

TEC submission to the call for inputs on the 2023 focus area of the PCCB | April 2023

Context: In response to the PCCB call for inputs on existing and emerging capacity gaps and needs as well as challenges, case studies, good practices, tools and lessons learned with regard to capacity-building support for adaptation, especially as it relates to addressing gaps and needs of developing countries in formulating and implementing their NAPs, the TEC wishes to offer insights and relevant elements from the TNA process, emerging from previous work of the TEC and secretariat on the topic¹, that may inform and enrich this exercise, addressing the key elements outlined in the call for inputs.

Background: The technology needs assessment (TNA) methodology is a mature process under the UNFCCC, which follows a participatory and country-driven approach and has evolved over about two decades. Countries undertake TNAs to determine their climate technology priorities and needs and develop technology action plans (TAPs) to meet those needs, including by examining relevant information on climate mitigation and adaptation technologies. This methodology may also be useful for developing countries as they work to further develop and implement their NAPs and NDCs.

Decision 13/CP.18, para. 12 highlights that the TNA process should be integrated with other related processes under the Convention, including nationally appropriate mitigation actions, national adaptation plans and low-emission development strategies. Since the adoption of the Paris Agreement, several Parties refer to previously conducted TNAs as a starting point and/or source of information for their NDCs and vice versa.

Responding to the key elements outlined in the call for submission

On key challenges in the formulation and implementation of NAPs, the following could be highlighted:

- **Unavailable and/or lack of access to reliable, comparable, and up-to-date baseline data and information**, particularly at the sector and local levels, prevents a thorough assessment of technology/adaptation needs, and the identification of context-specific priorities and options (including with regard to analysis of feasibility, readiness and costing).
- **Outdated needs assessments and plans** hinders evidence-based target setting and effective technology/adaptation policy and actions on the ground. In the absence of institutional arrangements and protocols for regular updating of strategies, needs assessments, and action plans, such tools fail to fully serve their purpose.
- **Insufficient knowledge and technical skills at the national and sub-national levels** in areas such as risk analysis and management, particularly in SIDS and LDCs, impede the identification of appropriate policy and actions and analysis/quantification of their potential for scaling up and improving resilience, including with regard to emerging and transformational technology/adaptation measures.
- **Lack of resources and institutional inefficiencies in accessing climate finance**, in addition to worsening the conditions as regards the above mentioned points, perpetuates the implementation gap and hampers climate action on the ground.

On areas for improvement for the existing capacity-building efforts related to the formulation and implementation of NAPs, the following considerations may be highlighted:

¹ Relevant resources are provided in the last section of this document

- **Integrating TNA/NAPs processes** in other relevant processes with a view to establish synergies, avoid duplication of efforts, make use of the experience acquired, and retain the capacities built in the TNA-TAP process.
- **Ensuring systematic and cyclical updates of TNA/NAPs**, in coherence with data collection, needs assessment and target setting for other national, sub-national or sectoral strategies/plans would enhance efficiencies and synergies in such processes and efforts, and promote the use of evidence-based targets. For instance, the timing of TNA/NAP updates should be planned with a view to inform and be informed by the NDC ambition cycle.
- **Institutional-level coordination mechanism, as well as integrated monitoring, reporting and measurement systems** are effective means to: ensure TNA/NAPs are prepared in coherence with other instruments under the UNFCCC and other multilateral environmental agreements (e.g. NDC, LT-LEDS, LDNs); foster continuity and cross-fertilization in the climate policy across sectors and governance levels; avoid duplication of efforts and undue reporting burden for national climate change teams, especially in the LDCs and SIDS; and ensure an effective, efficient and impactful TNA/NAPs process.
- **The TNA/NAPs should be connected to and supported by financing and implementation mechanisms** that bolster the uptake and scaling of technology/adaptation action on the ground, through both international and domestic resources. Utilizing project preparation/implementation facilities (e.g. the GCF PPF), promoting multi-stakeholder partnerships and investment strategies, and fostering an enabling environment for international cooperation on technology/adaptation are key to boosting the efficiency and effectiveness of project pipelines and accelerating the implementation.
- **Integration of cross-cutting issues in the formulation and implementation of TNA/NAPs** is key to ensure such instruments systematically take into account gender considerations and voices of the most vulnerable groups, as well as knowledge and practices of indigenous peoples and local communities, and that technology/adaptation measures emerging from such instruments yield just and equitable outcomes.

On the need for new or additional capacity-building efforts related to the formulation and implementation of NAPs, the following may be considered:

- The **step-wise decision making procedure, used as part of the Global TNA Project, could be replicated in the context of NAPs** towards enhanced implementation efforts. The process consists of three main stages: (1) prioritization of technologies for selected sectors/sub-sectors for meeting countries' climate and development goals, (2) identifying barriers and enablers for scaled up and accelerated implementation of these technologies, and (3) formulating technology action plans.
- **Using existing resources based on the best science available** (e.g. The Working Group II contribution to the IPCC Sixth Assessment Report "Climate Change 2022: Impacts, Adaptation and Vulnerability" regional chapters) might be helpful in identifying the key risks, relevant adaptation options and sectoral priorities for adaptation.
- **Repositories of tools, knowledge products, and practical technology/adaptation measures** are instrumental in raising the ambition of climate plans and policies (i.e. TAP/NAPs) and boosting the uptake and scaling up of transformative actions identified therein.
- **Monitoring and tracking tools for implementation of TNA/NAPs**, and the state of play of the implementation of transformational climate technologies for mitigation and adaptation in key sectors, powered by digital technologies, could facilitate the data and information gathering,

foster climate transparency and reporting, and promote evidence-based target setting and decision making.

- **Peer-learning and knowledge sharing among TNA focal points** -including through regional and global workshops and development of success stories- has proven to be effective in advancing the collective understanding of the TNA process and its significance, and building a supportive community of TNA experts globally, which may serve as an inspiration towards strengthening a NAP community.
- **Provision of trainings and practical guidance for national teams on how to access climate finance and promote climate investments in the context of TNA/NAP implementation** is a necessary step to ensure the application and usefulness of such tools in the country, e.g. through the provision of guidelines and skills for developing winning project proposals, putting in place favorable regulatory measures, and promoting public-private partnerships.
- **Interdisciplinary and cross-sectoral technical teams and approaches behind the formulation and implementation of TNA/NAPs** are pertinent to ensure holistic technology/adaptation measures that maximizes synergies and complementarities in climate actions and development co-benefits on the ground, e.g. in the nexus of water-food-energy.

On target recipients and providers of capacity-building efforts related to the formulation and implementation of NAPs, the following recommendations may be taken into account:

- **Capacity-building recipients**, much like the diverse range of stakeholders involved in the formulation and implementation of the TNA/NAPs, may range from national government representatives and TNA/climate change focal points to representatives of industry sectors, financial entities and non-state and private sector actors.

Findings from the terminal evaluation of the phase 1 of the TNA global project highlighted that, beyond global and regional workshops, tailored in-country capacity-building would be very beneficial to the TNA processes and relevant stakeholders.

In addition, a growing attention is put towards raising awareness of financial actors about the TNA process and strengthening their engagement in the formulation and implementation of TNAs and TAPs. For instance, the TEC is convening a global event with financial actors at the SB58 to raise awareness of the TNA results. Such events could be replicated at the regional and national levels, with a view to mobilize climate funds and investments for the implementation of prioritized technology/adaptation measures identified in TNAs/NAPs.

- **Capacity building providers**, whether at the national or global level, could play a key role in highlighting success stories in the preparation of TNA/NAPs; showcasing means and tools for assessing and prioritizing technology/adaptation measures; promoting peer exchanges among national/sectoral teams on overcoming common challenges and sharing lessons learned; and mainstreaming cross-cutting issues in the formulation and implementation of TNA/NAPs.

Capacity-building efforts around the formulation and implementation of TNA/NAPs should be conducted in an inclusive and participatory manner and convene various stakeholders, in particular actors from the private sector, to promote cooperation and information flow at the sectoral and sub-national levels.

In addition, such capacity-building efforts should include measures to enhance the capacity of national teams for accessing climate finance and creating opportunities for climate investments as well as fostering systemic interactions with financial actors at the global, regional and domestic levels.

Useful links and resources

- [TNA process under the UNFCCC](#)
 - [Learn more about the TNA guidance](#)
 - See some of the [success stories](#), including snapshots from [2021](#), [2019](#), and [2017](#)
 - Learn more about [adaptation-focused success stories](#) from the TNA process, including in the water, agriculture and health sectors
 - Read the latest (fourth) [synthesis report of technology needs](#) identified by Parties not included in Annex I to the Convention
- [TEC's work on linkages between TNA and NDCs processes](#)
 - [Paper](#) on linkages between the TNA process and the NDC process
 - [Policy brief](#) on linkages between the TNA process and the NDC process
- [The Global TNA Project](#), implemented by the UNEP-CCC on behalf of the GEF