

Please note that this request was initially made by the country under the Adaptation Fund Climate Innovation Accelerator (AFCIA) programme, using a template for the application (technology concept) of AFCIA. As the implementation of technical assistance under AFCIA was limited, the request was not selected; however, in discussion with the country, it was agreed in principal that the request can be implemented using CTCN resources. Hence, a reference number for the CTCN TA request is generated with the AFCIA application attached here. As soon as the signed request in CTCN TA request template is received from the country, this document (AFCIA application) will be replaced by the same. Please see the AFCIA Technology Concept from the next page onwards.

## Technology concept submission form

### Guidelines:

- Technology concept submission form should be completed by an applicant organisation in collaboration with the national focal points to the CTCN (National Designated Entity, NDE) and the Adaptation Fund (Designated Authority) of the country. Please see updated contact list of the NDEs and the Designated Authorities through web-links as below:
  - NDE: <http://unfccc.int/ttclear/support/national-designated-entity.html>
  - Designated Authority: <https://www.adaptation-fund.org/apply-funding/designated-authorities/>
- The form must be signed by the NDE before official submission to UNEP-CTCN.
- The form can be submitted as a Word file containing a digital signature or as a signed and scanned PDF file in combination with an un-signed Word file.
- For the technology concept submitted by multiple countries, all the NDEs of the respective countries shall sign identical forms before official submission to UNEP-CTCN.

<b>Country or countries:</b>	CAMBODIA
<b>Title of the technology concept:</b>	Climate risk assessment for subnational adaptation and establishment of a local climate information system for climate change adaptation (LISA) <i>Please reflect the objective of the technology concept in the title (maximum 200 characters).</i>
<b>NDE:</b>	<i>Please add name of the organisation, name of the focal point, position, email and address.</i> Dr. Hak Mao Director of the Department of Climate Change General Secretariat of the National Council for Sustainable Development/ Ministry of Environment of the Kingdom of Cambodia No. 503, Road along Bassac River, Sangkat Tonle Bassac, Chamkarmon, Phnom Penh, Cambodia Phone: (855-78) 996 479 Email: maohakccd.se@gmail.com
<b>Applicant:</b>	<i>Please add name of the organisation, name of the contact person, position, email and address of the organisation.</i> NCSD (General Secretariat of the National Council for Sustainable Development - department of climate change) Dr. Hak Mao Director of the Department of Climate Change General Secretariat of the National Council for Sustainable Development/ Ministry of Environment of the Kingdom of Cambodia No. 503, Road along Bassac River, Sangkat Tonle Bassac, Chamkarmon, Phnom Penh, Cambodia

Phone: (855-78) 996 479

Email: maohakccd.se@gmail.com Email: monyneath0777@gmail.com

**Geographical scope:**

- Community level
- Sub-national
- National
- Multi-country

*If the technology concept is at a sub-national or multi-country level, please describe specific geographical areas (provinces, states, countries, regions, etc.)*

*The technology concept will be designed at national level to be applicable at local level – under an overall national coordinating and managing system.*

**Problem statement related to climate change (up to one page):**

*This section should answer the question “what is the problem?” Please summarise the problem related to climate change and/or the negative impacts of climate change in the country that the technology concept aims to address.*

As set in the NDC<sup>1</sup>, Cambodia is considered one of the most vulnerable countries to the impacts of climate change and is particularly vulnerable to floods, droughts, windstorms, and seawater intrusion. Climate change may reduce the country’s annual average GDP growth by 6.6% and absolute GDP by 0.4% in 2020, by 2.5% in 2030, and up to 9.8% in 2050. This may delay reaching upper middle-income status by one year.

Cambodia’s vulnerability is characterised by frequent floods and irregular rainfall, coupled with an agrarian based economy, limited human and financial resources, insufficient physical infrastructure, and limited access to technologies. Despite rapid economic growth Cambodia remains an agrarian country with the agriculture sector accounting for about 26% of GDP and 51% of employment; with a young population and growing workforce, agricultural sector growth remains important to ensuring economic opportunities for Cambodia’s population, particularly in the event that growth in manufacturing, construction and services proves more moderate than in the recent past. However Cambodia’s agriculture sector is highly climate-dependent, being dominated by wet-season rice production in fields that are watered only by rainfall or by only rudimentary supplementary irrigation infrastructure. Some of the most commercially productive rice-growing areas are dominated by dry season production but in these areas irrigation is heavily dependent on annual cycles of flood and recession as well as on streamflow in natural rivers. Moves to diversify agriculture including expanding production of higher-value crops are also heavily constrained by water availability. Global climate change is already having effects in making the seasonal rainfall patterns less predictable and is expected to result in more frequent and more severe extreme flood and drought events, with consequent damage to crops. Increasing temperatures may have damaging consequences including reduced rice yields, increased incidence of crop pests and increased livestock diseases. Increased temperatures may also have harmful consequences for human health.

As an inevitably disaster-prone country, Cambodia is exceptionally high at risk when it comes to climate change activities; far over 90 percent of the total population in Cambodia are measured to

be dependent upon the land for their livelihood, but also their lack of facilities and prior knowledge to cope with numerous floods and droughts has reluctantly urged them to continuously experience considerable amounts of economic loss and land degradation<sup>2</sup>. According to KEI (2016)<sup>3</sup>, the provinces Prey Veng and Battambang are expected to be particularly vulnerable to climate change:

**TABLE 8. CLIMATE CHANGE VULNERABLE PROVINCES PER SECTORS<sup>7</sup>**

Main Sector	Most Vulnerable		
	Province 1	Province 2	Province 3
Agriculture	Battambang	Prey Veng	Kandal
	Prey Veng	Battambang	Thbong Khmom
	Prey Veng	Battambang	Kampong Thom
Water	Kampong Cham	Banteay Meanchey	Thbong Khmom
	Koh kong	Phnom Penh	Prey Veng
	Battambang	Kandal	Prey Veng
	Battambang	Prey Veng	Thbong Khmom
Health	Prey Veng	Kandal	Battambang
	Battambang	Prey Veng	Kandal
	Prey Veng	Battambang	Kampong Cham

If a number of initiatives are under implementation to help address the climate challenge, support is still highly needed to improve (local) decision-making process on adaptation though the production and use of relevant data at different scales – as highlighted in the 2019 mid term review of Cambodia Climate Change Strategic Plan. Collecting and processing data at the local scale is particularly critical as the impacts of climate change are experienced and managed at the local level. Building on yet existing facilities (see past and on-going efforts part), the establishment of a multi-scale, inclusive, users' friendly climate information system is needed to help scaling up adaptation policies and projects, in alignment with the national guidelines and corresponding needs. When designing this system, lessons have to be drawn from observed challenges (see technology barriers part), while taking into account knowledge sharing and M&E requirements (see Alignment part).

**Past and on-going efforts to address the problem (up to half a page):**

*This section should answer the question “what has been done or is currently being done to address the problem?” Please describe past and on-going processes, projects or initiatives implemented in the country or region to tackle the climate problem as described above.*

During the last decade, Cambodia committed to climate action, as formalized in its Cambodia Climate Change Strategic Plan 2014-2023 (CCCSP), where much emphasis is put on building institutional capacity and science-based knowledge for projection of climate change impacts, adaptation and disaster risk reduction (Strategic Objective 5: Improve capacities, knowledge and awareness for climate change Responses). The improvement of information systems is a key CCCSP component - to help build resilience capacity and production skills, especially at the community level, to effectively overcome climate change impact. Expected improvements refer to i) the capacity for collection, analysis, modelling and interpretation of climate data and information dissemination to various end-users, including seasonal forecasting for adaptation and community

<sup>2</sup> MoP, 2013

<sup>3</sup> Scientific Report for Climate Change Projection: Cambodia, KEI, 2016

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early-warning facilities for disaster risk management, ii) the national weather monitoring and forecasting systems and develop partnerships for creating downscaled models of future climate, iii) early-warning systems and programmes for climate-related disaster management and recovery, iv) lessons learned, local knowledge and good practices for development of policies and actions for adaptation and mitigation, v) a ‘knowledge management centre’ for facilitating access to up-to-date information for climate change responses.

On production, access and use of climate change information (CCCSP process indicator 4), the country had partially achieved some milestones – but not fully achieved any milestones. In particular, there has been progress in the establishment of coordination mechanism for data sharing and a climate change knowledge management platform, and the availability and accessibility public meta-database listing climate change info<sup>4</sup> (CCCSP Mid term review), building on downscaled climate projections (including KEI findings<sup>5</sup>). Much effort has also been spent in early warning systems: e.g. under the GEF-funded project on Strengthening Climate information and Early Warning Systems in Cambodia, a network of climate infrastructure has been installed including 53 automatic stations across the country, a hydro-meteorological platform<sup>6</sup>. Key challenges are still ahead as commented below.

In 2011, the National Committee for Sub-national Democratic Development Secretariat (NCDD-S) started the Local Governments and Climate Change (LGCC) project - with finance and technical assistance from CCCA-TF under MoE and UNCDF. LGCC is designed and implemented within the framework of the “Local Climate Adaptive Living Facility” (LoCAL) which is the UNCDF flagship global program to promote climate change–resilient communities and economies by increasing financing for and investment in climate change adaptation at the local level in least developed countries. Vulnerability Target Province for LGCC were identified based on Vulnerable Index developed by NCS/MoE

Following the LoCAL 3-step process, a pilot phase was initiated in 2011 leading to a second phase (LGCC-2) commenced in 2013, that enabled a progressive implementation in the country. Building on the achievements of the previous phases (Vulnerable Communities Supported to Plan and Implement Investments for CCA in 8 Districts, 90 climate-resilient sub-projects funded, a total number of beneficiaries of 320,934), the country now aims at scaling up the mechanism all-over the country. To do so, it requires further assistance notably for the design of tools and technologies supporting the adaptation decision-making process and services delivery at local level.

**Specific technology<sup>7</sup> barriers** (up to one page):

*This section should answer the questions “what are the technology barriers that hinder national efforts described above” and “how will the technology concept complement these efforts?” Building upon the problem statement and taking into consideration the existing efforts described above, please describe the specific technology barriers encountered by the applicant to identify, assess or deploy climate technology(ies) in an effort to address the problem statement. The described barriers should be within the scope of the technology concept (described in the section below).*

<sup>4</sup> [Data Portal | The National Council for Sustainable Development \(moe.gov.kh\)](http://dataportal.moe.gov.kh)

<sup>5</sup> KEI, 2016

<sup>6</sup> [Project Closing Workshop Strengthening Climate Information and Early Warning System | UNDP in Cambodia](#)

<sup>7</sup> **“any equipment, techniques, practical knowledge and skills needed for reducing greenhouse gas emissions and adapting to climate change”** (Special Report on Technology Transfer, IPCC, 2000)

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The CCCSP 2019 midterm review finds that critical improvements are needed regarding production, access and use of climate change information (CCCSP process indicator 4). If some relevant climate modelling information has been made available by some projects, there is still limited domestic capacity to generate, analyse, update and manage climate data on a regular basis. While there has been some progress on building a public meta-database on climate, further progress is needed; there has still many information gaps, among other things on the impacts of climate change in urban and coastal areas and in non-primary economic sectors, including tourism.

Support is then needed to help Cambodia progressing toward a robust decision-making on adaptation decision-making through the implementation of a widescale climate information system, tailored to users' needs, populated with relevant and reliable information on a timely basis – including a comprehensive set of scientific data and evidence-based climate change risk and vulnerability analysis. Data produced will also help improve the M&E system: methods in place seem not totally appropriate - very lengthy, with problems in accessing the data source for the impact indicators. Needs for improvement are observed at the national level but also at sub-national level: if the CCCSP supports the mainstreaming of climate change into sub-national planning and budgets (specific objectives 6 and 7) and contributed to disseminate climate information and guidelines for climate change mainstreaming at the sub-national level – notably through the Local Governments and Climate Change (LGCC) project, deficits in data circulation compromise proper coordination and management of the information process.

Those various shortfalls refer to the need for a better planning and decision-making process for adaptation actions in relation with community climate challenges, what requires a better understanding of issues and solutions building on scientific and evidence-based information. When facing those specific challenges, identified barriers (CCCSP midterm review) include: lack of a protocol for the management and exchange of data, lack of a central clearing house that ensures climate data is analysed/updated/managed, low availability of climate modelling information to public institutions, no mechanism in place to systematically gather evidence on what works well and what works less well and replicate and scale up what has worked well.

Furthermore, as was commented during the closing workshop of the GEF-funded project on Strengthening Climate information and Early Warning Systems, climate information and early warning systems is not only about installing hardware and software, it is also about applying climate data for better development planning. To do so, it is particularly important to involve a series of stakeholders, notably at local scale: local communities along with local governments; the latter are uniquely positioned to collect data on vulnerable communities and groups across their territories as they are responsible for a variety of sectors and areas which are climate sensitive and of extreme importance to the success of adaptation measures – including land use, infrastructure and water management.

From a governance perspective, better coordination will be needed from a sectoral but also from a spatial perspective, notably between the NCDD and the Department of Local Governments in the Mol - both being involved in the LGCC project.

#### **Sectors:**

*Please indicate the main sector(s) related to the technology concept:*

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<input checked="" type="checkbox"/> Agriculture	<input type="checkbox"/> Coastal zone management	<input checked="" type="checkbox"/> Disaster risk reduction	<input type="checkbox"/> Food security
<input type="checkbox"/> Forests	<input type="checkbox"/> Human health	<input type="checkbox"/> Marine and fishery	<input checked="" type="checkbox"/> Rural development (resilience)
<input type="checkbox"/> Urban development (resilience)	<input checked="" type="checkbox"/> Water management		

*Please add other relevant sectors:*

**Cross-sectoral enablers and approaches:**

*Please indicate the main cross-sectoral enablers and approaches:*

<input type="checkbox"/> Communication and awareness	<input type="checkbox"/> Economics and financial decision-making	<input checked="" type="checkbox"/> Governance and planning	<input checked="" type="checkbox"/> Community based
<input checked="" type="checkbox"/> Disaster risk reduction	<input checked="" type="checkbox"/> Ecosystems and biodiversity	<input checked="" type="checkbox"/> Gender	

**Technology concept requested (up to one page):**

*Founded on the problem statement, past/on-going efforts and technology barriers, please describe the technology concept. The technology concept should clearly contribute to adaptation to climate change as described in the problem statement and contribute to overcome the specific technology barriers. Within a clearly defined scope, the description of the technology concept should be structured into the following*

- **Overall objective**  
The general objective of the technology concept is to establish a local climate information system for climate change adaptation (LISA) to climate change in Cambodia. More specifically, the purpose is to: i) analyze current and future risks according to the approach advocated in the fifth report (AR5) by the Intergovernmental Panel on Climate Change and produce data and information accordingly – as an input to the information system; ii) undertake a country climate risk assessment for subnational adaptation and iii) establish a climate information system to inform local decision making
- **Anticipated groups of activities to be performed by the micro-grants project**
  - . Stocktaking
    - In-depth assessment of the climate information system in place
    - Stakeholders' mapping
    - Needs' assessment – specific attention to local needs as well as to gender issues
  - . Cambodia Country Report on Climate Risk Assessment (“soft technology component”)
    - Data collection through individual surveys and focus groups
    - Collection of climate and secondary data – sex-disaggregated when relevant
    - Data analysis and processing
    - Design of processes to gather evidence on what works well and what works less well, with a focus on leveraging data from local level.
  - Climate information system (“hard technology component”)
    - Design of the mock-up of the information system
    - Mock-up validation workshop
    - Design of a protocol on data management and exchange (including regulatory aspects) – involving local governments.
    - Implementation of the system
    - Set up of a central clearing house to ensures climate data check and management ('knowledge management centre')
    - System testing
    - Installation and operation of the information and monitoring system
    - System summary guide, system user guide and climate information production guide
  - . Transverse management
    - Progress reports (inception, intermediary, final)
    - Multi-stakeholders (data producer and users) workshops
    - Knowledge sharing events
- **Anticipated products to be delivered by the micro-grants project**
  - . A national Climate Risk Assessment, which combines a climate downscaling model with a vulnerability analysis to identify climate risk maps at the district level and for prioritized sectors (e.g. agriculture, health and water)
  - . A preliminary design of the information system
  - . A system's user guide
  - . A system's-aided guide on the production of local climate information

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- . A local information system for climate change adaptation (LISA)
- . A report on experiences and lessons learnt
- . A final report

*Please note that UNEP-CTCN facilitates technical assistance and is not a project financing mechanism.*

**Expected timeframe:**

*Please indicate the expected duration period for the micro-grants project. Please note that the micro-grants project is limited to a maximum duration of 18 months.*

- . Inception phase: 1,5 months
  - . Cambodia Country Report on Climate Risk Assessment for subnational adaptation (SNA): 5 months
  - . Local information system for climate change adaptation (LISA) : 10 months
  - . Validation phase: 1,5 months
- Total: 18 months

**Anticipated gender and other co-benefits from the technology concept:**

*Please describe the activities with gender linkages as well as the anticipated gender and other co-benefits (e.g. biodiversity, economic, social, cultural, etc.) that are likely to be generated as a result of the micro-grants project.*

According to the Gender Inequality Index (GII)<sup>8</sup>, Cambodia ranked at the bottom tier, 99 out of 145 countries, reflecting the stunted status of women empowerment, including issues of education, health and access to public services. Gender inequality has long been a limitation originated from the conventional rules of social restriction and unequal distribution of power and wealth. Climate change has been playing a decisive role in influencing the roles of gender issues within Cambodia, as in the rural districts of Cambodia, more than 52 percent of women are dependent on local natural resources for their livelihood<sup>9</sup>. Although there is an intention to address gender-based vulnerabilities to climate change, the understanding, knowledge and skills to systematically and holistically integrate are still limited in Cambodia.

The proposed technology will be designed with specific attention to gender issues, in alignment with the NCSG gender strategy; the NCSG is committed to mainstreaming gender in all its activities.

The potentially different priorities and perspectives of women for climate change adaptation will be reflected in the Vulnerability Reduction Analysis process and in the participatory evaluation methodology – focus groups of women will be conducted, methodology using gender indicators will be used such as the UNCDF climate risk assessment for subnational adaptation (CRA-SNA) methodology. The mobilization of Commune Women Focal Points in the District Facilitation Committee meetings will help ensure that needs (including data needs) and technologies (including data dissemination channels) take into account women expectations and constraints. Processes will build on existing processes such as the ones developed in the LGCC project; LGCC Gender Policy Objective 3 addresses this specific challenge : “Promote women’s voice, representation, leadership and decision making positions through strengthened gender institutional mechanisms, network and partnerships.” As an illustration, post-partum situations have to be taken into account from a

<sup>8</sup> UNDP, 2012

<sup>9</sup> FAO, 2010

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vulnerability perspective, as was done through the building of a flood refuge with post-partum recovery rooms under the LGCC project in 2018.

More generally, interaction with gender-focused initiatives will help mainstreaming gender in the design of the technology – the Ministry of Women’s Affairs (MoWA) is developing a conceptual model of how climate change may affect women differently from men and is expected to develop guidelines for mainstreaming gender in climate change adaptation with support from the ADB-financed SPCR programme.

For more information you can find guidelines on the CTCN’s website here:

<https://www.ctc-n.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development>

Further reading on gender can be found on the CTCN website here:

<https://www.ctc-n.org/technology-sectors/gender>

**Key stakeholders:**

Please list the stakeholders who will be involved in the implementation of the micro-grants project and describe their role during the implementation (for example, government agencies and ministries, academic institutions and universities, private sector, community organisations, civil society, etc.).

Stakeholders	Role to support the implementation of the micro-grants project
National Designated Entity	Department of Climate Change of the General Secretariat of the National Council for Sustainable Development/Ministry of Environment of the Kingdom of Cambodia
Designated Authority	Dr. Tin Ponlok Secretary of State Ministry of Environment of the Kingdom of Cambodia No. 503, Road along Bassac River, Sangkat Tonle Bassac, Chamkarmon, Phnom Penh, Cambodia Phone: (855-78) 996 479 Email: maohakccd.se@gmail.com
Applicant	Department of Climate Change of the General Secretariat of the National Council for Sustainable Development
Please add as many stakeholders and lines as required.	<ul style="list-style-type: none"> <li>. Government representatives, including: National Committee for Sub-National Democratic Development Secretariat (NCDD-S), Gender and Climate Change Group of Ministry of Women’s Affairs and meteorological services.</li> <li>. LGs representatives, including: provincial and district governments, commune councils</li> <li>. CSO representatives, research institutions and academia:</li> <li>. Technical and Financial partners, including: . UNCDF - as a leading LGCC technical and financial partner, the United Nations Development Programme (UNDP)–Global Environment Facility Small Grants Programme, the UNDP Sustainable Rural Livelihood</li> </ul>

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	project, the International Fund for Agricultural Development / Agriculture Services Programme for Innovation, Resilience and Extension (ASPIRE), the Cambodia Climate Change Alliance and the Global Climate Change Alliance Plus (GCCA+) Support Facility
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**Alignment with national priorities** (up to 2000 characters including spaces):

*Please describe how the technology concept is consistent with national climate priorities such as: Nationally Determined Contribution, national development plans, poverty reduction plans, Technology Needs Assessments, Technology Action Plans, National Adaptation Plans, sectorial strategies and plans, etc.*

As highlighted in the 2019 CCCSP midterm review, progress has still to be made regarding production, access and use of climate change information (CCCSP process indicator 4), building on previous achievements. The government wants to further improve and concretize the adaptation decision-making system; specific attention is drawn at local level in alignment with the Decentralization & Devolution policy.

The technology concept will help strengthen the national climate change M&E framework – launched in December 2017, while taking into account the upcoming transparency requirements as set up in the Article 13 of the Paris agreement.

Furthermore this technology may highly contribute to the design of the National Adaptation Plan (NAP) – the process is underway, based on the National Adaptation Programme of Actions (NAPA).

Reference document (please include date of document)	Extract (please include chapter, page number, etc.).
Nationally Determined Contribution (NDC) – updated version (2020)	<p><i>Direct alignment and contribution to NDC implementation is required. Please include a direct reference to the INDC/NDC document (chapter, page number, etc.).</i></p> <p><i>Chapter 3. Contribution to adaptation</i></p> <p>The technology concept will more particularly support / interact with a number of planning actions ), as follows:</p> <p><u>Priority adaptation actions (table 10)</u></p> <ul style="list-style-type: none"> <li>. Integrating climate change response measures to the commune land use planning (action 31)</li> <li>. Vulnerability assessment towards the development of climate change strategic plans to respond to the impacts on land, housings, coastal management and building due to climate change (action 34)</li> <li>. Develop and annually update national and subnational multihazard and climate risk assessments, including the identification of the most vulnerable communities (action 43)</li> </ul> <p><u>Enabling actions (table 11):</u></p> <ul style="list-style-type: none"> <li>. Building climate resilience for district and commune governance through policy and strategic development plan reform (Focus on implementation) (action 18)</li> </ul>

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	<ul style="list-style-type: none"> <li>. Development of climate change national/capital/ provincial development plans including an M&amp;E system with specific indicators (action 21)</li> <li>. Building adaptive and resilient capacity for MRD officers at national and sub-national level for mainstreaming climate change into rural development planning processes and technical design (action 23)</li> <li>. Build adaptive capacity on climate change for Village leaders (Village Development Committees, VDCs) (action 24)</li> <li>. Strengthen resilience and adaptation capacity to climate change in the most vulnerable provinces/districts/communes (produce vulnerability index maps at the commune level, integrate climate change into investment and development plans, demonstrate the identified actions at pilot sites) (action 25)</li> </ul>
<p>Technology Needs Assessment</p>	<p><i>Presentation of the Adaptation TNA in the Nationally Determined Contribution (NDC) / updated version (2020) – see 7.3.3 and 7.4.4</i></p> <p>Cambodia has developed a technology needs assessment for adaptation (and mitigation), and technology needs also feature prominently in the sectoral climate change action plans; each ministry provided an action by action indication of technology needs and availability.</p> <p>The technology is more particularly aligned with the following needs:</p> <ul style="list-style-type: none"> <li>. agricultural sector: knowledge to draw/disseminate from a number of innovative information platforms and databases in use for disaster risk management, including CAMDI (to monitor the impact of disasters, and the DesInventar package), real-time technology-based weather forecasting methods and technology transferred from the French and Finnish meteorological societies, in addition to manuals and toolkits such as the Community Based Disaster Risk Management Field Practitioners Handbook and the KoBo toolbox for community assessment.</li> <li>. health sector: knowledge to draw/disseminate from a number of systems, such as the National Dengue Surveillance System, or the CAMEWARN, a case-based surveillance system which covers seven epidemic prone diseases and syndromes.</li> <li>. land use planning sector: knowledge to draw/disseminate from land survey high technology, aerial photography for mapping, soil tests for spatial planning, downscaled climate projections and network-level vulnerability assessments.</li> <li>. water resources sector: knowledge to draw/disseminate from groundwater analysis, vulnerability and risk assessments, in addition to groundwater monitoring systems are in use.</li> </ul>
<p>National Adaptation Plans</p>	<p>The Cambodia Climate Change Strategic Plan (2014-2023) was approved in 2013, which required the development of necessary frameworks, i.e., monitoring and evaluation, finance, legislation, and information and knowledge management. The plan refers more</p>

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	<p>particularly to local planning<sup>10</sup> under Strategic Objective 6: Promote adaptive social protection and participatory approaches in reducing loss and damage due to climate change (one of the 6 strategies is to “Leverage the decentralization process to strengthen financial and institutional processes for local adaptation”) and under Strategic Objective 7: Strengthen institutions and coordination frameworks for national climate change responses (the first strategy reads “Mainstream climate change into national and sub-national development plans and the NSPS”)</p> <p>As set in the NDC, Cambodia has begun developing a National Adaptation Plan (NAP) based on the National Adaptation Programme of Actions (NAPA); the technology will help inform the NAP through the Climate Risk Assessment and the Climate Information System.</p>
<p>Add others here as relevant</p>	<p>The Ministry of Women’s Affairs (MoWA) is developing a conceptual model of how climate change may affect women differently from men and is expected to develop guidelines for mainstreaming gender in climate change adaptation with support from the ADB-financed SPCR programme.</p> <p>The technology will take into account the reference documentation to be published under this programme.</p>

**Development of the technology concept** (up to 2000 characters including spaces):

*Please describe how the technology concept was developed at the national level and the process used by the NDE and the Designated Authority to approve the technology concept before submitting it (who initiated the process, who were the stakeholders involved and what were their roles?) and describe any consultations or other meetings that took place to develop and select the technology concept, etc.*

As Cambodia is progressing toward Local government and Climate Change-III (LGCC3) and other locally led adaptation actions, the government formally supports technologies that will help improve previous achievements and further enable the deployment of local climate responses that are risk informed.

In order to enable a wide-scale implementation in a number of districts and communes, the government is mobilizing international funds in addition to committed domestic funding - Local government and Climate Change-III (LGCC3) is embedded in the GCF country programme and a funding proposal to GCF under preparation<sup>11</sup>. Needs for the funding of specific related work components have been identified by the NDE and the Designated Authority, including those covered by the proposed technology concept.

**Background documents and other information relevant for the technology concept:**

*Please list all relevant documents that will help UNEP-CTCN analyse the context of the technology concept and national priorities. Please note that all documents listed/provided should be mentioned in the technology concept in the relevant section(s), and that their linkages with the*

<sup>10</sup> Since 2002 Cambodia has been promoting a decentralisation process, implementing a De-concentration and Decentralization (D&D) reform.

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technology concept should be clearly indicated. For each document, please provide web-links (if available) or attach to the form. Please add any other relevant information as required.

[Cambodia Climate Change Strategic Plan 2014-2023, 2013](#)

[Cambodia updated NDC, 2020](#)

[Mid term review of Cambodia Climate Change Strategic Plan 2014 – 2023, Draft Evaluation Report, July 2019](#)

Local Governments and Climate change / Bridging Phase 2017 – 2019, Final report

[Data Portal | The National Council for Sustainable Development \(moe.gov.kh\)](#)

Local Governments and Climate Change Project / Bridging Phase, Final Assessment, 2020

**Consultation with the Designated Authority of the country:**

Please indicate whether the technology concept has been developed in consultation with the Designated Authority of the country.

- The Designated Authority of the country has been engaged in the design of the technology concept and will be involved in the further process leading to the implementation of the micro-grants project.

**Monitoring and evaluation:**

By signing this form, I affirm that processes are in place in the country to monitor and evaluate the micro-grants project funded by the Adaptation Fund through UNEP-CTCN. I understand that these processes will be explicitly identified in the Project Concept Note (response plan of the micro-grants project) and that they will be used in the country to monitor the implementation of the micro-grants project.

I understand that, after the completion of the micro-grants project, I shall support UNEP-CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country.

**Signature:**

NDE name: Hak Mao,  
Director of the Department of  
Climate Change

Date: 29 January

Signature:



**THE COMPLETED FORM SHALL BE SUBMITTED THROUGH A WEB-LINK AS BELOW:**

<https://www.ctc-n.org/adaptation-fund-climate-innovation-accelerator-afcia-unesp-ctcn>

UNEP-CTCN is available to answer all questions and provide guidance on the application process.