Summary of the thematic dialogue on enablers and barriers to South-south cooperation on technologies for adaptation

United Nations Campus, Bonn, Germany
6 April 2016

Report

Summary

➢ The Technology Executive Committee (TEC) held a thematic dialogue on enablers and barriers to South-south cooperation on technologies for adaptation on 6 April 2016 on the United Nations Campus (Altes Abgeordnetenhochhaus) in Bonn, Germany.

➢ This document provides a summary of the thematic dialogue, covering the proceedings of the event, a summary of the presentations and ensuing discussions as well as the work and outcomes of break-out groups.

United Nations
Framework Convention on
Climate Change

I. Introduction

A. Background

1.   South-South cooperation (SSC) is an essential component of international cooperation. It should play a central role in the sharing, dissemination and scaling up successful development solutions and technologies. The Technology Executive Committee (TEC), in its role as the policy component of the Technology Mechanism, sees potential opportunities that the SSC could bring to facilitate enhanced action on technology development and transfer, in particular for technologies for adaptation.

2.   To deepen the understanding on this topic and to share and learn from experiences among countries regarding SSC on technologies for adaptation, the TEC held a thematic dialogue on enablers and barriers to SSC on technologies for adaptation, as part of the first meeting of the TEC in 2016.

3.   The thematic dialogue is a continuation of the work of the TEC in the area of technologies for adaptation that the TEC has undertaken since 2014, which included a workshop on "Technologies for Adaptation" and the development of two policy briefs (TEC Briefs) on technologies for adaptation in the water sector and in the agriculture sector.

4.   To facilitate the discussion of the thematic dialogue, a background paper on the topic was commissioned to provide the global context and replication potential on SSC on technologies for adaptation in the areas of agriculture and water based on real case studies and experiences on the ground. This paper was presented during the thematic dialogue.

B. Scope of the document

5.   This document provides a summary of the thematic dialogue, covering the proceedings of the event, a summary of the presentations and ensuing discussions as well as the work and outcomes of break-out groups.

6.   In supplement to this document, it should be noted that the thematic dialogue was webcast live, and its viewing is available on the TEC webpage of the technology information clearing house (TT:CLEAR),[1] as are all documents and presentations made during the dialogue.[2]

II. Objectives and form/nature of the dialogue

A. Objectives and expected outcomes

7.   The objectives of the thematic dialogue were to:

(a)   Share and learn from experiences among countries and institutions with regard to SSC and Triangular cooperation (TrC) in the area of technologies for adaptation in the sectors of agriculture and water;

(b)   Identify enablers, barriers and contributing factors to successful development, replication and transfer of technologies for adaptation in the SSC and TrC context;

(c)   Identify needs, processes, and actions for effective SSC and TrC, taking into consideration diversity of elements and specific characteristics of each region;

(d)   Highlight potential recommendations of the TEC with regard to policy that may contribute to successful SSC and TrC for development and transfer of technologies for adaptation.

8.   The expected outcomes of the dialogue were:

(a)   Enhanced awareness of potential SSC and TrC on technologies for adaptation; and replication and scaling-up potential of the same;

(b)   Enhanced understanding of enablers for and barriers to the successful development and implementation of initiatives on SSC and TrC in the areas of agriculture and water;

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[1] <http://unfccc6.meta-fusion.com/tec12/channels/livechannel-unfccc-tec-12>.

[2] <http://unfccc.int/ttclear/templates/render_cms_page?s=TEC_TD6>.

(c)   Potential areas of actions by the TEC and policy recommendations to promote further SSC for the development and transfer of technologies for adaptation identified;

(d)   Identified potential future work in this area.

B.   Format/nature and participation

9.   The thematic dialogue had four sessions:

(a)   Session I: Setting the context – Roles and contribution of SSC/TrC to technologies for adaptation;

(b)   Session II: Sharing experiences & lessons learnt to promote enablers and address gaps to facilitate and upscale SSC/TrC in the development and transfer of adaptation technologies in agriculture and water sectors;

(c)   Session III (break out group discussions): Potential areas of actions and recommendations to promote SSC/TrC on technologies for adaptation;

(d)   Session IV: Wrap up & way forward.

10.   The thematic dialogue was attended by members of the TEC and representatives of Parties, United Nations organizations, intergovernmental and non-governmental organizations, experts/resource persons, including from the Adaptation Committee, and members of the UNFCCC secretariat.

11.   Nine experts made interventions on various areas of the SSC on technologies for adaptation from various perspectives and backgrounds. These SSC included developing countries representatives, UN organisation, collaborative research centres, international organisations, practitioners, and financial institutions.

III.   Summary of the sessions

A.   Welcome and opening

12.   Ms. Duduzile Nhlengethwa-Masina, Chair of the TEC, opened the thematic dialogue by welcoming participants and highlighting the potential role of SSC in the sharing, dissemination and scaling up successful development solutions and technologies; including technologies for adaptation.

13.   She further outlined the objectives and expected outcomes of the thematic dialogue, and shared her expectations that the dialogue could also identify potential future work in this area, which may inform the discussion of the new rolling workplan of the TEC. In that regard, Ms. Nhlengethwa-Masina encouraged participants to actively engage in all discussions including in the break-out groups. She stated that other stakeholders should be able to participate online via social media by sending questions and comments for consideration by participants, by using the Twitter hashtag #climatetech.

B.   Session I: Setting the context - Roles and contribution of South-South and Triangular cooperation to technologies for adaptation

14.   The first session was moderated by Mr. Carlos Fuller (Caribbean Community Climate Change Center). It commenced with the presentation of a background paper commissioned by the TEC. It was followed by a panel discussion on the roles and contribution of SSC & TrC to technologies for adaptation in the agriculture and water sectors from the perspectives of various actors/institutions.

1.   Background paper

15.   The background paper on South-South cooperation on technologies for adaptation was commissioned by the TEC and was prepared by Ms. Karin Costa Vazques (Researcher and advisor in international cooperation for development). It aims to provide the context to the discussion of the thematic dialogue by highlighting the findings on enablers and barriers to the SSC/TrC based on real case studies, surveys and interviews, and findings from technology needs assessments (TNAs).

16.   Ms. Vazquez first explained the nexus of water-agriculture-climate, highlighting that these issues are closely intertwined and cannot be looked at in isolation one from another. She emphasized that

adapting water management and agricultural practices to climate variability requires integrated responses and technology, which can be fostered through the exchange of experiences of countries through SSC or TrC.

17.   She then shared the findings of the assessment of current initiatives and potential for SSC[3], where she pointed out that nearly 50% of the organizations that participated in the e-survey indicated that they had never engaged in SSC in technologies for adaptation. The assessment also highlights a number of common challenges for SSC on technologies for adaptation, including lack of alignment with development priorities, sector strategies and plans; inadequate policy/legal/regulatory frameworks, poor resource mobilization and predictability, and lack of human/technical resources and capacity.

18.   Ms. Vazques then presented recommendations on a number of actions that could be undertaken by various stakeholders to foster technologies for adaptation in the context of SSC (see Table 1 and 2 below). The recommendations were based on the findings of the survey and the following observations:

(a)   SSC in technologies for adaptation have low visibility. There is a limited awareness of what and where hard, soft and orgware technologies for adaptation from the South are located. There is also a need to establish an enabling environment for institutions and experts from the South to share information and knowledge;

(b)   The intersection between water, agriculture and climate change in SSC remains underexplored. There are only a few SSC initiatives in technologies for adaptation that adopt integrated approaches to the water-food-climate nexus;

(c)   SSC goes beyond financial transfers. It can foster adaptation measures through the exchange of technologies that countries accumulate in their own development processes and their adaptation to other similar environments. Bilateral funds and global trust funds figure among the main avenues for financing SSC in technologies for adaptation, while private sector engagement needs to be further developed. There is scope for cooperation among all developing nations in this regard.

19.   In the ensuing discussion, participants discussed various ways to enhance visibility of SSC in technologies of adaptation, including through the use of indicators (Sustainable Development Goals (SDGs) related indicators were suggested) taking into account the diverse nature of SSC approaches and modalities, the increase of regional cooperation, the potential link with relevant UN agency and Action Agenda, and through the panel expert establishment to address specific region or specific barriers. The discussion also pointed out the extension of the nexus climate-agriculture-water to include energy sector to increase the integrated approach to adaptation.

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[3] The assessment was based on: analysis of on-going and completed projects between 2010-2015 in which transfer of technologies for adaptation in the agriculture and water sectors have originated in developing countries; e-survey conducted with 138 National Designated Entities to the CTCN, 14 CTCN Consortium Partner representatives, and 102 CTCN Network Members; and three case studies on how countries have been addressing some of the barriers to SSC in technologies for adaptation.

Table 1
Policies and actions for enhanced SSC in technologies for adaptation

Issues	Actor	Recommendation	Action
Few integrated approaches to water food-climate. Limited awareness of what and where hard, soft and orgware technologies for adaptation from the South are located. Lack of an enabling environment for institutions and experts from the South to share information and knowledge.	Governments, research institutions, specialized UN agencies, programs and funds, and other national and international organizations. TEC/CTCN enhanced support to SSC in technologies for adaptation in water and agriculture.	A. Develop knowledge base of integrated technologies for climate change adaptation from the South. B. Create a policy space and network to promote SSC in technologies for adaptation.	1. Expand ongoing efforts to develop a broadly accepted definition for adaptation technologies. 2. Map technologies and systematize exchanges among developing countries, including strategies for capacity-building, management of indigenous technology, and scaling up. 3. TEC: include enhancement of SSC as a topic for discussion in the annual meeting, and thematic dialogues and other regular events. 4. TEC: establish a Panel composed of SSC experts and practitioners in the area of climate change adaptation. 5. CTCN: explore the potential for Arab States, Eastern Europe, etc. by identifying centers of excellence and engaging them in its network. 6. CTCN: review membership to balance regional participation and include a mix of (non-)/ governmental organizations.
Low visibility of SSC initiatives in technologies for adaptation.	Governments, research institutions, specialized UN agencies, programs and funds, and other national and international organizations. TEC/CTCN enhanced support to SSC in technologies for adaptation in water and agriculture.	C. Increase visibility of existing successful technologies and networks from the South. D. Develop an online knowledge repository and exchange platform to identify and match the demand with the supply of SSC in technologies for adaptation.	7. Develop indicators for identifying SSC project and activities/achievements (e.g. SSC 'marker') 8. TEC: Recommend the creation of a SSC marker 9. TEC: Facilitate a global initiative to map technologies and systematize exchange among developing countries. 10. CTCN: Develop a registry with all relevant information on SSC in technologies for adaptation to be hosted on the CTCN website.
Enhance bilateral funds and global trust funds support to SSC in up-scaling technologies for adaptation. Further develop private sector engagement.	Governments, research institutions, specialized UN agencies, programs and funds, and other national and international organizations TEC/CTCN enhanced support to SSC in technologies for adaptation in water and agriculture	E. Map existing climate funds for technologies for adaptation and how to access them. F. Assist Parties access and make better use of funding mechanisms.	11. Map existing commitments by countries, the mechanisms through which this funding will be disbursed, how organizations can access these mechanisms, and potential barriers to assess, disburse and use this funding 12. TEC: Propose a review of operational procedures of the GCF and the GEF to ensure these mechanisms can best support SSC in technologies for adaptation. 13. TEC: recommend specific allocations for SSC in technologies for adaptation 14. TEC: recommend mapping of commitments, mechanisms, and barriers to assess, disburse and use this funding.

Table 2
Tapping the potential contribution by other global mechanism and institutions

Recommendation	Action
Explore complementarity and foster cooperation among the TFM (Technology Facilitation Mechanism), the TEC and the CTCN with regards to the matchmaking functions as well as the facilitation of access to information, knowledge, experience and best practices with regard to the implementation of SSC initiatives in technology for adaptation	15. Joint policy spaces and networks to promote SSC in up-scaling technologies for adaptation. 16. Coordination of the SSC in technology for adaptation initiatives taken by the TFM, the TEC and the CTCN should be further discussed as the TFM evolves and taking into consideration the review of adaptation activities under the Convention scheduled for 2017 as well as the implementation of the 2030 development agenda.

2. Panel discussion

20.   The first intervention was made by Ms. Daniela Medina (Inter-American Institute for Cooperation on Agriculture), who highlighted that SSC requires great deal of knowledge management to connect the actors and the needs of countries; hence, an effective articulating mechanism is needed. She presented a few examples of creative ways to identify and share successful agriculture technologies in Latin Americas.

21.   Mr. Youba Sokona (South Centre) in his intervention pointed out the need to bring together three main clusters of actors: i) Policy - to understand better policy, regulatory, legislative aspects, ii) Knowledge – to produce, share, broker, and disseminate knowledge; and iii) Practice actors – to implement the action on SSC. There is a need also to identify actions and enabling environment for these actors to work together.

22.   The next panel intervention by Ms. Masako Ogawa (Global Environment Facility) emphasized that SSC is an effective instrument to share lessons, and to replicate the experiences and good practices, and that institutions in developing countries should play active roles to implement SSC. In this context, she presented three examples of SSC opportunities in the GEF projects, including Adaptation actions in Pacific Island and in the Andean Region, and enhancing capacity, knowledge and technology support to build climate resilience of vulnerable developing countries.

23.   Mr. Juan Hoffmeister (Green climate Fund) outlined potential for SSC that the GCF could assist, including the promotion of regional opportunities, international entities support to direct access entities, information exchange, and country programme alignment with existing processes, such as TNA and NAPs, noting that in country programmes, technology should not be a stand-alone solution but be rather part of a systematic intervention. He also emphasized the important role of international organisations in SSC in technologies for adaptation.

24.   In their interaction with participants, the panellists discussed the pro-active approach from both recipient and provider sides needed to make the SSC work effectively, the unique opportunity that the SSC provides related to SDGs (beyond climate goals), and the importance of sustainable replication and up-scaling of technologies for adaptation.

C. Session II: Sharing experiences to promote enablers and address gaps to facilitate SSC/TrC in the development and transfer of agriculture and water technologies

25.   The second session was moderated by Mr. Youba Sokona and consisted of presentations of case studies highlighting success stories and lessons learned from a variety of SSC and TrC in many areas.

26.   The first presentation was made by Mr. Andrew Noble (International Center for Agricultural Research in the Dry Areas - ICARDA), focusing on SSC experiences in the water/agriculture sector in dry/water-scarce Middle East and North Africa (MENA) regions. Mr. Noble highlighted that the reason why interventions are carried out in this region is because this is the region where water is the most significant challenge and it may get worse as the climate is changing, and at the same time the region is the home for genetic resources of major food crops consumed in the world today. Hence, opportunities

exist for genetic improvement through gene mining to increase yields under changing climate conditions.

27.   The first case study he discussed was the application of Raised Bed Seeder, which involved National Agricultural Research Systems in seven countries (Egypt, Iraq, Jordan, Lebanon, Palestine, Tunisia, and Yemen) in collaboration with US universities and international research centres. The application of the seeder, an Indian original design but modified to fit the needs of the region, has resulted in reduced water need by 30%, increased yields by 25% and has been applied successfully in 70,000 acres in Egypt. The second case study was the hybridization of West Asia lentils using breeders from India, Morocco and ICARDA, where the resulted germplasm was shared across India, Bangladesh and to surrounding countries in the region, through an international nursery program free of charge. As a result, Nepal has improved its food production and emerged as an exporter of lentil in South Asia. Mr. Noble then shared his views on enablers of a successful SSC, including the need to have common goal, commitment, and buy in at high level, and institutional support for enabling data sharing and for training specific skills required for collaborative research.

28.   The next presenter, Mr. Carlos Fuller, pointed out the vulnerability of countries in the Caribbean region and small island countries, owing to their typical geography (small size, limited mobility, low elevation), economy (heavily dependent on tourism and agriculture), and threats to water resources due to, for example evaporation and salinization. Recognizing these similar challenges, countries in the region cooperate to develop a regional strategy for coping with climate change over the period 2012-2022 called "Implementation Plan for the Regional Framework". Central to this strategy is the water sector; however various actions adopted a cross-sectoral approach.

29.   One example presented was the installation of a Solar Water Reverse Osmosis potable water system powered by renewable energy in the Paget Farms area of Bequia in St Vincent & the Grenadines where excess energy produced by the system is sold to the grid. This model was very successful so it was extended to Grenada (Carriacou and Petite Martinique islands). Mr. Fuller also shared another example about the installation of a water conservation system at the Coconut Bay Resort Vieux Fort, Saint Lucia, which was done through partnership with the private sector/hotel owners applying a 50%-50% funding scheme. Another example was a Belize Agroforestry project that was successfully replicated in Saint Lucia for replantation of aged cocoa plantations. Finally, Mr. Fuller pointed out that in addition to a regional strategy, total engagement of everyone, partnerships (MOUs) with South and North, regional ownership, and sustainable interventions, are all key to the success of the SSC.

30.   The last presentation was made by Mr. Jason Spensley (CTCN). He explained that support provided to developing countries via the CTCN Network members is a triangular cooperation as the developed countries provided funding for these technical assistance activities. Mr. Spensley elaborated on an example about facilitating financing to address water scarcity in Namibia, where the technical assistance was provided by the CSIR of South Africa, Carbon Trust, UNEP-DTU Partnership. He pointed out that strong political championship, technical expertise, broad support by national stakeholders, are very important elements in ensuring successful cooperation. This cooperative engagement is not only during the initiation and conduct of the process, but also for the monitoring and evaluating the implementation of the SSC.

31.   Finally, Mr. Spensley shared his assessment of crucial factors to sustainably upscale SSC for development and transfer of technologies for adaptation. These include: adequate, predicable and non-tied funding, technology neutrality, diversity of available sectoral and regional expertise, policies and procedures to ensure beneficiary ownership, and linkages with financing opportunities for deployment and scale-up of adaptation technology solutions.

32.   In the discussion that followed, participants exchanged views on country ownership, how effective communication and country driven-ness could be used to identify opportunities for building long-term strategy and partnership in the SSC, and the link of SSC replication/scaling up with the need of funding infrastructure to share knowledge and information.

D.   Session III: Potential areas of actions and recommendation to promote SSC/TrC on technologies for adaptation

33.   Session III consisted of a facilitated break out group discussion and was moderated by Mr. Kuni Shimada (member of TEC taskforce on adaptation). This session was preceded with a brief intervention by Ms. Teresa Liu from the UN Office for South South Cooperation (UNSSC) via webex.

1.   Promoting SSC on technologies for adaptation: role of global mechanism and international communities

34.   Ms. Liu started her intervention by explaining the mandate of the UNOSSC in promoting and supporting SSC and TrC. She shared UN Member States perspectives that SSC and TrC will be key to achieving the targets set in the 2030 Agenda and that there is a movement towards more formalized and institutionalized forms of SSC. She also highlighted that the UN system contributes through measures such as supporting research and analysis, establishing and serving as a facilitator of exchange and cooperation, implementing capacity development activities, and developing partnerships.

35.   Specifically on support for technology transfer, she mentioned that since 2009 UNOSSC has operated a platform that supports the exchange of technology solutions, policies, practices, and innovations between countries of the global South, and that this platform is transitioning to support the online platform called for under the Technology facilitation Mechanism (TFM). Other UNOSSC support also includes the Southern Climate Partnership Incubator programme.

36.   The discussion that followed highlighted the need to understand better how the UN system works in this field and where synergies can be found, as the number of players is growing that work on SSC, and therefore more coordination is needed. Ms. Lu also suggested the potential of UNOSSC and UNFCCC working together, for example through organising a joint meeting with TEC and CTCN, or producing a report on SSC for countries with special circumstances such as LDCs, or land-locked developing countries.

2.   Break out group discussions

37.   To allow active participation and sufficient time for focused discussions, the participants of the thematic dialogue were divided into three breakout groups, facilitated by members of the Taskforce on adaptation (Mr. Omedi Jura, Mr. Al Binger, Ms. Viktoria Shtets), and discussed the following questions:

(i)   What would be required for the setting up of sustainable SSC & TrC processes?

(ii)   What could be areas of interventions by the TEC, Technology Mechanism and other stakeholders?

(iii)   What could be recommendations by the TEC to policy makers to enhance replication and upscale the potential of SSC and TrC?

38.   Following the breakout group session the facilitators reported back on the responses of each of the breakout groups to the aforementioned questions.

39.   With regard to the first question, the breakout group suggested the following would be required to setup **sustainable SSC and TrC processes:**

(a)   Use a systematic/systemic approach (step-by-step approach);

(b)   Undertake a benefit analysis to determine the added value of SSC and TrC in the technology development and transfer activity;

(c)   Use existing national and regional mechanisms, and CTCN and other organizations rather than creating new mechanisms;

(d)   Develop a view/perspective of the broader picture/inventory, such as globally what options are available, and what relevant knowledge and expertise needed;

(e)   Draw upon and use databases; information and knowledge as required;

(f)   Involve people on the ground (champions, users, etc,) not just policy-makers;

(g)   Monitor and evaluate the activities, for example through use of indicators.

40.   With regard to the second question, the breakout groups suggested the following could be **areas of intervention by the TEC, Technology Mechanism and other stakeholders**:

(a)   The TEC could continue its work on SSC, and broaden the focus using also existing tools as a priority but also exploring other opportunities that could benefit SSC;

(b)   The TEC could promote discussions, providing input/recommendation to the COP, initiate cooperation amongst the relevant bodies, including the CTCN ;

(c)   The CTCN could broaden its scope and maybe open a new window within the CTCN to pro-actively promote such collaboration, providing a seed fund to initiate collaboration. The need to engage NDEs, and to develop linkages to the LEG to work with LDCs was identified;

(d)   The TEC in cooperation with the CTCN could involve industrialized countries, initiate a learning process that could contribute to building a body of knowledge on up-scaling adaptation technologies to serve as info resource for developing countries;

(e)   TrC is considered very important and the TEC and the CTCN should explore a mechanism that would efficiently promote such cooperation, for example on early warning systems, climate observations, and insurance;

(f)   The quality component of technologies was considered important, the TEC could play/support/guide monitoring; assessment and validation role;

(g)   Enhance peer-to-peer cooperation, expertise, and exchange of experiences, using the existing Centers of Excellence as focal points;

(h)   Design more comprehensive types of information based on success stories.

41.   With regard to the third question, the breakout groups suggested the following could be **recommendations by the TEC to policy makers to enhance replication and upscale potential of SSC and TrC**:

(a)   Information sharing and knowledge management on adaptation technologies to be taken up by governments at wider scope with relevant stakeholders;

(b)   Entry points for the private sector are usually umbrella bodies or associations; each private sector organization at national level should work closely with the policy custodian in their core business to utilize opportunities that come with technologies for adaptation;

(c)   Governments should play their roles in providing the right enabling environment to attract private sector investment and catalyze innovation;

(d)   National institutions should be linked to the relevant private sector entities to enable them to supplement their work;

(e)   Encourage governments to make use of universities/academia, regional centres/entities, CTCN and NDEs, and other international organizations to identify, implement and upscale SSC.

E.   Session IV: Conclusion and wrap-up

42.   Finally, in the conclusion and wrap-up session of the thematic dialogue, Mr. Michael Rantil, Vice-Chair of the TEC, gave a short summary of the discussion. Mr. Rantil highlighted some of the issues discussed, including:

•   Potential and opportunities offered by SSC and TrC need to be optimally explored and fully supported by countries and all stakeholders involved;

•   There is no uniform approach to SSC, hence the need to adjust the SSC approach and modalities to country's or site/local situation;

•   Successful SSC is within reach and exists already, however there may be constraints faced in specific situations. Financing is critical but not always an issue;

- Successful and sustainable SSC requires bringing together various actors to work together with different capacities: policy, knowledge, and practise, and looking beyond climate into the inter-linkages across sectors, such as agriculture-water-energy-climate;

- Knowledge & information sharing requires institutional support to enable effective knowledge management and information sharing. Creative tools such as the use of champion, information brokering, and "help desk" services would help accelerating the knowledge dissemination;

- Global mechanism and international organisations (UN agencies, partnerships, and global centres) can play important roles in supporting the promotion of SSC; they should intensify working in partnership with countries and collaboration with other UN institutions, such as the TEC.

43.   Mr. Rantil thanked all participants for the productive and fruitful discussions and extended his deep appreciation to all experts and practitioners for sharing their insights and experience during the thematic dialogue. Mr. Rantil concluded and closed the workshop by reiterating that the outcome of the dialogue would be very useful for the TEC in the context of developing its new rolling workplan.

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