Adaptation Committee

AC/2018/13

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Agenda item 7 (c)

Fourteenth meeting of the Adaptation Committee
Bonn, Germany, 24-26 October 2018

Report on the expert meeting on national adaptation goals/indicators and their relationship with the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction

Recommended action by the Adaptation Committee

The Adaptation Committee (AC), at its 14th meeting, will be invited to consider the information contained in the report. It may wish to agree on next steps and consider any relevant recommendations for consideration by the Conference of the Parties.

TABLE OF CONTENTS

1. Introduction

1. 1. The Adaptation Committee (AC), in its 2016-2018 workplan, agreed to convene a meeting in 2018, in collaboration with the Nairobi work programme (NWP), to exchange views on national adaptation goals/indicators and how they relate to indicators for sustainable development goals (SDGs) and for disaster risk reduction in the context of the Sendai Framework for Disaster Risk Reduction 2015-2030.[1] The expert meeting aimed to achieve two objectives:

a) Exchange views on national adaptation goals/indicators and related data collection, monitoring and evaluation (M&E) and reporting frameworks;

b) Inform the Parties on what is possible in terms of national adaptation goals/indicators and how such goals and indicators relate to the global goal on adaptation.

2. Given the meeting objectives, the growing recognition of a close relationship across three global agendas, and seeking co-benefits for assessing adaptation progress, the expert meeting was designed to provide technical support and guidance to the Parties on M&E of adaptation actions and to mobilize knowledge and experience in the context of relevant international frameworks for national adaptation planning and implementation processes.

3. The following report first provides an overview of the proceedings of the meeting and then moves on to key issues addressed during the meeting by a variety of experts. In conclusion, it delivers ways to enhance effective and functional adaptation M&E on goals/indicators in collaboration with the SDGs and the Sendai Framework for further consideration by the AC. The AC is also invited to consider possible next steps and derive recommendations to the COP.

2. Proceedings

4. The expert meeting on national adaptation goals/indicators was held in Tokyo, Japan, on 24 and 25 July 2018. It was co-organized by the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) in collaboration with the UNFCCC and with the support of the Governments of Japan, Australia, Germany and Ireland as well as United Nations Office for Disaster Risk Reduction (UNISDR). The meeting was chaired by Ms. Pilar Bueno, Co-Chair of the AC.

5. Participants at the meeting comprised four AC members and about 70 experts from governments, UN-affiliated agencies, international organizations, development banks, bilateral cooperation agencies, research institutions and the private sector that are highly active in M&E of adaptation and monitoring progress of the implementation of the SDGs and the Sendai Framework at different levels and sectors.

6. The design of the expert meeting was informed by a background document developed from the concept note for the meeting presented at the AC 13th meeting.[2, 3] The background document provides an overview of the individual goals/targets and reporting mechanisms of the three global agreements and the relationship between adaptation, the SDGs and the Sendai Framework monitoring process. The aim was to build upon the accumulated knowledge and experience of M&E adaptation from the previous AC activities and the inventory of M&E tools and relevant submissions made under the

[1]. http://unfccc.int/files/adaptation/groups_committees/adaptation_committee/application/pdf/2016-2018_ac_revised_workplan.pdf.
[2] Back ground document for the expert meeting is available at https://unfccc.int/sites/default/files/resource/indicators_background_paper.pdf.
[3] Concept note of the meeting at the AC 13th session is available at https://unfccc.int/sites/default/files/resource/ac13_7e_indicators_0.pdf.

NWP.[4,5,6] In addition, experts provided inputs on adaptation-related goals/indicators to inform the meeting in advance.[7]

7. The expert meeting started with opening remarks from the AC Co-Chair and UNU-IAS as co-organizers of the meeting, and the Government of Japan to welcome all participants. Following brief introductory guidance about the objectives of the meeting, the session explored the previous work under the UNFCCC on adaptation monitoring, the global goal on adaptation and relevant provisions under the Paris Agreement, and the monitoring and reporting systems of the SDGs and the Sendai Framework. The goal was to establish a common understanding among meeting participants and set the stage for the next two days of discussion. Presentations from the AC, UNISDR and UN Statistics Division (UNSD) highlighted their on-going work and the differences between the three agreements.[8,9]

8. With a view to creating synergy between adaptation under the UNFCCC, the SDGs and the Sendai Framework, and improving the progress assessment systems at national level, participants from Canada, Japan and Moldova shared their experience with national adaptation M&E systems. Experts from Thailand, Brazil and Mozambique demonstrated their efforts to integrate and coordinate the three global agendas horizontally at national level. Following presentations of the experiences of countries, breakout groups discussed guiding questions on a) Assessing adaptation progress at a national level and b) Integrating adaptation, the SDGs and the Sendai Framework monitoring process, sharing their experience and lessons learned and analysing the pros and cons of the integration.

9. On the second day, the meeting examined the issues of capacity-constraints and overcoming barriers at national level through an interactive panel discussion involving representatives from the Philippines, Botswana, the Adaptation Fund and Germany's technical development cooperation agency (GIZ). Participants highlighted their approaches to addressing challenges at national level, including available support networks and resources. Participants exchanged views on M&E integration in terms of a) how institutional and human capacity can be built and what innovative approaches can be taken, b) how relevant capacity-building activities and/or resource allocation can be enhanced for overall resource efficiency and c) how responsible institutions can be encouraged to collaborate to avoid the duplication of work and promote quality and comparability. The AC Co-Chair concluded the meeting with a summary of the two-day discussion.

10. In conjunction with the AC expert meeting, the governments of Japan and Australia held the 27th Asia-Pacific Seminar on Climate Change on 26 July 2018, serving as a regional technical expert meeting on adaptation (TEM-A). While the AC expert meeting examined national M&E systems across the three global agendas, the regional TEM-A provided an opportunity to deepen understanding of the linkage between assessing progress in adaptation, the SDGs and the Sendai Framework from local to national and global level. The session explored opportunities for vertical integration of M&E systems between the multiple levels, complementing the discussion of horizontal harmonization across the global

[4] Information on the previous AC workshop on monitoring and evaluation is available at https://unfccc.int/node/63381
[5] For the M&E inventory, see http://www4.unfccc.int/sites/NWP/News/Pages/M-and-E-inventory.aspx
[6] Prior to the this meeting, the SBSTA invited NWP partner organizations and other relevant organizations to submit, by 20 September 2017, information on indicators of adaptation and resilience at the national and/or local level or for specific sectors. The summary of the submissions received from two Parties and 13 observers is available at the annex of the concept note at AC 13th meeting, at the link above.
[7] https://unfccc.int/process-and-meetings/bodies/constituted-bodies/adaptation-committee-ac/workshops-meetings/information-provided-by-participants
[8] Agenda and all presentations in the meeting is available at the event page; https://unfccc.int/node/180267
[9] See also a policy brief from GIZ for more information and comparisons across the three global agendas and synergies between them http://www.adaptationcommunity.net/wp-content/uploads/2017/11/giz2017-en-cc-policy-brief-synergies-PA_SDG_SF.pdf

frameworks at national level in the AC expert meeting. The session was organized with experts from Japan, Morocco, the Gambia, India, the Japan National Institute for Environmental Studies (NIES) and the Climate Risk and Early Warning System (CREWS) secretariat, which is a collaboration between the World Meteorological Organization (WMO), the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR) and the United Nations Office for Disaster Risk Reduction (UNISDR).

3. Key issues addressed at the meeting

11. Adapting to climate change is not only a key objective of the Paris Agreement but also necessary to implement the SDGs and the Sendai Framework. The 2017 technical examination process on adaptation (TEP-A) conducted by the AC concluded that integrating adaptation with the SDGs and the Sendai Framework can be very beneficial for building resilience comprehensively across societies.[10] While maintaining the autonomy of each of the post-2015 agendas, improved coherence of implementation and horizontal progress monitoring, when appropriate for the country's context, can save resources, time and enhance efficiency. Strengthening the linkage of the M&E systems vertically from local to national and even regional levels is expected to further improve countries' understanding of implementation across the three agendas.

3.1. National reporting systems under the Sendai Framework and the SDGs, and connections to assessing adaptation progress

12. The meeting highlighted the different approach taken for national reporting of M&E on climate change adaptation under the UNFCCC and that used for the Sendai Framework and the SDGs. Experts stressed the context-specific nature of climate change adaptation and the bottom-up approach to M&E taken by the UNFCCC, contrasting the more top-down approaches of the SDGs and the Sendai Framework. It was also recognized that all approaches may be informative in helping to assess collective progress towards global goals.

13. The Sendai Framework Monitoring process is a voluntary self-assessment process aiming at measuring progress in the implementation of the Sendai Framework with the support of an online monitoring system, the Sendai Framework Monitor (SFM). The SFM was launched in March 2018, with accompanying technical guidance on the collection and analysis of disaggregated data. It provides an online platform for Member States to report on progress against the agreed seven global targets and 38 indicators of the Sendai Framework and the disaster risk reduction targets of Sustainable Development Goals 1, 11 and 13, as well as options for customized national indicators. Data from the monitor are reported by UNISDR to the Department of Economic and Social Affairs of the Secretariat to inform the deliberations of the high-level political forum on sustainable development. In addition to the global indicators, the SFM provides 142 pre-defined custom indicators (with sub-indicators) across the four Sendai Framework's priority areas that can be selected by Member States to track progress towards self-defined targets at regional, national and local level, including progress in adaptation to climate change. Member States may also define and include additional custom targets and indicators to tailor the monitoring to their specific needs. Additionally, UNISDR has updated the on-line disaster loss database system called 'DesInventar', to reflect the Sendai Framework's enhanced list of hazards and indicators, and which has been operating since 1994 as a tool to assist countries in managing disaster loss data, supporting the analysis of the disaster trends and impacts. As a part of the preparation for launching the reporting system, UNISDR carried out a data readiness review in 2017 in which 87 countries

[10] All information on TEM-A from 2016 are available at http://tep-a.org/. See also technical paper 2017 for the integration of the three global agendas http://tep-a.org/technical-paper/

reported on data availability, data quality and data accessibility. The review concluded that there was no single country which has all datasets to satisfy the evaluation standards set in the reporting system. To close this gap, UNISDR is supporting local and regional reporting and providing assistance to increase the capacity and quality of national monitoring and reporting.[11]

14. 14. When developing a global set of climate change indicators as part of the SDG process, UNSD analyzed existing indicators, including ones related to adaptation, from 35 countries in different regions, as well as from international organizations such as the IPCC, WMO, FAO, FDES, ECE, and academic institutions. Approximately 900 indicators relevant to adaptation were identified, many of which were used by multiple countries and organizations. These were synthesized into 24 indicators commonly observed across countries and institutions. Examples include the number of early warning systems, published mitigation strategies, and expenditures on adaptation, although classifying these by type (input, output, outcome indicators and impact) is challenging and further work is required (see table 1 below).

Table 1. Exmaples of commonly observed adaptation indicators

Common indicators	Number of occurrences (both national/international)	Countries which have reported (out of 35 consulted)
Early warning systems, mitigation strategies, published forecasts accessible to the public	50	12
Distribution and status of known species	48	24
Expenditure for adaptation	47	14
Number of climate-change-relevant plans or policies developed	45	10
Area which is protected	41	24
Production of food	32	13
Use of water	32	13

Source: Presentation from Reena Shah 2018[12]

15. These top-down approaches using pre-defined indicators contrast with the voluntary reporting on adaptation under the Paris Agreement. Given the bottom-up nature of adaptation, many participants noted that it cannot be fully captured by quantitative indicators, while recognizing the quantitative indicators were likely to be preferred across multiple levels.[13]

16. Methodologies for identifying adaptation needs, which can inform monitoring and evaluation systems, are being synthesised by the AC and the Least Developed Countries Expert Group (LEG). Submissions under the NWP illustrate the challenges to assessing national-level progress adaptation through indicators, including indicator design (purposes and scope, generic or universal indicators), user capacity (data assessment and ICT literacy) and data constraints (baseline and basic statistical data, and financial and institutional capacity). Given the context-specific nature of adaptation, the inherent methodological challenges and capacity constraints, and the evolving objectives for assessing

[11] https://www.desinventar.net/
[12] https://unfccc.int/node/181218
[13] UNEP-DTU (2018). Adaptation metrics: Perspectives on measuring, aggregating and comparing adaptation results. http://www.unepdtu.org/newsbase/nyhed?id=2EE1A180-9012-47A2-A50A-D5316246A814

adaptation at various levels (local, national and global), it is necessary to consider the desirability and feasibility of common indicators. An AC expert meeting on adaptation M&E in 2013 in Fiji concluded that indicators are neither the only nor necessarily the best approach to M&E.[14]

17. In addition to quantitative indicators, a narrative of adaptation progress can be developed, with qualitative indicators being critical to providing a complete picture of outcomes. While the analysis of indicators by UNSD referred to in paragraph 14 above identified some commonalities across different parts of the world, there are no universally qualified and generic indicators for adaptation.[15] Moreover, the application of indicators needs to be carefully scrutinized in the context of the goals, interventions and implementations being measured. While practices and lessons learned in different countries can be informative, applying those methods in different circumstances requires appropriate adjustments to the country-specific context.

3.2. Creating synergy among M&E at national level regarding adaptation, the SDGs and the Sendai Framework

3.2.1. M&E of adaptation progress at national level

18. Good practices and lessons learned from country experiences illustrate that the design of M&E systems for adaptation should focus on what progress needs to be measured, what type of information is needed, and from whom.[16] The defined scope of an M&E system can provide a basis for identifying the type of indicators needed, giving consideration to data availability and resource capacity. Experience from Canada, Japan and Moldova demonstrates that adaptation M&E systems are still in the early stage of development, requiring further improvement for their full operationalization (see Box 1 below).

[14] See also the report on the workshop on the monitoring and evaluation of adaptation http://unfccc.int/files/adaptation/cancun_adaptation_framework/adaptation_committee/application/pdf/ac_me_ws_report_final.pdf

[15] Leiter & Pringle (2018). Pitfalls and potential of measuring climate change adaptation through adaptation metrics. UNEP-DTU partnership.

[16] GIZ & IISD (2015). Developing national adaptation M&E systems: A guidebook. Supplementary materials to the NAP Technical Guidelines. http://www.adaptationcommunity.net/?wpfb_dl=268

Box 1. National experience of assessing adaptation progress

Canada

- Addressing profound climate change impacts, the government of Canada developed the Pan-Canadian Framework on Clean Growth and Climate Change (PCF) in 2016. An Expert Panel on Climate Change Adaptation and Resilience Results was created to advise on assessing adaptation and climate resilience progress. The panel recommended 54 indicators in their report, and the government of Canada is analyzing their recommendations to determine next steps for enhancing implementation of the PCF.

Japan

- The government is carrying out the national adaptation planning process to respond to a broad range of climate change impacts. To assess the progress on implementation of the NAP process, monitoring was conducted in 2016 through self-assessment by each ministry and agency, using indicators in 7 thematic areas. The government continues annual monitoring at the Inter-Ministry meeting, and is working to develop indicators that cover all adaptation measures noted in the NAP, in order to incorporate them into their second monitoring report.

Moldova[17]

- An adaptation M&E system is being developed to measure the outcomes and impacts of interventions aligned with the NAP process and sectoral adaptation plans' (SAPs)Monitoring is being conducted at three levels, the micro-level (project and program scale), the meso-level (sectoral or territorial scale) and the macro level (national scale). The reporting system consists of driver, output, outcome and objective indicators. The indicators cover or cross different sectors (agriculture, water, forestry), with 25 of 95 indicators currently operational.

19. In discussing the objective of an M&E system, participants highlighted that the context-specific feature of climate change adaptation requires an M&E system to be able to accommodate different types of information to capture all aspects of outcomes, including benefits and drawbacks.

20. Discussions of qualitative and quantitative information noted that quantitative information tends to be more comparable and aggregable nature than qualitative information. However, the numeric values do not necessarily describe improvements correctly and accurately. Qualitative information is significant at national level to improve adaptation operations and processes, and at the international level to obtain a better understanding of what is working, what is not working, and the reasons for this.

21. Measuring adaptation outcomes is difficult owing to the long-time scales needed to observe changes, difficulties in assessing attribution within complex environments, and the close linkage with development outcomes.[18] To date, countries have often used input and output indicators to appraise the implementation process, but cannot sufficiently evaluate outcomes or impacts. Therefore, governments need to be encouraged to shift gradually from input and output indicators to outcome-based indicators.

3.2.2. Linkage of M&E of the three agendas at national level

22. Close coordination of the work carried out by the Open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OIEWG) and the Inter-Agency

[17] Further details are described in a case study in UNEP's 2017 Adaptation Gap Report, chapter 4 on national adaptation M&E systems.

[18] OECD (2015). Monitoring and Evaluation of Climate Change Adaptation. Methodological approaches. OECD Environment Working Papers, No. 74, OECD Publishing. http://dx.doi.org/10.1787/5jxrclr0ntjd-en

and Expert Group on SDG Indicators (IAEG-SDGs) has ensured close coordination in the reporting of both post-2015 agendas leveraging on the existing synergies of the two frameworks. Data reported by Member States on the indicators of Targets A – E of the Sendai Framework directly informs progress on 11 DRR-related SDG indicators.

23. Lack of coordination between multiple M&E processes was identified by participants as a significant challenge. Many experts pointed out that the absence of functional coordination with relevant line ministries, and especially with national statistical offices, was a primary obstacle hindering the integration of various M&E systems. The development of functional M&E systems depends on the continuous engagement of relevant actors, including planning officers, data collectors and providers, and those in charge of reporting.

24. In many countries, institutions or agencies with responsibilities for data collection, analysis and reporting are spread across the government. Stakeholder involvement has been emphasized as important for the successful use of M&E systems for adaptation. However, as the spectrum of stakeholders gets extensive, the development of M&E systems for adaptation becomes more complicated and time-consuming process. Enhancing communication would be a starting point to avoid the duplication of work and promote greater integration across the three global agendas. Participants highlighted the benefits of processes to formulate and implement adaptation, such as the NAP process, provides for coherent stakeholder coordination. Moreover, Participants suggested that sectoral approaches could facilitate the interactions across the three agendas and be helpful to identify overlaps and synergies.

25. In addition, consultation with sector experts and local communities is necessary to identify what types of indicators are needed to capture the full picture of the outcomes associated with adaptation interventions. Participants suggested that stronger links between practitioners and experts across the three global agendas would help address common methodological challenges and assist in harmonizing the terminology used between the different communities.

3.3. Addressing capacity constraints and overcoming barriers at national level

26. As demonstrated above, countries have encountered different challenges related to adaptation M&E and its linkages with monitoring progress under the SDGs and the Sendai Framework. Discussion by experts focused attention on the institutional and human capacity building needed to overcome obstacles in implementing monitoring under each of the three agendas, and harmonizing their M&E systems.

3.3.1. Institutional and human capacity-building with technical knowledge and development

27. Many experts emphasized the lack of institutional and human capacity to undertake M&E, and how this lack of capacity impacts their practices. The government of the Philippines responded to the needs of enhancing technological abilities at the individual and institutional level by launching comprehensive training programmes, including on statistical methodologies. Participants suggested that training of trainers for compiling information and reporting would be another opportunity for technical development at the individual level. It could improve information literacy and support the acquisition of techniques required for M&E. As capacity-building is an ongoing activity, coordination mechanisms to build relevant M&E capacities across the three agendas would be helpful. Exchanging peer reviewers between countries was suggested as another training opportunity to build capacity in M&E.

28. Data acquisition and information management was another issue where capacity-building is critical. As experience in Botswana demonstrated, countries are facing constraints related to a lack of data and information, and a lack of expertise in the multiple sectors. Participants advocated that the accommodation of climate change adaptation and disaster risk reduction data and information in the current national census and survey process would provide an entry point to link the M&E outcomes beyond the silo of the individual reporting formats.

29. In addition, participants noted that several issues, including insufficient climate change and disaster risk maps and information, difficulty on disaggregation of climate change and disaster risk reduction statistics, limited knowledge management systems, and lack of monitoring framework were intertwined and complicate the integration of M&E mechanism across the agendas.

30. One of the solutions for information management issues could be a publicly accessible online platform to disseminate information to support adaptation planning and implementation, including lessons learned from national to local level, methodologies for vulnerability and climate risk assessment, and details about indicators for tracking progress. As the example of UNISDR's 'DesInventar' demonstrates, this type of reference site plays a significant role for linking relevant expertise and catalyzing actions from local to national level.

Box 2. Sharing information at national level and beyond

- Moldova established an online information platform to enhance the accessibility and management of data and communication with practitioners. It provides M&E resources for adaptation, for example, a comprehensive list of adaptation indicators. Available at http://portal.clima.md/indicatori.php?l=en

- National Institute for Environmental Studies in Japan (NIES) serves as a centre of excellence in adaptation information and manages the national climate change adaptation platform (A-PLAT) to support adaptation planning and implementation at regional level. Available at http://www.adaptation-platform.nies.go.jp/en/index.html. NIES is also working to establish an online information platform in the Asia-Pacific region by 2020 with research institutions/universities in both developed and developing countries. The platform will contribute to capacity-building on impact assessment and adaptation planning by developing a dataset on projected climate change impacts and creating toolkits for adaptation planning.

31. Participants explored the possibility of using innovative ways to gather data, in particular through smartphone-based data collection and dissemination. However, barriers to information technology still exist, especially in remote areas. Rapid IT and AI development could contribute to M&E capacity enhancement.

3.3.2. Budget allocation and alignment of capacity-building activities

32. In creating opportunities for capacity-building, actions should strive to maximize overall resource efficiency and be designed to benefit all three agendas. Allocating limited resources strategically could start by mapping out needs, gaps and ongoing activities, including relevant actions for capacity-building across institutions.

33. To maximize the efficiency and increase understanding of the importance of the agendas within finance ministries, participants noted that alignment of the agendas across multiple agencies would be beneficial. The momentum associated with the SDGs could contribute to mainstreaming climate change adaptation and disaster risk reduction and raising their visibility in national development planning and

budget allocation. In some countries, budget request documents have a chapter of "cross-cutting issues", where multiple targets of action can be included, and the budget can be increased because of its multiple benefits. Participants suggested that to maximize impact, the government should utilize budget resources within multiple line ministries/agencies.

34. Moldova and Philippines tag climate change expenditure s that contribute to identifying and prioritizing related programmes and activities beyond the boundary of the lead ministries and agencies, and harmonize with spending on the SDGs and Sendai Framework goals and targets. For example, Moldova marks their climate-related budgets and external financial assistance with four classifications: 1) policy development and governance; 2) research and development; 3) knowledge sharing and capacity-building; and 4) climate response and service delivery, to evaluate multiple aspects of adaptation policy at national level.

35. In terms of financial resources distributed to M&E activities, some governments cannot allocate enough sufficient resources to implement M&E systems for each of the three agendas. By gathering the budget needs for M&E from multiple sources, stressing its cross-cutting benefits, spending on M&E would be more persuasive to the budget authorities.

3.3.3. Efficiency of collaborative work

36. Participants at the meeting stressed that the lack of coordination is highly likely to cause unnecessary duplication of effort and resources. The challenge lies in determining how to encourage responsible institutions, including meteorological organizations and statistical offices, to collaborate to prevent overlap and to promote quality M&E. Participants suggested that it would be advantageous to start by engaging top-level management of leading institutions for data generation with the goal of catalyzing actions beyond silos and conventional frameworks. Another enabler of inter-agency coordination in some countries could be cooperation with the national designated authority (NDA), whose knowledge and experience for NAP planning and its implementation through the Green Climate Fund (GCF) readiness programme could provide a focal point to activate the linkage of the three agendas.

37. Better harmonization would raise the visibility of the three global agendas in broader political agendas to could enhance obtain understanding at the highest political level. Sustained political leadership for adaptation, disaster risk reduction and the SDGs would further justify investing in suitable M&E systems.

3.4. Linkage of M&E systems from local to national levels

38. To understand the full picture of adaptation across multiple levels, national adaptation M&E systems should include adaptation actions and information originating from sub-national levels. Such vertical integration can enhance comparability and standardization of adaptation M&E.

39. The expert meeting demonstrated that the national governments have started to link M&E systems at the local level with national level assessments of progress on adaptation.[19] However, in terms of bridging M&E systems of the three global agendas from local to national level, efforts remain at a very early stage. For example, Morocco has established an environment information system to assist the integration of adaptation into existing information systems in three regions. In close coordination with regional offices, the information system is expected to become a regional hub for monitoring data. Another example comes from India, where close collaboration between national and sub-national

[19] Examples are provided in Leiter (2015). Linking monitoring and evaluation of adaptation to climate change across scales: Avenues and practical approaches, *New Directions for Evaluation*, 147. http://onlinelibrary.wiley.com/wol1/doi/10.1002/ev.20135/abstract

entities in the development of a resilience index and scorecard allowed for identification of indicators that enable comparative assessment across different administration authorities (see box 3).

Box 3. Linkage between national and sub-national adaptation M&E

- Morocco has launched a Regional Information System on Environment and Sustainable Development (SIREDD). Operating in coordination with national institutions, including State Secretariat for Sustainable Development (SEDD) and National Observatory office, and regional actors, SIREDD establishes a regional network that includes the private sector, academia and civil society. The regional observatory office plays a significant role in bridging national and regional level monitoring institutions, and ensuring effective coordination of environmental information management systems. Through SEDD, Morocco seeks to harmonize and converge regional data for aggregation and to generalize the information management systems in all parts of the country.

- In India, a disaster score card and resilience index is one of several collaborative projects initiated by the central government at the request of state governments to allow them to assess disaster risk and resilience in 640 districts of the country. Developing the index involved cataloguing State-level activities for achieving disaster resilience, classifying State-level activities regarding disaster management cycle, and selecting indicators for measuring progress in disaster resilience. Generic indicators on resilience were categorized in two groups, one focused on pre-disaster (risk assessment, risk prevention & mitigation, risk governance and disaster preparedness) and other focused on post-disaster (disaster response, disaster relief & rehabilitation and disaster reconstruction). A total of 70 indicators were developed as outcomes of the joint work.

4. Ways to enhance effective and functional adaptation M&E and promoting synergy across climate change adaptation, the SDGs and the Sendai Framework

4.1. Lessons and key messages from the meeting

40. The following points emerged from the discussion among the experts that may be particularly relevant for the work of the AC:

a) In contrast to the top-down approach of the SDGs and the Sendai Framework, approaches to measuring progress on adaptation need to be individually defined in different countries because of the context-specific nature of adaptation. M&E systems should be designed to align with a country's overall objectives on adaptation. In developing indicators, consideration should be given to the benefits and drawbacks of quantitative and qualitative indicators;

b) Although full and complete harmonization among the three agendas may not be feasible nor useful, some degree of synergy could be beneficial;

c) Enhancing individual and institutional technical capacity for data collection and assessment of adaptation is an ongoing task for many countries. National statistical offices could be more engaged in developing national indicator reporting systems on climate change, given their experience and expertise in data compilation and assessing data quality and availability. Linking data gathering and reporting systems for the SDGs, the Sendai Framework and on climate change adaptation will help avoid the duplication of effort;

d) Improved coordination among related actors yields multiple benefits, including a reduced reporting burden, improved political oversight, and enhanced cost-effectiveness of measures

that cut across the three agendas. Using the momentum associated with the SDGs could support mainstreaming of adaptation and disaster risk reduction into national level strategies;

e) Effective alignment of agendas across agencies could improve budget efficiency and increase the understanding and awareness of fiscal authorities. Government can draw on their financial and human resources in multiple line ministries/agencies to maximize impact and resource efficiency;

f) Collaborative work between different levels of government to link their M&E systems is needed to understand the full picture of adaptation. Such collaboration strengthens understandings of status of adaptation at sub-national levels and ensures local results can inform national adaptation policy.

4.2. Next steps

41. The Adaptation Committee may wish to consider the following next steps:

a) Agree on a set of recommendations for consideration by COP 24. The COP may wish to invite Parties and relevant entities working on national adaptation goals/indicators to strengthen linkages with the SDGs and the Sendai Framework, taking into account:

i) The importance of designing adaptation M&E systems according to a country's overall objectives for adaptation, and to consider the benefits and drawbacks of quantitative and qualitative indicators when developing methodologies;

ii) Although full and complete harmonization among the three agendas may not be feasible nor useful, some degree of synergy could be beneficial, where appropriate, leveraging on the existing monitoring frameworks as appropriate;

iii) Enhancing individual and institutional technical capacity for data collection and assessment of adaptation is an ongoing task for many countries. Increased capacity can help to link data gathering and reporting systems for the three global agendas at national level;

iv) Improved coordination results in a reduced reporting burden for countries, improved political oversight, and enhanced cost-effectiveness of measures that cut across the three agendas. Government can draw on their financial and human resources in multiple line ministries/agencies to maximize impact and resource efficiency;

v) M&E programmes at sub-national level should be linked with national level M&E system to provide a complete picture on adapation;

b) Develop a user-friendly format information product to disseminate the outcomes of the meeting;

c) Continue work on national adaptation goals/indicators, as part of the next AC's work plan, in relation to the SDGs and the Sendai Framework.