



**Framework Convention on  
Climate Change**

Distr.: General  
27 April 2011

Original: English

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**Subsidiary Body for Implementation**

**Thirty-fourth session**

**Bonn, 6–16 June 2011**

Item X of the provisional agenda

**Synthesis report on views and information on the elements  
to be included in the work programme on loss and damage**

**Note by the secretariat\***

*Summary*

This report presents views and information submitted by Parties and relevant organizations on the elements that the Subsidiary Body for Implementation may wish to consider for inclusion in the work programme on loss and damage. It synthesizes views on the expected outcomes, guiding principles and scope of the work programme, followed by a discussion on relevant stakeholders and processes. It also reports on different ways to structure the work. The report concludes with views on possible activities under the work programme and a brief summary on the main themes identified in the submissions.

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\* This document was submitted after the due date in order to enable the secretariat to include all relevant inputs.

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## I. Introduction

### A. Background and mandate

1. The Conference of the Parties (COP), at its sixteenth session, established the Cancun Adaptation Framework with the objective of enhancing action on adaptation. At the same session, recognizing the need to strengthen international cooperation and expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events, it established, within this framework, a work programme in order to consider approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change.

2. The COP invited Parties and relevant organizations to submit to the secretariat, by 21 February 2011, views and information on elements to be included in the work programme, including the following:

(a) Possible development of a climate risk insurance facility to address impacts associated with severe weather events;

(b) Options for risk management and reduction; risk sharing and transfer mechanisms such as insurance, including options for micro-insurance; and resilience-building, including through economic diversification;

(c) Approaches for addressing rehabilitation measures associated with slow onset events;

(d) Engagement of stakeholders with relevant specialized expertise.<sup>1</sup>

3. The COP requested the secretariat to prepare a synthesis report based on these submissions, to be made available for consideration by the Subsidiary Body for Implementation (SBI) at its thirty-fourth session, and with a view to making recommendations on loss and damage to the COP for its consideration at its eighteenth session.<sup>2</sup>

### B. Scope of the note

4. This document synthesizes the views and information submitted by 22 Parties, representing the views of 98 Parties, 10 intergovernmental organizations (IGOs) and nine non-governmental organizations (NGOs).<sup>3</sup> The nature of the inputs differed considerably: some submissions contained views on the possible content of the work programme for the period up to COP 18 (e.g. specific activities, arrangement of work), while some contained information that could serve as useful inputs during the implementation phase (e.g. sources of information on certain types of work).<sup>4</sup> Some others posed a series of key questions that need to be taken into account in undertaking the activities in order to make recommendations on loss and damage to the COP.

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<sup>1</sup> Decision 1/CP.16, paragraphs 13 and 25–28.

<sup>2</sup> Decision 1/CP.16, paragraph 29.

<sup>3</sup> The submissions from Parties and IGOs are contained in document FCCC/SBI/2011/MISC.1 and submissions from NGOs are available at <<http://unfccc.int/3689.php>>.

<sup>4</sup> Two Parties provided views on a work programme in the broader context of adaptation, of which the views pertaining to the work programme on loss and damage have been included in this document.

5. Efforts have been made to differentiate between views expressed by only one Party or organization and those more commonly noted, in order to clarify where major disparities exist on approaches to address loss and damage under the Convention.
6. Where specific action was proposed as a potential contribution by an organization to the work programme, the name of the organization was included.
7. The document first provides an overview of the elements proposed for the consideration of key expected outcomes and guiding principles (chapter II), the scope of the work programme, including specific views and information regarding the elements contained in paragraph 2(a–c) (chapter III), followed by views on the relevant stakeholders and processes (chapter IV). Different ways to structure the work are introduced (chapter V). In order to facilitate the identification of common elements that are viewed as important in achieving expected outcomes, chapter VI discusses possible activities to be undertaken in the period up to COP 18. The note concludes with a short section the brief summary on key common themes identified in the submissions (chapter VII).
8. Document FCCC/SBI/2011/MISC.1 should be referred to for the contextual details of the proposals, voluminous information on current practices and related activities and general views on loss and damage.

## **II. Objectives, key outcomes and guiding principles of the work programme**

9. The work programme, as widely acknowledged in the submissions, would facilitate exploring, analyzing, planning, prioritizing, support for and implementing approaches to address loss and damage, as well as provide a platform to bring together the experience of expert communities in adaptation and disaster risk management from both the public and the private sector by offering a structured channel to bring relevant information to Parties.
10. To ensure the development of an effective work programme, many submissions mentioned the importance of agreeing at the outset on its scope, expected outcomes, concrete deliverables and structure.
11. Initiating activities immediately after SBI 34, as noted by some, would ensure a sufficient implementation phase before formulating recommendations to the COP for its consideration at COP 18.
12. There was broad consensus that reducing exposure to risk by enhancing prevention and reduction measures and preparedness for disaster is fundamental in climate risk management. It was also recognized that not all risks can be prevented or reduced and that risk transferring can be a useful approach in these cases; many indicated, however, that financial risk sharing or transferring should be considered only as a tool in a risk management strategy, as it does not eliminate physical risks but only pools the risk to spread it across economies and through time. Views expressed in the submissions highlighted the need to strengthen international cooperation and mobilize the necessary expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change.

### *Objectives and expected outcomes of the work programme*

13. A number of submissions noted that the work programme should serve as a knowledge base that provides input to the deliberations by the COP on what further action may be required. The ways in which this knowledge base would assist Parties, as noted in many submissions, include:

- (a) Enhancing understanding of different types of risk, vulnerability, approaches, tools and requirements for implementation, at different levels, with a view to:
  - (i) Identifying foundational requirements for developing risk management strategies in a given country or region;
  - (ii) Making decisions on how to allocate limited public funds among a range of risk reduction and risk transfer approaches;
  - (iii) Strengthening institutional capacity needed to address climate change related risk in an anticipatory manner;
- (b) Catalyzing existing and future activities on loss and damage by:
  - (i) Providing a platform for exchanging ideas;
  - (ii) Strengthening international cooperation and expertise to reduce more effectively loss and damage;
- (c) Increasing collaboration with relevant stakeholders, including the private sector, to achieve effective and comprehensive risk management.

14. Recognizing that loss and damage is a long-term issue that will become even more relevant in future, some submissions suggested establishing the work programme as an ongoing programme cycle serving as a framework for activities up to and beyond COP 18, continuing the work in order to support Parties in improving their understanding of loss and damage related issues and to facilitate implementation, including by:

- (a) Providing a continuing channel to bring relevant expertise to Parties on the management and reduction of loss and damage;
- (b) Collecting information and experience from the implementation of approaches to manage and reduce loss and damage, including risk reduction and insurance measures in various areas of the world.

15. Some areas, in particular approaches for addressing rehabilitation measures associated with slow onset events, as further noted by some, may require time beyond COP 18 to consider implementation options because the knowledge base to address this type of risk is still limited.

16. One Party suggested that the work programme should include oversight of an international mechanism to address social, economic and environmental loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the impact of the implementation of response measures.

17. Finally, some indicated that the recommendations in the work programme need to cover what action under the Convention can catalyze prevention and reduction of loss and damage internationally, and identify areas where concerted international efforts can fill gaps which individual governments may struggle to fill alone.

*Guiding principles of the work programme*

18. A set of elements was put forward in the submissions which would serve as guiding principles of the work programme, including:

- (a) **Attention to the particularly vulnerable:** focusing on those that are particularly vulnerable owing to the high degree of exposure to the physical impacts of climate change and limited institutional and financial capacity to respond, and prioritizing activities that address their urgent, immediate and specific needs. The submissions identified the following as those in need of particular attention:
  - (i) The least developed countries;

- (ii) Small island developing States (SIDS);
  - (iii) Stakeholders in the agriculture sector, including smallholders, pastoralists, fishermen and forest-dependent people;
  - (iv) Other vulnerable groups that are traditionally underrepresented owing to factors such as geographical location, minority status and disability, including indigenous peoples in developing countries, the poor, women and children;
  - (v) Those particularly vulnerable to the impact of the implementation of response measures;
- (b) **Suitability for national and regional contexts:** taking into account the diversity of national situations and vulnerabilities, and regional governance mechanisms; possible measures to be considered under the work programme should be suitable for national and regional contexts;
- (c) **A country-driven approach:** supporting flexibility that allows tailored approaches at the subnational, national and regional levels, and the identification of the optimal allocation of a limited amount of public financing for adaptation between risk reduction and risk transfer options;
- (d) **Ensuring cost-effectiveness:** ensuring that supported measures can achieve efficient and cost-effective outcomes, including in relation to possible alternative approaches;
- (e) **Building on the existing work and technical expertise:** drawing on the existing work, technical expertise and lessons learned from existing programmes, mechanisms, institutions and organizations working on loss and damage associated with climate change impacts, including:
- (i) Bringing together experts from the public and private sectors, IGOs and all relevant stakeholders;
  - (ii) Being based on the best available scientific knowledge and information, such as the knowledge synthesized in the Intergovernmental Panel on Climate Change (IPCC) *Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* (SREX);
- (f) **Ensuring coherence and catalysing synergy:** taking into account other work under and outside of the Convention to complement the broader adaptation body of work and ensure coherence, with a view to avoiding duplication of work and identifying and increasing synergy:
- (i) Between work on adaptation and that on disaster risk reduction (DRR), including the work by the United Nations International Strategy for Disaster Reduction (UNISDR) and that under the Hyogo Framework for Action<sup>5</sup> as appropriate;
  - (ii) Within and between countries, including through the incorporation of adaptation and risk reduction practices into bilateral and regional development programmes;
- (g) **Principle of common but differentiated responsibilities:** enhancing international cooperation by strengthening and mobilizing the necessary expertise should be carried out in accordance with the principle of common but differentiated responsibilities.

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<sup>5</sup> <<http://www.unisdr.org/eng/hfa/hfa.htm>>.

### III. Scope of the work programme

19. Recalling the mandate in decision 1/CP.16, a number of submissions agreed that the work programme should focus principally on providing the necessary technical background and exploring themes that support Parties in making recommendations on loss and damage to the COP for its consideration at COP 18. In one Party's view, it should focus on substantial discussion by experts and avoid discussions of a political nature.

20. This section first provides specific views on the elements referred to in paragraph 2(a–c) above, then additional views on the scope of the work programme.

#### 1. Possible development of a climate risk insurance facility to address impacts associated with severe weather events

21. Insurance is widely considered as an important tool among a number of possible options to manage financial risk from increasingly frequent and severe weather events. Divergent views were, however, expressed on advancing the discussion on the development of a climate risk insurance facility.

22. One Party, echoed by one organization, viewed the establishment of a work programme under the SBI as preparation for a decision to establish an international insurance mechanism in the future. One Party noted the need for insurance schemes to address damage from extreme weather events, especially at the local community level. Others stated that the consideration of the development of an insurance facility should be included in the work programme, without expressing, however, their opinions on the appropriate level for such a facility. Some of the submissions provided views on the process for and the required inputs into such an institutional arrangement.

23. Some submissions reflected reservations with regard to developing a climate risk insurance facility. Key concerns as identified in the submissions include: current lack of detailed risk data for vulnerable countries, and of analyses of whether such an insurance facility would be the most efficient and effective way to support adaptation; differences between countries in terms of anticipated climate change impacts and characteristics of national insurance regulations, readiness and existing capacity; different regional characteristics and circumstances; the limited role of insurance in risk prevention; fewer funds becoming available for preventive, risk reduction measures; and that a country-driven approach to adaptation could be inhibited. Taking into account these concerns, a single insurance facility or 'one-size-fits-all' approach was perceived in some submissions as technically unsound and not an effective option.

24. One Party noted that national and regional schemes with appropriate private-sector participation are also likely to be more capable of rapid response than a global insurance facility under the Convention, and that, eventually, some of these regional schemes could be linked to a larger risk pool, with a view to improving efficiency and making cost savings.

25. The use of climate risk insurance as a tool, according to one NGO, should be limited to addressing non-recurring events because the cost of insuring recurrent episodes is very high; other types of instruments or measures are required for such episodes.

26. The focus, as noted by some, should be on macro-level risks of loss and damage at the national and regional levels when addressing this issue.

27. Submissions confirmed that there are examples of insurance facilities in the area of severe weather events, addressing different levels. New approaches and potential new institutions are, however, viewed as necessary in order to operationalize mechanisms for vulnerable countries that are currently outside the scope of commercial insurance.

According to some, there is a need to examine the financial sustainability of such compensatory schemes (especially those specific to the agriculture sector) in the context of the increased probability of weather-induced adverse effects, and to explore the conditions and ways to enhance it, in particular through spreading risk across larger geographical areas and/or with external subsidies, including the possible model of a disaster relief fund backed up and subsidized by developed countries and the reinsurance industry.

28. Furthermore, the development of an insurance facility, as noted by many, needs to be supported by the inclusion in the work programme of quantification of loss and damage caused by climate change. This may include identification of vulnerable areas or sectors, analysis of threat with regard to source, extent and time frame, detailed modelling of the impacts of climate change and specific assessments of damage.

29. A few Parties drew attention to funding aspects, including:

(a) A climate risk insurance facility should not be used as a mechanism whereby the responsibilities of developed country Parties, as stipulated by Article 4, paragraphs 4, 5 and 8, of the Convention, are shifted;

(b) Parties included in Annex I to the Convention should commit sufficient public funds that are adequate, predictable, stable and timely, so that developing countries could, inter alia, finance insurance coverage to address issues relating to adaptation and a climate risk insurance facility;

(c) Such a facility<sup>6</sup> must not increase the financial burden on developing countries, and should provide funding for institutional capacity-building activities through workshops and the exchange of knowledge and experience.

## **2. Options for risk management and reduction; risk sharing and transfer mechanisms such as insurance, including options for micro-insurance; and resilience-building, including through economic diversification**

30. As noted in the submissions from Parties and confirmed by those from organizations, there is already considerable activity in this area of work. Several submissions indicated that the principles of DRR laid out in the Hyogo Framework for Action can serve as a guideline for undertaking activities in this area. One organization indicated that there is a possibility that, provided appropriate regulatory and informational infrastructure and international support are put in place, risk sharing and transfer mechanisms can become self-sustaining in a commercial context, and that the insurance industry can advise on how physical risk management can make risks insurable.

31. One Party placed priority on this area of work, emphasizing that the work programme should prioritize exploration of appropriate options for effectively and efficiently managing different kinds of climate-related risks.

32. The focus, as noted by some, should be on micro- and meso-level risks of loss and damage at the subnational and national levels when addressing this area of work.

33. The economic diversification subtheme addressed within any new work programme, argued one Party, should provide tangible results in order to promote economic diversification, and the SBI should coordinate, support and follow the implementation of actions to:

(a) Promote economic diversification and provide assistance for developing countries to achieve economic diversification in order to build resilience against climate change and the impact of the implementation of response measures;

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<sup>6</sup> Referred to as "Risk Insurance Fund" in the original submission.

(b) Provide support through foreign direct investment aimed at diversifying economic structures in developing countries; and assist in creating a favourable environment to attract such investments;

(c) Strengthen and improve technology transfer to support economic diversification efforts in developing countries.

34. An IGO suggested focusing on local economic development as an important mechanism for supporting the process of economic diversification and creating 'green' jobs as a key part of a diversification strategy in the face of structural changes brought on by climate change.

### **3. Approaches for addressing rehabilitation measures associated with slow onset events**

35. Several submissions noted that the knowledge base on approaches to address loss and damage from slow-onset events is still limited. Assessing the issues, exploring all approaches and building a multi-stakeholder process are regarded as requiring more time than the period up to COP 18.

36. The following were put forward by one or more submissions as matters that need to be considered when addressing this area of work:

(a) Longer-term foreseeable loss and damage;

(b) Incorporation of adaptation policies into sectoral planning, urbanization and coastal development;

(c) Prioritizing among the types of slow onset events for which policies can be designed to reduce risks;

(d) Involving expertise that exists outside of the UNFCCC process in discussions on a range of proposals, including on financial and risk transfer mechanisms, technology transfer mechanisms, instruments, approaches and alternative solutions;

(e) Developing strategies that leverage private-sector resources and create market-based mechanisms that are not overly reliant on public-sector budgets and are sustainable in the long term.

37. One Party stressed that all strategies to implement rehabilitation measures should respond to the specific circumstances and priority areas of each country, and be implemented under the Convention with a view to building capacity to address slow onset events.

38. Meaningful mitigation of greenhouse gases, as noted by a few, is the primary means of preventing and minimizing climate-related risks and avoiding the emergence of dangerous climate change, especially with regard to gradual changes and their impacts.

39. An IGO indicated that although the assessment of costs is very difficult, it is possible that some insurance tools (e.g. life insurance, pension provision, investment management) may be relevant in this area of work.

### **4. Additional views on the scope of the work programme**

#### *Sectoral focus*

40. The need to address ways to include multi-sectoral aspects, such as health, food security, water and sanitation, in the context of loss and damage was raised by one Party. Particular attention needs to be given, according to one or more submissions, to:

(a) The agriculture sector in the light of the sector's importance to the livelihood, economic development and food security of the population in developing countries;

(b) Health, as part of the adverse effects of climate change mentioned in the Convention;<sup>7</sup>

(c) Conservation and restoration of functional ecosystems in order for them to contribute as cost-efficient measures to reduce the risk of disaster.

*Additional elements*

41. An IGO noted that the issues listed in paragraph 2 above should not be seen as a complete list of choices for response to loss and damage. Another proposed an additional element entitled “Improved climate services for developing countries to provide better climate information and forecast products to facilitate early action to limit the loss and damage caused by climate change”, with a view to enhancing the linkages with the Global Framework for Climate Services.

## **IV. Relevant stakeholders and processes**

### **A. Engagement of stakeholders**

42. All submissions agreed on the critical importance of expert involvement in the work programme. Expert-level discussions with private- and public-sector stakeholders are viewed as necessary to achieve a better understanding of the various options available, with a view to informing the COP in providing guidance to Parties on suitable solutions. Drawing on the technical expertise of a broad range of established practitioners, programmes and institutions that are involved in adaptation and disaster risk management processes will ensure that the consideration of approaches to address loss and damage is adequately informed on lessons learned from ongoing efforts to address climate risks broadly.

43. Stakeholders with relevant specialized expertise mentioned in the submissions include:

(a) Academic institutions, especially those that have been involved in assessing costs of climate change;

(b) The agriculture sector;

(c) Civil society organizations and NGOs, especially those involved in research and pilot initiatives around the world;

(d) Development practitioners;

(e) DRR, humanitarian and emergency aid communities;

(f) Early warning experts;

(g) Financial institutions;

(h) Indigenous communities;

(i) National and international health organizations;

(j) Private-sector entities, in particular the insurance industry;

(k) Workers’ and employers’ organizations and labour institutions.

44. The need for not limiting the engagement of stakeholders to those with relevant specialized expertise was noted. A significant amount of programme implementation will

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<sup>7</sup> Health is mentioned in Article 1, paragraph 1, and Article 4, paragraph 1(f), of the Convention.

ultimately happen at the national and local levels; therefore local, subnational and national governments, as well as those involved in on-the-ground planning and implementation, are also important stakeholders of the work programme. It was suggested that Parties should identify agencies working on adaptation in their countries and involve experts in all sectors engaged in adaptation, loss and damage reduction and disaster risk management.

45. The importance of consulting with the intended beneficiaries was also noted, in order to target the work programme at the most pressing questions and facilitate the development of effective risk management systems that make a real impact on vulnerability. The work programme, as suggested by some, should take into account beneficiaries' perceived risks, existing coping mechanisms, the demand for risk management products and the need for training on topics such as risk reduction and financial literacy, and engage them in the design and implementation of risk management strategies.

46. An NGO suggested that multi-stakeholder platforms established within the context of DRR under the Hyogo Framework for Action could be enhanced to serve as a platform for multi-stakeholder cooperation at the national level, and possibly be part of national adaptation programmes.

47. The need to catalyse the inputs from the whole range of insurance experts and financial institutions from the private and public sectors in a structured and complementary manner through an inclusive and comprehensive process was also raised frequently in the submissions. The United Nations Environment Programme (UNEP) offered to establish a dialogue and collaborative action on a principles-based approach to loss and damage, and to facilitate insurance industry involvement via the Principles for Sustainable Insurance Initiative of the UNEP Finance Initiative (FI).

48. With regard to the UNFCCC process, two broad types of role were noted:

- (a) International coordination to share ideas and information and to improve countries' access to information and knowledge;
- (b) Catalysing and facilitating discussion on and support for the implementation of nationally and, where appropriate, regionally driven responses.

## **B. Relevant processes and ongoing work**

49. The work programme should take into account, as repeated in many submissions, existing institutional mechanisms, arrangements and work related to loss and damage at all levels both under and outside of the Convention. The following linkages were noted by one or more submissions:

- (a) **Decision 1/CP.10:** ensuring coherent consideration of related issues under decision 1/CP.10, including:
  - (i) The workshop on identifying gaps and challenges of risk management approaches mandated under decision 1/CP.10;
  - (ii) Any follow-up workshop(s) to discuss how to overcome identified barriers in the implementation of risk management approaches;
  - (iii) A new agenda item on adaptation to the adverse effects of climate change that includes the work programme and the assessment of the status of implementation of adaptation to the adverse effects of climate change;
- (b) **Nairobi work programme on impacts, vulnerability and adaptation to climate change:** linking with the relevant work done by partners to the Nairobi work

programme in response to the calls for action related to understanding the impacts of, and vulnerability to, extreme events;

(c) Technical paper on mechanisms to manage financial risks from direct impacts of climate change in developing countries;<sup>8</sup>

(d) **The Adaptation Committee:** analysing and defining proposals for possible decisions on scientific-based standard measures for vulnerability, and damage and loss quantification;<sup>9</sup>

(e) **National-level action and planning:** designing the national adaptation plans would benefit from the access to the extensive expertise that can be made available through the work programme (e.g. in modelling extreme events and designing appropriate risk management and risk transfer strategies and products);

(f) **IPCC SREX:** this report can be utilized as a useful resource for providing information, including for evaluating different mechanisms (e.g. prevention, insurance, compensation, rehabilitation);

(g) **Existing DRR-related work:** some submissions noted the usefulness of the Global Platform for Disaster Risk Reduction<sup>10</sup> and the Global Assessment Report 2011<sup>11</sup> for discussions on the work programme, particularly about the nature of exposure of assets to extreme weather events and a range of approaches that can help manage potential loss and damage from extreme weather events. In addition, the following were suggested as necessary to ensure synergy with the DRR-related work:

(i) Ensuring that all actions under the work programme strive to complement and enhance the ability of national platforms under the Hyogo Framework for Action to prevent and reduce loss and damage at the national and subnational levels;

(ii) Aligning activities under the work programme with existing DRR expertise and priorities that are set out by the Global Platform for Disaster Risk Reduction, and prioritizing activities that contribute to sustainable development efforts;

(iii) Enhancing collaboration between the secretariats of the UNFCCC and UNISDR to ensure the involvement of relevant experts in all relevant workshops and expert meetings.

## V. Implementation approaches and structure of the work programme

50. The work programme, as indicated in many submissions, should have a clear structure with concrete deliverables, in a manner that:

(a) Encourages innovative thinking and solution-oriented approaches that support Parties in increasing understanding of loss and damage and articulate implementation options that can be recommended to the COP for its consideration;

(b) Enables thorough discussion to ensure that recommendations are appropriately placed in the context of the broader suite of actions required for adaptation;

<sup>8</sup> FCCC/TP/2008/9.

<sup>9</sup> Linkage of the Adaptation Committee with the work programme is also referred to in document FCCC/AWGLCA/2011/3, paragraph 36.

<sup>10</sup> <<http://www.preventionweb.net/globalplatform/2011/>>.

<sup>11</sup> The report is to be launched at the third session of the Global Platform for Disaster Risk Reduction in May 2011.

(c) Ensures that progress in one area of work is not dependent on progress in another.

## 1. Modalities

51. The modalities proposed for delivering the potential activities mentioned in chapter VI include:

- (a) International and regional workshops;
- (b) Expert meetings;
- (c) Informal meetings of delegates and/or specific task groups;
- (d) Public consultations and extensive dialogue with universities, regional centres, relevant experts and stakeholder organizations;
- (e) Technical papers, compendium, and other analysis and synthesis documents and guidelines;
- (f) Training courses, including those that can be conducted virtually;
- (g) Pilot initiatives;
- (h) Targeted submissions.

## 2. Structure

52. Several proposals on the structure of the work programme were put forward, most of which included the enhancement of understanding of various aspects of loss and damage as either the first step in the work programme, or as an integral work stream in arrangement of work being carried out in parallel. Proposed approaches include:

(a) **Phased approach 1:**<sup>12</sup> this option places importance on structuring the work sequentially in order to ensure that a discussion of specific tools (e.g. insurance) and support for implementation builds on an adequate foundation of knowledge of the economics and complementarity of the different approaches to risk reduction and transfer. It entails:

- (i) Phase 1 – understanding, targeting and linking instruments for cost-effective risk management;
- (ii) Phase 2 – informing implementation and support;

(b) **Phased approach 2:**<sup>13</sup> considering foreseeable imminent severe climate events that may affect developing countries, the work should be arranged in:

- (i) Phase 1 – focusing on the immediate implementation of measures that pave the way for future agreed actions and respond to climate change consequences that are already happening;
- (ii) Phase 2 – preparing a long-term strong response to climate phenomena;

<sup>12</sup> This approach is meant for the area of work referred to in paragraph 2(b) above. Further details of the approach can be found at [http://unfccc.int/files/adaptation/cancun\\_adaptation\\_framework/application/pdf/usa\\_25\\_february\\_2011.pdf](http://unfccc.int/files/adaptation/cancun_adaptation_framework/application/pdf/usa_25_february_2011.pdf).

<sup>13</sup> Further details of this approach can be found at [http://unfccc.int/files/adaptation/cancun\\_adaptation\\_framework/application/pdf/mexico\\_1\\_march\\_2011.pdf](http://unfccc.int/files/adaptation/cancun_adaptation_framework/application/pdf/mexico_1_march_2011.pdf).

(c) **Thematic approach 1:**<sup>14</sup> this option allows for the work to be undertaken under themes 1 and 2 in parallel, followed by theme 3, and entails:

- (i) Theme 1 – enhancing knowledge of exposure to loss and damage;
- (ii) Theme 2 – exploring the use of the range of instruments and approaches available to address loss and damage at different levels, their respective functions, limits and relevance in a climate risk management strategy;
- (iii) Theme 3 – identifying possible implementation pathways under the Convention to operationalize approaches;

(d) **Thematic approach 2:** all the work under each of the following themes would be carried out in parallel:

- (i) Theme 1 – enhancing understanding of loss and damage associated with climate change impacts;
- (ii) Theme 2 – exchanging and deepening knowledge of ways to reduce loss and damage;
- (iii) Theme 3 – exchanging and deepening knowledge of residual risks.

53. With regard to the time frame, two sets of views were expressed:

(a) Divide the thematic work into three time periods:

- (i) June to December 2011;
- (ii) January to May 2012;
- (iii) June to December 2012;

(b) Use most of 2012, or the time from SBI 36 onward, to prepare recommendations for COP 18.

54. Flexibility was also regarded as important with regard to incorporating additional activities at a later stage, as needed, taking into account the outcomes of the workshop to identify challenges and gaps in the implementation of risk management approaches to the adverse effects of climate change, mandated by the SBI at its thirty-third session,<sup>15</sup> and the ongoing processes beyond the work programme both under and outside of the Convention.

## VI. Proposals for possible activities under the work programme

55. The work programme should, as frequently noted, consider all the elements needed to establish and implement risk management strategies. Views were put forward on the kind of activities to be undertaken in general terms or in detail (e.g. title/theme of workshops), along with or without the corresponding time frame, geographical coverage, modality and details regarding whether the activities would be undertaken under certain themes, in different implementation phases or under the areas mentioned in paragraph 2 above. The elements suggested were of a cross-cutting nature. This chapter aims to highlight the focus of activities proposed.

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<sup>14</sup> Further details of this approach can be found in the submissions from the Alliance of Small Island States, Climate Action Network International, the Centre for Climate Change Economics and Policy, the Grantham Research Institute on Climate Change and the Environment, the Munich Climate Insurance Initiative and UNDP, contained in document FCCC/SBI/2011/MISC.1 and available at <[http://unfccc.int/parties\\_observers/ngo/submissions/items/3689.php](http://unfccc.int/parties_observers/ngo/submissions/items/3689.php)>.

<sup>15</sup> FCCC/SBI/2010/27, paragraph 86.

56. Several areas of common ground were identified, including:
- (a) Enhancing the understanding of risks, approaches, tools and requirements for implementation;
  - (b) Observation, and data and information collection and management;
  - (c) Strengthening institutional capacity;
  - (d) Implementing pilot initiatives.

#### **A. Enhancing the understanding of risks, approaches, tools and requirements for implementation**

57. Further understanding of all aspects of loss and damage is, as commonly noted, essential and should be an integral part of the work programme in order to inform the development of viable and practical plans, approaches or mechanisms for the implementation of adaptation measures to reduce loss and damage.

58. Further understanding of national contexts and specific vulnerabilities would help countries to identify the risk reduction and risk transfer approaches that would be appropriate given the risks they face, and to design policies to address non-climate stresses that threaten to exacerbate loss and damage. This would also help to identify areas where international coordination would be beneficial.

59. Elements identified in the submissions to address further understanding are broadly summarized in this section.

##### *Risk management concepts*

60. Achieving greater clarity on the meaning and use of the terminology used in climate risk management strategies would help stakeholders to better understand the issues and articulate the respective roles for public- and private-sector actors. Currently, no common language on loss and damage exists among the insurance industry, adaptation and DRR communities to realize effective dialogue for mutual understanding.

61. ClimateWise and UNEP proposed contributing to bridging this gap by providing a draft glossary of such terminology through their insurance company members and partners. Similarly, the Munich Climate Insurance Initiative (MCII) and the United Nations University (UNU), together with other relevant stakeholder organizations, offered to co-organize a series of training workshops to support delegates in familiarizing themselves with technical terms. The UNISDR secretariat also proposed convening workshops to harmonize key concepts and promote a more robust communication and information sharing platform that could lead to more efficient meetings and sessions of the COP.

##### *Quantification of loss and damage associated with climate change*

62. Improving the scientific and technical base in developing countries, as reported in submissions, is vital for the quantification of loss and damage from climate change impacts. This would also help an insurance mechanism to be based on substantive figures. A comprehensive overview of risks, including through mapping of assets exposed to loss and damage at the regional and national levels, would enable the discussion on what risks are insurable and cost-effectively addressed through insurance, and which are best addressed through risk reduction measures. In this context, it is necessary to:

- (a) Identify the nature and scope of risks and characterize exposure (i.e. risk assessment/mapping, typologies of assets exposed to loss and damage through rapid onset events or through slower onset foreseeable events);

(b) Clearly define the criteria for losses that vulnerable countries are facing and likely to face from the direct and indirect impacts of climate change, including what could be considered unavoidable damage;

(c) Define vulnerability at the regional, national, subnational and local levels with regard to increasing losses. Methodologies and measuring systems need to be agreed on to allow comparison and application of standard criteria to vulnerability conditions.

*Risk management approaches and schemes on different scales*

63. The submissions reaffirmed that a range of well-tested tools on different scales are available to manage physical and financial risks from current natural disasters.<sup>16</sup> Understanding and assessing the potential and limitations of various existing tools and approaches is viewed as necessary to ensure well-founded recommendations and to inform appropriate risk management strategies, including facilitating the replication of similar approaches, including on:

(a) The scope of possible tools and approaches;

(b) Data and technical requirements;

(c) A regulatory and institutional framework;

(d) Risk management priorities or action;

(e) Advantages and disadvantages (suitability) of micro, national, regional and international scales of implementation;

(f) Ways to fit the existing mechanisms within the wider adaptation context and within risk reduction measures for events unrelated to climate change;

(g) Ways to strengthen the role of social security, including basic social protection, as a mechanism for risk sharing associated with loss of income;

(h) The roles of different entities (e.g. governments, the private sector and civil society organizations), including that of the Convention, in order to identify innovative partnership approaches and areas that require intervention from the national government, and to clarify what each entity can deliver and what it cannot.

64. Information sharing regarding the risk transfer schemes, especially on the application of insurance, was regarded as particularly important, including on:

(a) The effectiveness of various mechanisms for incentivizing adaptation and avoiding maladaptation, especially on how financial products such as insurance and credit can be utilized as an incentive for adaptation and DRR;

(b) Ways in which insurance schemes can assist the poorest and most vulnerable people, who often have no insurable assets, including how to ensure that insurance payouts to a national government are channelled and spent in a way that benefits the poor and most vulnerable, especially in the absence of micro-insurance products that provide payouts directly to households;

(c) The necessary enabling conditions and replicability of the main common elements, institutional set-up and the role of the partners involved in existing macro-insurance schemes such as the Caribbean Catastrophe Risk Insurance Facility and examples

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<sup>16</sup> Submissions noted a number of ongoing initiatives outside of the UNFCCC process and the available expertise of private insurers and the financial sector from which the work programme could benefit. These include, in addition to those mentioned in paragraph 67 below, analyses undertaken by the Economics of Climate Adaptation Working Group, the Caribbean Catastrophe Risk Insurance Facility and the International Labour Organization Microinsurance Innovation Facility.

at the national level (e.g. Turkey and Mexico), including how catastrophe bonds are used to mobilize resources to reduce the risks associated with slow onset events;

- (d) Ways to develop the infrastructure of the insurance market;
- (e) Ways to improve the professional level of employees of insurance companies;
- (f) Available mechanisms to invest in the insurance industry.

65. One Party suggested that the work programme should support the creation of a template that could be applied in various countries and regions to assess readiness for market-based insurance schemes.

66. The submissions from implementing agencies and the insurance sector indicated that a number of examples already exist where national governments have come together with private insurers and reinsurers, civil society and other relevant organizations to develop and implement new climate risk management and insurance partnerships.

67. The information on these examples, however, has not been brought together in a coherent manner to allow for a systematic appraisal of existing schemes to inform discussions under the UNFCCC process. Several submissions offered to share knowledge from ongoing experiences to respond to this gap, as follows:

- (a) Mexico: information on, among others:
  - (i) Post-event evaluation of loss and damage;
  - (ii) Financial tools (i.e. extraordinary allocations, special funds) for disaster risk prevention;
  - (iii) The development of systems that allow analysing and visualizing risk scenarios, and responding to emergency insurance mechanisms in the agriculture sector;
  - (iv) Catastrophe bonds for disasters using climate indices;
  - (v) Programmes to build resilience at the local level;
- (b) The World Bank and its wider community: information on the operations and delivery of programmes and projects that mainstream climate change and risk management into the development process, including:
  - (i) The Global Facility for Disaster Reduction and Recovery, which supports disaster risk management and is increasingly taking an integrated approach to risk management, including climate adaptation aspects;
  - (ii) The Pilot Program for Climate Resilience under the Strategic Climate Fund, which provides additional insights into climate risk, financing and resilience-building, responding to the elements mentioned in paragraph 2 above;
- (c) The Inter-American Development Bank: information on ongoing systematic risk management practices in vulnerable countries throughout the Latin America and the Caribbean region, including risk identification, emergency preparedness, governance, risk reduction and financial protection. The wide range of financial instruments to implement these approaches includes disaster prevention technical cooperation (non-reimbursable funds), investment loans, a policy-based loan contingent credit facility and an insurance facility. The Bank also has ex post instruments to support its member countries in meeting the needs of the affected population while reducing their vulnerability to future disasters during the emergency, rehabilitation and reconstruction phases;

(d) International Labour Organization (ILO): information on options for prevention and rehabilitation measures, such as large-scale public works programmes, enhanced local employment and social protection. These options, according to ILO, can also complement and fill the gap where the private sector is not able to respond and can provide the much needed safety net by maximizing the employment and income effects of the poorer and more vulnerable segments of the population.

68. In addition, ClimateWise and UNEP offered to share their knowledge through voluntary and collaborative partnerships with key stakeholders. The Tebtebba Foundation suggested that lessons can be learned from indigenous communities in SIDS and pastoralist communities that are experienced in dealing with extreme weather events, prolonged drought and climate-related disasters, by linking up these communities in knowledge and learning networks. Some submissions noted the benefits of a complementary event to highlight the relevant findings from the IPCC SREX and to ensure that Parties receive the summary for policymakers in a timely manner to feed into the work programme.

#### *Funding aspects*

69. A few submissions noted the need to enhance understanding of relevant financial aspects with a view to developing possible instruments for addressing loss and damage, including a potential source of funding and distribution arrangements for developing countries, in particular through private-sector involvement.

## **B. Observation, and data and information collection and management**

70. Accurate and reliable data, as noted in many submissions, is essential in order to assess and develop effective risk management systems for climate change impacts in developing countries, including insurance solutions.

71. Highlighting the importance of essential climate variables being systematically observed,<sup>17</sup> the secretariat of the Global Climate Observing System offered to provide resources to further develop synergy between work on climate variables and that on adaptation and sustainable development.

72. According to some submissions, the work programme could support this area of work in various ways, for example as follows:

(a) Identify what information and data on weather and climate change would be needed, especially for the most vulnerable areas, taking into account the link to the Global Framework for Climate Services;

(b) Identify, in each country, existing information related to climate phenomena and opportunities to produce data that are lacking, with the aim of developing integrated databases of loss and damage caused by past events, and elaborate current and future climate risks maps;

(c) Take stock of relevant and potential methodologies to identify the main gaps in knowledge on the ways and means of addressing loss and damage, including risk modelling and regulatory and implementation frameworks;

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<sup>17</sup> According to the Global Climate Observing System secretariat, directly relevant essential climate variables include water use, river discharge, groundwater, lake levels, snow cover, glacier measurements, soil moisture and land cover. Other relevant essential climate variables include the fraction of absorbed photosynthetically active radiation and leaf area index.

(d) Provide a method for capturing the experience gained in the use of risk management, risks transfer and other financial instruments, as well as non-financial instruments to minimize impacts;

(e) Develop a mechanism to measure, record and verify loss and damage caused by climate change;

(f) Manage the data and information at the national, regional and international levels, including through the enhancement of database systems, information on and knowledge of climate risks, impacts, vulnerability and adaptation capabilities, as a source of decision-making for the development of facilities and mechanisms to address loss and damage.

### C. Strengthening institutional capacity

73. Institutional development and capacity-building at the national and regional levels, as noted in a number of submissions, will play an important part in addressing loss and damage, including that associated with slow onset events. The work programme, as viewed by some, provides an important opportunity for enhancing capacity in developing countries that are particularly vulnerable to the adverse effects of climate change, including financing and methodological aspects as well as transfer of technology.

74. Parties and other relevant stakeholders have mutually supportive skills, expertise and experience to share with regard to identifying, assessing, managing, reducing and transferring risks faced by societies and economies as a result of climate change, but further work is needed to bring these respective skill sets together.

75. Strengthening the capacity needed by countries to address climate change related risks in an anticipatory manner will support a country-driven approach to adaptation action. The following elements were suggested to advance this area of action:

#### *At the national level*

(a) Support for the development of climate change scenarios and the application of remote sensing and modelling according to local and regional conditions for climate risk reduction, management and prevention;

(b) Support for the enhancement of resilience through integrated risk management, including through the following:

(i) Identifying a national authority in charge of implementing policies and actions for adaptation that include risk reduction and management;

(ii) Enhancing capacity with regard to events prediction and early warning systems;

(iii) Increasing public awareness of risks, prevention and post-event actions;

(iv) Building partnerships in prevention and response plans, including by making an inventory of available expertise and identifying cooperation opportunities;

(v) Preparing an action plan for loss and damage from the perspective of food safety and security, because this is directly threatened as a result of the land degradation, forest degradation and desertification that are caused by extreme and unexpected climatic events;

(vi) Creating special funds, in addition to normal budget allocations, for national development plans. Such funds could be used to finance relief and reconstruct critical infrastructure and could also gradually become a tool to reduce risks. Setting

aside financial resources would allow continuation of the implementation of current development plans even if a climate event occurs;

*At the regional level*

(c) UNISDR proposed building on its partnerships with the existing regional IGOs, with a view to, inter alia:

(i) Developing guidance on integrated adaptation and DRR plans, and on a joint reporting mechanism for adaptation and DRR;

(ii) Supporting regional and national academic systems of research on the development of norms and codes for the construction of climate-resilient public infrastructures and human settlements;

(d) MCII and UNU volunteered to co-organize, together with other relevant stakeholder organizations, a series of training workshops to support delegates in familiarizing themselves with different ways of addressing loss and damage. UNDP noted that its experience would assist this area of work, not only by contributing to the reduction of loss and damage but also by providing a scientific and operational base for the assessment of existing assets that are vulnerable to climate change.

#### **D. Implementing pilot initiatives**

76. Analysis of existing approaches and technical advice on tools and instruments, as noted by some, could be supplemented by establishing demonstration activities, such as pilot projects on public-private partnership models for integrated risk management approaches and climate insurance, in selected countries in order to facilitate implementation.

77. In this context, UNEP offered to produce the following in the short to medium term (2011-2012):

(a) A summary for policymakers of relevant information on practice, experience and success stories in the area of integrated risk management and climate insurance, building on previous work by various agencies, organizations and UNEP FI;

(b) A shortlist of potential pilot projects to gain further knowledge in order to develop a scaled-up work programme and facilitate implementation at the national, regional and international levels.

### **VII. Summary of common themes identified in the submissions**

78. In view of the submissions provided by Parties, it is clear that there are some areas of convergence and disparity in the elements referred to in paragraph 2 above.

79. Key commonalities identified in the submissions include:

(a) Expanding and updating knowledge on current risk management approaches, measures, tools and instruments, and improving observation and data/information collection are essential building blocks of the work programme and important for the consideration of implementation options;

(b) Building on existing work and bringing in technical expertise, especially from the DRR, insurance and financial sectors, and engaging broad stakeholder groups are essential for developing an effective work programme;

(c) Involving experts from both the private and the public sector in the work programme is critically important in achieving a better understanding of the various options available;

(d) Ensuring coherence with other institutional arrangements, in particular with existing work on DRR, including under the Hyogo Framework for Action, is important in order to catalyse synergy.

80. The principal divergence in views found in the submissions concerned the possible development of a climate risk insurance facility, including with regard to an appropriate level at which to develop such a facility.

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