ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Pre-Concept for a Regional Project

Countries/Region: Bhutan and Nepal
Project Title: Strengthening community-based adaptation and food system resilience for vulnerable communities in Nepal and Bhutan
Thematic focal area: Food Security
Implementing Entity: World Food Programme (WFP)
Executing Entities: Bhutan: Gross National Happiness Commission (GNHC)
Nepal: Ministry of Forests and Environment (MoFE) and Ministry of Industry, Tourism, Forests and Environment (MoITFE), Sudur-Paschim Province
AF Project ID:
IE Project ID:
Requested Financing from Adaptation Fund (US Dollars): 14,000,000
Reviewer and contact person: Imèn Meliane
Co-reviewer(s): Aloke Barnwal
IE Contact Person(s):

Technical Summary:	The project "Strengthening community-based adaptation and food system resilience for vulnerable communities in Nepal and Bhutan" aims to reduce vulnerability and increase the adaptive capacity of smallholder farmers through enhancing community-based adaptation processes, adopting resilient climate practices for the agriculture and food systems and improving access to reliable and timely climate information services and early warning for the communities in Bhutan and Nepal. This will be done through the three components below: Component 1: Improving last mile climate advisory services for risk-informed local adaptation planning and preparedness/early action (USD 2,945,950); Component 2: Strengthening of multi-hazard impact -based forecasting for early action (USD 1,767,570); Component 3: Strengthening adaptation through community-based participatory approaches (USD7,070,280). Requested financing overview: Project/Programme Execution Cost: USD 1,119,460 Total Project/Programme Cost: USD 12,903,260

	Implementing Fee: USD 1,096,770 Financing Requested: USD 14,000,000 The proposal includes a request for a project formulation grant and/or project formulation assistance grant of USD 20,000. The initial technical review raises several issues, such as improving the project rational and justification, in particular with regard to the regional approach, duplication with other projects and cost-effectiveness as is discussed in the number of Clarification Requests (CRs) and Corrective Action Requests (CARs) raised in the review.
Date:	28 January 2022

Review Criteria	**Questions**		**WFP responses**
Country Eligibility	1. Are all of the participating countries party to the Kyoto Protocol?	**Yes.**	
	2. Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?	**Yes.** Both Bhutan and Nepal are located in the Himalayan Mountain, which is considered one of the most vulnerable mountain formations. Both countries are Least Developed Countries (LDC). The agricultural sectors of both countries are highly vulnerable to climate hazards and extreme weather events which result in detrimental impacts on food and nutrition security for the rural communities, and have cascading adverse effects on the urban population.	

Project Eligibility	1. Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme?	**Yes.** As per the Letters of Endorsement dated 28 December 2021 for Bhutan and 10 January 2022 for Nepal.	
	2. Has the pre-concept provided necessary information on the problem the proposed project/programme is aiming to solve, including both the regional and the country perspective?	**No.** The preconcept proposal provides general information on climate change impacts in both country however it lacks a short description of the current situation with respect to climate information services and adaptation planning in Bhutan and Nepal. Significant number of projects and resources have flowed in the past to these highly vulnerable countries to address these two issues, and it is unclear how this project builds on these. The project design doesn't provide a very compelling case for why additional resources are needed for the proposed objectives. The context setting paras 1-4 hardly refers to climate information system in the countries and is very generic. The proposed multi-hazard forecasting platform in component (2) appears to be unique with a potential for a distinct added-value, however it is unclear as to what	These recommendations are well received. A more precise background information addressing the issues mentioned has been added on pages 2 (in paragraphs 4, 5 and 6) and 5 (in paragraph 8) of the pre-CN. In summary: Both Nepal and Bhutan have received investments to improve the generation and management of climate services, which has taken predominantly a top-down approach. Both countries are therefore in need of a bottom-up approach to (i) better tailor climate services to respond to farmers' needs, and (ii) ensure delivery to the last mile. In fact, both countries are experiencing limited accessibility of climate services for end-users and lack of awareness of what kind of information is available, where it can be found and how it can be used in adaptation planning decisions. Similarly, weak infrastructure and communication technology, physical remoteness, illiteracy, trust and a lack of knowledge around climate information are also the limiting factors. *(see page 2, paragraphs 4, 5 and 6 of the pre-CN)* Addressing these challenges will require additional resources which will also contribute

		particular benefits would such system add that is not provided by other similar systems-and what is the availability of the data that would feed into it, and how it related to component 1. Lastly, the regional approach is not justified. There's a lack of details on the challenges or barriers faced by both countries with respect to data and why the proposed approach is needed. **CAR1:** please provide a more precise background information addressing the issues mentioned above.	to establish an opportunity for know-how and technology exchange from Nepal to Bhutan on the design of tailored agromet services. The regional approach will be based on (ii) *knowledge and know how transfer*, as the project will establish a bilateral mechanism to mobilize support and knowledge transfer on climate information systems and local adaptation practices while systematising best practices and lessons learned; and (ii) *leveraging of regional institutions and platforms* to strengthen the capacity of the National Hydro Meteorological Services (NHMS) of Bhutan and Nepal on Climate Services. NHMS of Nepal and Bhutan are part of the South Asia Hydromet Forum (SAHF) which facilitates knowledge/capacity sharing across the countries in South Asia. NHMS also receive technical support from the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES). The project will strengthen NHMSs engagement with these regional initiatives/institutes greatly benefitting the NHMSs in improving their climate services and continuously upgrade them with the advancements in the field. (*see page 5, paragraph 8 of pre-CN)* The proposed activities under this project will complement existing investments in this sector in both countries. The project will ensure coordination with related national

			projects in Nepal and Bhutan. Lessons will be shared through national coordination mechanisms, hence creating an opportunity to enrich and mutual learning. Furthermore, best practices will serve to enrich the bi-national network that will be created for the project thus creating an opportunity for upscaling at a regional setting. For example, the GCF funded project on "*Supporting Climate Resilience and Transformational Change in the Agriculture Sector in Bhutan*" aims to develop tailored agriculture-relevant climate products using existing climate data and upgradation of irrigation schemes in 8 districts. On the other hand, this project will aim to improve the accuracy of weather forecast data through localization of weather data with enhanced capacity of NCHM in modelling. This will help improve the accuracy of agromet advisories. Furthermore, this project is also expected to look at institutional arrangements and capacity building for data weather and agriculture data management. Nepal Adaptation Fund project "*Adapting to Climate-Induced Threats to Food Production and Food Security in Karnali Region of Nepal (CAFS-Karnali)"* has demonstrated scalable best practices in the areas of rural resilience with development of climate smart villages, nature-based solutions, and food system resilience. Hence, the best practices of Nepal's project will be scaled up in other areas of Nepal and Bhutan having similar

			ecological features and climate change impact. Component 1 of the project builds on the NAMIS system developed by World Bank funded PPCR - Building Resilience to Climate Related Hazards Project. There is no geographic overlap of this project with other ongoing and pipe projects under the GCF, AF, GEF and other multilateral and bilateral donors in Nepal.
	3. Have the project/programme objectives, components and financing been clearly explained?	**Not fully.** The rational for investment in the project component is not strong, and the articulation between the three components is not sufficient. While the rational of building on results of components 1 and 2 to design community-based participatory approaches in component 3 is implicit, the project would benefit from an articulation of the added benefits of more information driven approaches, particularly given that many of the possible adaptation options mentioned are often used as no-regret measures and for many, the need for climate advisory services is not justified (e.g. climate proofing of storage facilities, promotion of	The recommendation is well received. The IE has revised the narrative of the project structure on page 4 of the pre-CN to highlight the articulation among the three components. It is important to note that the project is informed by Nepal's National Adaptation Plan (2021-2050) which was recently formulated adopting a participatory consultative process including the interactions and consultations with vulnerable communities. Additionally, the proposed interventions and adaptation actions are based on the findings of WFP's Consolidated Livelihood Exercise for Analyzing Resilience (CLEAR) methodology, which is used to understand how food security would be affected by climate-related risks, both in terms of extreme weather events and gradual changes. The CLEAR assessment was completed in 2021 which adopted interactions with vulnerable communities and consultations with different stakeholders at local, sub-national and national levels.

		renewable energy for productive use, strengthening of market linkages). **CAR2:** Please provide better articulation of the project objectives and components, with justification of financing needs, after addressing CAR1 above.	During concept note and full proposal development, further consultations will be conducted with local authorities, communities, women groups, and vulnerable groups for the identification of concrete project activities and indicators.
	4. Has the project/programme been justified in terms of how: - it supports concrete adaptation actions? - it builds added value through the regional approach? - it promotes new and innovative solutions to climate change adaptation? - it is cost-effective? - it is consistent with applicable strategies and plans? - it incorporates learning and knowledge management? - it will be developed through a consultative process with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund? - it will take into account sustainability?	**No.** The investment in climate advisory services is not fully justified, and the added-value of some activities is not clear (as explained above). The regional approach is not sufficiently justified- and seems limited to component 2. The project aims to leverage current regional platforms such as SAARC. However, these platforms have their own challenges and to be more effective, the project should proactively create mechanisms between the two countries for knowledge exchange e.g. regional workshops, regional coordination platforms, etc. Para 10 mentions three countries, but it is not clear which is the 3rd country referred. The project may	The IE has revised the narrative for the regional approach on page 5, paragraph 8, of the pre-CN. The IE will take into account the mentioned previously funded projects by LDCF, AF, GCF (including NAP readiness) and other bilateral climate projects in the next phases of project design. **Learning and knowledge management**: Under component 1 and 2, the project will systematically document best practices in the implementation of adaptive measures and use of climate information systems including indigenous and community level knowledge and organic/traditional adaptation practices. These experiences will be systematized in the forms of toolkits, guidance notes and similar publications to allow for the replication and upscaling in similar contexts. The binational coordination platform will allow for wider upscaling of the learning in both countries and both countries will disseminate the successful experiences widely through the regional platforms.

		consider collaboration with other countries, in particular India given their existing collaboration on climate and weather services with Bhutan and Nepal. Please also clarify potential synergies and collaboration with the AF project being developed by WFP for India and Sri Lanka which includes last-mile climate services. In addition, we note that a number of previously funded projects by LDCF, AF, GCF (including NAP readiness) and other bilateral climate projects need to be taken into account to properly assess the baseline. The cost-effectiveness is also subjected to the points mentioned above. Learning and knowledge management seems inherent across the project design but can be made more explicit, especially on how it can support a regional approach beyond the two countries. Very little information is provided on initial consultation with stakeholders, and on	**Cost-effectiveness**: The project adopts a cost-efficient approach to implementation through its regional approach that will allow the project to build on best practices while leveraging existing capacities and promoting knowledge exchange. The project will provide regional technical assistance capacity to both countries that will result in less need for investment in individual country teams while allowing the project to better systematize, contextualize and cross pollination of lessons learned amongst areas. This approach creates an economy of scale in technical expertise that is both cost efficient and valuable for a principal project objective (promoting exchange for adaptation action, including gender mainstreaming, at a local level). **Sustainability of the project**: Project sustainability will be guaranteed by the building of capacities at the institutional, multisector, and local levels, by the commitment of the competent institutions in the monitoring and technical assistance of the actions implemented by the project, and by greater awareness and equal participation of the key actors identified by the project. The project will build capacities at multiple levels through its various components including community groups in their ability to implement climate smart technologies and nature-based solutions. The project also allows for key actors to gain knowledge on the development and implementation of local

		vulnerable groups. The project misses an important element of leveraging local and indigenous knowledge and practices to complement climate information services and leverage them for adaptation planning. The sustainability of the project is unclear. **CAR 3:** Please revise the project design and justification taken into account the points raised above	adaptation actions and nature-based solutions. The revenue generated by additional productive incomes through alternative livelihoods and reduced losses will provide the income required to maintain inputs beyond the project's lifetime. To address existing capacity gaps, the project has considered the need for strengthening the capacity of national and local institutions and systems under component 1 and 2. For the sustainability of the binational coordination platform, the platform South Asia Hydromet Forum (SAHF), will be linked with existing regional coordination mechanisms i.e., More importantly the regional character that is being sought through the project will allow project results to be sustainable as made applicable in a wider setting by incorporating lessons learned that are not just nationally nor site specific (a common challenge of national projects). These lessons will be systematized and packaged for wider dissemination within the south Asia region facing similar challenges. **Stakeholder consultation**: The design of the pre-concept note was informed by a consultation with the Designated Authority (DA) in both countries to ensure alignment with specific country needs and priorities. The project concept consultation was held in Nepal with the DA, proposed executing entities, Department of Hydrology and Meteorology, Ministry of Agriculture and

			Livestock Development, and other relevant stakeholders at federal and provincial/sub-national levels to collect stakeholder feedback and get government's ownership in the project formulation process from the beginning. In Bhutan, preliminary consultations were conducted with relevant agencies including local government officials. Through these consultations, the priorities of the government were established. Furthermore, the Gross National Happiness Commission, which endorsed on this proposal, has been leading all the consultations to prepare the country/s NAP which is in draft. **Synergies with other AF regional project:** This project will seek synergies with the WFP reginal project for India and Sri Lanka. In particular the project will contribute to: - Output 1.2.2 Regional knowledge sharing platforms leveraged for vertical and horizontal knowledge exchange and scaling out of tailored last mile climate services Additionally, the project will seek to learn from the experience of the regional project on: - Output 2.1.2 Linkages facilitated between community members and financial services for long-term sustainability of adaptation plans

	5. Does the pre-concept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/sub-national level, and how coordination would be arranged? Does it explain how national institutions, and when possible, national implementing entities (NIEs) would be involved as partners in the project?	**Yes.** The preconcept provides a brief overview of the executing entities. **CR1:** The proposal mentions that for Nepal these are the Ministry of Forest and Environment as well as the Ministry of Industry, Tourism, Forest and Environment. Please clarify if the second ministry is at regional level, or how Forest and environment are within the responsibility of two ministries. **CR2:** Please consider the benefits of involving the NIE in Bhutan as a partner in this project.	The IE confirms that the Ministry of Industry, Tourism, Forest, and Environment in Sudur-Paschim Province is at regional/sub-national level. This Ministry covers the climate change portfolio at provincial/sub-national level and will have the lead role in execution of the proposed project activities in the field. Bhutan will consider the engagement of the NIE in the project as a partner.
Resource Availability	6. Is the requested project / programme funding within the funding windows of the programme for regional projects/programmes?	**Yes.**	
	7. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget?	**Yes.** However, the sum of the various budget components results in 14,000,030. **CAR 4.** Please adjust the budget so it does not exceed	This is well noted and the budget has been adjusted in the pre-CN.

		the maximum amount for regional projects.	
Eligibility of IE	8. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	**Yes.**	

ADAPTATION FUND

PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Strengthening community-based adaptation and food system resilience for vulnerable communities in Nepal and Bhutan
Countries:	Bhutan and Nepal
Thematic Focal Area:	Food security
Type of Implementing Entity:	Multilateral implementing entity
Implementing Entity:	World Food Programme (WFP)
Executing Entities:	Bhutan: Gross National Happiness Commission (GNHC) Nepal: Ministry of Forests and Environment (MoFE) and Ministry of Industry, Tourism, Forests and Environment (MoITFE), Sudur-Paschim Province
Amount of Financing Requested:	14,000,000 (in U.S Dollars Equivalent)

Project Background and Context

1. Both Bhutan and Nepal are located in the Himalayan Mountain, which is considered one of the most vulnerable mountain formations. Both countries are Least Developed Countries (LDC) characterized by slow economic development, socio-economic challenges, and low human development. In 2021, approx. 22% or 6.5 million people were considered food insecure in Nepal. Although 98%of Bhutanese households are food-secure, 88% of children between six to 23 months are not being given the minimum acceptable diet.[1] Agriculture is a major sector of the economy in terms of income, employment, and food security for both countries. In 2020, the sector accounted for 27.7% of GDP and 60.4% of national employment in Nepal[2] and 10.88% of GDP and 49.9% of employment in Bhutan. Nevertheless, agriculture remains mainly subsistence-based with more than half of the farms being small scale (less than 0.5 ha) in both countries and reliant on rainfall.

2. The socio-economic contexts and climate change vulnerability analyses of the agricultural sector in Bhutan and Nepal shows common challenges and issues, despite national specificities. The agricultural sectors of both countries are highly vulnerable to climate hazards (temperature rise, unpredictable rainfall, shifting of seasonality, prolonged droughts - particularly in winter) and extreme weather events which result in detrimental impacts on food and nutrition security for the rural communities, and have cascading adverse effects on the urban population. Climate change already has socio-economic implications in the Himalayan Mountain areas in both countries. The IPCC report (2019)[3] provides evidence that the reduction in streamflow due to glacier retreat or reduced snow cover has diminished water availability for irrigation of crops and declining agricultural yields in both countries. In addition to the effects on agriculture of altered availability of irrigation water, reductions in snow cover can also impact agriculture through its direct effects on soil moisture, where lesser snow cover has led to the drying of soils and lower yields of potatoes and fodder.[4] As a result rural communities are already experiencing poorer pasture availability and quality affecting pastoralism, a centuries-old practice in high mountain areas in both countries, involving summer and winter pastures.

3. In coming decades, climate change will add to and magnify current water management challenges in both countries. Scenarios show that warmer temperatures and increased evapotranspiration rates, combined with altered rainfall and snowfall patterns, will affect river flows and aquifer recharge, thus affecting water supply and demand. An increase in the frequencies and intensities of droughts, erratic rainfall-induced sedimentation in riverbanks and valleys, and

[1] Sonam Pelden, "UN Family 'scaling up' on Nutrition", UNICEF Bhutan, May 11, 2020, https://www.unicef.org/rosa/press-releases/un-family-scaling-nutrition

[2] World Bank, 2021. World Bank Data Nepal.

[3] Hock, R., G. Rasul, C. Adler, B. Cáceres, S. Gruber, Y. Hirabayashi, M. Jackson, A. Kääb, S. Kang, S. Kutuzov, A. Milner, U. Molau, S. Morin, B. Orlove, and H. Steltzer, 2019: High Mountain Areas. In: *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*.

[4] MoFE, 2021. 'Vulnerability and Risk Assessment and Identifying Adaptation Options Summary for Policy Makers'. Ministry of Forests and Environment, Government of Nepal. Kathmandu, Nepal.

landslides (extreme weather events) are also expected in the mountain areas.[5] While climate projections suggest a general warming trend across both countries, precipitation will likely become more erratic and unpredictable. According to forecasts for 2030 and 2050, summer monsoon rainfall in Nepal is likely to increase in amounts yet shorten in duration, resulting in higher intensity during peak summer months across the country.[6] These conditions leading to temperature increase will result in the proliferation of more pests and diseases and a reduction of yield. Hill lands and mountain areas are projected to become drier for the winter months. Increasing winter droughts are especially problematic for high mountain areas with significantly less access to irrigation sources than lower elevation areas, thus likely to severely affect the agricultural productivity and food and nutrition security in already food insecure remote hills and mountains.

4. The climate hazards that are most detrimental to rural households and agricultural production in the highlands and mountain areas in Nepal and Bhutan include droughts (due to decreased snowfall), landslides and erratic rainfall. These hazards cause lower agricultural yields and lower incomes for communities, thus increasing negative trends in food insecurity and accentuation of poverty. With current climate scenario, both Nepal and Bhutan need to implement adaptation measures to tackle climate change challenges, reduce vulnerability, and strengthen the resilience of communities and their livelihoods while protecting sources of local food security and livelihoods that have already been affected as a result of climate change.

5. Both Nepal and Bhutan have received investments to improve the generation and management of climate services and adaptation planning processes and have achieved significant progress from which they can learn from. However, this has taken predominantly a top-down approach and there are still gaps and needs to address, in particular the resilience of remote mountainous communities to climate variability and change, and disaster risks. While Nepal has advanced in the development of agromet services and provides 7-day Agromed Advisory Bulletin[7], its technological capacity is limited to three-day forecasts and lacks the ability to produce precise, localized data. On the other hand, Bhutan's agromet services provide only 72-hour weather forecast and lack quantitative measurements of rainfall, tailoring to crop varieties and geographic coverage. Both countries are therefore in need of a bottom-up approach to (i) better tailor climate services to respond to farmers' needs, and (ii) ensure delivery to the last mile. In fact, both countries are experiencing limited accessibility of climate services for end-users and lack of awareness of what kind of information is available, where it can be found and how it can be used in adaptation planning decisions. Similarly, weak infrastructure and communication technology, physical remoteness, illiteracy, trust and a lack of knowledge around climate information are also the limiting factors. Some of the reasons behind these challenges are that i) farmers require local level agrometeorological information that can realistically represent the farming environment, which is often lacking and ii) there is limited access to local extension staff and farming communities, making the integration of meteorological and local knowledge very challenging.

6. In summary, the barriers to adaptation and resilience identified are:
    - Insufficient technical capacity at national level to generate tailored high-resolution weather and climate information at all time scales, multi-hazard impact-based forecast/ potential impacts of climate change scenarios, to guide early action, and adaptation planning.
    - Limited access to climate information for the last mile communities and their lack of capacity to use it for adaptation planning.
    - Lack of local awareness among communities and local governments of tangible impacts from climate change to economies, agricultural productivity, and rural based livelihoods.
    - Limited capacity of rural communities to design and implement risk-informed adaptive practices and resilient livelihoods strategies.
    - Limited capacity in the development and implementation of tools and sustainable production practices to contribute to diversification and improvement of the resilience of production systems to climate change effects
    - Lack of access to knowledge of relevant regional best practices and lessons learned to allow for upscaling and local implementation of adaptation measures.

Project / Programme Objectives

7. The project's objective is to reduce vulnerability and increase the adaptive capacity of smallholder farmers through enhancing community-based adaptation processes, adopting resilient climate practices for the agriculture and food systems and improving access to reliable and timely climate information services and early warning for the communities

[5] *Idem Footnote 2*
[6] oFE, 2019. Climate change scenarios for Nepal for National Adaptation Plan (NAP). Ministry of Forests and Environment, Kathmandu
[7] The Nepal Agricultural Management Information System (NAMIS) has established hydromet services and provides a 7-day Agromet Advisory Bulletin since 2015. The Bulletin includes a summary of agrometeorological parameters, current and past week weather information along with weather forecast, information on pests and diseases.

in Bhutan and Nepal. The project will achieve this objective by catalyzing a regional approach to climate adaptation. The specific objectives of the project are:

- Strengthening operational capacity of National Meteorological and Hydrological Services (NMHS) and enhancing the engagement with key stakeholders including communities to generate tailored climate information services and ensure last-mile delivery;
- Strengthening national and local capacities to utilise weather, climate and hydrological information for short term (informed decision making to minimize/manage the risk) and long-term (local adaptation planning) strategies
- Enhance community-led adaptation processes, integrated risk management, and development of resilient, and productive/protective community assets for resilience building;
- Strengthening regional transboundary cooperation for knowledge sharing between the NMHSs and key stakeholders in agriculture in Bhutan and Nepal.

Project duration: 5 years (60 months)

Project / Programme Components and Financing:

Project/Programme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US$)
1. Improving last mile climate advisory services for risk-informed local adaptation planning and preparedness/early action	1.1 Strengthened systems and capacities to co-develop accessible climate advisory services tailored to last mile user's needs	1.1.1 Strengthened capacity of key government institutions at all levels and communities to co-produce tailored climate services products. 1.2.2 Regional knowledge sharing platforms for cross-learning, enhanced last mile climate knowledge management systems and tools, and potential scale up in other countries, are leveraged[8]	Bhutan and Nepal	2,945,950
	1.2 Remote and vulnerable rural communities use climate information to inform local adaptation planning	1.2.1 Effective delivery methods and channels for climate advisory services inform last mile communities 1.2.2 Capacities of local stakeholders and last mile communities to access, understand and use climate information are improved		
2. Strengthening of multi-hazard impact -based forecasting for early action	2.1 Capacities and tools for impact-based forecasting enables decision making for early action	2.1.1 National and local capacities for implementing impact-based forecasting are improved 2.1.2 Impact forecasting tools and methods for multiple hazards are co-designed to support decision and early action planning	Bhutan and Nepal	1,767,570
3. Strengthening adaptation through community-based participatory approaches	3.1 Strengthened institutional and local capacities enable community-based adaptation planning	3.1.1 Capacities of local governments and communities are strengthened to plan and implement adaptation solutions 3.1.2 Local adaptation planning instruments (e.g., LAPA) are revised/designed based on climate risk information	Bhutan and Nepal	7,070,250
	3.2. Last mile communities benefit from climate resilient strategies and adapted livelihoods	3.2.1 Technical support delivered on climate resilient agricultural production, sustainable water management and climate-proved production assets for improved food security 3.2.2 Improved access to markets and other financial services for long-term climate adaptation results		
4. Sub-total project cost				11,783,770
5. Project/Programme Execution cost (9.5 percent)				1,119,458
6. Total Project/Programme Cost				12,903,228
7. Project/Programme Cycle Management Fee charged by the Implementing Entity (8.5 percent)				1,096,772
8. Amount of Financing Requested				**14,000,000**

[8] E.g.: South Asian Climate Outlook Forum/Climate User Forum, South Asia Hydromet Forum

PART II: PROJECT / PROGRAMME JUSTIFICATION

Component 1. Improving last mile climate advisory services for risk-informed local adaptation planning and preparedness/early action. This component will establish the last mile climate services mechanisms and enabling environment to effectively plan local adaptation actions, prepare and implement community level preparedness and response activities for climate-induced disasters and adapt the agricultural activities based on available timely and tailored climate advisory services. The component aims to increase access to reliable, easy to understand, tailored climate and weather information to remote communities. Activities will seek to improve generation of tailored climate information (e.g., seasonal forecast, rainfall, soil moisture, temperature variations) by taking a bottom-up approach and involving local communities in a feedback mechanism to further improve climate products. The project will also facilitate access to additional information that is crucial for livelihood decision making, such as seasonal crop selection and calendar, crop water needs, agriculture market information. The type of information and dissemination channels will be designed considering the specific needs of gender, age, education, technology literacy. Activities will also enhance the effectiveness of climate information delivery methods to ensure their suitability for remote communities e.g., dedicated radio programmes, mobile phone (SMS and audio) and training of agricultural intermediaries. In addition, a dedicated mechanism will also be created to ensure access to better climate and weather information to local decision makers and relevant agricultural stakeholders (i.e., market suppliers) to inform their decision-making and practices as well. To achieve this, the project will coordinate and strengthen capacities of relevant agencies such as the Department of Hydrology and Meteorology and the Ministry of Agriculture and Livestock Development in Nepal and National Center for Hydrology and Meteorology and Ministry of Agriculture of Bhutan. This component will strengthen the collaboration between the two countries by establishing knowledge exchange platforms and regional dialogues to transfer know-how and technologies from Nepal to Bhutan, building upon existing systems[9&10]. By providing farmers and other community members with reliable and easy to understand information at the right time, this component will effectively enable them to plan and manage, in short and long-term, climate-related risks and make informed decisions on appropriate adaptation practices in Component 3.

Component 2. Strengthening of multi-hazard impact -based forecasting for early action. This component will focus on strengthening the multi-hazard impact-based forecasting to enable risk-informed decisions and trigger early actions by enhancing the national and local capacities. Results from this component will inform community anticipatory (short-term) flood and landslide protection measures designed and implemented in Component 3. The activities will enhance the institutional capacities and technical aspects required for delivering impact-based forecasting to inform early action. The project will build upon the WFP's experience with the Platform for Real-time Impact and Situation Monitoring (PRISM) to assess the potential risk and forecasts the impact of climate hazards (drought and landslides), on the most vulnerable communities, in order to design risk reduction activities and target disaster responses. PRISM will combine climate and vegetation information from satellites, and ground observatories, with data on vulnerability to facilitate risk-informed decision making, allowing the decision makers to prioritize assistance to those most in need based on interactive maps and impact analytical products. The activities will bring together Nepal's and Bhutan's disaster management authorities, meteorological agencies and key line ministries such as agriculture to collectively monitor risks, prioritize responses and inform programmes and policies.

Component 3. Strengthening adaptation through community-based participatory approaches. Component 3 will promote the adoption of sustainable community-led adaptation processes, and integrated risk management approach and develop diversified and resilient livelihoods for vulnerable communities for which the identification and implementation of adaptive measures will be informed by project's Component 1 (risk-informed local adaptation plan and farmer's agricultural adaptation, such as water management and harvesting) and 2 (integrating early actions into adaptation practices based on impact-based forecasting, such as flood and landslide protection measures). In particular, the activities aim to support planning and implementation of adaptation measures through a facilitated and inclusive community-based participatory process for short and long-term local planning processes, identification of suitable adaptation options and of productive assets which community can work on and create to generate income (such as flood and landslide protection measures and improvements to water management and harvesting, as well as encouraging climate resilient crop and seed varieties). The project will also explore further options to develop climate resilient livelihoods for farmers communities (such as climate-proofing of storage facilities and other productive assets, introduction of post-harvest technologies, promotion of renewable energy for productive use, strengthening of market linkages). At a full proposal stage and after community consultations, a menu of adaptation options will be designed, where each option will be assessed against a set of criteria that include adaptation impact, cost-effectiveness, relevance to the context and to targeted communities. In the context of Nepal, activities under this component will be embedded

[9] Nepal: Agriculture Management Information System (AMIS) developed by the Pilot Program for Climate Resilience (PPCR): http://brch.dhm.gov.np/components/

[10] Bhutan: Agro-meteorological Decision Support System in Bhutan: https://sesame-bt.rimes.int/LandingPageInfo/about_adss

in the National Framework for Local Adaptation Plans of Action (LAPA)[11]. Where no LAPA are developed, the project will support the municipalities to develop such. The approach for the community-based adaptation planning in Bhutan will be developed based on the lessons learned and best practices from LAPA processes in Nepal and ongoing adaptation projects in Bhutan. Additionally, the project will assess the feasibility of adopting best practices and adaptation models such as the Climate-Smart Villages (CSVs)[12] implemented in Nepal. Innovative farmer-to-farmer knowledge sharing tools and methods (e.g. podcasts in local radio station, videos) will seek to enhance community adaptive capacity through the regional collaboration.

8. **Regional approach**: The regional approach will be based on (i) knowledge and know how transfer and (ii) leveraging of regional institutions and platforms. **Knowledge and know-how transfer**: the project will establish a bilateral mechanism to mobilize support and knowledge transfer on climate information systems and local adaptation practices while systematising best practices and lessons learned. The mechanism will support the inclusion of local actors in bi-national knowledge exchange through virtual and on-site visit exchanges. Under component 1 and 2 the project will systematize the lessons learned and best practices. This will enable the dialogue between producers and users of information and invest in strengthening extension services and other knowledge intermediaries' capacities. **Leveraging of regional institutions and platforms**: the project will leverage the regional institutions, initiatives, and mechanisms to strengthen the capacity of the National Hydro Meteorological Services (NHMS) of Bhutan and Nepal on Climate Services. NHMS of Nepal and Bhutan are part of the South Asia Hydromet Forum (SAHF), a regional initiative that provides capacity building and training activities to NMHSs of South Asia to generate and transform climate data into reliable information that are critical in saving lives, protecting assets and strengthening the resilience of communities in South Asia. NHMS also receive technical support from the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES). The project will strengthen NHMSs engagement with these regional initiatives/institutes greatly benefitting the NHMSs in improving their climate services and continuously upgrade them with the advancements in the field.

9. An Environmental and Social Risk assessment, in compliance with the ESP Policy of the Adaptation Fund will be carried out during project preparation and a risk management plan will be developed, with related indicators, budget, clear roles and responsibilities. Concrete adaptation options and assets will be small-scale and developed at household or community level, therefore the project is expected to be classified as low or moderate risk.

10. **Alignments with strategies**: The proposed project is strategically aligned to several national priorities both in Nepal and Bhutan. In Nepal, the project directly contributes to the Nepal Climate Change Policy (2019) in particularly to its two sectoral priority areas – agriculture and food security, and disaster risk reduction and management. The Nationally Determined Contribution (NDC, 2020), National Framework on LAPA (2019) and National Adaptation Plan (NAP, 2021) highlight adaptation priorities in agriculture and food security and disaster risk reduction. In Bhutan, the project is aligned with the Climate Change Policy (2020) and its strategic goal to enhance resilience of livelihoods and climate information and knowledge system to support a long-term, iterative process of adaptation planning and implementation. As well the Project is aligned with the adaptation objectives of the first NDC (2017) and second NDC (2021).

11. **Leveraging achievements from other funding sources:** This project has been designed to build on, synergize and complement results previous and current projects in Nepal and Bhutan. In particular, the project will seek synergies with the following projects in Nepal: (i) Adaptation Fund country project "*CAFS-Karnali*", which has demonstrated best practices on building rural resilience with the development of climate-smart villages, nature-based solutions, and food system resilience. This project will seek to build upon lessons learned and, where possible, replicate solutions; (ii) GCF project "*Building a Resilient Churia Region in Nepal (BRCRN)"*. In Bhutan, this project will seek synergies with the following projects: (i) GEF-LDCF project "*Enhancing Sustainability and Climate Resilience of Forests and Agricultural Landscapes and Community Livelihoods*"; (ii) GCF project "*Supporting Climate Resilience and Transformational Change in the Agriculture Sector*".A joint meeting to clarify the collaborative framework will be organized with all relevant partners to ensure complementarity and synergy of interventions.

PART III: IMPLEMENTATION ARRANGEMENTS

The project will be implemented by the WFP who will be overlooking all financial, monitoring and reporting aspects to the Adaptation Fund. In Nepal, Ministry of Forests and Environment (MoFE) which is also the Designated Authority (DA) for AF, will be the executing entity together with Ministry of Industry, Tourism, Forests and Environment (MoITFE) at provincial level in collaboration with respective local governments. All project activities will be integrated in national

[11] Nepal's National Framework for Local Adaptation Plans of Action. Available online: https://climate.mohp.gov.np/downloads/National_Framework_Local_Adaptation_Plan.pdf

[12] ICIMOD has developed and piloted in Nepal the Climate Smart Village approach, which is customized for mountain areas..

budget and programme of government at different levels. In Bhutan, the Gross National Happiness Commission (GNHC) will be the executing entity. WFP will also provide administrative and management support to the executing entities as well as technical guidance. Project architecture includes a binational advisory committee, as well as national project steering committee, project implementation and coordination units at sub-national and local levels.

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

A. Record of endorsement on behalf of the government[13] *Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.*

Mr. Rinchen Wangdi, Secretary, Gross National Happiness Commission Secretariat	Date: December 28, 2021
Dr. Arun Prakash Bhatta, Under-Secretary, MoFE, AF DA for Nepal	Date: January 10, 2022

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 (Nepal Climate Change Policy, 2019; Nationally Determined Contribution, NDC, 2020; National Framework on LAPA, 2019; and National Adaptation Plan, 2021, in Nepal; National Adaptation Plan and Climate Change Policy, 2020; Nationally Determined Contribution, 2021, in Bhutan) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
(signature) ***Mr. Robert Kasca,*** ***Representative and Country Director*** ***WFP Nepal*** Implementing Entity Coordinator Nepal	*(signature)* ***Mr. Svante Helms,*** ***Head of Office WFP*** ***Country Office Bhutan*** Implementing Entity Coordinator Bhutan
Date: 10.01.2022	Date: 10.01.2022
Tel. and email: +977 5260607/5260316; robert.kasca@wfp.org	Tel. and email: +975 17110190 svante.helms@wfp.org
Project Contact Person Nepal: **Mr. Krishna Jogi, Deputy Head of Programme, WFP Nepal**	Project Contact Person Bhutan: **Mr. Dungkar Drukpa, Government Partnership Officer, WFP Bhutan**
Tel. and Email: +977 01-5260607 krishna.jogi@wfp.org	Tel. and Email: +975 17110187 dungkar.drukpa@wfp.org

[13] 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.

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

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Name & Signature Implementing Entity Coordinator Signature: Mr. Robert Kasca, Representative and Country Director WFP Nepal Implementing Entity Coordinator, Nepal	*Name & Signature* Implementing Entity Coordinator Signature: Mr. Svante Helms, Head of Office, WFP Country Office, Bhutan Implementing Entity Coordinator, Bhutan
Date: *(01, 10, 2022)* Tel. and email:+977 5260607/5260316; robert.kasca@wfp.org	Date: *(01, 10, 2022)* Tel. and email+975 17110190; svante.helms@wfp.org
Project Contact Person: Nepal: Krishna Jogi, Deputy Head of Programme, WFP Nepal,	Project Contact Person: Bhutan - Mr. Dungkar Drukpa, Government Partnership Officer, WFP, Bhutan
Tel. And Email: +977 01-5260607 krishna.jogi@wfp.org	Tel. And Email: +975 17110187 dungkar.drukpa@wfp.org

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Royal Government of Bhutan
Gross National Happiness Commission

Date: 28.12.2021

The Chairman
The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat

Dear Sir,

Endorsement for Pre-Concept: Strengthening community-based adaptation and food system resilience for vulnerable communities in Nepal and Bhutan

In my capacity as the National Designated Authority (NDA) for the Adaptation Fund in Bhutan, I confirm that the pre-concept of the above regional project 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 Bhutan.

Accordingly, I am pleased to endorse the above pre-concept note with support from the Adaptation Fund. If approved, this project will be implemented by the UN World Food Programme and executed by the Governments of Bhutan and Nepal.

Thank you,

Yours sincerely,

Secretary
GNH Commission

(Rinchen Wangdi)
Secretary
Gross National Happiness Commission Secretariat
Royal Government of Bhutan

Government of Nepal

Ministry of Forests and Environment

Government of Nepal
Ministry of Forest and Environment
Singh Durbar, Kathmandu

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

Ref.No. 126

Date:-10th January, 2022

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

Subject: Endorsement for the Regional Project - Strengthening community-based adaptation and food system resilience for vulnerable communities in Nepal and Bhutan.

In my capacity as designated authority for the Adaptation Fund in Nepal, 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 the Sudur-Paschim Province of 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 UN World Food Programme (WFP) and executed by Ministry of Forests and Environment (MoFE) and Ministry of Industry, Tourism, Forests and Environment (MoITFE) of Sudur-Paschim Province in Nepal as per the prevailing Legislation of Government of Nepal. As per decision made by the Ministry (Secretary Level) dated on 10th January, 2022.

A.P. Bhatta

Sincerely,

Dr. Arun Prakash Bhatta
Under Secretary (Technical)
Climate Change Management Division
Ministry of Forests and Environment, NEPAL

Project Formulation Grant (PFG)

Submission Date: 10 January 2022

Adaptation Fund Project ID:
Country/ies: Bhutan and Nepal
Title of Project/Programme: Strengthening community-based adaptation and food system resilience for vulnerable communities in Nepal and Bhutan
Type of IE (NIE/MIE): MIE
Implementing Entity: World Food Programme (WFP)
Executing Entity/ies: Bhutan: Gross National Happiness (GNH) Commission
Nepal: Ministry of Forests and Environment (MoFE) and Ministry of Industry, Tourism, Forests and Environment (MoITFE), Sudur-Paschim Province

A. Project Preparation Timeframe

Start date of PFG	**March 2022**
Completion date of PFG	**March 2023**

B. Proposed Project Preparation Activities ($)

Describe the PFG activities and justifications:

List of Proposed Project Preparation Activities	Output of the PFG Activities	USD Amount
1.Consultations (stakeholder & community)	Preliminary consultation at the beginning of the process and validation at the end - interviews and workshop. To identify community challenges and needs. It is conducted together with communities, partners and local government staff to identify priority activities to significantly improve the adaptive capacity and food security of the poorest and most vulnerable households.	8,000.00
2.Context analysis to identify gaps and vulnerabilities	The project team will analyze climate change trends and projections, the existing projects and programmes, gaps to be filled, vulnerabilities and needs.	4,000.00

3.Drafting the concept note	Concept note drafted and ready for submission	6,000.00
4.Audit of the grant	Independently undertaken	2 000.00
Total Project Formulation Grant		20,000.00[1]

C. Implementing Entity

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
Mr. Svante Helms, Head of Office, WFP Country Office, Bhutan		10/01/2022	Mr. Dungkar Drukpa, Government Partnership Officer, WFP, Bhutan	+975 17110187	dungkar.drukpa@wfp.org
Mr. Robert Kasca, WFP Representative and Country Director, Nepal		10/01/2022	Mr. Krishna Jogi, Deputy Head of Programme and Strategic Programme Manager (Livelihoods, Resilience, Climate Change and Food System), WFP Nepal	+977 9801083533	krishna.jogi@wfp.org

[1] Includes WFP Indirect Support Cost of 6.5%.

3.Drafting the concept note	Concept note drafted and ready for submission	6,000.00
4.Audit of the grant	Independently undertaken	2 000.00
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Mr. Robert Kasca, WFP Representative and Country Director, Nepal	UN WORLD FOOD PROGRAMME KATHMANDU-CO 2	10/01/2022	Mr. Krishna Jogi Deputy Head of Programme and Strategic Programme Manager (Livelihoods, Resilience, Climate Change and Food System), WFP Nepal	+977 9801083533	krishna.jogi@wfp.org

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