



PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Building the Resilience of Persons with Disabilities to Cope with Climate Change in the Asia Pacific Region
Countries:	Cambodia, Nepal, Philippines, Thailand ¹
Thematic Focal Area ² :	Disaster risk reduction and early warning systems
Type of Implementing Entity:	Multilateral Implementing Entity (MIE)
Implementing Entity:	United Nations Development Programme
Executing Entities:	
<u>Cambodia</u>	<u>TBD</u>
<u>Nepal</u>	<u>Ministry of Forest and Environment</u>
<u>Philippines</u>	<u>TBD</u>
<u>Thailand</u>	<u>Department of Disaster Prevention and Mitigation</u>
Amount of Financing Requested:	13,662,863 (in U.S Dollars Equivalent)

Project / Programme Background and Context:

It is well established that climate change is one of the major challenges facing humanity, with impacts that are potentially devastating – whether it be increased severity and frequency of storms, sea level rise, or changing weather patterns. This affects the poorest and vulnerable populations most severely. Research has shown that persons with disabilities, who make up 15% of the world population³ are disproportionately affected by climate change impacts due to their livelihood circumstances, socio-political isolation (perpetuated by stigma, discrimination, inaccessible infrastructure/information and exclusion), and related information asymmetries. Constraints and exclusion from related decision-making processes aggravate their vulnerabilities.^{4 5 6 7 8}

¹ [UNDP offices in Bangladesh, Indonesia, and Pakistan have been in constant communication with their government counterparts to procure official endorsement for the pre-concept note but have faced unexpected delays. A copy of the pre-concept note is with all NDAs, but endorsement is dependent on the varying national processes. Country level involvement of these countries will be subject to official endorsement.](#)

² Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

³ World Health Organization & The World Bank (2011). World Report on Disability. Geneva: World Health Organization

⁴ CBM and DiDRRN, 2013 Disability Inclusive Disaster Risk Management: Voices from the field and good practices. Bensheim: Christian Blind Mission (CBM)

⁵ Gartrell, 2010 'A frog in a well': The exclusion of people with disability from work in Cambodia. Disability and Society, 25, 289-301

⁶ IFRC, 2007. World Disasters Report 2007: Focus on Discrimination. Geneva, Switzerland: International Federation of Red Cross and Red Crescent Societies.

⁷ UNESCAP, 2017 Disability in Asia and the Pacific: The Facts - 2017 Midpoint Review edition [Online]. Bangkok: United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). Available:

http://www.unescap.org/sites/default/files/Disability_The_Facts_2.pdf [Accessed 19 June 2018].

⁸ Ibid 2

In the IPCC Fifth Assessment Report, Working Group II notes that socially and geographically disadvantaged people, including those facing discrimination based on gender, age, race, class, caste, ethnicity and disability, are asymmetrically impacted by climate change and climate disasters⁹ in the following ways:

- Persons with disabilities often face food shortages and climate change is predicted to exacerbate food shortages and malnutrition. An expected decline in production will adversely affect people already living in poverty, triggering increased risks for persons with disabilities.^{10 11}
- Climate change is expected to expose hundreds of millions of people to increased water stress. People living in poverty are at the greatest risk, and many people with disabilities already face barriers accessing safe water for drinking, sanitation and hygiene, thus compounding these water issues.
 - Persons with disabilities may also have increased sensitivity to water-borne pathogens.
 - Droughts and floods are also expected to become more severe, adversely impacting an already scarce water supply.^{12 13}
- Climate change and climate disasters will cause millions of people to be displaced, causing them to migrate. Many persons with disabilities will also be left behind when others have moved on, with the consequent loss of crucial social and support networks.
- The infrastructure, particularly public schools, health facilities, temporary shelters constructed primarily after the climate induced disaster are not accessible.
- In the absence of other family members, support systems, and information, persons with disabilities may also get deprived from relief materials and other basic rights such as food, education and shelter.
- Persons with disabilities who migrate may face challenges around mobility, requiring assistive devices, a lack of accessible transportation and accommodation.^{14 15 16}

Amongst persons with disabilities, intersectional discrimination is common, and greatly intensifies existing vulnerabilities. Service providers can often be insensitive to the needs of persons with disabilities, especially those from marginalized groups. Persons with disabilities often face barriers accessing information and resources which could impact their knowledge of, and capacity to adapt to climate change. Climate change also increases pressure on available resources and services, which could lessen their availability for persons with disabilities. This will also place greater pressure on affected populations to maintain and rebuild their assets after climatic shocks. This can lead to increased conflict over natural resources, placing greater pressure on persons with disabilities with less capacity to adapt. Persons with disabilities and

⁹ Olsson, L., M. Opondo, P. Tschakert, A. Agrawal, S.H. Eriksen, S. Ma, L.N. Perch, and S.A. Zakiudeen, 2014: Livelihoods and poverty. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the IPCC [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 793-832.

¹⁰ World Bank (2008) Climate Change, Human Vulnerability, and Social Risk Management

¹¹ Lewis, D. & Ballard, K. (2012) Disability and Climate Change – understanding vulnerability and building resilience in a changing world

¹² Ibid 10, 11

¹³ Ibid 10, 11

¹⁴ International Disability and Displacement Consortium (IDDC) (2012), Disability and sustainable development.

<https://www.iddcconsortium.net/>

¹⁵ Ibid 11

¹⁶ Ghenis, A. (2016) Making migration accessible: Inclusive relocation for people with disabilities

their families are also vulnerable to exposure of their assets and livelihoods to climatic risks and have limited capacity to manage these risks.¹⁷

Climate change will make climate events such as hurricanes, cyclones, storms, droughts, and floods worse, amplifying the impacts, along with making access to natural resources, transportation and emergency shelters difficult. On the other hand, lack of identification of specific needs of persons with disabilities add extra challenge for them to receive the required support. In the Asia-Pacific region, which is highly prone to extreme climate events and disasters, persons with disabilities face disproportionately high levels of risk of susceptibility. Evidence shows that **persons with disabilities are between two and four times more likely to be killed during disasters than others.**¹⁸ Persons with disabilities were 2.45 times more likely to have been injured during Tropical Cyclone Pam which struck Vanuatu on the 13th March 2015 causing an estimated US\$ 449.4 million in damages (equivalent to 64.1% of the GDP of Vanuatu).¹⁹ Very few persons with disabilities had assistive devices, and adults with disabilities had poorer access to disaster risk reduction efforts compared to adults without disabilities.²⁰

At the global level, a number of conventions highlight the importance of including the needs of persons with disabilities, and the Asia-Pacific region is making some progress in this regard:

1. Article 11 of the **UN Convention on the Rights of Persons with Disabilities** (UNCRPD) requires the 177 states which are party to it, to take all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk including natural disasters.
2. The **Sendai Framework for Disaster Risk Reduction 2015-2030** requires governments to engage with Persons with disabilities in the design and implementation of policies, plans and standards for DRR.
3. The **Incheon Strategy 2013-2022** to “Make the Right Real” for persons with disabilities in Asia-Pacific includes “Goal 7: Ensure disability-inclusive disaster risk reduction and management.”
4. Goal 7 of the Incheon Strategy links directly to the **UN Sustainable Development Goal (SDG) 13 on Climate Action**. SDG Goals 2, 3, 4, 5, 6, 8, 10 and 11 also take into account the needs of persons with disabilities.

However, despite these international agreements, further progress is needed at the country level to fully realise the equal rights of persons with disabilities as it relates to climate change adaptation and disaster risk reduction.

At the country level in [Cambodia, Nepal, Philippines, and Thailand](#), there has been some progress in strengthening the resilience of persons with disabilities to address climate change and reduce risks related to disasters, yet many challenges continue to exist. These include, but are not limited to:

- Government policy, planning and consultation processes around climate change adaptation and disaster risk reduction don't provide for adequate mechanisms to ensure the inclusion, active participation, and voices of persons with disabilities in their design, implementation and monitoring.²¹

¹⁷ Ibid 10, 11, 14

¹⁸ Ibid 7

¹⁹ http://www.ilo.org/suva/public-information/WCMS_368560/lang--en/index.htm

²⁰ Disability Inclusion in Disaster Risk - Reduction: Experiences of people with disabilities in Vanuatu during and after Tropical Cyclone Pam and recommendations for humanitarian agencies (July 2017). The University of Melbourne, CBM, Nossal Institute Partnership for Disability Inclusive Development

²¹ Ibid 2.

- Disabled People's Organizations (DPOs) and persons with disabilities do not have adequate and accessible information on awareness of climate risks, climate change adaptation policy frameworks, or the tools and evidence necessary to advocate for their needs.²²
- Early warning systems are not tailored to the needs of persons with disabilities, i.e. for those with hearing, visual or psycho-social impairments.
- Inaccurate and uneven data on disability prevalence, disaster risk reduction and climate change adaptation in general (and even less disaggregated by different types of disability, age, social groupings, and gender), reflect broader challenges related to disability data.^{23 24 25} This impedes the implementation of effective adaptation measures.
- Information asymmetries prevent informed decision-making for persons with disabilities. These stem from the disregard to the particular challenges faced by people with different types of disabilities, e.g. materials that do not follow accessibility and reasonable accommodation guidelines, incompatibility with assistive devices, and inadequate vocabulary related to disaster risk reduction and climate change adaptation, risks, impacts, and warnings in national sign languages for the deaf.^{26 27 28}
- Infrastructure used in climate disasters (shelters, transportation, communications) is often inaccessible to different groups of persons with disabilities.^{29 30 31}
- Broader challenges relating to cultural and religious stigma, discrimination, poverty, lack of access to education, gender based violence and discrimination, youth and children with disabilities, aggravate the disadvantages faced by persons with disabilities in relation to climate response.^{32 33 34 35}

While there is a growing focus on the impacts of climate change on livelihoods, health, migration, access to water and sanitation, persons with disabilities are referenced (if at all) only under the heading of *vulnerable groups*, with insufficient attention given to the specific challenges they face (let alone attention to the issues facing groups with different types of disabilities). Furthermore, persons with disabilities are not privy to opportunities to participate in the design, implementation, and monitoring of CCA policy frameworks.

The status quo in the participant countries renders persons with disabilities extremely vulnerable to climate change, and in a situation where they continue to be at an inherent disadvantage in responding effectively to climate impacts and climate events. Governments do not have the data or systems in place to effectively assist persons with disabilities or disabled peoples'

²² Priestley, M. & Hemingway, L. 2007. Disability and Disaster Recovery: A Tale of Two Cities?. *Journal of Social Work in Disability & Rehabilitation*, 5, 23–42.

²³ Ibid 6

²⁴ Ibid 2

²⁵ Ibid 7

²⁶ Calgaro, E., Allen, J., Craig, N., Craig, L. & Dominey-Howes, D. 2013. Deaf Community Experience, Knowledge & Needs Assessment - Final Results Report (Milestone 2 & 3) [Online]. Sydney: University of NSW.

²⁷ Calgaro, E. & Dominey-Howes, D. 2013. Final Project Report (Milestone 7) - Increasing the resilience of the Deaf Community in NSW to natural hazards [Online]. Sydney: University of NSW. Available: http://deafsocietynsw.org.au/news/entry/resilience_natural_hazards [Accessed 21 October 2013]

²⁸ Calgaro, E. & Dominey-Howes, D. 2013. Final Project Report (Milestone 7) - Increasing the resilience of the Deaf Community in NSW to natural hazards [Online]. Sydney: University of NSW. Available: http://deafsocietynsw.org.au/news/entry/resilience_natural_hazards [Accessed 21 October 2013]

²⁹ Gartrell, A., Calgaro, E., Goddard, G. & Saorath, N. 2017. Women with disabilities experience of disasters in rural Cambodia. Disability and Disasters: Empowering people & building resilience to risk - Project Report. Melbourne & Sydney:

³⁰ Waterstone, M. E. & Stein, M. A. 2006. Emergency Preparedness and Disability. William & Mary Law School Scholarship Repository: Faculty Publications [Online]. Available: <http://scholarship.law.wm.edu/facpubs/661>

³¹ Ibid 23

³² Ibid 4

³³ Ibid 24

³⁴ UNESCAP 2012. Disability, Livelihood and Poverty in Asia and the Pacific: An executive summary of research findings. Bangkok United Nations Economic and Social Commission for Asia and the Pacific.

³⁵ Ibid 2

organizations to enhance their resilience or reduce their risks to disasters. This initiative aims to strengthen the climate resilience of persons with disabilities and disabled people organizations through improving the early warning systems for climate change, and enabling disabled people organizations to design effective adaptation options with persons with disabilities.

Project / Programme Objectives:

The overall objective of the project is to build the capacity of participant countries to more effectively take action in improving the resilience of persons with disabilities to climate change and climate related disasters. The project will work with persons with disabilities and disabled people’s organizations to build their capacity on climate change adaptation, raise awareness so that they can be empowered, and work with government and the private sector to design effective climate change adaptation policies and strategies. The project will work to collect appropriate and disaggregated data, which can be used to propel the design of effective laws and regulations relating to persons with disabilities and climate change.

A major focus of the project will be the development of early warning systems, to be tailored to the needs of persons of disabilities with innovative technology solutions. This will be driven through a human-centred design (HCD) approach through engagement with disabled people’s organizations and the private sector to achieve scale and replication.

The project will engage with governments and disabled people’s organizations, providing the governments technical advice while facilitating the inclusion of person with disabilities and disabled people’s organizations, in the overall policy development discussion in the country. Overall, the project will build the capacity of the participant countries to take effective actions to improve the resilience of persons with disabilities to climate change and climate related disasters.

Adaptation Fund resources will be used to develop specific tools and materials specifically for persons with disabilities, for example, the development of sign language materials and documents in accessible formats, along with the communication materials for people with intellectual and psycho-social disabilities. Resources will be used to improve policies, and mainstream budgets to better include persons with disabilities into climate change adaptation issues. Technical advice will be provided to governments, and non-governmental organizations to improve strategies, procedures, and policies. Climate change adaptation and disaster risk reduction risks and concerns will be integrated into disability action plans, policies, and frameworks.

The project will adopt an integrated approach to identify, capture and share the outputs of the project, so that the tangible outputs can be used to reduce the vulnerability of persons with disabilities in other communities, as well as to increase the capacity of those who support people with disabilities to address climate change risks. The lessons learned, technologies produced, and results from the program will be used to inform projects in other countries and to scale up the capacity and resilience of persons with disabilities.

Project / Programme Components and Financing:

Project/Programme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US\$)
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<p>1. Capacity Building for Disabled People's Organizations, Persons with Disabilities, and Governments to address Climate Change, and Enhance Institutional Frameworks.</p>	<p>Improved data regulatory, legal and institutional frameworks, to better manage climate change risks, such as droughts, floods, cyclones, and improved disaster risk reduction measures for persons with disabilities.</p>	<p>Output 1.1 Improved disaggregated data on persons with disabilities to support planning for climate change adaptation and disaster risk reduction measures.</p> <p>Output 1.2 Enhanced, Legal, Regulatory and Institutional Framework to incentivize and mandate assistance to people with disabilities during times of climate disasters.</p> <p>Output 1.3 Improved capacity of Disabled People's Organizations to include persons with disabilities specific issues in climate change adaptation policies.</p>	<p>Cambodia, Nepal, Philippines, Thailand</p>	<p>2,500,000</p>
<p>2. Early warning Infrastructure and last mile services targeting the specific needs of persons with disabilities to better manage and reduce vulnerability of climate change induced risks.</p>	<p>Introduction of cutting edge technologies for the diffusion of, and responses to, early warnings of impending extreme events, geared towards the special needs of persons with disabilities.</p>	<p>Output 2.1 Improved early warning systems for climate events such as drought, floods, and storms, recognizing the needs of persons with disabilities.</p> <p>Output 2.2 Initiate a challenge scheme for the incubation of smart technological and infrastructure solutions to cater to the needs of people with disabilities during climate disasters and extreme weather events.</p> <p>Output 2.3 Support the incubation and acceleration of innovative solutions targeting the needs of persons with disabilities that are promising for scale up via public-private partnerships.</p>	<p>Cambodia, Nepal, Philippines, Thailand</p>	<p>7,000,000</p>

<p>3. Knowledge generation, codification and dissemination of the effectiveness of targeted measures to reduce the vulnerability of persons with disabilities to climate change risks.</p>	<p>Knowledge products that capture the lessons from implementing measures to</p>	<p>Output 3.1 Development of training modules for CCA and DRR practitioners and government officials on how to incorporate the specific needs of persons with disabilities into CCA and DRR frameworks.</p> <p>Output.3.2 Technical training workshops and manuals for persons with disabilities and relevant community based organisations on climate change and disaster risk reduction.</p> <p>Output 3.3 Impact evaluation of the effectiveness of early warning systems using mobile phone technologies that provide targeted support to the needs of persons with disabilities.</p>	<p>Cambodia, Nepal, Philippines, Thailand</p>	<p>2,000,000</p>
<p>4. Project/Programme Execution cost</p>				<p>1,092,500</p>
<p>5. Total Project/Programme Cost</p>				<p>12,592,500</p>
<p>6. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)</p>				<p>1,070,363</p>
<p>Amount of Financing Requested</p>				<p>13,662,863</p>

Project Duration: The project duration will be five years.

PART II: PROJECT / PROGRAMME JUSTIFICATION

Climate Context

South and South-East Asia is highly vulnerable to the impacts of climate change. The IPCC Fifth Assessment Report (AR5) indicates that temperatures in this region have been increasing at a rate of 0.14°C to 0.20°C per decade since the 1960s, which is predicted to increase from 0.8°C to 3.2°C by the end of the century (with differences between regions and microclimates

within and across Southeast Asia). Southeast Asia also has one of the highest percentages of persons with disabilities compared to other regions around the world (16%) (see Table 1). Persons with disabilities face many problems, in addition to being marginalized, and the impacts of climate change will be felt more severely by persons with disabilities than those for the general population. This section highlights the climate change vulnerabilities for each country, and the related issues faced by the persons with disabilities within those geographies.

Table 1: Prevalence of moderate and severe disability by region based on Global Burden of Disease estimates for 2004

Severity of disability	Percent							
	World	High income countries	Africa	Low income & middle income countries				Western Pacific
				Americas	Southeast Asia	European	Eastern Mediterranean	
Severe	2.9	3.2	3.1	2.6	2.9	3.0	2.8	2.7
Moderate	12.4	12.2	12.2	11.5	13.1	13.4	11.2	12.3
All	15.3	15.4	15.3	14.1	16.0	16.4	14.0	15.0

Source: adapted from World Health Organization and The World Bank (2011).

Nepal is at high levels of risk from disasters caused by natural hazards, climate change. It also has a high concentration of persons with disabilities. Experience from past disaster events such as the 2017 floods reveal that persons with disabilities suffer the most during disaster events and face increased hardship for recovering their livelihood.³⁶ The health impacts are also severe - altered rain patterns can lead to waterborne infectious diseases such as cholera, and outbreaks of vector-borne diseases such as Japanese encephalitis and malaria in Nepal have been specifically linked to excess rainfall.³⁷ Distributions of vector-borne diseases have been shifting into highland areas, putting more people with disabilities at risk.⁴⁴

In a population of approximately 28 million, there are varying estimates of the number of persons with disabilities ranging from 1.94%³⁸ to 3.6%.³⁹ Persons with disabilities are very susceptible to natural disasters. Flood early-warning systems are yet to be designed to be inclusive of persons with disabilities. Additionally, there is a need to enhance the awareness and capacity of elected officials and government staff to integrate the concerns of persons with disabilities into disaster risk reduction and climate change adaptation plans. There is also inaccurate and unreliable data which is needed to design effective adaptation interventions and policies.

Cambodia is a least developed country and one of the poorest countries in the world.⁴⁰ Just over a fifth of the Cambodian population (23 per cent) lives below the poverty line, with a high concentration of people living very near the poverty line, who are highly vulnerable to small economic shocks.⁴¹ Climate change has severe impacts in Cambodia. The increase in frequency and intensity of floods has caused severe damage to rice harvests. Successive combinations of droughts and floods have resulted in a significant number of fatalities and

³⁶ Start Network, "Floods in north, northeast, and southeast Bangladesh," 17 August 2017.

³⁷ Dhimal Meghnath, Dhimal Mandira Lamichhane, Pote-Shrestha Raja Ram, Groneberg David A, Kuch Ulrich. 2017. Health-sector responses to address the impacts of climate change in Nepal [Online]. WHO South-East Asia Journal of Public Health. Volume 6, Issue 2.

³⁸ Nepal, The National Census of 2011, Central Bureau of Statistics (CBS). Available: <https://unstats.un.org/unsd/demographic-social/census/documents/Nepal/Nepal-Census-2011-Vol1.pdf>

³⁹ Nepal Living Standard Survey, 2010/2011. Available: <http://cbs.gov.np/nada/index.php/catalog/37/download/744>

⁴⁰ World Bank. Least developed countries: UN classification. Available: <https://data.worldbank.org/region/least-developed-countries:-un-classification>

⁴¹ The World Bank in Cambodia. 2018. Available: <http://www.worldbank.org/en/country/cambodia/overview>

considerable economic losses.⁴² Sea level rise may also affect the 435 kilometres long coastline, which already suffers from storm surges, high tide, beach erosion, and seawater intrusion.⁴³ Low-lying areas, including settlements, beach resorts, seaports, coastal fisheries, and mangroves forests, may become submerged with rises in sea levels.⁵⁰ In addition, vector-borne diseases, in particular malaria, may become more widespread under changing climatic conditions.⁴⁴

Cambodia, like many other countries in the region, lacks comprehensive data on the numbers and distribution of persons with disabilities. The 2013 Cambodian Inter-Census Population Survey states that 2.06 per cent of the total population have a disability. Of these, 48 per cent are female, 52 per cent are male, and 86 per cent live in rural areas. Initial data at the commune level suggests that 45% of adults with disability do not earn an income.⁴⁵ With disability rates higher in rural areas along with the pursuit of livelihood strategies that are associated with high exposure to hazards means that people with disabilities have lower incomes and standards of living which limited their ability to be resilient to the changing climate. For Cambodia, early warning systems are not designed for persons with disabilities. There is lack of data on persons with disabilities prevents effective policies and regulations, and disability is not included in climate change adaptation and disaster risk reduction polices and laws. Disabled people's organizations are not included in the discussions related to climate change and there is a need to increase their capacity and knowledge of climate change issues.

By virtue of its location the **Philippines** is in the “Pacific ring of fire” and directly in the typhoon path, the Philippines is vulnerable to the impacts of natural hazards.⁴⁶ This vulnerability has been aggravated with the onset of climate change. The World Risk Report of 2016 placed the Philippines third among the high disaster risk countries in the world. Its coastal communities, especially in the eastern seaboard fronting the Pacific Ocean, bear the full brunt of an average of 20 typhoons a year, not to mention the chronic impacts of sea level rise.⁵³ While the country has abundant water resources, water availability is scattered. Given geographic and seasonal variations, several parts of the Philippines have become water scarce during the dry season.⁴⁷ Climate change is further exacerbating this situation. The Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) observed that while there has been decreasing number of tropical cyclones that entered the Philippine area of responsibility (PAR) between the period 1951 to 2015; the intensity increases over the years; explaining the most damaging typhoons experienced in the recent years, notably Typhoon Haiyan, which is by far the strongest ever recorded in the world. The El Nino event in 2015 was also one of the strongest since 1950, affecting 7 million individuals across 43 provinces. The hardest hit was North and South Cotabato with 1.7 million and 800,000 affected people, respectively.⁴⁸

⁴² UNDP Cambodia. Cambodia Disaster Loss and Damage Analysis Report 1996 – 2013. 2014. Available: http://www.kh.undp.org/content/cambodia/en/home/library/environment_energy/cambodia-disaster-loss-and-damage-analysis-report-1996---2013.html

⁴³ Cambodia, National Institute of Disaster Management. 2014. Available: http://nidm.gov.in/easindia2014/err/pdf/country_profile/cambodia.pdf

⁴⁴ Cambodia, Ministry of Health. Second National Forum on Climate Change Cambodia. 2011. Available: <http://www.camclimate.org.kh/en/documents-and-media/library/category/14-health.html?download=100:oct-2011-climate-change-and-health>

⁴⁵ RGC. 2014. *National Disability Strategic Plan (NDSP) 2014-2018*: MOSAVY, Phnom Penh.

⁴⁶ Asian Disaster Reduction Center. Information on disaster Risk Reduction or Member Countries. Available: <http://www.adrc.asia/nationinformation.php?NationCode=608>

⁴⁷ Greenpeace. The state of water resources in the Philippines. 2007. Available: <https://www.greenpeace.org/seasia/ph/Global/seasia/report/2007/10/the-state-of-water-in-the-phil.pdf>

⁴⁸ The Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation, Inc. (Oscar M. Lopez Center) and Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA). 2016. State of the Philippine Climate 2016. December 2016. Available at <http://www.omlopezcenter.org/>

In the Philippines, results of the 2010 Census of Population and Housing show a disability prevalence rate of only 1.57% or for a total of 1,443,000 persons with disabilities, however there are many indications that this figure under-reported. People with disabilities are most at risk to climate change in Philippines, as often they do not have access to early warning systems for climate events and are more likely to suffer severely. In 2010, the Philippines passed into law the Philippine Disaster Risk Reduction and Management Act (RA 10121) in order to strengthen institutional capacities to prepare for, mitigate, prevent, and respond to disasters from the national to local levels.⁴⁹ The law puts more emphasis on gender than disability, stating that disaster risk reduction and management plans should be gender-responsive. Persons with disabilities also face barriers accessing information and resources which could impact their knowledge of, and capacity to adapt to, climate change. There is a lack of useful disability data to support disaster risk reduction and climate change adaptation planning and prioritization. There is also the need to include concerns of people with disabilities in developing sub-national and local disaster risk reduction and climate change adaptation plans.

Thailand is one of the top ten countries identified globally as being in the “extreme risk” category of those most vulnerable to future climate change impacts over the next 30 years.⁵⁰ Extreme, severe drought and floods are likely to be experienced increasingly in the near and longer-term future. There will be a greater frequency and intensity of flooding during wet season, and extended drought periods during the dry season, presenting a significant challenge to effective water management in Thailand. The frequency of floods and drought events has already increased considerably over the past 50 years.⁵¹ Increased incidence of extreme events, and rainfall variability, are adversely impacting economic activity and livelihoods. Thailand until a few years ago, was the largest exporter and leading rice supplier in the world.⁵² Thailand’s consecutive years of below-normal rainfall have the potential to cripple the agricultural sector and slow the country’s economy.⁵³ Future climate change influence on these extremes, according to climate projections, is set to increase both in the magnitude and frequency of these extreme events. In economic terms, the recent drought in 2015-2016 is estimated to have resulted in losses of US\$3.4 billion, while the 2011 floods are estimated to have cost US\$45.7 billion in loss and damage costs.⁵⁴ Projected negative impacts are estimated to affect Thailand’s agriculture (which employs roughly half of the country’s population) nationally during 2040 – 2049 to range from loss and damage impacts of US\$24 to US\$94 billion.⁵⁵

In Thailand, there are around 1.5 million persons with disabilities (2.2% of total population⁵⁶) but disaster risk reduction and climate change adaptation information and early warning is not accessible and available to people with different disabilities. Persons with disabilities generally lack knowledge on the impact climate change, and how to adapt. In addition, in Thailand there is

⁴⁹ Philippines, the LAWPHIL Project. Fourteenth Congress Third Regular Session. 2010 Available: https://www.lawphil.net/statutes/repacts/ra2010/ra_10121_2010.html

⁵⁰ German Watch. Global Climate Risk Index (CRI). 2017.

⁵¹ Royal Irrigation Department, Thailand. 2016. *Feasibility Study of Yom and Nam O&M Project*. Bangkok

⁵² World Atlas. Top Rice Exporting and Importing Countries. 2017. Available: <https://www.worldatlas.com/articles/top-rice-exporting-and-importing-countries.html>

⁵³ United Nations Department of Agriculture, Foreign Agricultural Service. Commodity Intelligence Report. THAILAND: Irrigation Shortage Reduces 2015/16 Rice Production. 2015. Available: <https://ipad.fas.usda.gov/highlights/2015/10/th/index.htm>

⁵⁴ Attavanich, W. 2012. *The effect of climate change on Thailand’s agriculture*. https://www.researchgate.net/profile/Witsanu_Attavanich/publication/262067789_The_Effect_of_Climate_Change_on_Thailand's_Agriculture/links/566a311a08ae1a797e379c9b.pdf

⁵⁵ Bangkok Post. “Relief as rain falls, but drought’s aftermath to linger.” 2016. Available: <https://www.bangkokpost.com/news/general/994313/relief-as-rain-falls-but-droughts-aftermath-to-linger>

⁵⁶ Thailand, National Statistics Office, 2012

a need to promote and establish a new enabling environment and new policies to ensure the person with disabilities are included in issues related disaster risk reduction and climate change adaptation.

There are thus many issues confronting persons with disabilities in the participant countries as it relates to climate change adaptation and enhancing resilience. These include issues related to lack of data to inform policy decision, regulation and development of new laws, the need for enhanced and improved early warning systems and enhancing the capacity of disability peoples organizations to work with persons with disabilities on issues of climate change adaptation and disaster risk reduction.

Programme Components

Component 1: Capacity Building for Disabled People's Organizations, Persons with Disabilities and Governments to address Climate Change, and Enhance Institutional Frameworks.

There is a lack of information and data in the participating countries on persons with disabilities, that are living in areas that are susceptible to climate induced disasters, along with a lack of knowledge on the exact impact climate change will have on persons with disabilities. Through this component there will be baseline surveys and studies on the specific numbers of persons with disabilities that are present in vulnerable areas, and accessibility assessments of critical infrastructure (such as disaster shelters, current climate early warning systems, transport systems and disaster infrastructure).

All of the data which will be collected will be disaggregated by gender to assist planning, as in many cases, women with disabilities often face additional discrimination and challenges. Disabled People's Organizations will play a key role in collecting the relevant data and will receive training on data collecting methodologies. In line with other recent UNDP projects, the project will work with the UNDP Global Centre for Disaster Statistics to utilise cloud based solutions for the storage and analysis of data.

Policy and regulatory frameworks on inclusive disaster risk management and climate change adaptation are lacking. In this component there will be a review of disaster risk reduction plans, disaster preparedness plans, and climate change adaptation strategies to include persons with disabilities. National and regional disabled peoples' organizations will be involved in the reviews to ensure that persons with disabilities' concerns are effectively addressed. Laws, policies and regulations will also be examined and reviewed for inclusivity. Where appropriate, new policies, regulations and laws will be put in place to address the concerns of people with disabilities

There will be technical training workshops for disabled people's organizations to improve their overall understanding of climate change and disaster risk reduction, and to allow these organizations to advocate, and work with governments of issues related to persons with disabilities, to ensure that concerns related to person with disabilities are incorporated to national climate change adaptation plans and policies.

Component 2: Early warning infrastructure and last mile services targeting the specific needs of persons with disabilities to better manage and reduce vulnerability of climate change induced risks.

This will be the major component of the project and will focus on using technology to establish early warning systems that will be targeted to persons with disabilities. These early warning systems will be designed for people who have hearing and vision impairments, and other physical disabilities, and will build where possible on current early warning infrastructure if it is already in place. Possible specific outputs will include, for example, speech related emails to provide climate information and disaster warnings.

A challenge scheme will be put in place for the design of innovative smart technologies, so that the specific needs of persons with disabilities can be catered to, through the design of appropriate early warning systems. This will involve working with the private sector and using human-centered design to put in place solutions that will be effective for persons with disabilities. Some possible technological applications could include the development of specific applications, crowd-sourcing, and geo-tagging.

The project will support the development of the technological applications which have been identified, and assist with the scale up and replication of the viable technologies, through public and private sector partnerships so that they can be used to assist persons with disabilities.

Component 3: Knowledge generation, codification and dissemination of the effectiveness of targeted measures to reduce the vulnerability of persons with disabilities to climate change risks.

This component will enhance the capacity of DRR and CCA officials and policy makers so that they can more effectively incorporate the concerns of persons with disabilities into climate change adaptation planning and disaster risk reduction. There will be the production of training manuals, and specific tools to assist, with the aim of informing and training officials on the issues related to persons with disabilities. The training modules will be shared with other countries in the Asia-Pacific region as well as globally so that other countries will be able to learn and put measures in place to address climate change. Help with practical issues such as the incorporation of design to ensure compatibility with assistive devices, and aid persons with disabilities will be included. Lessons learned and best practices will be documented and shared with other countries in the region.

Technical training workshops will also be held for disabled people's organizations and other community based organizations on climate change and its impacts, along with disaster risk reduction. These workshops will train participants in climate change as well as train the participants on how to use the outputs of Component 2, such as the challenge scheme identified technological solutions, and sign language specifically for climate change and disaster risk reduction. These training manuals and documents will be shared with the other countries in the region to encourage peer learning and sharing. To enhance regional knowledge sharing, online platforms and networks will be developed to facilitate the sharing of information with disabled people's organizations.

There will also be an impact evaluation of the early warning systems designed in component 2, as to how effective these early warning systems are in providing persons with disabilities with the relevant information and data. This information will be shared via UNDP networks and platforms to other disability people's organizations so that they can benefit from the outputs of the project.

PART III: IMPLEMENTATION ARRANGEMENTS

The project will be directly implemented by UNDP, supported through UNDP's Regional Hub for the Asia-Pacific Region and the UNDP Country Offices of each country. Country level implementation will be through the engagement of:

- National level disabled people's organizations, other NGOs (including national red cross/red crescent societies);
- Relevant ministries including disaster risk reduction, environment, and/or local governance, central agencies of planning and line ministries dealing with key vulnerable sectors, national hydro-met agencies, as well as local governments, social welfare, and disabilities rights. Existing national and local DRR and CCA platforms and coordination mechanisms will be harnessed.
- Regional support institutions will involve ICRC, IFRC, and disability forums such as ASEAN Disability Forum.
- Appropriate partners in the private sector.

A **Regional Steering Committee (RSC)** will be established, composed of high-level representatives of the institutions from each target country, UNDP Country Offices and key regional institutions including ICRC, IFRC and disability forums such as ASEAN Disability Forum and South Asian Disability Forum.

- The RSC will meet on a regular basis (frequency to be determined) during implementation to consolidate national components and ensure coherence of regional approach, to achieve consensus, and provide overall coordination.
- It is expected that the RSC will function as the key strategic and coordination body of the project with the detailed Terms of Reference to be defined during the proposal stage.

The **Project Implementation Team** will be composed of a **Regional Coordination Unit (RCU)** and **National Implementation Units (NIU)**. The project will establish National Implementation Units (NIU) in each country, comprised of National Coordinators, administrative/financial officers, ICT/GIS Specialists, and other profiles as necessary. A more detailed description of RCU and NIU functions and structure will be provided after the completion of the proposal development stage.

The project also contemplates the establishment of **National Technical Committees (NTC)**, composed of technical experts from key national and provincial/municipal institutions and agencies, representatives of local governments, academia, NGOs and community organizations, and UNDP Country Office technical officers. The technical experts will provide expertise in the area of environment and climate change, disaster risk reduction and EWS, local development, territorial planning, hydrometeorology, GIS/ICT and the like.

Further details pertaining to execution arrangements will be outlined in the full proposal.

PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY


A. Record of endorsement on behalf of the government⁵⁷ *Provide the name and position of the government official and indicate date of endorsement for each country*

Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.


participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.

Atty. Analiza Rebueltah-Teh Undersecretary, Climate Change Service and Mining Concerns Department of Environment and Natural Resources Republic of Philippines	Date: 27 July 2018
Tin Ponlok Secretary General NCSD Ministry of Environment Kingdom of Cambodia	Date: 6 August 2018
<u>Wijarn Simachaya</u> <u>Permanent Secretary</u> <u>Ministry of National Resources and</u> <u>Environment</u> <u>Thailand</u>	Date: 14 August 2018
<u>Sindhu Prasad Dhungana</u> <u>Joint Secretary and Chair,</u> <u>Planning, Monitoring and Coordination</u> <u>Division,</u> <u>Ministry of Forest and Environment,</u> <u>Nepal</u>	Date: 23 August 2018

B. Implementing Entity certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
 <p>Adriana Dinu Director, Sustainable Development (Environment) a.i. Executive Coordinator, Global Environmental Finance Bureau for Policy and Programme Support United Nations Development Programme</p>	
Date: 24 August 2018	Tel. and email:+1 (212) 906-5143; adriana.dinu@undp.org
Project Contact Person: Pensiri Sattapan	
Tel. And Email: +66 (2) 304 9100 ext. 5405; pensiri.sattapan@undp.org	

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Adriana Dinu Director, Sustainable Development (Environment) a.i. Executive Coordinator, UNDP-GEF		Aug 24, 2018	Pensiri Sattapan	+66 (2) 304 9100 ext. 5405	pensiri.sattapan@undp.org



Government of Nepal

Ministry of Forests and Environment



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4211862
Fax. 4211868

Ref. No. 10/(2075/76)

P.O.Box No. 3987
Singha Durbar, Kathmandu

Date :- 23rd August 2018

Letter of Endorsement

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 2025223240/5

Subject: Endorsement for “Building the Resilience of Person of Disabilities to Cope with Climate Change in the Asia Pacific Region.”

I confirm that the above regional project proposal is in accordance with the government’s national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Nepal.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by United Nations Development Programme in Nepal and executed by the Ministry of Forests and Environment.

Sincerely,

Sindhu Prasad Dhungana, PhD
Joint Secretary and Chair
Planning, Monitoring and Coordination Division



ADAPTATION FUND

Letter of Endorsement by Government



Republic of the Philippines
Department of Environment and Natural Resources

Visayas Avenue, Diliman, Quezon City, 1100
Tel. Nos. (632) 929-66-26 to 29 • (632) 929-62-52
929-66-20 • 929-66-33 to 35 • 929-70-41 to 43

July 27, 2018

TO: THE ADAPTATION FUND BOARD

c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for “Building the Resilience of Persons with Disabilities to cope with Climate Change in the Asia Pacific Region

In my capacity as designated authority for the Adaptation Fund in the Philippines, I confirm that the above regional project/programme proposal is in accordance with the government’s national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Asia Pacific Region.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by United Nations Development Programme and executed by national and local executing entity “to be determined”.

Very truly yours,

ATTY. ANALIZA REBUELTAH-TEH

Undersecretary
Climate Change Service and Mining Concerns



KINGDOM OF CAMBODIA
Nation Religion King

National Council for Sustainable Development
General Secretariat

No: 258 GSSD

Letter of Endorsement by Government

Phnom Penh. 06 August 2018.

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Building the Resilience of Persons with Disabilities to Cope with Climate Change in the Asia Pacific Region

In my capacity as designated authority for the Adaptation Fund in Cambodia, I confirm that the above Asia Pacific Region project/programme proposal is in accordance with the government's Cambodia priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Asia Pacific Region.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by UNDP and executed by the Royal Government of Cambodia.

Sincerely yours,

Tin Ponlok
Secretary General NCS/Ministry of Environment

URGENT

No. 1007.4/ 1855



Ministry of Natural Resources and Environment
92 Soi Phahol Yothin 7, Phahol Yothin Road
Phayathai, Bangkok 10400
Thailand
Tel. +662 265 6500 Ext. 6849
Fax. +662 265 6692

14 August B.E. 2561 (2018)

To: The Adaptation Fund Board

Subject: Endorsement for Building the Resilience of Persons with Disabilities to Cope with Climate Change in the Asia Pacific Region

In my capacity, as designated authority for the Adaptation Fund in the Kingdom of Thailand, I confirm that the above regional project proposal is in accordance with the national policy and sub-regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Kingdom of Thailand, which is part of the Asia Pacific region.

Accordingly, I am pleased to endorse the above concept project proposal with support from the Adaptation Fund. If approved, the project will be implemented by United Nations Development Programme (UNDP) and executed by the Department of Disaster Prevention and Mitigation of Thailand.

Yours sincerely,

(Mr. Wijarn Simachaya)

Permanent Secretary

Ministry of Natural Resources and Environment

c/o Adaptation Fund Board Secretariat
1818 H Street NW, Washington DC 20433, USA
Email: Secretariat@Adaptation-Fund.org