aridity. State shifts are qualitative changes in the state of a system. Such changes are often, though not always, irreversible. While most often we think of state shifts in biological or climatological terms, we can also consider socio-economic state shifts, brought about when land is no longer able to produce food, to provide fodder for animals, or when fisheries no longer provide enough fish for the fishing communities dependent on them. These permanent shifts in state can happen slowly or rapidly. The drying described above will result from a slow shift in the temperature and precipitation regime. Major tipping elements in the earth system, such as the annual West African and Indian summer monsoons, the El Niño Southern Oscillation, or the Amazon rainforest could be pushed towards tipping points that would bring about more rapid state shifts with impacts felt at the global level.

The work already achieved under the work programme supports the need to move towards a systematic approach to address loss and damage, including through specialized support for addressing impacts from slow-onset processes and to observe and take appropriate action as tipping points begin to be identified. The Convention needs to find a way to *systematically* support developing countries as they address slow-onset impacts, rather than with an *ad hoc* humanitarian pledge approach, as has been historically the case with major disasters in developing countries. While parallels might be sought with the governance system for addressing impacts of extreme events, where disaster risk reduction and humanitarian intervention build the proactive and reactive response to a disaster, slow-onset events will require action and measures to address loss as well as to remediate and rehabilitate damage – to livelihoods, to both natural and managed ecosystems, and other productive resources.

V. The need for systematic consideration and support on loss and damage

The current work of the work programme indicates that loss and damage will grow to become a major issue affecting economies and livelihoods in developing countries. A systematic approach to addressing loss and damage could be achieved through establishing an international mechanism to address loss and damage under the

⁸ These impacts are listed in a footnote in decision 1/CP.16.

Convention, as called for by developing countries in negotiations. The mechanism would be a facility to support developing countries' needs with respect to loss and damage; drive enhanced understanding and means of assessing loss and damage; facilitate coordination and cooperation on addressing loss and damage around the world, including through a compensation mechanism; and would be a means for the Convention to exercise leadership in coordinating a global response on loss and damage. Below we briefly point out three of the elements that such a systematic approach should address:

Extreme events and low-onset impacts are surpassing the capacities of countries to cope, and the associated losses and damage require new approaches. Because the Earth is slow to warm, accumulated historical emissions will cause warming, and impacts, for years to come – even if all emissions are halted immediately. We are facing the risk of passing tipping points and triggering a process of abrupt and non-linear climate change.

Finance alone cannot adequately compensate people for the loss of family, homes, territory, culture or livelihoods that will result from radical changes in climate, whether at local, regional or global levels. Approaches to address non-economic losses need to be central to a holistic framework to support developing countries in coping with loss and damage. This systematic approach needs to give consideration and support to national and subnational social safety nets and on how to strengthen these approaches through the Convention, which can tackle some of these non-economic losses.

There are limitations to humanitarian approaches to respond to disasters. Traditional approaches to respond to emergencies, particularly at the international level (e.g., pledge-based responses, ad hoc bilateral support for recovery, concessional loans) are not sufficient to address recurrent loss and damage. Therefore, the regional meetings need to consider relevant experience on financial and other measures to assist developing countries affected by extreme losses, such as debt relief and concessional loans. Such schemes could be designed to help developing countries recover after terrible tragedies. Relevant examples can be drawn from the devastating earthquake in Haiti in January 2010, when a trust was created for international debt relief efforts when countries meeting certain criteria are hit by the most catastrophic of natural disasters. Such debt relief and similar concessions can free up additional resources to meet exceptional balance of payments needs created by the disaster and the recovery, complementing direct financing at preferential terms and in some instances concessional liquidity support. There are other relevant experiences and approaches that should be part of a range of approaches to address loss and damage and where the Convention must take the lead.

VI. Recommendations to the SBI on loss and damage to address the needs of developing countries

SBI37 will make recommendations on loss and damage for consideration by COP18. A COP decision should contain several elements, many which have been already outlined by developing countries in the negotiations. First, the COP should extend the work programme, and include as top priority the elaboration of the modalities of an institutional mechanism on loss and damage. Additionally, work similar to that already undertaken should continue in the SBI, further examining some of the issues that have emerged from the work programme and considering how to extend the work to other appropriate bodies under the Convention. The COP18 outcome should contain stand-alone elements and recommendations, such as a request to the financial mechanisms and actions related to capacity building. The COP could also establish pilot programmes to address the needs of developing countries identified over the course of the last two years, whether individually under the Convention or in collaboration with other institutions.

A. Addressing needs of developing countries under the Convention

The UNFCCC is the relevant policy forum to take concrete action to address loss and damage, both under and outside the Convention, and the COP must exercise its responsibility as such. The Convention contains relevant principles for addressing loss and damage that should be taken into consideration as Parties debate next steps on loss and damage. For example, Article 3.3 of the Convention states that: “...where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures.” This principle must be applied consistently in the development of inputs for a COP18 outcome.

1. Elaboration of the modalities of an institutional mechanism on loss and damage

Negotiations in Doha must focus on filling the existing gaps in institutional and legal frameworks to address loss and damage, including through an institutional mechanism to address slow-onset impacts and other unavoidable damages. An institutionalized process to address loss and damage needs to be put in place, with roles assigned to the Adaptation Committee (AC), and consideration of the matter taken up also under the financial mechanism, including the Green Climate Fund (GCF).

The decision establishing the mechanism should give guidance on the governance and functions of the mechanism. As identified by developing countries in Bonn, these functions could be:

a) Assessment of loss and damage from the adverse effects of climate change: The special needs of particularly vulnerable developing countries must be accounted for in assessing the avoidable or unavoidable nature of loss and damage from the adverse effects of climate change. This role could include coordinating and providing guidance on standards for assessing loss and damage, such as guiding the data collection and analysis activities of relevant institutions.

b) Addressing loss and damage from the adverse effects of climate change, including through a compensation and rehabilitation fund: Unavoidable loss and damage from the adverse effects of climate change may be addressed through risk sharing mechanisms, but total loss and damage from the adverse effects of climate change will need to be redressed through compensation and rehabilitation mechanisms. This role could include coordinating and supporting technical assistance and action, and establishing and supporting regional networks of collaborative partners within and external to Governments. It could also require dedicated support through the GCF to facilitate approaches to address loss and damage at the regional, and national level.

c) Leadership and promotion of cooperation and coordination outside the Convention: The mechanism should be situated under the umbrella of the Convention and housed within the UNFCCC Secretariat, where administrative support can be provided, with support and guidance of a Board constituted by Party members and with involvement of stakeholders. The Convention could under this mechanism take systematic efforts to support responses to slow-onset damage, link with UN institutions managing human mobility, coordinate cross-boundary issues and resources, link with other UN convention processes such as the CBD and the CCD, and other UN and international organizations as appropriate.

2. Role of the Adaptation Committee

The Adaptation Committee has the duty to promote coherence on adaptation. Given the important overlaps and synergies between adaptation and approaches to address loss and damage, the AC can be asked to provide technical support and guidance to the Parties with a view to facilitating the implementation of adaptation activities in a manner that fosters approaches to address loss and damage.

Similarly in performing its role, *inter alia*, in strengthening, consolidating and enhancing the sharing of relevant information, knowledge, experience and good practices, at the local, national, regional and international levels, taking into account, as appropriate, traditional knowledge and practices, the Adaptation Committee could play an active role in providing technical support and guidance to the Parties on some of the work remaining specific to loss and damage. This role could include the elaboration of modalities and technical aspects of an international mechanism to address loss and damage, as well as to provide recommendations to bodies of the Convention and strengthen related work under the Convention.

Additionally, the AC could be requested to play an active role and engage actions necessary outside the Convention, in accordance with its role of promoting synergy and strengthening engagement with national, regional and international organizations, centres and networks, in order to enhance the implementation of adaptation actions, in particular in developing country Parties, including to identify and recommend appropriate actions to address emerging needs and gaps, including outside the Convention. This work could include matters related to engaging relevant stakeholders in advancing agreed actions related to loss and damage, such as other UN institutions and civil society. Some of the issues to consider under this work can be matters related to, *inter alia*, migration, disaster risk reduction, agriculture and fisheries. For example, the AC could engage with the UN International Strategy for Disaster Reduction where parallels might be sought with the governance system for addressing impacts of extreme events and identify common actions on disaster risk reduction and humanitarian intervention as part of a proactive and reactive response to loss and damage.

A particular issue that the could be tasked to the AC in the interim is to further explore the multiple challenges for developing countries in operating catastrophe insurance and alternative non-market instruments. The work under the work programme to date appears to identify this area as a gap. This work could be done in collaboration with the SBI as part of a second phase of the programme of work.

3. Role of the SBI

A second phase of the programme under the SBI could help maintain the momentum and focus on some of the emerging issues under the current three themes, particularly employing leadership from constituted bodies and subsidiary bodies. The current work programme has identified opportunities and challenges for developing countries with respect to approaches to loss and damage, many of which have been mentioned in this briefing. For example, additional work focused on the implementation of approaches to address slow-onset events could be a key element under a second phase of the work programme on loss and damage, including on how insurance

and non-insurance tools could be employed to manage adverse effects from slow-onset processes whilst longer-term solutions are being explored. As noted earlier, slow-onset processes will require action and measures to address loss as well as to remediate and rehabilitate damage – to livelihoods, to both natural and managed ecosystems, and other productive resources. The SBI could work to further elaborate approaches to address slow-onset processes, particularly at national level. In this sense, collaboration with the on-going work on the development and implementation of National Adaptation Plans (NAPs) could be timely. Additionally, the SBI could also work in collaboration with experts and stakeholders on how to strengthen social safety nets, such as social security and other measures directed to responding to local and community needs.

Similarly, discussions on the elaboration of modalities for support of NAPs, including on the identification of needs at national level, requires special consideration of elements related to work on loss and damage. The assessment of loss and damage, in particular, could be an element included in the formulation of NAPs, and bodies under the Convention, as well as other experts involved in the modalities, could collaborate in a second phase of the work programme to make loss and damage part of such on-going work.

The SBI could also continue to explore macroeconomic tools to manage loss and damage to create a buffer for developing countries, as well as help the international community better plan for financial needs associated with the additional challenge posed by loss and damage. This work could complement, without pre-empting or replacing the need, the work required for the elaboration of the modalities of an institutional mechanism on loss and damage discussed also in this section.

4. Role of the Financial Mechanism

The level of funding required to prevent, manage, and compensate for loss and damage related to slow-onset impacts varies greatly from country to country and between regions, although it is clear that overall significant amounts will be needed above and beyond financial needs for adaptation. Therefore, there is an immediate need for consideration of financial resources required related to loss and damage, in order to develop a collective understanding of where overlaps might occur with current adaptation finance and where there may be unique needs. Clearly resources specific for loss and damage will need to be new and additional to existing resources. Discussions on finance for loss and damage must be integrated into on-going processes related to long-term finance.

To fully adhere to the precautionary principle in the context of loss and damage requires the support and implementation of proactive approaches to manage slow-onset climate hazards. Allocation of finance to specific actions related to loss and damage, particularly where synergies with adaptation are not sufficient, must become part of the conversation on long-term finance.

5. Role of the SBSTA

The Nairobi Work Programme could collaborate with the SBI Loss and Damage Work Programme Second Phase to provide advice on scientific programmes, international cooperation in research and development related to climate change loss and damage, as well as on ways and means of supporting endogenous capacity-building in developing countries.

The work under themes 1 and 2 of the loss and damage work programme has begun to identify and better understand slow-onset processes. This work could be continued with inputs of the work on-going in the SBSTA under Article 5, including to enhance our understanding of tipping elements and tipping points, and possible early warning mechanisms for the potential triggering of key tipping elements, both ecological as well as societal. Based on this enhanced understanding, this collaboration between the SBI Loss and Damage second phase could recommend appropriate actions.

B. Promoting cooperation and coordination outside the Convention

While the UNFCCC is the relevant policy forum to take concrete action to address loss and damage, there are many critical issues that do not fall within its mandate and the scope of its work. Therefore, the extent to which Convention is able to achieve its objective under Article 2 will have consequences for matters outside the Convention, and the Convention should seek to collaborate with other institutions to address such issues. As mentioned before, the AC could be requested to play an active role and engage in actions necessary outside the Convention, in accordance with its role of promoting synergy and strengthening engagement with national, regional and international organizations, centres and networks, in order to enhance the implementation of adaptation actions, in particular in developing country Parties, including to identify and recommend appropriate actions to address emerging needs and gaps. The AC could be charged with carrying out an element of a continued work programme on loss and damage focused on external cooperation and coordination. Such work could include:

1. Integrating the work of regional centres and networks

Regional centres and networks could have an important role to play both in the assessment and addressing of loss and damage, enhancing synergies related to research and regionally appropriate mechanisms. The AC could incorporate this coordination into its work plan with regards to the work related to regional centres. The role that some institutions are already playing, such as the CCRIF on regional risk transfer mechanisms, and SPREP and CCCCC supporting research, modelling, and decision-making, as well as project implementation, exemplifies the role that these actors could have both in the context of an international mechanism, as well as under a second phase of the SBI work programme.

2. Climate change-induced displacement, migration and planned relocation

The Adaptation Framework already calls for work on measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels.”⁹ This work has been identified in several regional meetings as important; adequate support will need to be designed in collaboration with relevant international institutions to consider how to address the issue of migration. Many people will be forced to move from affected areas, including from low-lying islands and coastlines and from areas affected by permanent changes to the ecosystems and other resources on which they depend for their lives and livelihoods. Industrialized countries should do their fair share in helping these people build new lives, and in some instances accept their fair share of the people exiled from their homes and countries by climate change. The complicated issue of displacement, migration and planned requires adequate and considered attention, including further research and collaboration among a range of relevant international institutions. As the COP has the capacity to make recommendations to other international bodies along these lines, the Doha outcome could specifically target this issue and call for joint-discussions with the UN High Commissioner for Refugees and the International Organization for Migration as part of the SBI Loss and Damage Work Programme Second Phase, with collaboration of the AC. Existing international frameworks dealing with issues of displacement and migration will need to be expanded to handle movement resulting from the pressures imposed by slow-onset processes.

3. Making international finance respond to loss and damage context

The Convention, as the policy-relevant forum, has the capacity to convene discussions on how financial measures could assist countries in coping with loss and damage, for example deferral of payments to international institutions, debt relief, and other similar measures. Financial shocks and lost development opportunities from the potential for large-scale economic disruption brought on by slow-onset climate change hazards will require significant coordination of international trade and investment flows. Addressing loss and damage resulting from slow-onset processes, in the context of sustainable development, will require different approaches than those used to address financial shocks resulting from extreme events. For example, slow-onset impacts may permanently diminish the tourism industry in many developing countries due to the loss of ecosystems, animal and plant diversity, and other tourist-attracting resources. These issues need to be considered as part of the Loss and Damage Work Programme Second Phase, in collaboration with actors outside the UNFCCC, and could be systematically addressed through the International Mechanism.

⁹ Decision 1/CP.16, paragraph 14(f).