

**GREEN
CLIMATE
FUND**

Meeting of the Board
21 – 24 October 2024
Songdo, Incheon, Republic of Korea
Provisional agenda item 10

GCF/B.40/02/Add.04

30 September 2024

Consideration of funding proposals – Addendum IV

Funding proposal package for SAP047

Summary

This addendum contains the following five parts:

- a) A funding proposal summary titled “Climaventures: Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan” by the National Rural Support Programme;
- b) No-objection letter(s) issued by the national designated authority(ies) or focal point(s);
- c) Independent Technical Advisory Panel’s assessment;
- d) Response from the accredited entity to the independent Technical Advisory Panel’s assessment; and
- e) Gender documentation of the funding proposal.

These documents are presented as submitted by the accredited entity and the national designated authority(ies) or focal point(s), respectively. Pursuant to the Comprehensive Information Disclosure Policy of the Fund, the funding proposal titled “Climaventures: Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan” submitted by the National Rural Support Programme is being circulated on a limited distribution basis only to Board Members and Alternate Board Members to ensure confidentiality of certain proprietary, legally privileged or commercially sensitive information of the entity.

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Simplified Approval Process Funding Proposal

Project/Programme title:	<u><i>Climaventures: Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan</i></u>
Country(ies):	<u><i>Pakistan</i></u>
National Designated Authority(ies):	<u><i>Ministry of Climate Change (MoCC)</i></u>
Accredited Entity:	<u><i>National Rural Support Programme (NRSP)</i></u>
Date of first submission:	<u><i>[2023/11/30]</i></u>
Date of current submission/ version number	<u><i>[2024/09/27] [V.008]</i></u>



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Contents

Section A PROJECT / PROGRAMME SUMMARY

This section highlights some of the project's or programme's information for ease of access and concise explanation of the funding proposal.

Section B PROJECT / PROGRAMME DETAILS

This section focuses on describing the context of the project/programme, providing details of the project/programme including components, outputs and activities, and implementation arrangements.

Section C FINANCING INFORMATION

This section explains the financial instrument(s) and amount of funding requested from the GCF as well as co-financing leveraged for the project/programme. It also includes justification for requesting GCF funding and exit strategy.

Section D EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section provides an overview of the expected alignment of the projects/programme with the GCF investment criteria: impact potential, paradigm shift, sustainable development, needs of recipients, country ownership, and efficiency and effectiveness.

Section E ANNEXES

This section provides a list of mandatory documents that should be submitted with the funding proposal as well as optional documents and references as deemed necessary to supplement the information provided in the funding proposal.

Notes to accredited entities on the use of the SAP funding proposal template

- The Simplified Approval Process Pilot Scheme (SAP) supports projects and programmes with a GCF contribution of up to USD 25 million with minimal to no environmental and social risks. Projects and programmes are eligible for SAP if they are ready for scaling up and have the potential for transformation, promoting a paradigm shift to low-emission and climate-resilient development.
- This template is for the SAP funding proposals and is different from the funding proposal template under the standard project and programme cycle. Distinctive features of the SAP funding proposal template are:
 - *Simpler documents*: key documents have been simplified, and presented in a single, up-front list;
 - *Fewer pages*: A shorter form with significantly fewer pages. The total length of funding proposals should **not exceed 20 pages**, annexes can be used to provide details as necessary;
 - *Easier form-filling*: fewer questions and clearer guidance allows more concise and succinct responses for each sub-section, avoiding duplication of information.
- Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other funding proposal documents such as project appraisal document, pre-feasibility studies, term sheet, legal due diligence report, etc.
- Submitted SAP Pilot Scheme funding proposals will be disclosed simultaneously with submission to the Board, subject to the redaction of any information which may not be disclosed pursuant to the [GCF Information Disclosure Policy](#).
- For more information on how to develop Funding Proposals under the SAP please refer to the [Simplified Approval Process \(SAP\) Funding proposal guidelines](#).

Please submit the completed form through the GCF Digital Proposal Submission Platform (DPS)¹

LIST OF ACRONYMS	
AE	Accredited Entity
AMA	Accreditation Master Agreement
ARA	Adaptation results area
CN	Concept note
EE	Executing Entity
ESIA	Environment and Social Impact Assessment
ESMF	Environment and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESS	Environmental Social Safeguard
FP	Funding Proposal
GHG	Greenhouse Gas
IDP	Information Disclosure Policy
IRMF	Integrated Results Management Framework
MOV	Means of verification
MRA	Mitigation results area
NAMAs	Nationally appropriate mitigation actions
NAPs	National adaptation plans
NDA	National Designated Authority
NDC	Nationally determined contributions
RFP	Request for Proposals
ToC	Theory of change
tCO₂eq	tons of carbon dioxide equivalent

¹ See the [DPS user guide](#) for further information on how to access and submit proposals.

A. PROJECT/PROGRAMME SUMMARY					
A.1. Has this FP been submitted as a SAP CN before?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
A.2. Is the Environmental and Social Safeguards Category C or I-3?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
A.3. Project or programme	Indicate whether this FP refers to a combination of several projects (programme) or one project. <input checked="" type="checkbox"/> Project <input type="checkbox"/> Programme	A.4. Public or private sector	<input checked="" type="checkbox"/> Private sector	A.5. RfP	Not applicable
A.6. Result area(s)	Check the applicable <u>GCF result area(s)</u> that the overall proposed project/programme targets. For each checked result area(s), indicate the estimated percentage of GCF and Co-financers' budget devoted to it. The total of the percentages when summed should be 100% for GCF and Co-financers' contribution respectively.				
	The figures below have been concluded using case studies of companies which are representative of the climate ventures in which investments will be made during the project life. (See Annexures 22a.1 22a.2 and 22b to learn more)				
				GCF Contribution 37.5%	Co-financers' contribution² 62.5%
	Mitigation total			70 %	70 %
	<input checked="" type="checkbox"/> Energy generation and access			28 %	28 %
	<input checked="" type="checkbox"/> Low emission transport			28 %	28 %
	<input checked="" type="checkbox"/> Buildings, cities and industries and appliances			14 %	14%
	<input type="checkbox"/> Forestry and land use			Enter number %	Enter number %
	Adaptation total			30 %	30 %
	<input checked="" type="checkbox"/> Most vulnerable people and communities			8 %	8 %
<input checked="" type="checkbox"/> Health and well-being, and food and water security			22 %	22 %	
<input type="checkbox"/> Infrastructure and built environment			Enter number %	Enter number %	
<input type="checkbox"/> Ecosystem and ecosystem services			Enter number %	Enter number %	
A.7.1. Expected mitigation outcome (Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)	Indicate GHG emission reductions or removals in tCO ₂ e _q over total lifespan of the project/programme ³ 3,508,243 See Annexures 22a.1, 22a.2, and 22b to view methodology and calculations.	A.7.2 Expected adaptation outcome (Core indicator 2: direct and indirect beneficiaries reached)	Indicate total number of direct and indirect beneficiaries Direct: 3,772,597 Indirect: 2,127,000 Total number of beneficiaries:5,899,597 See Annexures 22a.1, 22a.2, and 22b to view methodology and calculations.		
		Indicate number of direct beneficiaries		1,414,723	Indicate number of direct beneficiaries
					2,357,873

² Co-financer's contribution means the financial resources required, whether Public Finance or Private Finance, in addition to the GCF contribution (i.e. GCF financial resources requested by the Accredited Entity) to implement the project or programme described in the funding proposal.

³ The total lifespan of the project/programme is defined as the maximum number of years over which the outcomes of the investment are expected to be effective. This is different from the project/programme implementation period .

			Indicate % of direct beneficiaries vis-à-vis total population 0.58%	Indicate % of direct beneficiaries vis-à-vis total population 0.98%
A.8.1. Total investment (GCF + co-finance⁴)	Amount: 50 million USD	A.8.2 Total GCF funding requested (max USD 25M)	Amount: 25 million USD	
A.9. Type of financial instrument requested for the GCF funding	<p>Mark all that apply.</p> <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Loan ⁵ <input checked="" type="checkbox"/> Equity <input type="checkbox"/> Guarantees <input checked="" type="checkbox"/> Others: Reimbursable Grant			
A.10. Implementation period (months)	120 Months	A.11. Total project/ programme lifespan (years)	<p>Indicate the maximum number of years over which the outcomes of the investment are expected to be effective, i.e. to lead to adaptation and/or mitigation results.</p> 10 Years	
A.12. Expected date of internal approval	<p>The date that the Accredited Entity obtained/will obtain its own approval to implement the project/ programme, if available</p> 8/6/2024	A.13. Has Readiness or PPF support been used to prepare this FP?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
A.14. Is this FP included in the entity work programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.15. Is this FP included in the country programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
A.16. Executing Entity information	<p>Components 1A and 1B:</p> <ol style="list-style-type: none"> National Rural Support Programme (NRSP) will serve as the executing entity itself for Component I of the project which will be executed exclusively in Pakistan. <p>Component 2:</p> <ol style="list-style-type: none"> Sarmayacar Climate B.V. (a private Limited Liability Company registered in the Netherlands), the General Partner and Fund Manager of the Climaventures Fund ("CF") will serve as the executing entity for component 2. The Accredited Entity shall sign a Subsidiary Agreement with Sarmayacar Climate B.V. for the implementation of Component 2 - CF of the Project. GCF Holdings BV: GCF's investment into the Climaventures Fund (CF) shall be made through an investment holding company (GCF Investment Holdings) established in Netherlands. GCF Holdings will be 100% owned private limited liability company (besloten vennootschap met beperkte aanspreekelijkheid) under the laws of the Netherlands. GCF Holdings will be established and managed by the Accredited Entity pursuant to the power of attorney granted by the GCF. Climate Fund ("Climaventures Fund"): Sarmayacar Climate B.V. will set up Climaventures Fund as an alternative investment fund in accordance with Directive 2011/61/EU on Alternative Investment Fund Managers ("AIFMD"). Climaventures Fund will have a form of a limited partnership (commanditaire vennootschap or C.V.) or other legal form to be agreed in the FAA and will be set up pursuant to the laws of the Netherlands. The Key Persons, as identified in the fund documentation and the FAA. GCF Holdings. 			
A.17. Scalability and potential for transformation (max. 100 words)				

⁴ Refer to the Policy on Co-financing of the GCF.

⁵ Senior loans and subordinated loans.

Climaventures strategically invests in climate ventures, spanning from the ideation stage (Component 1) to MVP stage (Component 2), fostering innovation and advancing the transition to low-carbon systems, as well as a climate-resilient Pakistan. While Component 1 focuses on launching the climate ecosystem, Component 2 emphasizes on helping ventures with commercial traction to scale-up their operations. The project is designed to expedite climate mitigation and adaptation by supporting 100+ ground-breaking pre-seed level climate-solutions through Component 1, and 15-20 ready-for-investments climate ventures in Component 2 across five GCF result areas – the scaling of these climate-tech initiatives will unlock increased capacity in renewable energy, enhance efficiency, promote low-emission transport, improve natural resource management, and fortify resilient food systems and agricultural practices. The GCF investment in this project is poised to catalyse the emergence of a novel segment within Pakistan's domestic market ecosystem, setting off a cycle of capital mobilization and scaling the impact of climate initiatives.

A.18. Project/Programme rationale, objectives and approach (max. 300 words)

Climaventures is poised to invest across the spectrum of technology and innovation-led ideation to later-stage companies, focusing on those driving climate action and sustainable consumption and production. This strategic investment will cover mitigation efforts aimed at reducing emissions and limiting the impacts of climate change, as well as adaptation initiatives designed to respond and adjust to climate impacts by climate-proofing economic and social systems. The overarching goal is to establish financially viable, scaled-up climate solutions in Pakistan by supporting technology and innovation-led climate ventures with high growth potential, capable of generating exponential impact and commercial returns.

Climaventures seeks to demonstrate the viability of early-stage climate ventures as an asset class through Component 1, the Venture Accelerator. This component, supported by a reimbursable grant from GCF, aims to assist early-stage innovative climate ventures facing challenges in solidifying their development stage, launching their Minimum Viable Product (MVP), and securing capital for scale-up. Simultaneously, Component 2, the Climaventures Fund, envisions GCF's equity-focused contribution, directed towards investing in scalable businesses with robust impact objectives. The Fund's contribution to impact is achieved through the provision of capital as well as through management support and strategic engagement with investee companies through the life of the investment. Consistent with good practices for ESG and GCF's key principles for demonstrating mitigation and adaptation potential, the Fund will articulate its impact expectations in its Investment Agreements with the climate ventures.

The focus is on kickstarting the climate-tech ecosystem for climate action in Pakistan through mass adoption of climate-smart technologies, ultimately ensuring the project's scalability and replicability. The project outcomes include reduced GHG emissions and improved climate resilience of climate vulnerable populations, ultimately contributing significantly towards Pakistan's Nationally Determined Contributions (NDCs) and the National Adaptation Plan (NAP).

B. PROJECT/PROGRAMME DETAILS

B.1. Context and baseline (max. 500 words)

With a population of 241.49 million, Pakistan stands as the fifth most climate-vulnerable country in the world. The urgent need for adaptive and resilient initiatives in vulnerable regions is underscored by Pakistan's high disaster risk levels, ranking 18 out of 191 countries by the 2020 INFORM Risk Index. For example, the devastating 2022 floods, affecting around 33 million people, brought an estimated total damage of \$14.9 billion, loss of \$15.2 billion and needs for recovery of \$16.3 billion. On 3 March 2024, areas in Khyber Pakhtunkhwa and Baluchistan were hit by a series of flash floods triggered by heavy rainfall, over a one-week period, forcing the evacuation of 10,000 locals. The Gwadar region in Baluchistan, set to become Pakistan's economic hub, has now been declared a disaster zone. The Karakoram Highway is also facing blockages due to landslides, affecting trade. The impact of such disasters is exacerbated by Pakistan's socioeconomic vulnerability as a result of its high levels of poverty, where the country holds a GDP per capita of \$1,168, classifying it as a lower middle-income country. Given its current economic vulnerability, Pakistan is not fully equipped to combat climate hazards that can be expected from current and projected trends.

Pakistan's Climate Risk Profile and Key Trends

Mitigation Profile

GHG Emissions

Currently Pakistan contributes only 0.9% to global GHG emissions. The sectors with the highest CO₂ emissions are energy, transport, agriculture, industry, and solid waste. Pakistan's energy and agriculture sector contributes 77% in GHG emissions. The transport sector contributes 9%, industry contributes 5% and the solid waste sector contributes 4% to overall GHG emissions. Pakistan, under its 2021 Nationally Determined Contributions (NDCs), has set the target of reducing 50% of its projected emissions by 2030, from which 35% of these reductions are dependent on receiving international finance. Pakistan's projected emissions are approximately 1603 MTCO₂ by 2030 (NDCs) of which the country commits to reduce 50% (801.5 MTCO₂), with 15% (240 MTCO₂) drop below business as usual (BAU) from the country's own resources, and an additional 35% (561 MTCO₂) subject to International Financing. This project aims to contribute **3.5m metric tons of CO₂** towards the total commitment.

Sector of focus	Sectors contribution to emissions	Need for mitigation	Potential interventions/emissions reduction	Contribution to NDCs
Energy generation and access	<p>The electricity generation sector contributes around 76.1% of Pakistan's total CO₂eq emissions, where the national energy mix heavily consists of fossil fuels, mainly natural gas, and oil. This overreliance on finite and expensive resources exposes the industry to fluctuations in price and supply disruptions.</p> <p>Future demand projections show that overall primary energy demand of the country will increase from 75.5 million tons of oil equivalent (Mtoe) in 2021 to 99.2 Mtoe by 2030. The country's high energy demand is exacerbated due to wasteful industrial, commercial, and residential practices, as well as the lack of energy-efficient technologies and energy conservation measures.</p>	<p>This sector's high emission denotes the need to reduce fossil fuel sources in the national energy mix and increase the share of renewable energy. However, the energy sector suffers from insufficient investment in building new power plants and upgrading existing infrastructure.</p> <p>There is also a need to reduce energy demand to avoid overreliance on fossil fuel consumption, especially with Pakistan's high potential for demand-side improvement. According to the Asian Development Bank, Pakistan has the potential to save 10 to 12 Mtoe through energy conservation and efficiency measures. Currently however, Pakistan is focused more on adding generation capacity than reducing energy demand. To reduce energy demand, it is critical to demonstrate the benefits of energy efficiency investments to key players and mobilise private sector investment.</p>	<p>To support the integration of renewable energy sources, potential interventions include installing smart grid and energy management systems to optimize the distribution of renewable energy like wind and solar power. To reduce energy demand through increased energy efficiency, interventions include investing in energy-efficient software and hardware solutions, including data centres and cloud computing services. The total GHG emissions from the energy sector in Pakistan are 218.94 (MtCO₂e). Through these interventions, this project will mitigate 0.34 (MtCO₂e) from the energy sector.</p>	<p>According to NDCs, by 2030, 60% of all energy produced in the country will be generated from renewable energy resources including hydropower. The reduction of fossil fuels for energy generation from this project would facilitate Pakistan's NDC targets.</p>
Low-emission transport	<p>Pakistan's transport sector accounts for 30% of the total final energy consumption. Oil has been the primary energy source</p>	<p>Increasing fuel demand poses risks for energy security, and concerns related to emissions and air quality. Pakistan aims to electrify transportation to</p>	<p>To support widescale EV adoption, it is critical to develop and support smart transportation systems and promote EV</p>	<p>According to NDCs, by 2030, 30 % of all new vehicles sold in Pakistan in various</p>

	<p>in the transport sector, accounting for 91% of the total energy consumed in 2019. With the number of cars and motorcycles increasing rapidly, the demand for fuel is expected to grow. The projected values of oil demand and carbon emissions from the transportation sector from the years 2018 to 2030 reveal average annual growth rates of 12.68% and 11.45% respectively. The increase in population growth is a main driver of this projection.</p>	<p>reduce energy intensity in the sector. Under a best-case scenario, high electric vehicle (EV) adoption in the market will bring a fuel reduction of over 18 Mtoe from 2021-2030. In medium and low growth scenarios, EV adoption will result in about 10 and 5 Mtoe respectively. Currently, however, Pakistan has a low EV adoption rate; in 2022, around 8000 EV were sold. Whilst Pakistan has set EV targets under its NDCs, EV policies are more favorable towards importing EVs and EV parts than supporting local manufacturing. Additionally, the transport sector faces several challenges including the lack of sufficient infrastructure for sustainable transport such as charging stations and maintenance facilities, limited model variety and availability, the scarcity of financial resources for both the government and individuals, and the lack of public awareness and education regarding the environmental implications of transport.</p>	<p>infrastructure. Interventions also involve using data analytics to optimize transportation routes and reduce fuel consumption. The total GHG emissions from the transport sector in Pakistan are 51.34 (MtCO₂e). This project will mitigate approximately 1.6 (MtCO₂e) from the sector.</p>	<p>categories will be Electric Vehicles (EVs). Promoting EVs will help Pakistan achieve its NDC target for the transport sector.</p>
Buildings, cities and industries and appliances	<p>The primary sources of emissions come from industries, including cement plants, gas processing, power plants, and refineries, where the industrial sector uses over 98% of the polluting energy sources. In terms of geographical contributions, Sindh accounts for over 22 million tons of CO₂ emissions, followed closely by Punjab, which exceeds 20 million tons.</p>	<p>Pakistan set an Energy Efficiency & Conservation Strategic Plan 2020-23 to achieve 3 Mtoe energy saving by 2023 through initiatives in key energy-consuming sectors including industry and building sectors. However, industries are facing challenges to transition from fossil fuels to clean energy related to government support, investment costs, availability of alternative technology, replacement of existing technology, and the fluctuation of the profitability of companies. Companies also lack information and technical knowledge on how to implement decarbonization measures.</p>	<p>Potential interventions include on-site renewable energy production, as well as energy efficient technologies and measures leading to lower energy demand, peak load reductions, and reduced CO₂ emissions from industries and buildings. The total GHG emissions from the industrial sector in Pakistan are 25.76 MtCO₂e. The proposed interventions under this project will mitigate 1.5 MtCO₂e from the sector.</p>	<p>Air pollution was introduced as a new sector under the NDCs, and the reduction of emissions from industries would curb its effects. This project aims to reduce energy usage in buildings by up to 35%, contributing to the NDC's unconditional emissions reduction target of 15% and conditional target of 35% by 2030.</p>

Adaptation Profile

Heavy Precipitation and Floods

Pakistan's Risk Index for floods is 8.9 out of 10. Flood events are triggered by heavy precipitation and the number of days with heavy precipitation events are only expected to increase. Nationally aggregated climate projections show a slight increase in the number of days with heavy precipitation events, from 7 days per year in 2000 to 8 days per year in 2080. On a regional level, northern Pakistan and parts of south-eastern Pakistan will see an increase by up to 3.5 days per year. According to IPCC's climate models, the median precipitation for warming at 2°C is 1.8. About 60% of the population in Pakistan relies heavily on rain-fed agriculture that depends on predictable weather patterns. The country produces

wheat, rice, cotton, sugarcane, and maize, where these crops are affected by climate change. Continued escalations in temperatures globally are changing rainfall patterns including a shift in Pakistan’s monsoon season. These conditions affect agricultural production, farm livelihoods and agribusiness infrastructure that leads to food insecurity and malnutrition among farming communities. As a result of floods, 9.4 million acres of crop area in Pakistan was potentially inundated in August 2022, of which 4.8 million acres are in Sindh, 2.7 million acres in Punjab, 1.2 million acres in Baluchistan and 714,000 acres in Khyber Pakhtunkhwa, severely impacting the agricultural sector.

The majority of investments should be directed towards high-risk flood areas i.e., Sindh, Balochistan, and Khyber Pakhtunkhwa.

Drought

Extremely dry months are projected to increase all over Pakistan, severely impacting Pakistan’s soil conditions and water reservoirs. The probability of meteorological drought, because of precipitation deficits, is predicted to increase under all emissions pathways, and with very strong increases. Already, the frequency of severe drought is increasing in arid and semi-arid areas, but also in Pakistan’s wetter northern areas. By 2030, projections show a positive trend in the number of extremely dry months in most of Pakistan, with the strongest increase in western Pakistan by up to 5 more extremely dry months. Moderate to low Southeastern monsoon (SEM) precipitation triggered the extreme drought episode (2017–2020) over southern Pakistan and intensified water scarcity. Currently, Sindh faces moderate to severe drought conditions in 8 districts. The future changes in water scarcity over the southern regions of Pakistan present a sharp increase under the SSP2-RCP8.5 scenario and are expected to intensify in regions that are already water-stressed. The risk of droughts will heavily impact Pakistan’s agriculture, water, livestock, textile and energy sectors, bringing water, food and energy insecurity implications.

Investments for drought risk management should be directed towards the southeastern and northern parts of the country, where there is the highest risk of drought. The provinces of Sindh and Balochistan, in the southern and southeastern areas of Pakistan, are the most susceptible to drought.

Temperature

If the status quo of emissions remains, air temperature over Pakistan is also projected to rise. The average temperature of Pakistan will rise by 2.0–2.6 °C. According to the IPCC climate models, in the SSP5-8.5 scenarios, the median temperature warming to 2°C is 1.6. The uncertainties in the difference in temperature rise could arise from future GHG emission scenarios, which could either increase or decrease based on emissions reduction. This will be considered by taking regular inventory of emissions.

It is predicted that there will be a 3°C temperature rise by 2040, and that by the end of the century temperatures are predicted to have risen 5-6°C that will cause losses of up to 50% of the wheat productivity in Asian countries. This loss will be greater for Pakistan due to its geographical location. A rise in temperature would increase glacial and snow melt, increasing the chance of floods. The devastating impact of floods due to extreme heat would largely be observed in the northern areas of Pakistan. The south and southeastern regions in Pakistan would experience extreme heat as a result of rising temperature.

To tackle extreme heat because of rising temperatures, investment should be channelled to both central and peripheral parts of the country where the effects will be most prevalent.

Sector of focus	Climate risk/hazard	Need for adaptation /additionalities	Potential interventions/beneficiaries	Contribution to NDCs
Most vulnerable people and communities	<p>63% of the population resides in rural areas and this population depends on agriculture for their livelihoods. By 2030, there is a positive trend in the number of extremely dry months, with the strongest increase in western Pakistan by up to five more extremely dry months. Farmers will be the most affected by drought due to the shortage of water for crops and livestock.</p> <p>60% of crops in Sindh were destroyed in the 2022 floods, resulting in many farmers losing their livelihoods. Irregular melting of snow and glaciers and flooding</p>	<p>These rural communities are vulnerable to food poverty, and they need to</p> <p>build resilience and have access to readiness and disaster risk warning systems.</p> <p>Currently, farmers build their own embankments on flood-prone water bodies, but these are not enough to withstand the impact of a disastrous flood.</p> <p>Farmers are not equipped with the technology needed to be able to prepare for unpredictable weather patterns, leaving them unprepared.</p>	<p>Flood early warning systems in high-risk areas, which use river gauges and weather forecasts to provide advance notice of potential floods, especially to nearby farms. This mechanism would allow vulnerable communities more preparedness for disasters.</p> <p>Maintaining good soil health to store carbon and prevent flooding.</p> <p>Out of 33 million people affected by loss of agricultural land due to floods, 2.4 million beneficiaries will be targeted through this</p>	<p>Flood early warning systems are aligned with Recharge Pakistan, through which the country aims to reduce flood risk and increase water recharge at six sites in the Indus Basin by 2030. According to the NDCs, Recharge Pakistan will build resilience of 10 million people.</p>

	<p>pose challenges to farmers through low discharge and drought, and flood-related damages to irrigation channels and cropland.</p> <p>Smallholder farmers in Pakistan are increasingly challenged by the uncertainty and variability of weather. Crops are irrigated and depend on water availability from melting snow and glacial meltwater.</p>		<p>project, including smallholder farmers.</p>	
<p>Health and well-being, and food and water security</p>	<p>Increased frequency and severity of droughts threatens agricultural production and food and water security.</p> <p>Solid waste generation in Pakistan ranges between 0.283 to 0.612 kg/capita/day and the waste generation growth rate is 2.4% per year. Solid domestic waste is typically dumped on low-lying land.</p> <p>The growing population will lead to increased water abstraction for irrigation, drinking water supply and domestic use, consequently leading to reduced water availability. The country relies heavily on the Indus River and its tributaries to meet its water demands, where the agriculture sector consumes 90% of the country's available water.</p>	<p>Currently, loss of vegetation through deforestation and over-grazing practices exacerbates the food and water security that follows a drought, to counter this, large-scale afforestation projects need to be prioritized.</p> <p>Measures to counter dumping and inefficient waste management such as the introduction of a sanitary landfill and of a compost facility in Lahore has been implemented, involving joint ventures between the government and private companies. However, Pakistan's waste sector is still at an early stage of development, and a relatively small proportion of waste is collected, especially outside urban areas.</p> <p>Water conservation is used to tackle water insecurity; however, it occurs on a small scale and does not address the problem of the pollution of water bodies, which makes water undrinkable and unfit for irrigation.</p>	<p>Water management systems to reduce crop damage from drought are critical. Adopting climate-smart agriculture involves conservation techniques to improve soil moisture retention; drip irrigation; reducing post-harvest losses and food waste. 1,850 million people are food insecure and the project targets 1.28 million beneficiaries.</p> <p>Efficient waste management systems including recovering recyclables for reuse in the economy, implementing waste-to-energy technologies and strengthening institutional capacity.</p> <p>Efficient groundwater management, and investment in recycling and desalination of wastewater, brackish groundwater, and salt water, coupled with increased storage capacity.</p>	<p><u>Under the NDCs, Pakistan aims to enhance municipal service delivery by the local governments and promote reuse and source reduction of waste. Under this project, improved waste management from Pakistan's top sectors will help the country achieve its waste-related objectives.</u></p>

Need for Investing in critical sectors and technologies for climate action and sustainability in Pakistan

Pakistan is in polycrisis. The alarming climate projections emphasizes the critical necessity of addressing climate change and mitigating its adverse effects on the well-being and livelihoods of the population. Moreover, with PKR's relentless depreciation (13.8% annually) over the past decade, fuelled by chronic trade imbalances, domestic economic turbulence, political instability, and global headwinds, and now climate change exposes a

deep vulnerability for any funds or International Financial Institutions (IFIs) aiming to operate in Pakistani economy, particularly in the climate market landscape, leaving a critical gap/need for investments in the climate-tech ecosystem. While developing countries like Pakistan may not be the primary contributors to climate change, acknowledging and addressing its consequences is crucial, particularly in tackling urgent local challenges listed in section above.

Needless to say, the debt-ridden public sector of Pakistan cannot take on the risks – the onus lies on the private sector. Fortunately, the private sector has already gained a lot of momentum within the last two years – it is, to most extent, already well on to the path of addressing the socio-economic challenges, only not yet in the climate action space. For instance, between 2018 and 2022, VC funding surged to \$347m, a 20-fold increase despite a weak economy. Pakistani start-ups' market cap now ranges between \$1.5bn to \$2bn, anticipated to hit \$6bn in 5 years and \$30bn by 2031, aligning with NAP and updated NDCs financing targets.

This project aims to harness the private sector momentum – especially the start-up ecosystem – by building and scaling climate ventures to address emissions, predominantly stemming from the energy, waste, transport and agriculture sectors. Pakistan's energy consumption relies mainly on fossil fuels, with only 17% from electricity, prompting the country to curtail dependency for reduced imports and greenhouse gas emissions, aligning with a 60% renewable energy target. The transport sector's 27% CO2 emissions impact air quality, necessitating a shift to electric vehicles to meet a 30% sales goal by 2030 and improve air quality. Agriculture, a key economic contributor, faces potential productivity loss of 8%–10% by 2040 due to climate change effects. Additionally, the waste sector has the potential to significantly reduce global emissions through enhanced waste management, recycling, and waste-to-energy solutions.

Project's strategy to address barriers towards achievement of outcomes

Pakistan faces several barriers to progress in its climate action agenda. Firstly, there's a lack of awareness about the country's specific climate needs and the global climate discourse. Secondly, understanding how climate policies translate into action within public and private spheres remains limited. Thirdly, there's a shortage of de-risked capital for early-stage climate ventures, hindering the development of a thriving climate-tech ecosystem. Fourthly, non-capital challenges, such as securing later-stage investments, impede the growth of climate ventures. Additionally, marginalized groups need tailored financial avenues for integration into the climate ecosystem. Lastly, the limited availability of patient private green capital poses a significant barrier.

Hence, to address these barriers, the AE proposes a Venture Accelerator and Venture Capitalist led project – in this case, National Rural Support Programme (AE and EE) together with Sarmayacar Climate B.V. (EE) – with a climate-centric approach, particularly aligning with GCF's Private Sector Strategy (PSS), GCF investment framework & result areas, and Pakistan's national climate targets. Similar projects, such as KawiSafi, Green Growth Equity Fund and CATALI.5T, Avaana Sustainability Fund, and Acumen Climate Action Pakistan Fund have been funded by GCF in emerging markets. However, this will be a first of its kind project (especially for Pakistan) which would facilitate and finance climate ventures from ideation-stage all the way to later-stages, ultimately resulting in the emergence of an entirely new segment in Pakistan's market landscape and essentially kickstarting the stagnated climate-tech ecosystem.

Sarmayacar Climate B.V. pioneered venture capital investing in Pakistan. The firm launched its first fund in 2018 (see details below), anchored by the IFC, to invest in tech and tech-enabled businesses in the country. The fund brought together LPs including LFI, local conglomerates, diaspora Pakistanis, & foreigners, and put local start-ups on the global map. Since the fund launch and early deployment days, more than \$800m of VC funding has come into the tech ecosystem. Sarmayacar Climate B.V. intends to play the same role it did to enable the tech ecosystem in the country. It wants to create a snowball effect with regard to capital flows in the climate tech space. (Sarmayacar Climate B.V. has managed one fund till date, details of which are as follows: AUM: \$24.6 million (Fund Size), Vintage: 2018, Sector Exposure: E-commerce, Logistics, Media Streaming, Health-tech, Ed-tech, Agri-tech, Fintech, Web3 Gaming, Hospitality, IoT).

The Climate Pivot in Venture Capital Space:

Recently, Sarmayacar Climate B.V. has increasingly encountered climate-oriented investment opportunities – as seen above, its first fund has already taken exposure in climate focused start-ups (EV SaaS Platform - Orko & Water Conservation - Aabshar) and is working with existing portfolio companies to make them sustainable (carried out a pilot to see if ride sharing platform - Bykea can induct an Electric fleet). Having said that, opportunities like these remain scarce due to lack of compatible investment opportunities available. Sarmayacar Climate B.V. also observes a global shift of the entire Entrepreneurship Supporting Organizations (ESO) towards climate – the demand and supply are increasing exponentially by the day. Sarmayacar Climate B.V. looks at this shift as the perfect opportunity to address and bridge the financing and climate needs of Pakistan.

Climaventures looks at this shift as the perfect opportunity to address and bridge the financing as well as technical climate needs of Pakistan. Once viable climate ventures will be provided with non-capital and capital support to scale, more entrepreneurs will look to venture into climate space or align their business models to make them sustainable. Climaventures believes that dedicated and professionally managed climate Accelerator and Fund can aid the influx of resources towards a climate-proof economy. Many of the critical technologies required to facilitate low-carbon transition are still at a nascent stage and require considerable funding before commercialization can begin. As climate ventures grow, so will impact.

B.2.1. Project/Programme description (max. 1,000 words)

Project Ethos and Approach

Component 1: Venture Accelerator (sub-components 1A: Technical Assistance Facility, and 1B: Venture Grant)

The foundational component, Venture Accelerator, of this project is strategically crafted to address the impediments hampering the growth of the climate venture ecosystem in Pakistan. These challenges encompass a lack of awareness regarding climate change, restrictive policies hindering access to international private sector climate financing and entrepreneurship support organizations, limited availability of de-risked capital for initiating climate ventures, and non-capital capacity constraints for climate-focused businesses.

The Venture Accelerator is subdivided into two essential sub-components: The Technical Assistance Facility (TAF) (up to USD 5M – GCF Grant) and the Venture Grant (up to USD 5M – GCF Reimbursable Grant). Initially, TAF (sub-component 1A) is engineered to tackle non-capital barriers,

while the Venture Grant is tailored to address obstacles related to the scarcity of de-risked capital. TAF's primary objective is to establish a robust pipeline of validated climate ventures operating within Pakistan. At the inception of this project, NRSP conducted an in-depth examination of the existing climate venture ecosystem. Following consultations with incubation centres nationwide and analogous development programs, NRSP identified over 150 climate ventures. However, validation proved challenging due to the prevalence of unregistered or inactive ventures. To rectify this issue, TAF will undertake an exhaustive idea mining exercise, extending the project's reach to identify genuine climate businesses for project enrolment.

This initiative will be reinforced by a comprehensive communications strategy, leveraging social media, mobile applications, and web platforms to establish a dynamic hub for all climate ventures operating in Pakistan. This digital platform addresses two critical issues: the absence of a unified platform for climate ventures to validate their presence and the lack of direct connectivity between climate ventures and potential investors. Through this platform, both climate entrepreneurs and investors will have authenticated profiles, facilitating direct interaction — a pioneering endeavour in Pakistan's climate venture landscape, essential for fostering growth in an emerging economy. The TAF component will also provide mentorship support to founding teams through a panel of experts from both the climate space as well as the entrepreneurial space to provide the teams with cutting edge impact and scalability options for expansion.

Concurrently, TAF will also focus on advocating for climate-focused and entrepreneurship-oriented policies in Pakistan. Through stakeholder engagement, NRSP identified the restrictive nature of Pakistan's existing policy framework, particularly concerning private sector entities accessing international climate financing and executing funded projects. Additionally, while recent initiatives have aimed to incentivize entrepreneurship, policy-level barriers such as tariffs, restrictions, and instability persist, impeding climate-business growth.

Following the attainment of these milestones by TAF — establishing a robust pipeline of opportunities, facilitating digital engagement among climate ventures and investor networks, and influencing relevant policies — the logical progression involves the implementation of a rigorous Investment Eligibility Framework (IEF). This framework will scrutinize climate ventures against predefined criteria and categorize them based on their investment readiness. Ventures deemed less prepared will benefit from enrolment in a Readiness Programme designed to enhance their investment readiness.

Subsequently, Venture Grant (sub-component 1B) will furnish de-risked capital to investment-ready ideation stage ventures, augmenting their scalability prospects. This capital injection will enable ventures to conduct (including but not limited to) feasibility studies, market research, and prototype development, paving the way from ideation to Minimum Viable Product (MVP) stage. Ventures achieving commercial viability will become eligible to access equity options provided by the Climaventures Fund (CF) in Component 2 of the project. The CF may also refer ventures from its pipeline to the Venture Accelerator, in order to address impact or invest-ability gaps that prevent the fund from investing.

Governing Structures for Component 1:

Disbursement Committee

The Disbursement Committee (DC) is the final decision-making body in the investment process of Component 1. DC will assess the business model for potential ideation-stage/pre-seed level venture's financial viability, social impact, climate contribution and alignment with targeted GCF result areas (see IEF scorecard below) and make a final decision to approve each transaction. The focus of DC will primarily be on the climate impact and commercial viability and invest-ability of the ventures. The DC will also collaborate with the Accredited Entity Risk Management Team (AERMT) to facilitate mitigation of projects risks (if any).

The DC will comprise three to five members, including one of the Partners of the Fund Manager. The other members will bring a diverse mix of climate and entrepreneurial knowledge and expertise. For a detailed overview of their roles and responsibilities, please refer to Annex 13 of this document, which outlines the broad Terms of Reference (TORs) for these Disbursement Committee Members.

Experts Panel

The Experts Panel (EP) is designed to bridge capacity gaps and provide essential mentorship to climate venture teams within a venture studio environment through a Readiness Programme – ventures which fall in scoring category three (Moderate potential - Meets several criteria well but requires improvement in specific areas, see IEF scoring systems for Component 1) will be recommended to go through a Readiness Programme by the Programme Team of Component 1 in order to nudge them up to scoring category 1. The EP will come into play after the DC has determined the level and scale of non-capital support required by the ideation-stage climate ventures and will comprise of entrepreneurial and climate impact expertise.

Component 2: Climaventures Fund

The Climaventures Fund (up to USD 15M – GCF Equity) will strategically invest in scalable early-stage to late-stage climate ventures, under the guidance of a stringent Investment Eligibility Framework (IEF) and Investment Committee (IC). This pivotal component is designed to attract private capital, forming an equity fund, and subsequently allocate these funds to climate ventures poised for investment, possessing the most impactful climate solutions. The Climaventures Fund will aim to source companies that are looking for growth capital to scale their impact (both climate and commercial), companies that have demonstrated traction, are looking for replicability in their markets (product-market fit, proven technology) and have management teams that demonstrate commitment with a clear vision to build a regional/global climate product.

Governing Structures for Component 2:

Investment Committee

The Investment Committee (IC) is the final decision-making body in the investment process of Component 2. IC will assess the business model for early to late-stage commercially viable climate venture's financial viability, social impact, climate contribution and alignment with targeted GCF result areas and make a final decision to approve each transaction. The IC will also collaborate with the Accredited Entity Risk Management Team (AERMT), via the Programme Team of Component 2, to facilitate mitigation of projects risks (if any). The overarching approach of IC will be to maintain a high-risk appetite for climate ventures that demonstrate high impact.

The IC will consist of a maximum of five persons, always including the Key Persons of the Fund Manager. The Key Persons will provide input on the invest-ability and scalability prospects of the climate ventures. To supplement this expertise, the IC can have up to three additional independent members appointed by the Fund Manager at its discretion, in addition to the two Key Persons. Such additional independent members shall include at least one AE nominated climate expert, to be approved by the GCF. Such climate expert shall offer insights on whether a contemplated venture offers a genuine solution to a climate problem, on prospective climate impact forecasting and on associated risks. This approach aims to ensure that the IC makes its investment decisions based on a balanced blend of economic and impact perspectives, ultimately leading to the selection of high-impact, high-return climate ventures.

Advisory Committee

An advisory committee (the "Limited Partner Advisory Committee" or "LPAC") shall be formed and shall consist of representatives of certain Investors in the Fund. There shall be a maximum of 6 members of the LPAC, provided however that all Investors in the Fund with commitments of at least USD 5,000,000 (five million United States Dollars) will be entitled to appoint one representative to the LPAC with priority given to the Investors with largest commitments. No member of the LPAC shall be a Key Person or an officer or employee of the General Partner, the Investment Adviser, or any associate thereof. The GCF Holdings, acting through the Accredited Entity, will have one seat on LPAC.

The LPAC will provide, inter alia, overall policy guidance with respect to the Fund, provide overall guidance on valuation methodologies of assets or changes to valuation principles, will be consulted in relation to conflicts of interest, and will carry out such other duties as are specified herein or attributed to the LPAC pursuant to the LPA.

Decisions of the Limited Partner Advisory Committee will be made by simple majority unless specified otherwise in the LPA. The LPAC shall normally meet in a convenient location at least once annually as required to perform its duties. Additional meetings of the LPAC may be called by the General Partner or any member of the LPAC.

Cohesion and Complementarity between the Two Components Summarised

- ▶ **Governance**
 - AE nominated climate expert, to be approved by the GCF, to be part of the Investment Committee
- ▶ **Streamlined investment criteria (selection of climate ventures) across both components**
 - IEF scoring tool to be applied by both Venture Accelerator and Climaventures Fund
- ▶ **Graduation and referrals of ventures between components**
 - Climaventures Fund's (Component 2) to source approximately 20% of the pipeline from Venture Accelerator (Component 1) for investments
 - Component 2 ventures which require further support to be transferred over to Component 1 where they will be provided non-capital and capital support to fill the capacity gaps. Once capacity gaps are filled, these ventures will enrol back into Component 2.
- ▶ **Increased Accelerator focus on improving venture's invest-ability, with direct line of sight to Climaventures Fund**
 - Disbursement Committee (Component 1) to include Partners of the Fund Manager (Component 2)
 - Experts Panel (Component 1) to include Partners of the Fund Manager (Component 2) to provide mentorship to climate founders

Overarching Functions

Monitoring, Evaluation, and Learning (MEL)

Climaventures MEL framework consists of the following three teams which will be responsible for collecting data against the committed indicators reporting them to relevant governing body, providing analysis through development of knowledge products and then ultimately facilitate the steering of project towards the direction necessary to achieve impact:

- Accredited Entity MEL team (overarching body)
- NRSP MEL team (part of the Programme Team of Component 1)
- Fund Manager MEL team (part of the Programme Team of Component 2)

See **Annex 13** for details on the reporting flows as well as compositions and roles and responsibilities of each team.

Accredited Entity Risk Management Team (AERMT)

The AE Risk Management Team (AERMT) plays a pivotal role in ensuring the integrity and success of ventures by developing and implementing a comprehensive Risk Management Strategy (RMS) aligned with the Green Climate Fund's (GCF) Environmental and Social Safeguards (ESS) and gender policies. This strategy encompasses risk identification, assessment, mitigation, and management of residual risks, ensuring that all risk management practices are seamlessly integrated across both components of the projects. The AERMT is committed to continuous improvement, adapting to the evolving socio-economic landscape of Pakistan while maintaining clear and effective communication channels between the NRSP Board and Climaventures.

By facilitating robust risk management processes and aligning them with the Board's vision and strategic objectives, the AERMT ensures that all projects are resilient, compliant, and capable of achieving long-term sustainability and growth. In terms of compliance, the AERMT ensures adherence to GCF guidelines and NRSP policies through continuous oversight of risk management practices. The AERMT ensures that all Climate Ventures under both components are resilient, compliant, and strategically aligned with the overarching goals of the NRSP Policies and the GCF. This approach to risk management creates a stable and adaptive projects environment, capable of handling the ever-evolving challenges of Pakistan's entrepreneurial landscapes.

See **Annex 13** for details.

Decision Tree for Investment Flows and Interflows between Components

Component 1 - Venture Accelerator

Component 1 - Venture Accelerator is designed to systematically nurture climate-focused ventures through a series of carefully structured stages, from the initial outreach and application process to post-investment evaluation. This process begins with nationwide roadshows aimed at engaging potential entrepreneurs and building awareness about the accelerator. It progresses through a rigorous selection and evaluation procedure, incorporating key milestones like demo days and detailed assessments based on the Investment Eligibility Framework (IEF). The ultimate goal is to support the most promising ventures, guiding them through to commercial viability, and aligning them with the larger Climaventures Fund for sustained growth and impact. The following sections detail each phase of the accelerator process, highlighting the structured approach to selecting, funding, and scaling ventures that contribute to climate resilience and sustainability in Pakistan:

1. Roadshows: Roadshows covering the entire Entrepreneurial Supporting Ecosystem (ESO) of Pakistan – including (but not limited to) National Incubation Centres (NICs), universities, and founders summits/networking platforms – are organized annually to reach out to potential ventures and entrepreneurs. These events will help in spreading awareness about the Climaventures accelerator program and serve as networking platforms, allowing startups to interact with industry experts, investors, and mentors.
2. Preliminary applications submission: Interested ventures can submit their application forms during three specific cycles throughout the year (March, August, and October) which will ensure a continuous intake of potential candidates, keeping the accelerator pipeline active.
3. Shortlisting of applications: The submitted applications are reviewed by the Programme Team of Component 1 and shortlisted within a two-week timeframe. This step involves evaluating the ventures based on predefined criteria such as the legal, economic and environmental aspects of the venture, impact potential, and feasibility. Shortlisted ventures are then invited to proceed to the next stage of the selection process.
4. Demo Day 1 (Initial Pitching): Shortlisted ventures participate in Demo Day 1, where they present their ventures to the Programme Team. This step helps in assessing the ventures' potential and readiness for the accelerator.
5. Shortlisting of ventures: These pitches are then reviewed and shortlisted within a two-week timeframe. This step involves evaluating the ventures based on mitigation and adaptation, impact potential, and feasibility.
6. Demo Day 2 (Structured Interview): Shortlisted ventures are then invited to be interviewed (structured based on IEF indicators) by the Programme Team as a one-on-one meeting with the venture where venture information/data is recorded/captured/collected to implement the IEF scoring tool.
7. Detailed Evaluation through IEF: A thorough evaluation is conducted using the Investment Eligibility Framework (IEF), where each venture is assessed against key GCF Investment Criteria. The scores from this evaluation determine whether the ventures meet the required threshold. Based on the IEF, ventures receive a scoring which determines whether the venture will be endorsed, conditionally endorsed, qualify for readiness program or not endorsed.
8. Impact memo generated: An impact memo is generated for each venture, summarizing their potential readiness for investment as well as their Impact Demonstration Plans (IDPs) clearly indicating the methodologies for impact quantification applicable to each venture and availability of required data. This memo is created within two weeks and is forwarded to the Disbursement Committee for their review. It includes insights into the venture's alignment with the accelerator's goals and objectives.
9. Disbursement Committee Review: The Impact Memo for each venture is presented to the DC for a final decision. The DC will work closely with the Programme Team to identify and communicate any potential technical, environmental, reputational, or financial risks. The Programme Team will then forward these concerns to the AERMT to ensure effective mitigation of the identified risks.
10. Final Decision: Based on DC's review ventures are: i) rejected or requested to resubmit in the next cycle, ii) placed in the Readiness Programme for TAF, iii) placed in the Readiness Programme for TAF AND Venture Grant, or iv) approved for Venture Grant (only).
11. TAF and Venture Grant: The Technical Assistance Facility (TAF) and Venture Grant provide the necessary funding and resources. This support is aimed at helping the ventures scale their operations and achieve commercial viability. The grants are allocated based on the venture's specific needs and growth plans.
12. Commercially Viable Ventures: Ventures that receive the TAF and Venture Grant work towards becoming commercially viable. They implement their business plans, scale operations, and expand their market presence. The accelerator continues to provide support and monitoring to ensure the ventures achieve their growth targets.
13. Post-Investment Evaluation: The ventures undergo post-investment evaluation throughout the project-life. This evaluation focuses on assessing the impact, sustainability, and overall performance of the ventures. Continuous monitoring and learning help in refining the accelerator program and ensuring long-term success.

Component 2 – Climaventures Fund

The process for Component 2 of the Climaventures Fund is designed to ensure the identification, evaluation, and support of climate-focused ventures with the highest potential for impact and scalability. This phase begins with sourcing ventures from the Venture Accelerator and other channels, ensuring a consistent influx of high-potential candidates. Each venture undergoes a series of structured assessments, beginning with initial pitches and follow-up discussions with the fund manager, followed by a detailed evaluation through the Investment Eligibility Framework (IEF). This thorough evaluation process not only determines the venture's readiness for investment but also identifies any capacity gaps that may need to be addressed through additional support from Component 1. The subsequent stages involve developing a tailored Impact Thesis, obtaining Investment Committee approval, and ultimately disbursing funds to the endorsed ventures. Post-investment evaluation and strategic exits ensure that the ventures not only achieve their goals but also contribute significantly to the overarching objectives of the Climaventures Fund.

1. Sourcing ventures: The Climaventures Fund will source approximately 20% of its pipeline from the Venture Accelerator. The rest will be sourced through other channels such as investors networks, roadshows (also organised under Component 1), etc. This multi-channel approach ensures that the fund has a steady flow of high-potential ventures with strong growth potential, scalability, and alignment with climate impact goals. The following mechanisms address the targets and potential system gaming by adding unnecessary ventures to the pipeline.
 - Mechanisms to achieve the 20% sourcing target: Ventures considered for the Climaventures Fund from the Accelerator must meet predefined selection criteria laid out in the IEF applied across both components to ensure ventures are genuinely investable. Quarterly pipeline reviews will be conducted to assess investment readiness, with the Disbursement Committee ensuring that ventures meet key indicators like market viability and climate impact potential. Ventures sourced from the Accelerator will be integrated into the Fund's pipeline for investment based on the achievement of specific performance milestones laid out in the IEF during the Accelerator phase. These milestones will be clearly communicated to the ventures at the outset. Additionally, the Fund Manager will ensure that approximately 20% of the fund pipeline is consistently reserved for ventures from the Venture Accelerator throughout the six-year investment period.
 - Mechanisms to incentivise the Climate Ventures in Component 1: Ventures in the Accelerator will have a clear roadmap outlining how they can progress toward securing investment from the Climaventures Fund, with transparency on eligibility requirements such as financial health, GHG reduction potential, and business model viability. Those achieving key milestones will gain access to follow-on capital, incentivizing them to become and stay investment ready. Strategic mentorship from Partners of the Fund will help ventures address gaps in their business models and climate impact strategies, creating a direct pathway to investment.
 - Mechanisms to measure the 20% sourcing target: Annual sourcing targets will be established, outlining the number of ventures to be sourced from the Accelerator each year, with up to 2 ventures in Year 3 and up to 2 additional ventures at Year 6. Tracking metrics will include the percentage of ventures progressing from the pipeline to investment, milestone achievement rates, climate impact metrics (e.g., GHG reduction and adaptation benefits), and investor engagement during roadshows and demo days.
2. Initial pitch to fund managers: Selected ventures present their initial pitch to the fund manager. This pitch provides an overview of the venture's business model, market strategy, and impact potential. The fund manager assesses the viability and alignment with the fund's investment criteria.
3. Follow-up structured conversations with Fund Manager: After the initial pitch, follow-up conversations (structured based on IEF indicators) are held with the ventures. These discussions delve deeper into the venture's plans, challenges, and support needs. The follow-up conversations help in building a comprehensive understanding of the venture's potential, sufficient for the programme team to conduct detailed evaluation through IEF. Structured conversations may continue in parallel with the detailed evaluation through IEF, if needed to improve understanding of the ventures.
4. Detailed evaluation through IEF: Ventures undergo a detailed evaluation through the Investment Eligibility Framework (IEF) over four weeks by the programme team of Component 2. This assessment covers various aspects such as financial health, market potential, and impact metrics. The evaluation helps in determining the readiness of the ventures for investment. Based on the evaluation conducted in this step, the programme team will produce one of the three outcomes for each venture: 1) endorsement, 2) non-endorsement, and 3) conditional endorsement where capacity gaps are identified.
5. Impact Thesis: The Impact Thesis, developed by the Programme Team of Component 2, for each investment will be presented to the Fund's IC for consideration and approval – see below to view its contents. In addition to the recommendations for (i) endorsements, (ii) non-endorsements, and (iii) conditional endorsements driven out of Investment Eligibility Framework Scoring Tool (see section 4.1 below for details), one of the key aspects considered while developing the Impact Thesis will be climate venture's ability to demonstrate impact – methodologies which will be applied for quantification of impact as well as the availability of required data. If a Component 2 venture lacks capacity to demonstrate impact, the venture will be immediately recommended to seek Venture Grant support from Component 1 to fill data gaps.
6. Investment Committee Review: The IC reviews the impact thesis and other relevant documents. They assess the venture's suitability for investment and make final decisions. The committee's review ensures that investments are aligned with the fund's strategic objectives. The IC will work closely with the Programme Team of Component 2 to identify and communicate any potential technical, environmental, reputational, or financial risks. The Programme Team will then forward these concerns to the AERMT to ensure effective mitigation of the identified risks.
7. Final Decision: Based on IC's review, ventures are: (i) endorsed for enrolment into the Climaventures Fund's portfolio, (ii) conditionally endorsed for enrolment into Climaventures Fund's portfolio (may re-pitch after receiving support from Component 1 to fill capacity gaps), and (iii) not endorsed.
8. Investment Disbursement: Funds are disbursed to the ventures based on the final decision of the investment committee. This financial support helps the ventures to implement their business plans and achieve scalability. The fund continues to monitor the ventures to ensure effective utilization of the investment.
9. Post Investment Evaluation: Ventures undergo post-investment evaluation throughout the project-life. This evaluation focuses on assessing the impact, sustainability, and overall performance of the ventures. Continuous monitoring and learning will help in refining the investment strategy and ensuring long-term success.
10. Exits: Ventures eventually reach the exit phase, where they either achieve self-sustainability or are acquired. This phase involves planning and executing exit strategies to ensure a smooth transition. Successful exits contribute to the Fund's overall impact and facilitate future investments.

See [Annex 13](#) to view the complete diagram highlighting clearly the cohesion and complementarity between the two components.

The Investment Eligibility Framework (IEF)

The Investment Eligibility Framework, designed for and applicable to both, Components 1 and 2, aligns with the Green Climate Fund's (GCF) Investment Criteria. It's a comprehensive tool for assessing the potential of climate solution ventures at various stages, from ideation to acceleration. IEF facilitates a comprehensive evaluation of climate solution ventures, ensuring that ventures with the highest potential for climate impact and scalability are enrolled into the project. It is designed to be adaptable, allowing for the assessment of ventures at different stages of maturity and providing clear pathways for their development and scaling. The IEF identifies indicators aligned with GCF Investment Criteria with additional sub-criteria, based on which, i) detailed metrics and ii) scoring tool have been developed.

The IEF scoring tool has been developed based on the following key principles:

- The business is aligned with GCF's principles for demonstrating mitigation and adaptation impact
- The business operates in at least one of the following identified GCF result areas:
 - Energy generation and access
 - Low emission transport
 - Buildings, cities and industries and appliances
 - Most vulnerable people and communities
 - Health and well-being, and food and water security
- The business aligns with the Pakistan's national plans and strategies, such as Nationally Determined Contributions, National Communications, National Adaptation Plans, National energy policy, and GCF country programme.
- The business aligns with the GCF's results areas and the indicators from the integrated results management framework that NRSP will report against.
- The business does not undertake any excluded activities (see [Annex 13](#) to view the detailed Exclusion List)

Scoring Systems of the IEF for Components 1 and 2: The scoring systems for both components of Climaventures evaluate the potential and readiness of ventures to receive support or investment.

- For Component 1 – Venture Accelerator: Ventures are: i) rejected or requested to resubmit in the next cycle, ii) placed in the Readiness Programme for TAF, iii) placed in the Readiness Programme for TAF AND Venture Grant, or iv) approved for Venture Grant (only) based on the scoring points provided in Annex 13.
- For Component 2 – Climaventures Fund: Ventures are: (i) endorsed for enrolment into the Climaventures Fund's portfolio, (ii) conditionally endorsed for enrolment into Climaventures Fund's portfolio (may re-pitch after receiving support from Component 1 to fill capacity gaps), and (iii) not endorsed based on the scoring points provided in Annex 13.

Theory of Change

Please see [Annex 19](#) to view the complete TOC diagram. Please see below to view its details.

Impact Paradigm Shift: IF the commercial viability and sustainability of climate tech focused products and solutions is enabled by investments THEN the country will be able to embark on the transition to a low-emission and climate-resilient economy through adoption of such products BECAUSE with de-risked climate investments, scalable and sustainable climate-oriented companies will emerge – resulting in low cost climate solutions which would lead to reduction in GHG emissions and increased resilience to the impacts of climate change.

Barrier 1: Lack of awareness around Pakistan's climate needs and overall global climate discourse, resulting in a weak climate-venture ecosystem

The discourse surrounding the mobilization of the domestic private sector in Pakistan for climate action is notably lacking, particularly concerning ideation or early-stage ventures. Despite the presence of a few donor-funded/G2G climate-focused programmes in the country, their impact is constrained by donor requirements and Key Performance Indicators (KPIs), prioritizing beneficiary numbers over programme sustainability and, most crucially, climate impact. Additionally, venture capitalists (VCs), incubation centres, and accelerators in the climate space exhibit limited awareness and focus on 'climate opportunities' in Pakistan, primarily due to the perceived high risk and low returns associated with such ventures.

Target Outcome 1: Strengthened climate-tech ecosystem in Pakistan through increased climate awareness and expanded opportunities for climate-focused investments

Target Outputs:

- 1.1. Increased awareness around the local and global discourse on climate change
- 1.2. A robust pipeline of climate-focused opportunities across both mitigation and adaptation result areas.

Activities:

Component 1A – Venture Accelerator: Technical Assistance Facility (TAF) (Grant)

Idea mining, communications for climate action and awareness raising, financing ideation-stage climate ventures to increase preparedness for scalability, policy engagement to facilitate climate venture growth

Activity 1.1.1 Idea Mining: To take the project “on the road” to:

- Strengthen the ESO ecosystem through new partnerships
- Strengthen the existing pipeline of climate opportunities
- Nudge ventures, which have climate impact potential but do not have the appropriate tools to harness it, towards climate action opportunities

Sub-activity 1.1.1.1 Roadshow: Research institutes, universities, incubators, accelerators, VCs / investors, DFIs, IFIs

Sub-activity 1.1.1.2 Launch Call for Ideas (COI) across Pakistan

Activity 1.1.2 Comms4Climate (C4C): To develop and implement a robust communications strategy to:

- Communicate the investment framework to the ESO ecosystem to spread awareness about local and global climate financing and adaptation & mitigation needs and opportunities
- Break down complex climate science into easily understandable messages. Emphasize the scientific consensus on climate change, its causes, and projected impacts.
- Stress the importance of equitable solutions for marginalized communities disproportionately affected by climate change in Pakistan.
- Showcase innovative technologies or approaches used in the project as well as globally to address climate challenges, fostering enthusiasm for sustainable solutions.
- Offer knowledge products, and resources to increase awareness about climate change and the project's role in combating it.

Sub-activity 1.1.2.1. Launch an interactive website and mobile application

Sub-activity 1.1.2.2. Develop and disseminate social media content – monthly newsletters, podcasts, documentaries etc.

Barrier 2: Lack of understanding of climate policies with regards to implementation within public and private spheres of Pakistan

Pakistan has numerous policies mandating climate action; however, the absence of clear implementation and operationalization plans raises significant challenges. There is a critical need for an integrated and holistic approach in developing frameworks that encompass both the public and private sectors. Only through this comprehensive strategy can these policies effectively translate into actionable initiatives, allowing Pakistan to embark upon low-carbon pathways and empower its population to become climate-resilient.

Target Outcome 2: Strengthened public-private climate policy networks in Pakistan

Target Outputs:

- 2.1 Multi-sectoral public-private partnerships formed for climate action with policy recommendations generated
- 2.2 Adoption of supportive and inclusive policies to attract green tech businesses

Activities:

Component 1A – Venture Accelerator: Technical Assistance Facility (TAF) (Grant)

Idea mining, communications for climate action and awareness raising, financing ideation-stage climate ventures to increase preparedness for scalability, policy engagement to facilitate climate venture growth

Activity 2.1.1 – Initiate Climate Conversations:

- To develop public-private partnerships by bringing key decision makers together through an annual event
- To bring together climate experts and thought leaders from different thematic areas to disseminate climate risks, trends, innovation, best practices and provide a platform for the industry leaders to connect & exchange information
- To recommend informed policies and regulatory frameworks to facilitate climate ventures of Pakistan with regards to “ease of doing business” and “inter-regional scalability”

Sub-activity 2.1.1.1 Annual Event

Sub-Activity 2.1.1.2 Develop policy briefs and advocacy materials

Barrier 3: Limited availability of de-risked capital for ideation or early-stage climate ventures to kick-off climate-tech ecosystem in Pakistan

In emerging markets like Pakistan, entrepreneurs face heightened challenges at the onset of ventures due to limited personal assets and support from family and friends. Access to essential resources such as business support, venture capital, or commercial accelerators for seed capital proves challenging for entrepreneurs. This difficulty is particularly pronounced for climate ventures, significantly contributing to the scarcity of finance for green initiatives. The substantial capital expenditure required for such businesses, combined with perceived high risks in nascent green sectors, has primarily resulted in the scarcity of de-risked capital for launching climate ventures. Consequently, this absence has hindered the establishment of a climate tech ecosystem in Pakistan's market landscape, ultimately keeping the cost of these technologies prohibitively high and inaccessible to vulnerable populations in dire need.

Barrier 4: Non-capital challenges faced by ideation or early-stage climate ventures to grow, particularly securing additional later-stage investments for scale-up

Apart from financial constraints, entrepreneurs and founders encounter numerous challenges in acquiring the requisite skills and capacities for conducting market feasibilities, identifying the appropriate consumer base, advancing their ideas to the MVP stage, and evaluating potential investors for scale-up prospects. Many donor-funded projects in Pakistan adopt an instructor-student approach, imparting theoretical knowledge without providing practical exposure in a studio-like environment.

Barrier 5: Limited participation and inclusion of women within the climate ecosystem

The most vulnerable segments of the population, including women, transgender individuals, and Persons with Disabilities (PWDs), bear the brunt of the severe impacts of climate change. For example, the 2022 floods displaced thousands of pregnant women, leaving them without food and shelter. Unfortunately, data on the impacts on transgender individuals and PWDs was never recorded. This underscores the glaring omission of the specific needs of these population segments from the climate discourse, let alone the search for climate solutions tailored to address them. The prevailing business-as-usual approach has consistently been reactive — aiding after disasters. However, there is a pressing need to shift towards a proactive approach.

Barrier 6: Limited availability of patient private green capital, especially for later-stage climate ventures in Pakistan

Private climate finance from both domestic and international investors has fallen behind that of other nations, and closing this financing gap will require substantial efforts. Presently, the climate finance landscape in Pakistan is largely shaped by international public financiers. Reports suggest that the country's domestic private sector accounted for a mere 5% of the total climate finance tracked in 2021, significantly lower than figures in Nigeria (10%), and Kenya (14%). Addressing this disparity necessitates the mobilization of the entire financial ecosystem towards climate action.

Target Outcome 3: Increased investments in climate-focused ventures in Pakistan

Target Outcome 4: Reduced GHG emissions in target results areas: 1) Energy access and power generation; 2) Low emission transport; 3) Buildings, cities and industries and appliances

Target Outcome 5: Enhanced climate resilience through increased uptake of sustainable resource management practices in vulnerable communities

Target Outputs:

- 3.1. Provision of TA facilities for ideation-stage ventures to enhance their readiness, directly supporting the advancement of climate focused ventures
- 3.2. Availability and increased flow of capital for getting climate-focused ventures off the ground.
- 3.3. Crowding in of private capital for scaling early to later-stage climate-focused ventures
- 3.4. Deployment of climate fund guided by a robust climate investment framework
 - 4.1. Increased access and usage of renewable energy solutions and energy management systems
 - 4.2. Increased access and usage of sustainable transport solutions
 - 4.3. Increased access and usage of smart buildings and appliances
- 5.1. Increased uptake of land management and resilient agroecology practices
- 5.2. Increased access and usage of smart water management systems
- 5.3. Increased access and usage of waste management and circular economy

Activities:

Component 1A – Venture Accelerator: Technical Assistance Facility (TAF) (Grant)

Idea mining, communications for climate action and awareness raising, financing ideation-stage climate ventures to increase preparedness for scalability, policy engagement to facilitate climate venture growth

Activity 3.1.1 – Gauging Venture Readiness: To align / streamline the supply-side opportunities with climate-financing, mitigation and adaptation needs of Pakistan by:

- Funnelling each opportunity / venture through a robust investment framework
- Equipping each opportunity / venture with pre-grant and post-grant toolbox of options

Sub-activity 3.1.1.1 Formation of Advisory Panel – a panel of sector-specific experts to be established to provide their expertise to climate founders

Sub-activity 3.1.1.2 GAAP: **Implement Gender Assessment and Action Plan (GAAP) to fill inclusivity gaps in ventures.**

Implementation of GAAP (as reflected in Budget for Component 1A (See [Annex 3a](#)))

3.1.1.2.1 – To promote inclusivity and actively engage women and vulnerable groups in Pakistan's private sector ecosystem for climate action.

3.1.1.2.2 – To facilitate capacity building of women entrepreneurs and increase their access to investor networks for mainstreaming gender in the climate space.

3.1.1.2.3 – To address governance challenges by increasing active involvement of women in decision-making processes.

3.1.1.2.4 – To develop a framework to monitor progress on GAP implementation to strengthen gender-responsive action.

Sub-activity 3.1.1.3: Disbursement Committee (DC) to review proposals (COI) against the investment framework (grant level), and share successful proposals with Advisory Panel for further review

Implementation of Investment Eligibility Framework (as per [Annex 13](#))

3.1.1.3.1 – Submission of initial applications to project team

3.1.1.3.2 – Preliminary Screening by project team

3.1.1.3.3 – Detailed evaluation through IEF by project team (evaluation of ventures against mitigation and adaptation indicators, gender and ESS indicators, among others)

3.1.1.3.4 – Due-diligence/risk assessment by project team

3.1.1.3.5 – Disbursement Committee (DC) review – implementation of scorecard

3.1.1.3.6 – Final decision by DC – categorization of ventures into 4 possibilities

3.1.1.3.7 – Readiness program enrolment of ventures falling into categories 2 (conditional) and 3

3.1.1.3.8 – Implementation of the readiness program which ventures will be provided TA to fill capacity gaps in order to bring them up to category 1

3.1.1.3.9 – Post-investment monitoring

Sub-activity 3.1.1.4 Advisory Panel to further evaluate the proposals (COI) against the investment framework (grant level) and share across successful proposals to the Disbursement Committee)

Sub-activity 3.1.1.5 Approved proposals from Advisory Panel to get scheduled for review in the earliest Disbursement Committee meeting / session

Component 1B – Venture Accelerator: Venture Grant (Reimbursable Grant) – See Annex 20 to view the long list of potential climate ventures

Activity 3.2.1 - Venture Grant Execution in MRAs and ARAs: Pre-seed funding from the project will help ideation-stage climate ventures to:

- Solidify their development stage
- Build marketing capabilities through feasibility studies
- Refine product offerings through prototyping and MVP development
- Fill leadership and gender gaps
- Ready ventures for Component 2: Climate Fund

Sub-activity 3.2.1.1 Disbursement Committee (DC) review

Sub-activity 3.2.1.2 Grants Announcement (post-approval of the disbursement committee)

Sub-activity 3.2.1.3 Grants disbursement: Type and size – Warrant vs. grant: \$50k-\$100k cheque size

Sub-activity 3.2.1.4 Venture Cycle: One cycle per year, up to ten (10) companies per cycle – robust midterm evaluation of the project will be conducted to gauge climate impact created and do course correction accordingly, if required.

Sub-activity 3.2.1.5 Gearing up shortlisted start-ups: Facilitate shortlisted ventures with regards to conducting market studies, feasibility, prototyping, and piloting (as required). This will include activities such as gender & diversity training.

Sub-activity 3.2.1.6 Completion: Shortlisting of ventures for Component 2: Climate Fund by the Advisory Panel

Component 2 – Climate Fund (Equity)

Equity fund for scaling later-stage climate ventures

Activity 3.3.1: Fundraising:

Sub-activity 3.3.1.1: Sourcing & Pitching: Engaging with development finance institutions, institutional investors, and family offices.

Sub-activity 3.3.1.2: Fund Diligence: Setting up a data room with fund information including fund material, team details, past fund performances, sample reports, term sheet, SHA, FAQs and responding to diligence questions.

Sub-activity 3.3.1.3: Fund Closing: Working with fund administrators, lawyers, bankers and regulatory approvals to close the fund as per the fund documentation.

Activity 3.3.2: Fund Formation

Sub-activity 3.3.2.1: Fund documentation: Working with administrators, lawyers and bankers to prepare fund documentation agreeing on the partnership terms.

Sub-activity 3.3.2.2: Fund Structuring: Establishing a fund entity with appropriate structure and ensuring compliances with regulations. Establishing relevant SLAs and establishing a governance structure to ensure transparency in financial fund flows.

Activity 3.3.3: Deal Sourcing

Sub-activity 3.3.3.1 Market screening, Pipeline Development & Deal Sourcing: The fund will screen opportunities to build a pipeline in the designated thematic areas, being in regular contact with entrepreneurs, investors, advisors and accelerators.

Sub-activity 3.3.3.2: Networking: Establishing a network within the broader ecosystem to become a partner of choice for enterprising entrepreneurs. Ensuring presence at panel talks and events to build a network for co-investing, follow-on capital and exits.

Activity 3.3.4 Commercial Diligence:

Sub-activity 3.3.4.1 Market validation and impact assessment: Focus on market validation & impact assessment; identifying potential to expand across geographies

Sub-activity 3.3.4.2 Market opportunity, value proposition, and product: Evaluating market opportunity, value proposition, and product features

Sub-activity 3.3.4.3 Founder backgrounds: Assessing the team for their backgrounds, coach-ability, ability to execute

Activity 3.3.5 Financial and Legal Diligence:

Sub-activity 3.3.5.1 Unit economics, traction, and forecasts: Understanding the unit economics and path to profitability; early traction numbers and future growth plans

Sub-activity 3.3.5.2 Evaluating financial returns and exit opportunities; identifying the appropriate transaction construct including investment instrument, capital to be deployed, valuation, term sheet

Sub-activity 3.3.5.3 Legal and Regulatory Diligence: Ensuring compliance with laws and regulations, as applicable. Undertaking KYC checks to avoid PEP exposure or involvement in any illegal activity

Activity 3.3.6 Technical Diligence:

Sub-activity 3.3.6.1 Technological capability: Carrying out the technology's diligence to assess the codebase and the use of any proprietary technology. This includes examining the codebase and its replicability as well as any IP which can be filed by the company

Sub-activity 3.3.6.2 Resilience of technology: These include engaging with engineering teams to understand the technology stack. Codebase, data practices and SQA practices are examined, as well as internal workflows to handle updates.

Sub-activity 3.3.6.3 Ability to scale: The product is also rigorously analysed to assess its ability to scale with the needs of the company and their customer. In conjunction with the technology stack, it is examined for limitations and ability to handle increased usage over time.

Activity 3.3.7 Impact Diligence

Sub-activity 3.3.7.1. ESG screening and assessment: ESG screening and assessment: Carry out ESG screening and assessment of potential investment(s), identifying the inherent risk factors and evaluating the action plan to mitigate them. Such investments shall be screen according to the fund's ESG policy (that details the ESG factors e.g. assessing **gender and inclusivity** maturity under the gender pillar, as applicable) (See **Annex 12**).

Sub-activity 3.3.7.2. Climate impact assessment & potential (Mitigation & Adaptation): Carrying out an impact assessment to assess climate impacts and their potential (both mitigation and adaptation) to make a significant contribution to the fund's overarching climate targets. Each company shall be assessed on their mitigation and adaptation potential, methodology used to calculate the output and integration of such forecast in the financial model. This will assist in mission alignment with the fund's targets.

Activity 3.4.1 Investment Execution in MRAs and ARAs

Sub-activity 3.4.1.1 Investment Committee: Potential investments (and exits) will be taken to the Investment Committee, which shall assess the opportunity and decide on investments in target Mitigation (MRAs – Outcome 4, Outputs 4.1, 4.2, 4.3) and Adaptation (ARAs – Outcome 5, Outputs 5.1, 5.2, 5.3) result areas of the project. The IC will be composed of established investment professionals having relevant investment expertise & experience and company building experience across similar economies and / or MENA region.

Sub-activity 3.4.1.2: Investment documentation & Closing: The investment terms will be formally documented with external counsel advising. Investment documentation includes impact, gender, and ESG provisions. The transaction is ensured for consistency with all regulations and governance agreements. Funds are transferred to the portfolio company

Activity 3.4.2 Portfolio Post-Investment Activities

Sub-activity 3.4.2.1 Post-Investment Engagement: The fund will be actively involved in the oversight and management of the investments. The fund will take a board seat as part of most of the investments it makes. Ventures shall be evaluated annually on their climate targets followed by evaluations to be conducted at the venture level goal-setting exercises and follow-up with subsequent reviews.

Sub-activity 3.4.2.2 Financial and Impact Reporting: The fund will receive quarterly reports from the portfolio companies – including cash flow, management reports, board reports, and impact reach.

Sub-activity 3.4.2.3: Board Meetings: The fund will have board representation for all of its portfolio companies. The fund will ensure adherence to best-practice corporate governance policies and strict enforcement of these policies, both internally and within portfolio companies.

Sub-activity 3.4.2.4: Compliance with Shareholders Agreement: The fund will oversee compliance with the shareholder agreement for each deal and work closely with its legal team to ensure all applicable regulatory frameworks are adhered to. The fund will have external consultants to support monitoring climate impacts at a Fund level while providing respective support to the investment team and portfolio companies.

Sub-activity 3.4.2.5: Portfolio support and value addition (across financial management, talent, ESG/impact management, capital raise, harnessing G2G partnerships etc): The fund will seek to harness its network and provide value addition & support to portfolio companies to help them professionalise, scale, raise further capital and explore opportunities in the climate space globally by enabling G2G connectivity.

Sub-activity 3.4.2.6: Managing Exits: The fund will drive sustainable growth of portfolio companies to exit upon investment maturity. The Fund exit strategy will be based on selling shares through a company sale to strategic buyers, financial buyers, initial public offering, or management team of the investee company “management buyout,” or alternatively through a secondary sale of shares to a later-stage investor.

Activity 3.4.3 Investor Engagement: The Limited Partners will have oversight into portfolio performance and other fund matters on a periodic basis in the form of portfolio reporting (Financial, Operational & Impact), audit reports, and board meetings (*The Limited Partners (LPs) are the investors in the fund making capital contributions i.e. DFIs, HNWIs, family offices, institutional/corporate/angel investors etc. LPs will have oversight into fund performance and other fund matters on a periodic basis in the form of portfolio reporting (Financial, Operational & Impact), audit reports, and board meetings*)

Sub-activity 3.4.3.1 Capital Calls: Capital Calls shall be made to Limited Partner(s) to transfer capital as per the FAA

Sub-activity 3.4.3.2: Financial and Portfolio Reporting: Financial and impact reporting of the fund’s portfolio will be shared with the investors on a quarterly basis. The quarterly report will also include pipeline/investment activities, and other relevant fund matters – including cash flows, balance sheet, portfolio mark-up, realised/unrealized gain/loss, etc. This will give visibility of the fund’s performance as well as other key developments within portfolio companies.

Sub-activity 3.4.3.3: Investor / Fund Meetings: The fund will have Annual General Meetings (AGM) to approve the audited financial statements, and changes in legal documentation (if any) and discuss matters of importance to the investors. The fund will also have bi-annual meetings with investors to update the investors on market trends, portfolio position, and impact achieved.

Sub-activity 3.4.3.4: Annual Audits: The Fund will share the annual audited financial statements with the investors within 120 (one hundred and twenty) calendar days after the end of the financial year of the Fund unless reasonably delayed by the Auditor.

Activity 3.4.4: Fund Returns: The fund will receive return on its investments in the form of a liquidity event i.e. dividend pay-out or a cash exit (Acquisition, IPO etc). By virtue of holding a board seat in most of the portfolio companies, the fund has oversight on the liquidity process.

Sub-activity 3.4.4.1: Payment Receipt: The fund receives cash from the portfolio company in a bank account monitored by the administrators.

Sub-activity 3.4.4.2 Distribution Notices: The Fund Managers prepare and will share distribution notices specific to each member of the fund, which are counter-checked and executed by administrators. These are then shared with LPs, payment released, and confirmation received. Compliance with regulations is ensured

B.2.2. Outcome mapping to GCF results areas and co-benefits categorization

Fill in the GCF results area table below to map each project/programme outcome identified in section B.2.1 to the contributing GCF results area(s) by referring to the description of eight results areas provided in the guidance note.

- **Outcome 1:** Strengthened climate-tech ecosystem in Pakistan through increased climate awareness and expanded climate-focused investments
- **Outcome 2:** Strengthened public-private climate policy networks in Pakistan
- **Outcome 3:** Increased investments in climate-focused ventures in Pakistan
- **Outcome 4:** Reduced GHG emissions driven by adoption of climate technology in target results areas: 1) Energy access and power generation; 2) Low emission transport; 3) Buildings, cities and industries and appliances

- **Outcome 5:** Enhanced climate resilience through increased uptake of sustainable resource management practices in vulnerable communities

Outcome number	GCF Mitigation Results Area (MRA 1-4)				GCF Adaptation Results Area (ARA 1-4)			
	MRA 1 Energy generation and access	MRA 2 Low-emission transport	MRA 3 Building, cities, industries, appliances	MRA 4 Forestry and land use	ARA 1 Most vulnerable people and communities	ARA 2 Health, well-being, food and water security	ARA 3 Infrastructure and built environment	ARA 4 Ecosystems and ecosystem services
Outcome 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outcome 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outcome 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outcome 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outcome 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If any co-benefits have been identified in section D.3, fill in the co-benefit table below to map each co-benefit to the corresponding category as defined in the FP guidance note.

- **Co-benefit 1:** Creation of green jobs
- **Co-benefit 2:** Enhanced inclusivity in climate-tech entrepreneurship

Co-benefit number	Co-benefit					
	Environmental	Social	Economic	Gender	Adaptation	Mitigation
Co-benefit 1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-benefit 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B.3. Implementation / institutional arrangements (max. 750 words)

A. Fund Structure

1. The Fund will be set up as alternative investment fund in accordance with AIFMD and as a Dutch limited partnership (commanditaire vennootschap or C.V.). NRSP will set up the Fund by engaging fund managers. NRSP has chosen the Key Persons (Mr. Rabeel Warraich and Dr. Bernhard Klemen) for this purpose, who shall set up an alternative investment fund manager (AIFM) by the name of Sarmayacar Climate B.V. (the "BV").
2. The BV will be the Manager and General Partner of the Fund.
3. The BV will qualify as alternative investment fund manager (AIFM) and will be duly registered as such with the Dutch financial regulator (AFM).

B. Contractual Structure

1. FAA

GCF and NRSP will enter into FAA governed by English law.

2. Subsidiary Agreements

NRSP will enter into the following agreements (the "Subsidiary Agreements"):

- a) implementation agreement with the BV and the Key Persons, whereby NRSP as the Accredited Entity will pass down obligations in the FAA and the AMA to the BV and the Key Persons as the Executing Entities (the "BV Implementation Agreement"); and
- b) implementation agreement with GCF Holdings BV whereby NRSP as the Accredited Entity will pass down obligations in the FAA and the AMA to GCF Holdings BV as the Executing Entity (the "Holdings Implementation Agreement",
- c) implementation agreement with Climaventures Fund, whereby NRSP as the Accredited Entity will pass down obligations set out in the FAA and the AMA to Climaventures Fund (the "Fund Implementation Agreement"),

(together, the "Implementation Agreements").

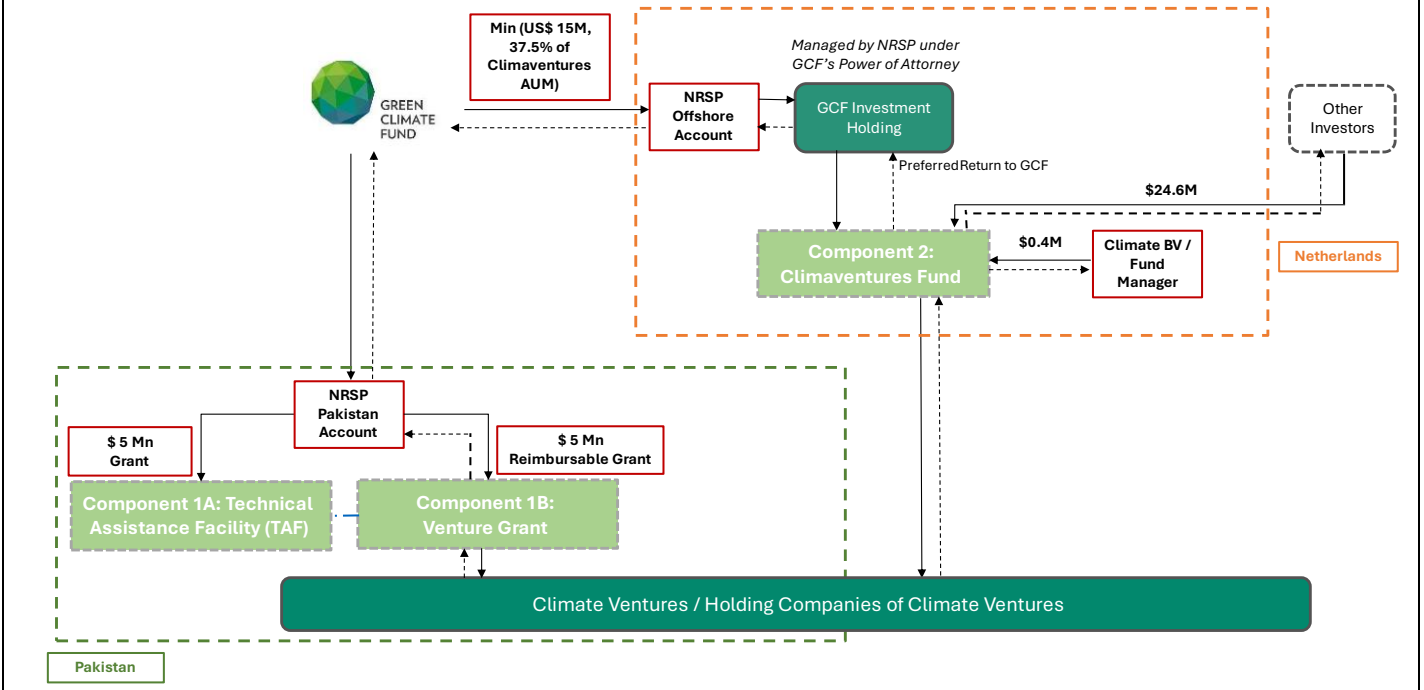
3. Covered Documents

NRSP will ensure that the following documents are duly and timely put in place (the "Covered Documents"):

- a) Climaventures Fund’s LPA which will be substantially based on the key terms and conditions set out in the Term Sheet;
- b) GCF Holdings constitutional document
- c) B.V.’s constitutional document
- d) Subscription agreement by which the GCF Holdings will subscribe to Class C Junior Interest and any side letter (“Side Letter”) to cover specific rights of GCF Holdings as limited partner, which rights will not be given to other limited partners; and
- e) Investment Advisory Agreement with Sarmayacar (Private) Limited

C. Financial Flows of GCF Proceeds

The GCF Proceeds will be made available by GCF to the Accredited Entity in accordance with the FAA. The GCF will disburse the GCF Proceeds into the GCF Account. GCF Proceeds will flow via the Accredited Entity to the GCF Holdings BV, and then will be contributed to the Fund.



C. FINANCING INFORMATION

C.1. Total financing

(a) Requested GCF funding (i + ii + iii + iv + v + vi)		Total Amount: 25		Currency: million USD (\$)	
GCF Financial Instrument	Amount	Currency	Tenor & grace	Pricing	
(i) Senior loans	N/A	Options	Enter years	Enter %	
(ii) Subordinated loans	N/A	Options	Enter years	Enter %	
(iii) Equity	15	million USD (\$)	10 Years	Fund Model: The financial model projects the different range of scenarios and the range of returns therein. We project based on market conditions and the performance of invested companies, that the fund will target a gross return of 3x.	
(iv) Guarantees	N/A	Options	10 years		

(v)	Reimbursable grants	<u>5</u>	<u>million USD (\$)</u>		10 Years	The EE aims to recoup 15-25% of the invested amount in climate ventures by the project's end. The reimbursable component of the grant will be returned to the GCF at the end of the project life.	
(vi)	Grants	<u>5</u>	<u>million USD (\$)</u>		10 Years		
(b) Co-financing information⁶		Total amount			Currency		
		<u>25</u>			<u>million USD (\$)</u>		
Name of institution	Financial instrument	Anticipated Amount	Currency	Tentative Tenor	Pricing	Seniority	
<u>Development Financial Institutions (DFIs)</u>	<u>Equity</u>	<u>10m</u>	<u>million USD (\$)</u>	<u>10 years</u>	<u>Enter %</u>	<u>Options</u> Class A Interests will be allocated to investors with mission orientation and no requirements for downside protection, such as development finance institutions and institutional foundations	
<u>Non-DFIs/Private Investors</u>	<u>Equity</u>	<u>14.6m</u>	<u>million USD (\$)</u>	<u>10 years</u>	<u>Enter %</u>	<u>Options</u> Class B Interests will be allocated to investors with a commercial mission orientation, such as private individuals, corporations and pooled funds.	
<u>Key Persons/GP</u>	<u>Equity</u>	<u>0.4m</u>	<u>million USD (\$)</u>	<u>10 years</u>	<u>Enter %</u>	<u>Options</u> Class D Junior Interests allocated to the Carry Vehicle	
(c) Total investment (c) = (a)+(b)		Amount			Currency		
		<u>50</u>			<u>million USD (\$)</u>		
(d) Co-financing ratio (d) = (b)/(a)		Total co-financing / total GCF funding amount					
		Component-wise breakdown Component 1: 0/10 Component 2: 25/15					
		Project-level breakdown 1/1					
(e) Other financing arrangements for the project/programme (max ½ page)		The fund's General Partners have been engaging their networks and apprising them of the fund. Despite changing global macros, and a riskier investment environment particularly in Pakistan, the responses have been favourable. Discussions are in various stages with different sort of investors such as DFIs/IFIs, Family Offices, Endowments, and HNWI's. In addition, several local and foreign family offices also have interests in foundations and trusts which deploy their endowments in socially beneficial projects. We anticipate there to be enough appetite from these to subscribe the full fund. GCF's confirmation will aid in locking these interests into LP commitments. See Annex 18 for more details.					
C.2. Financing by component							

⁶ If the co-financing is provided in different currency other than the GCF requested, please provide detailed financing information and a converted figure in the GCF requested currency in the comment box. Please refer to the date when the currency conversion was performed and the reference source.

Component	Output(s)	Indicative cost million USD (\$)	GCF financing		Co-financing		
			Amount Options	Financial Instrument	Amount Options	Financial Instrument	Name of Institutions
Component 1A	1.1, 1.2, 2.1, 2.2, 3.1	5m	5m	Grants	Enter amount	Choose an item.	Click here to enter text.
Component 1B	3.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3	5m	5m	Reimbursable grants	Enter amount	Choose an item.	Click here to enter text.
Component 2	3.3, 3.4, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3	40m	15m	Equity	25m	Equity	TBD
Click here to enter text.	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.
	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.
Indicative total cost (USD)		50m	25m		25m		

C.3 Capacity Building and Technology development/transfer

C.3.1 Does GCF funding finance Capacity building activities?

Outputs: 1.1, 1.2, 2.1, 2.2, 3.1
Amount: 5 million USD

C.3.2. Does GCF funding finance Technology development/transfer?

Outputs: 3.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3
Amount: 20 million USD

C.4. Justification for GCF funding request (max. 500 words)

GCF funding will play a critical role in unlocking private capital, which is crucial in enabling the climate ecosystem in the country and achieving positive environmental, social and financial outcomes. Record inflation & poverty levels coupled with the country's debt profile make it difficult to have funds allocated to achieve climate change resilience. The private sector supported by the right regulatory regime is therefore important in helping the country achieve the Nationally Determined Contributions (NDCs) and National Adaptation Plan (NAP) and objectives of international conventions it has ratified such as the Paris Agreement.

The climate ecosystem in Pakistan is at a very nascent stage, with little to no funding flowing to ventures that are solving for viable mitigation and adaptation measures. GCF funding will allow for innovation in climate space for new technologies/accelerated business models to enable and support enhanced action on adaptation, mitigation, technology development and transfer and capacity building.

The Technical Assistance (TA) activities under sub-component 1A will serve as a catalyst in addressing existing policy gaps in the climate sector, fostering increased public discourse, and promoting the equitable inclusion of marginalized groups. Grants provided through sub-component 1B will empower early-stage companies to develop a minimum viable product after successfully conducting a proof of concept. These companies will benefit from expert guidance and mentorship, bridging a critical gap in the current ecosystem where such de-risked capital is scarce. Without this support from the GCF, climate ventures will continue to face significant barriers, limiting the growth and diversification of the climate-tech sector. This lack of funding will restrict opportunities to a small number of climate-focused businesses, many of which have already exhausted traditional fundraising avenues, hindering the overall development of the ecosystem.

Moreover, undeniably, the Climaventures Fund's success in mobilizing interest during its development phase is tied to the GCF's anchor investment. Fund Managers, despite active engagement with other co-investors, have consistently observed that GCF's participation is pivotal in attracting additional investment, particularly from Private Investors (PIs), who are incentivized by the GCF's first-loss protection. It helps Development Finance Institutions (DFIs) meet their risk management criteria. GCF's involvement enhances deal flow, expands ecosystem partnerships, increases follow-on investor interest in portfolio companies – ultimately boosting the credibility of the Fund.

In essence, GCF's funding is not just a catalyst for unlocking private sector capital, but rather the entire private sector ecosystem of Pakistan. Without GCF's intervention, existing barriers will persist, stifling the growth and development of climate ventures and preventing the realization of their significant potential for climate mitigation and adaptation.

C.5. Exit strategy (max. 300 words)

Climaventures will ensure that a sustainable climate tech ecosystem develops and flourishes because of this project. The Fund will invest in scalable businesses that have strong impact objectives and work with the companies to ensure program's scalability and replicability through mass adoption of clean smart technologies and climate solutions, resulting in reduced GHG emissions, strengthened adaptation to climate change and availability of additional funding for such businesses. The fund will work with other capital providers to increase co-financing throughout the project's lifespan, aiming for subsequent and expanded climate funding, potentially spanning inter-regional scopes.

Sarmayacar Climate B.V. envisions several potential exit options for their stakes in the portfolio companies, including strategic acquisitions by global/local companies looking to expand/diversify into climate space and potential listing on the stock exchange, spearheading pivotal milestones in Pakistan's climate space. The Fund will seek buyers for their equity stakes/portfolio companies that are aligned with impact objectives, including private placements. Subsequently, the Fund will also explore setting up a later-stage Fund II to capitalize and further propel the momentum generated in the ecosystem. The Fund anticipates a holding period of 5-7 years before any exits can materialize in order to ensure scalability and impact.

GCF's exit:

The Fund has a fixed life i.e. 10 years, with the option of two 1-year extensions subject to member approvals. The Fund Manager envisions all exits during the life of the fund (this includes the GCF). It is also pertinent to note that the incentive of the Fund Manager is linked to successful exits. In an event where the Fund Manager is unsuccessful in exiting the company during the life of the fund, the shares usually get transferred to the investors on a pro-rata basis of the investment. In such a scenario, once the shares have been transferred on a pro-rata basis, the Fund Manager will work with GCF to try to secure a private placement for GCF holding.

Examples of past exits:

Sarmayacar Climate B.V., from their first fund, executed two successful exits: Trucksher's acquisition by Trukker, GCC's largest digital freight platform, at a valuation of \$437.5m, yielding a 3.5x markup on the original investment, and SimPaisa's distribution of dividends, offering a dividend yield of 189% p.a. Sarmayacar Climate B.V. also expects to divest some holdings in the company by Q2 2024, expecting a 20x+ MoM return.

Large global funds require earlier stage investors to be active and for there to be a thriving ecosystem. With an ecosystem enabled by right policy incentives, entrepreneurs will work towards climate action by exploiting increased awareness and information, thereby ensuring continuity of the paradigm shift. As these enterprises grow and generate strong financial outcomes, they are likely to attract further investment (In the form of equity) from private investors to replicate the solutions regionally.

Forex Risk Management:

The AE understands the nuances of investing in emerging markets and is cognizant of the foreign exchange risks inherent in such economies. While such risks cannot be eliminated, the Fund Manager is proactive in managing such risks.

- During the diligence phase of the investment, such risks are incorporated into the financial modelling and return analysis processes for the potential investee company. Decisions are undertaken in \$ terms, which is the fund denomination currency.
- The treasury function of the company will be evaluated to assess the financial management capabilities of the company. The fund actively engages with pipeline companies to understand their priority of establishing a global customer base, with tech being scalable across geographies.
- The investment by the Fund will, in most cases, be made into the holding companies of the pipeline. Recent updates in the Foreign Exchange manual allows companies to open HoldCos and mirror shareholding between the Opco and HoldCo. Hence, the investment in and divestment of a company is expected to happen in offshore jurisdictions, which will mitigate any such risks while investing and, eventually, exiting.

C.6. Financial management/procurement (max. 300 words)

Financial Management

The financial management process is centred on three entities with distinct and complementary responsibilities:

1. Accredited Entity, NRSP – responsible for fiduciary oversight as the Accredited Entity, as well as accounting, preparation of financial statements, cash management for Component 1.
2. The Manager/GP – with general responsibility for investment management, due diligence, and oversight for Component 2, as detailed in the project activities as well as the investment criteria
3. The Manager/Fund Administrator – responsible for accounting, preparation of financial statements, cash management, notices to investors and compliance with AML/CFT policies for fund investors, for Component 2.

NRSP and Sarmayacar Climate B.V. have internal policies and procedures in place with regards to financial accounting, auditing and disbursement of funds. Climaventures is subject to an annual financial audit by an independent external auditor accordance with internationally recognised financial reporting and auditing standards.

Procurement

The AE's fiduciary and accounting standards will be adhered to as specified in the AMA. The procurement plan has been developed according to NRSP's procurement guidelines and is applicable to both AE and EEs of this project. NRSP will hold the right to final approval for any item or service which may be needed to be procured during the life of the project. This clause will be reflected in the subsidiary agreement which will be signed between NRSP and the EEs.

Procurement risk assessment states that the level of procurement risks are negligible since no infrastructure based items will be procured during the life of this project, but rather only soft services will be hired. Further details on the items and services which may be required in this project are provided in **Annex 8**.

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

D.1. Impact potential (max. 300 words)

Overall impact targets: The fund will aim to identify investments that are directly or indirectly addressing the effects of climate change through the promotion of renewable energy solutions, low-emission transport, sustainable consumption through recycling, waste management, etc, smart buildings and appliances, efficient and sustainable farming practices, and solutions promoting food and water security for the vulnerable and marginalized.

Mitigation impact: Pakistan's projected emissions are approximately 1603 MTCO₂ by 2030 (NDCs) of which the country commits to reduce 50% (801.5 MTCO₂), with 15% (240 MTCO₂) drop below business as usual (BAU) from country's own resources, and an additional 35% (561 MTCO₂) subject to International Financing.

This project expects to contribute **3.5 million metric tons of CO₂** towards the total commitment by investing in renewable energy sources such as solar for optimizing electricity consumption and in low-carbon emitting mobility solutions. In addition, the fund expects to make investments in energy-efficient constructions and appliances as well as the use and development of recyclable materials that result in significantly lower CO₂eq emissions. This also includes supporting technologies that integrate green manufacturing techniques for industrial use.

Adaptation Impact: These advancements aim to drive low-carbon growth, decrease greenhouse gas (GHG) emissions, and enhance the quality of life for approximately **3.77m individuals directly, with a potential to indirectly benefit 2.12m**. The strategic allocation of resources will address the pressing challenges of climate change and changing weather patterns, while concurrently fostering social and economic empowerment for disadvantaged communities.

See **Annexures 22a.1, 22a.2 and 22b** to learn more about the methodologies and assessments undergone to achieve these numbers. Additionally, see **Annex 16** to learn how the project has aligned its pipeline with GCF's result areas.

D.2. Paradigm shift potential (max. 300 words)

The Venture Accelerator and Climaventures Fund will be Pakistan's first climate-focused institutions/systems that seek to showcase Pakistan's ability to transition from fossil fuel power generation and GHG-emitting transport and industries – the major CO₂ emission contributors – to renewable and clean energy solutions. In addition, the Fund will strive to showcase the potential for climate resilience within agricultural value chains as the sector serves as the largest employer of labour and holds significant social and livelihood importance.

Scalability:

The Entrepreneurship Supporting Organizations (ESO) ecosystem in Pakistan has invested heavily in e-commerce, fintech, and logistics ventures. However, there's a significant lack of involvement from investors in financing climate-focused initiatives due to high risks. While a few donor-funded programmes offer grants ranging from \$50k to \$100k for climate ventures, these grants prioritize capacity building over ensuring the ventures' impact, bankability and scalability.

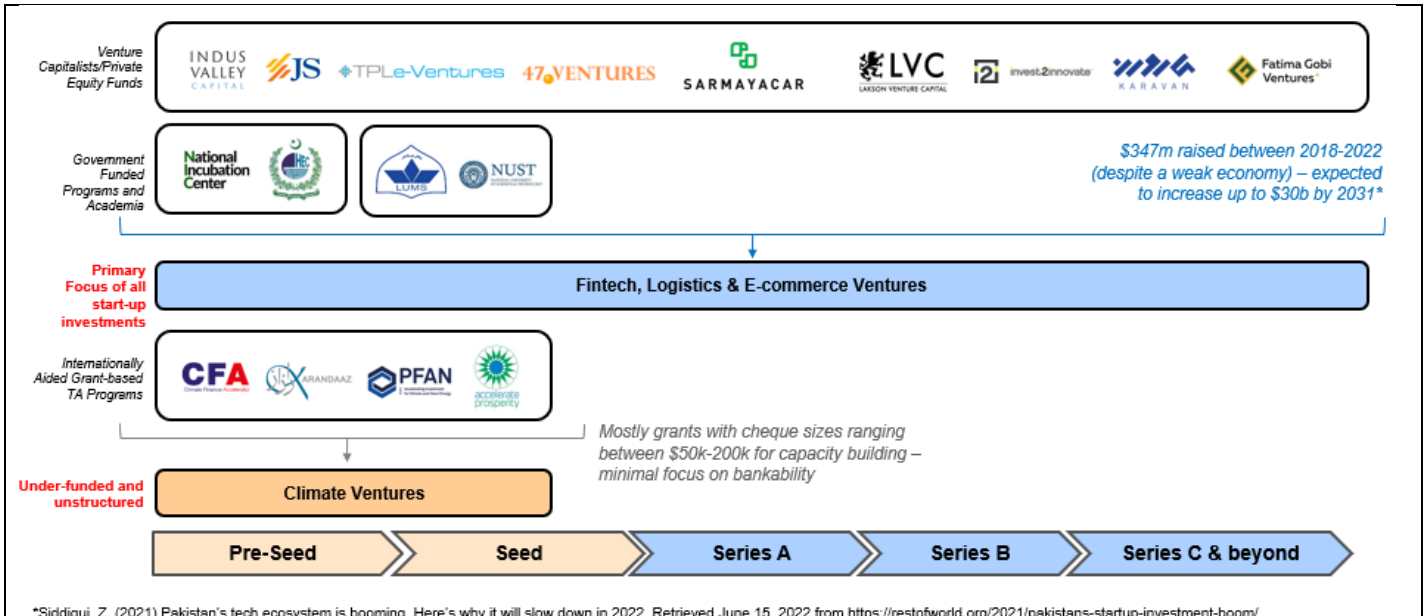
By de-risking the climate market landscape through grant and VC backed equity investments (supplemented by grants for ideation stage ventures), scalable and sustainable climate-oriented will emerge – resulting in low-cost climate solutions which would lead to reduction in GHG emissions and increased resilience to the impacts of climate change. Furthermore, it will incentivize other investors (DFIs, IFIs, VCs, local investors) to participate in the climate market – ultimately scaling up the inflow of climate financing in Pakistan. The Fund's core objective is to ensure continuous acquisition of co-financing throughout the program's lifespan, aiming for subsequent and expanded climate funding.

This strategy is instrumental in guaranteeing the project's scalability as the Fund's investments will potentially yield significant returns for investors. These investments are anticipated to have a ripple effect on the overall investment landscape in Pakistan. As these enterprises grow and generate strong financial outcomes, they are likely to attract further investment and interest from both domestic and international stakeholders. This, in turn, enhances the credibility and attractiveness of the Pakistani investment landscape, showcasing the potential for both profitable and sustainable ventures in the country.

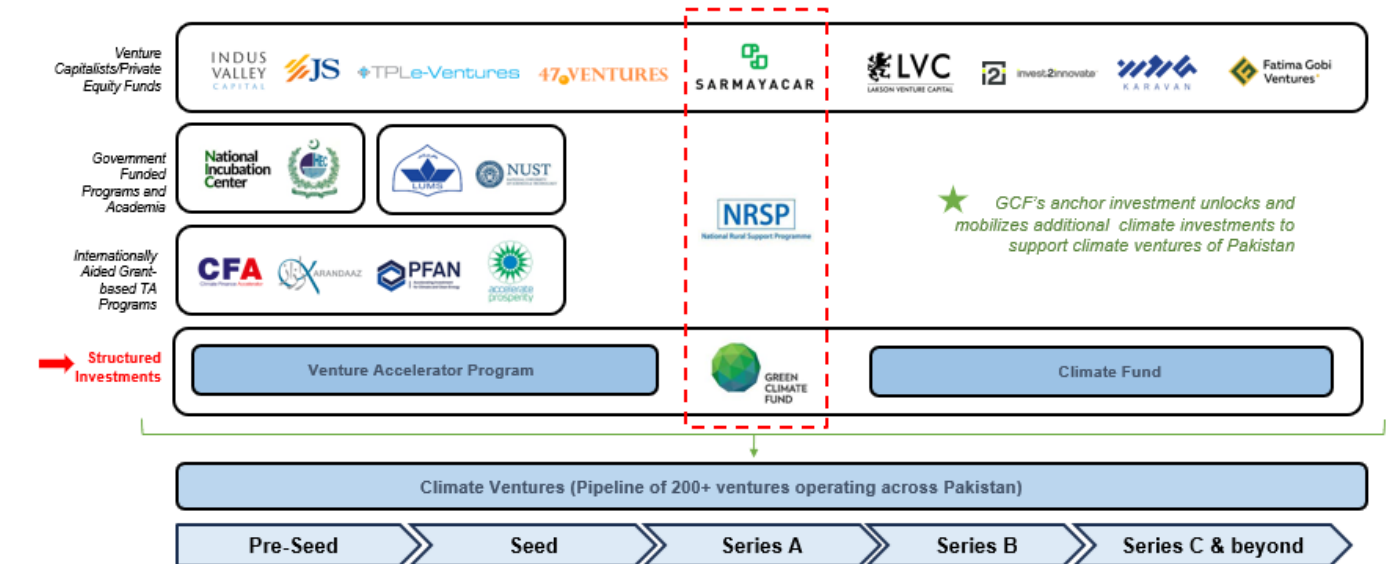
Replicability:

While there are a few donors funded climate projects running in Pakistan, there is lack of dedicated climate-focused equity funds or an ideation-stage climate venture accelerators (in public or private sector) to kickstart the climate venture market. By launching the first dedicated climate fund (with multiple IFIs as investors) and ideation-stage accelerator project, guided by a robust climate Investment Eligibility Framework (IEF) to ensure maximum impact, this project aims to create a snowball effect within the climate financing ecosystem by attracting even more investors. The graphic below illustrates the same. Furthermore, by engaging the public sector, the project also aims to incentivise the government to develop and execute such projects in the future as well.

Existing Climate Ecosystem:



Post Intervention Climate Ecosystem:



Sustainability:

Existing donor-funded climate projects operating in Pakistan have a very limited scope of investments – low risk, smaller cheques, mostly grants for capacity building and a broad investment framework. The degree to which the results and outcomes of these investments are sustained is extremely low, as achieving high impact requires investments which are high risk, larger at scale, diverse in terms of its nature (equity or debt) and a focused investment framework.

Climaventures aim to ensure that a sustainable climate tech ecosystem develops and flourishes because of this project. The project will invest in scalable businesses that have strong impact objectives and work with the companies to ensure program's scalability and replicability through mass adoption of clean smart technologies and climate solutions, resulting in reduced GHG emissions (contributing significantly towards Pakistan's NDCs, and ARE policy – see complete list below in Section D.5), strengthened adaptation to climate change and availability of additional funding for such businesses. The fund will work with other capital providers to increase co-financing throughout the program's lifespan, aiming for subsequent and expanded climate funding, potentially spanning inter-regional scopes.

D.3. Sustainable development (max. 300 words)

The Project will directly contribute to the following SDGs:

- SDG 5: Achieve gender equality and empower all women and girls: The Project will address barriers that women entrepreneurs face, including the cost of leaving the informal sector, limited knowledge of available funding opportunities, a lack of women role models in business, and unequal access to educational and professional networks.

- SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all: by promoting the development and sustained growth of climate ventures, accompanied by formalisation measures for these ventures, the Project will promote economic growth, technological and business innovation and job creation.
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation: by increasing entrepreneurs' access to finance and supporting domestic technology development and innovation.
- SDG 10: Reduce inequality within and among countries: by ensuring equal opportunities and encouraging investment in other countries or regions (including LDCs).
- SDG 13: Take urgent action to combat climate change and its impacts: through direct contribution to NDC targets and by building the regional knowledge base and capacity for climate change action.
- SDG 17: Strengthen the means of implementation and revitalise the global partnership for sustainable development: by mobilising financial resources towards Latin America and West Africa, sharing knowledge for technology and innovation, promoting sustainable technologies and enhancing the capacity of countries to address the climate emergency.

Environmental Co-benefits:

- Improved land-use and soil conservation practices: Ventures with significant impact on land use (e.g. through alternative fuels, more efficient agricultural processes, ecosystem restoration) will have a significant environmental impact going beyond decarbonisation.
- Reduced water stress on regions with limited access to adequate water sources: by reducing water consumption and contamination in economic activities and improving access to safe drinking water and sanitation.
- Improvement in air quality: Transitioning to renewable energy sources and electric mobility reduces air pollution, leading to improved air quality and associated health benefits for the population.

Social Co-benefits:

- Improved livelihoods of customers through the provision of locally relevant, low-emission climate solutions: the low-emission climate products and services created and sold by the Project-supported ventures will provide their users with the opportunity to reduce their carbon footprints as well as improve their livelihoods. This could be because of energy savings, improved resource efficiency, reduced travel times or improved product reliability, depending on the nature of the climate solution
- Improved adaptive capacities of consumers: by deploying products and services that are climate-resilient and adaptive in sectors with strong impacts on livelihoods (e.g. agriculture, energy and transport).

Economic Co-benefits:

- Private investment mobilised for climate ventures will strengthen the overall innovation ecosystem.
- Green job creation: The supported climate ventures will create jobs in a range of 'green' technologies and sectors. Moreover, the project's support to venture formalisation will help to ensure that these jobs are accompanied by other benefits: workplace insurance, health and safety, etc.

Gender-Sensitive Development Goals:

- Women's empowerment in climate entrepreneurship and broader climate action: Women are significantly under-represented among entrepreneurs and venture founders. **See Annex 4** to see what specific barriers are and how the project aims to solve them.

D.4. Needs of recipient (max. 300 words)

Currently, in Pakistan, there exist two tiers of needs: at the level of climate ventures and, crucially, among the climate vulnerable population. The project addresses the former by offering tailored financial tools and technical support for scaling up climate solutions. Simultaneously, it focuses on meeting the latter's needs by enhancing access to solutions that bolster their climate resilience, safeguarding their socio-economic well-being directly.

Additionally, the project's strategy plays a pivotal role in ensuring the project's scalability, potentially yielding substantial returns for investors. These investments are expected to have a ripple effect on Pakistan's investment environment. As these enterprises expand and deliver robust financial results, they are poised to draw increased attention and investment from both local and global stakeholders. Consequently, this bolsters the credibility and allure of Pakistan's investment terrain, highlighting the prospect of profitable and sustainable ventures within the country.

Finally, the venture accelerator, with its policy engagement component, aims to foster extensive partnerships between the private and public sectors. This collaboration aims to craft well-informed policies and regulatory frameworks, bolstering institutions where necessary. The goal is to enhance the "ease of doing business" within the climate market space, consequently expediting climate action.

D.5. Country ownership (max. 500 words)

The Strategic investment framework (**see Annex 16**) and project's thematic areas align with the national mitigation and adaptation measures outlined in diverse climate action plans of the country. The Government of Pakistan has undertaken significant climate action through multiple initiatives. The country has introduced its first-ever National Adaptation Plan (NAP) for 2023-2030, focusing on areas such as agriculture-water nexus, natural capital, urban resilience, and human capital. Additionally, Pakistan's Nationally Determined Contributions (NDCs) under the Paris Agreement aim for a 50% reduction in emissions by 2030, with progress already seen in an 8.7% decrease. A detailed description of priorities identified in policy documents the proposed project is aiming to address and/or improve are listed below.

Direct alignment with national policies:

Policy Name	Description of priorities identified in policy documents the proposed project is aiming to address and/or improve.	Responsible Authorities
National Climate Change Policy (2012)	Comprehensive framework for addressing climate change, covering adaptation, mitigation, capacity building, and knowledge development.	Ministry of Climate Change (MoCC)

Pakistan's Nationally Determined Contributions (NDCs)	<ul style="list-style-type: none"> Renewable Energy: By 2030, 60 % of all energy produced in the country will be generated from renewable energy resources including hydropower. Transportation: By 2030, 30 % of all new vehicles sold in Pakistan in various categories will be Electric Vehicles (EVs). Coal: From 2020, new coal power plants are subject to a moratorium, and no generation of power through imported coal shall be allowed, shelving plans for two new coal fired power plants in favour of hydroelectric power and focusing on coal gasification and liquefaction for indigenous coal. Land-use change and Forestry: 2016 onwards, continued investments in NbS through the largest ever afforestation program in the history of the country—the Ten Billion Tree Tsunami Programme (TBTP)—will sequester 148.76 MtCOe emissions over the next 10 years. The estimated project cost of about US\$800 million is being met nationally from indigenous resources as an unconditional contribution. 	Ministry of Climate Change (MoCC)
National Adaptation Plan (2023-2030)	Strategies for enhancing resilience to climate change impacts, focusing on sectors such as agriculture, water resources, health, and disaster risk reduction.	Ministry of Climate Change (MoCC)
National Disaster Risk Reduction Policy (2013)	Policy to address climate-related and natural disasters, with a focus on risk reduction and preparedness.	National Disaster Management Authority (NDMA)
Renewable Energy Policy (2019)	Encouraging the development of renewable energy, particularly wind, solar, and hydroelectric power, with incentives and a regulatory framework for renewable energy projects.	Alternate Energy Development Board (AEDP)
Ten Billion Tree Tsunami Afforestation Project	Initiative to plant ten billion trees over five years to combat deforestation and increase forest cover.	Ministry of Climate Change (MoCC)
Pakistan Cooling Action Plan (PCAP)	Aims to reduce energy consumption and greenhouse gas emissions from the cooling sector while ensuring access to cooling service.	National Energy Efficiency and Conservation Authority (NEECA)
National Energy Policy (NEP) 2021	Provides guidelines and strategies for energy production, distribution, and efficiency to ensure energy security and sustainability.	Ministry of Environment (MoE)
Alternative and Renewable Energy (ARE) 2019	Protection of the environment by increasing the proportion of green energy in the energy mix through efficient on-grid power generation, market development, local manufacturing, technology transfer and private sector participation.	National Electric Power Regulatory Authority (NEPRA)
National Electric Vehicles Policy (NEVP) 2019	Mitigation of climate change by reducing emissions from the transport sector.	Ministry of Climate Change (MoCC)
Indicative Generation Capacity Expansion Plan (IGCEP) 2021–2030	Envisages to enhance current installed capacity to 68,667-MW with net capacity addition of 17,812-MW by end of the plan period, with focus on developing hydropower, solar and wind power.	National Transmission & Dispatch Company (NTDC)
Pakistan's National Action Plan on Sustainable Development Goal-12 (SDG-12) (2017)	Focuses on promoting sustainable consumption and production patterns, resource efficiency, and responsible management of natural resources to achieve sustainable development.	Ministry of Climate Change (MoCC)
Clean Green Pakistan Program	An environmental sustainability program covering tree planting, sanitation, and plastic waste reduction.	Ministry of Climate Change (MoCC)
Pakistan Vision 2025	Pakistan Vision 2025 includes objectives related to sustainable development, energy efficiency, and renewable energy integration to reduce carbon emissions.	Ministry of Climate Change (MoCC)
Clean Development Mechanism (CDM)	Pakistan participates in the CDM framework to promote emission reduction projects and sustainable development.	Ministry of Climate Change (MoCC)
Green Pakistan Program	This program aims to increase forest cover and enhance afforestation and reforestation efforts to sequester carbon and improve biodiversity.	Government of Pakistan (GoP)
Plastic Management Strategy of Punjab, 2023	Targeting plastic packaging which is one of the leading causes of littering and in a country where solid waste collection efficiency is less than 75 % and recycling rate a meagre 19.2%, schemes should be encouraged to avoid plastic altogether.	Government of Punjab

Status of engagement with NDA: The project has been presented to the Ministry of Climate Change (MoCC) twice last year. It was first presented to the Climate Finance Unit (CFU) for review. The second and most recent presentation was given during the GCF local board meeting on October 25th, where the No Objection Letter (NOL) was granted in principle, with a request to submit the findings of the feasibility study that provides recommendations regarding the viable option with regards to the location of the Equity Fund.

The feasibility study was submitted to the MoCC at the end of March 2024, and the NOL was granted (see Annex 1 to view NOL).

Stakeholder Engagements: Aimed to validate key hypotheses:

- The domestic private sector holds potential for climate action but lacks resources, validated by ecosystem players.
- Identification of over 200 climate ventures aligned with GCF's goals indicates robust potential for climate action in Pakistan.
- The assumption of sole reliance on grants was challenged. Diverse financial instruments, including equity and blended financing, emerged as viable options, shaping the project's financial structure significantly.
- Collaboration with venture capitalists (VCs) was vital. Incubators and accelerators require guidance from VCs to navigate the nuances of the ecosystem for optimal performance.
- Inclusion of women and other marginalized groups into the ecosystem was essential to get on just and equitable climate action pathways.
- Environmental and Social Safeguarding (ESS) is a pre-requisite to sustainable growth and development of Pakistan.

D.6. Efficiency and effectiveness								
D.6.1. Estimated cost per t CO ₂ eq, defined as total investment cost / expected lifetime emission reductions (Mitigation and Cross-cutting)	(a) Total project financing	US\$ 50m						
	(b) Requested GCF amount	US\$ 25m						
	(c) Expected lifetime emission reductions	3,508,243 tCO ₂ eq						
	(d) Estimated cost per tCO ₂ eq (d = a / c)	US\$ 14.2						
	(e) Estimated GCF cost per tCO ₂ eq removed (e = b / c)	US\$ 7.1						
D.6.2. Expected volume of finance to be leveraged by the proposed project/programme and as a result of the Fund's financing, disaggregated by public and private sources (Mitigation and Cross-cutting)	(f) Total finance leveraged	US\$ 25						
	(g) Public source finance leveraged	US\$ 10						
	(h) Private source finance leveraged	US\$ 15						
	(i) Total Leverage ratio (i = f / b)	1						
	(j) Public source leverage ratio (j = g / b)	0.4						
	(k) Private source leverage ratio (k = h / b)	0.6						
D.6.3. Describe how the financial structure is adequate and reasonable in order to achieve the proposal's objective(s), including addressing existing bottlenecks and/or barriers; providing the minimum concessionality; and without crowding out private and other public investment. (max. 500 words)								
<p>Opportunity Size:</p> <ul style="list-style-type: none"> <p>Ideation-stage Climate Ventures in Pakistan:</p> <p>During the proposal development stage, the Accredited Entity (AE) identified over 100 ideation-stage climate ventures operating within Pakistan's climate sector. This number is expected to grow as the project gains visibility and awareness. These ventures are in the early stages of developing business models and prototypes, yet most lack the resources to conduct market and feasibility studies, hire experts to create Impact Demonstration Plans (IDPs), or even carry out primary research to gather the necessary climate data to quantify impact. As a result, they often participate in sector-agnostic events organized by Development Finance Institutions (DFIs) and National Incubation Centres (NICs) in Pakistan, where they struggle to attract the right investors or consumers, leading to stagnation.</p> <p>Based on the AE's stakeholder engagements with consultancy firms that specialize in these studies, as well as its own experience in hiring a firm through a competitive bidding process to conduct feasibility and impact potential studies for this project, the average cost of such activities ranges from USD 50,000 to 80,000 – this does not include costs of non-technical support such as (policy development, communication and awareness raising which are extremely integral to the objectives of this project).</p> <p>Given this context, the opportunity size far exceeds the requested amount. While ideally, the grant request should be higher, the AE believe s that an initial USD 10 million would be sufficient to "kickstart" the ecosystem, serving as the first step toward achieving a larger goal.</p> <p>Early-stage to later-stage Climate Ventures in Pakistan:</p> <p>As outlined in section B.1, the Fund Manager previously invested in several climate ventures through their initial USD 25 million fund in 2018. Since then, the opportunity size has expanded considerably. For the Climaventures Fund, the Fund Manager has already identified 11 climate ventures ready for investments totalling approximately USD 22 million (see Annex 14 for details). It's important to emphasize that this is at the proposal development stage, and the number of investable climate ventures is expected to grow as the project, across both components, progresses. Therefore, it is clear that the objectives and targets of this project are well-aligned with its financial structure.</p> <p>Overall Approach to Financial Structuring:</p> <p>Component 1 – Venture Accelerator:</p> <p>In addition to providing mentorship, training and readiness support, the grant component (sub-component 1B) will also cover early-stage financial support in the form of reimbursable grants to ensure sustainability and long-term impact. This approach is to support growth of viable ventures with a strong potential for acceleration.</p> <p>The Accredited Entity, in its capacity as the Executing Entity for Component 1B, will on-grant the GCF Reimbursable Grant in the form of Venture Grants to the eligible recipients (the "Venture Grant Beneficiaries") as per the following terms:</p> <table border="1"> <tr> <td>Amount</td> <td>Up to US\$ 50,000</td> </tr> <tr> <td>Repayment trigger</td> <td>Venture Grant Beneficiaries that receive follow-on equity financing (by Component 2 or from a third-party investor) within three years from the date of Venture Grant disbursement, will be liable to reimburse the received grant amount over a repayment period of 3 years</td> </tr> <tr> <td>Eligibility Criteria</td> <td>As per Annex 13 of the Funding Proposal</td> </tr> </table>			Amount	Up to US\$ 50,000	Repayment trigger	Venture Grant Beneficiaries that receive follow-on equity financing (by Component 2 or from a third-party investor) within three years from the date of Venture Grant disbursement, will be liable to reimburse the received grant amount over a repayment period of 3 years	Eligibility Criteria	As per Annex 13 of the Funding Proposal
Amount	Up to US\$ 50,000							
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Eligibility Criteria	As per Annex 13 of the Funding Proposal							

In line with the Fund's investment philosophy that not only ensures financial returns but also the amplification of climate impact, all financial support extended may not be reimbursed. Potential reimbursements at the end of the Project are projected as per the following four scenarios: nil (0%), downside (15%), base case (20%), and upside (25%).

Component 2 – Climaventures Fund:

In 2018, Sarmayacar Climate B.V. launched its inaugural Pakistan focused fund to catalyse the untapped tech ecosystem in the country. The fund, being the first of its nature in the country, brought together DFIs and facilitated co-investments by global VC firms into local start-ups, with more than \$800m being injected into the ecosystem since then. The fund's portfolio has remained resilient, despite the challenging macro conditions the country faces, with the fund currently at a mark-up of 1.9x. The fund covered fintech, logistics, e-commerce, and climate-related niches. Currently, Sarmayacar Climate B.V. is shifting towards a fund dedicated to climate-related investments—a sector that's emerging and challenging in Pakistan due to low adoption rates and scaling challenges.

Climate sector has struggled to attract capital, with investors sceptical about the mass adoption of such solutions, lack of success stories and challenging macroeconomic conditions. The country's bonds have a Moody's rating of Caa3, interest rates are at 22% increasing cost of financing for businesses and investors require a minimum equity risk premium of 19.23% (NYU Dataset). Such indicators underscore the financial challenges and investment risks present in the country.

This requires incentivizing investors to positively influence their risk appetite by offering tangible reassurance against potential equity losses. Essentially, it acts as a safety net, reducing the perceived risk and encouraging investment in innovative but uncertain ventures. This strategic approach will help mitigate risks for companies focused on developing and scaling innovative products, making them more attractive for additional capital investment.

Equity funding is especially critical, as it provides a foundation for these businesses to demonstrate commercial viability, a challenging feat given the restrictive cost of debt financing in the high-interest climate. An equity fund could thus serve as a crucial support system for green ventures, bolstering Pakistan's ability to embrace sustainable technologies despite these financial headwinds.

GCF's position in the Climate Fund will bolster Sarmayacar Climate B.V.'s proposition. Concessional equity will help attract other investors, particularly DFIs/IFIs, which will enable the fund to reach its target of \$40m. Our curated pipeline demonstrates enough appetite for uptake of the capital, as well as the ability to contribute towards the goal of decarbonizing the economy.

The financial model projects the different range of scenarios and the range of returns therein. We project based on market conditions and the performance of invested companies, that the Fund can gross a return between 2.9x-4.1x, which can translate into a net return of 2.5x-3.5x, and a 7YR IRR of 14%-20%.

Summary:

This project presents a highly efficient and effective model for climate action in Pakistan, channelling resources into early-stage ideation and market-ready climate ventures. By leveraging GCF's funds, the project is set to propel 100+ innovations through the reimbursable grant facility and further invest in 15-20 ventures from the equity fund, with an expected 3x impact scaling. This approach outperforms traditional benchmarks by integrating capital mobilization, technology adoption, and direct contributions to Pakistan's NDCs. The potential for scalability and replicability in the climate-tech sector positions Climaventures as a transformative force, ready to catalyse change and foster a resilient, low-carbon economy.

E. ANNEXES

E.1. Mandatory annexes

- | | | |
|-------------------------------------|----------|--|
| <input checked="" type="checkbox"/> | Annex 1 | NDA No-objection Letter(s) (Template) |
| <input checked="" type="checkbox"/> | Annex 2 | Pre-feasibility (or feasibility) study (Guidance) |
| <input checked="" type="checkbox"/> | Annex 2a | Logical Framework (Template) |
| <input checked="" type="checkbox"/> | Annex 2b | Timetable (Template) |
| <input checked="" type="checkbox"/> | Annex 3a | Budget plan that provides breakdown by type of expense (COMPONENT 1) (Template) |
| <input checked="" type="checkbox"/> | Annex 3b | Budget and Fund Model (COMPONENT 2) |
| <input checked="" type="checkbox"/> | Annex 3c | Indicative Disbursement Schedule and Envisioned Timelines |
| <input checked="" type="checkbox"/> | Annex 4 | Gender assessment and action plan (Template) |
| <input type="checkbox"/> | Annex 5 | Co-financing commitment letter (in progress) |
| <input checked="" type="checkbox"/> | Annex 6 | Term sheet and evidence of internal approval |
| <input checked="" type="checkbox"/> | Annex 7 | Risk assessment and management (Template) |
| <input checked="" type="checkbox"/> | Annex 8 | Procurement plan model (Template) |
| <input checked="" type="checkbox"/> | Annex 9a | Legal Due Diligence (regulation, taxation and insurance) (Template) |
| <input checked="" type="checkbox"/> | Annex 9b | Legal Opinion/Certificate of Internal Approvals (Template) (TBD) |

E.2. Other annexes to be submitted when applicable/requested

- | | | |
|-------------------------------------|-------------|---|
| <input checked="" type="checkbox"/> | Annex 10 | Economic and/or financial analysis (Guidance)
(mandatory for private-sector proposals) |
| <input checked="" type="checkbox"/> | Annex 12 | Environmental and Social Management Framework (Template) |
| <input checked="" type="checkbox"/> | Annex 13 | Operations Manual |
| <input checked="" type="checkbox"/> | Annex 14 | Climate Fund Indicative Pipeline |
| <input checked="" type="checkbox"/> | Annex 15 | Sarmayacar (PVT) Limited Coöperatief U.A. AML Policy 2022. |
| <input checked="" type="checkbox"/> | Annex 16 | Strategic Framework for Investments - GCF Alignment |
| <input checked="" type="checkbox"/> | Annex 18 | Climate Fund Potential Investors |
| <input checked="" type="checkbox"/> | Annex 19 | Theory of Change Diagram |
| <input checked="" type="checkbox"/> | Annex 20 | Long List of Climate Ventures – Component 1 |
| <input checked="" type="checkbox"/> | Annex 22a.1 | GHG Impact Potential - Mitigation |
| <input checked="" type="checkbox"/> | Annex 22a.2 | GHG Impact Potential – Mitigation (Excel) |
| <input checked="" type="checkbox"/> | Annex 22b | Beneficiary Details |

***** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents. *****

No-objection letter(s) issued by the national designated authority(ies) or focal point(s)



F.No. CFU/GCF/002/2015(pt)
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Islamabad the, 4th April, 2024

Ms. Mafalda Duarte,
Chief Executive Officer,
Green Climate Fund (GCF),
Song do, Incheon,
South Korea.

Re: Funding Proposal for the GCF by NRSP Regarding Climaventures: Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan

Dear Madam,

We refer to the project titled "**Climaventures: Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan**" in Pakistan as included in the funding proposal submitted by National Rural Support Programme to us on 15 August 2023.

2. The undersigned is the duly authorized representative of Ministry of Climate Change And Environmental Coordination, the National Designated Authority of Pakistan.
3. Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the project as included in the funding proposal.
4. By communicating our no-objection, it is implied that:
 - (a) The government of Pakistan has no-objection to the project as included in the funding proposal;
 - (b) The project as included in the funding proposal is in conformity with the national priorities, strategies and plans of Pakistan;
 - (c) In accordance with the GCF's environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.
5. We also confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.
6. We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

(Zulfiqar Younas)
Addl Secretary/Focal Point GCF
Ministry of Climate Change and Environmental Coordination
Pakistan

Secretary Climate Change

Dy. No: 1419

Date: 05-4-24

Independent Technical Advisory Panel’s assessment of SAP047

Proposal name:	Climaventures: Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan
Accredited entity:	National Rural Support Programme (NRSP)
Country/(ies):	Pakistan
Project/programme size:	Small

I. Assessment of the independent Technical Advisory Panel

1.1 Overview

1. The Climaventures project is a simplified approval process (SAP) funding proposal submitted by the National Rural Support Programme (NRSP) of Pakistan, a GCF accredited entity (AE) and executing entity (EE). NRSP has partnered with Sarmayacar Ventures (Sarmayacar), a Pakistani venture capital fund manager serving as an additional EE.
2. NRSP submitted an earlier version of this SAP funding proposal to the independent Technical Advisory Panel (iTAP) during the thirty-ninth meeting of the Board (B.39) review cycle. That submission was assessed as not ready for Board approval; several opportunities to improve the funding proposal were identified and elaborated in the iTAP assessment. After the assessment, the AE, the Secretariat and the iTAP met to explore ways to further improve the funding proposal, with all parties recognizing the importance of addressing the weaknesses in the original submission.
3. The current proposal incorporates some of the improvements proposed in the iTAP assessment and subsequent discussions. NRSP is requesting the maximum permissible GCF SAP funding of USD 25 million. The primary objective of Climaventures is to catalyse investment in scalable, financially viable climate solutions in Pakistan through direct venture investment and technical assistance to climate technology start-ups. The initiative targets both mitigation efforts to reduce emissions and adaptation initiatives to enhance resilience against climate impacts, thereby promoting sustainable consumption and production.
4. Climaventures comprises two key components. The first, the Venture Accelerator, managed by NRSP, is designed to foster the growth of Pakistan's climate venture ecosystem by providing grant funding to climate entrepreneurs and businesses. This component includes a USD 5 million technical assistance facility offering non-reimbursable grants to build a robust pipeline of validated climate ventures. The technical assistance facility will engage with the climate venture landscape through communication strategies, digital platforms and outreach while advocating for climate-focused and entrepreneurship-oriented policies in Pakistan. Additionally, a USD 5 million venture grant facility will offer reimbursable grants to approximately 100 start-ups over 10 years, enabling them to conduct feasibility studies, market research and prototype development, facilitating the transition from ideation to minimum viable products.
5. The second component, the Climaventures Fund, managed by Sarmayacar as the general partner, aims to invest in early-stage to late-stage climate ventures. The proposal requests a GCF equity investment of up to USD 15 million, contributing to a total target capitalization of

USD 50 million, with GCF participation capped at the lower of USD 15 million or 37.5 per cent of the fund. The fund is structured to achieve a first close at USD 25 million, with GCF contributing USD 9.38 million, and will have three share classes, with the GCF funds constituting the most junior equity tranche. The senior tranche is targeted at private sector investors, while the mezzanine tranche is expected to be taken up by development finance institutions and international finance institutions. Each tranche will be entitled to a preferred return, but the GCF junior equity tranche will assume a first-loss position relative to the senior private sector tranche. The proposal expects the bulk of the fund's capitalization to come from international finance institutions, development finance institutions and GCF.

6. Overall, the Climaventures project aims to mobilize substantial investment in climate technology ventures in Pakistan, driving innovation and sustainable development. By combining direct venture investments with comprehensive technical assistance, the initiative seeks to create a thriving climate venture ecosystem, ultimately contributing to Pakistan's climate resilience and sustainable economic growth.

1.2 Impact potential

7. The funding proposal posits that Pakistan is rated the fifth most climate-vulnerable country in the world, a significant concern given its large population of over 240 million. The urgent need for adaptive and resilient initiatives in Pakistan is underscored by its high disaster risk levels according to the INFORM Risk Index.¹ For instance, the 2022 floods affected approximately 33 million people and caused an estimated USD 14.9 billion in damage. The impact of this disaster was exacerbated by Pakistan's socioeconomic vulnerability, which includes high poverty levels that classify it as a lower middle-income country.

8. Climaventures aims to address some of these challenges by investing venture capital in early-stage climate technology companies. These companies will ideate, develop, mature, commercialize and integrate technologies for use by sectoral beneficiaries with climate mitigation, adaptation or resilience mandates.

9. The funding proposal suggests that the Climaventures programme will contribute to reducing greenhouse gas (GHG) emissions by over 3.5 million tonnes (Mt) of carbon dioxide equivalent (CO₂ eq) in Pakistan by investing in renewable energy sources and low-carbon mobility solutions. For context, it is noted that, according to its nationally determined contribution, Pakistan's projected emission levels are approximately 1,603 Mt CO₂ eq by 2030.² The SAP proposal further claims that, if successful, it will directly improve the quality of life of over 3.5 million individuals and potentially benefit another 2 million indirectly. These numbers rely on many assumptions and are not of high confidence in the specific but indicate a general impact potential. Additionally, the Climaventures Fund plans to invest in energy-efficient construction, appliances and recyclable materials, significantly reducing CO₂ emissions. This includes supporting technologies that integrate green manufacturing techniques for industrial use.

10. The iTAP notes that it is exceedingly difficult to accurately project future GHG emission reductions resulting from a venture fund. Estimates are undone by the sheer number of dependent variables, including final size of the fund, eventual portfolio make-up and the ability of portfolio companies to achieve scale and commerciality. Considering the economic challenges in Pakistan as described by the funding proposal and the embryonic stage of Pakistan's venture space, the iTAP continues to have low confidence around the likelihood of achieving the stated targets within the borders of this proposed project. However, that alone should not hamper a

¹ See <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk/Results-and-data/moduleId/1782/id/469/controller/Admin/action/Results#inline-nav-2>.

² See <https://unfccc.int/sites/default/files/NDC/2022-06/Pakistan%20Updated%20NDC%202021.pdf> (p.13).

GCF commitment to Climaventures. The heightened vulnerability of Pakistan and its scale (population, size of economy) support the argument that there are long-term climate benefits to kick-starting climate technology sectors in Pakistan and establishing investment track records that other managers and investors can follow.

11. Currently, there is limited availability of capital for ideation or early-stage climate ventures to kick-start the climate technology ecosystem in Pakistan. Entrepreneurs face heightened challenges at the onset of ventures owing to limited personal assets and support. Accessing essential resources like business support, venture capital or commercial accelerators for seed capital proves difficult, especially for climate ventures, contributing significantly to the scarcity of finance for green initiatives. The substantial capital expenditure required for such businesses, combined with perceived high risks in nascent green sectors, has primarily resulted in the scarcity of de-risked capital for launching climate ventures. This has hindered the establishment of a climate technology ecosystem in Pakistan, kept the cost of such technologies high and made them inaccessible to vulnerable populations in need.

12. Apart from financial constraints, entrepreneurs and founders face numerous challenges in acquiring the necessary skills and capacities for conducting market feasibility studies, identifying the appropriate consumer base and advancing their ideas to viability. A studio-like approach, as reflected in the grant components of Climaventures, could be beneficial in underdeveloped markets such as Pakistan by focusing on practical support.

13. The iTAP notes that the potential impact of this funding proposal depends heavily on the fund manager's ability to deploy capital promptly into portfolio companies that can achieve the targeted outcomes. As outlined in its previous assessment, the iTAP continues to have concerns about whether component 2 will meet its fundraising targets. These concerns stem from the iTAP review of the illustrative pipeline, potential co-investor interest and the current size of the venture space in Pakistan. However, these concerns are somewhat mitigated by the minimal requirements for the first closing and the cap on the total GCF contribution to the venture fund under component 2. The iTAP also views positively the commitment made in the current proposal to align grant disbursements with the venture fund's capacity and to link the GCF reimbursable grant disbursements to the size of the Climaventures Fund. Implementing this recommendation would help to address some of the concerns of the iTAP regarding the right-sizing of the grant component. That said, the iTAP notes that the mechanism for linking the disbursement amounts of the NRSP reimbursable grants to the size of the venture fund is not yet finalized and remains under negotiation.

14. On the topic of climate impact potential, the iTAP notes that, according to decision B.33/12, paragraph (c), resources will be allocated on the basis of the ability of a proposed activity to demonstrate its climate impact potential. In annex VI to the same decision, the Board defines four principles for demonstrating adaptation impact potential and five principles for demonstrating mitigation impact potential of GCF-supported activities.

15. The principles for demonstrating adaptation impact potential in GCF proposals include identifying current and future climate risks; explaining how the proposed activities address these risks; aligning the activities with national climate policies and strategies; and outlining a monitoring and evaluation system to assess adaptation outcomes. The iTAP acknowledges that it is currently not possible to fully assess the climate adaptation potential of each specific investment in the pipeline, as these are still in the early idea stage. However, the new funding proposal presents a minimally adequate process to secure these principles in the future. This includes a general method to identify climate risks, link them to the appropriateness of the proposed investments and establish monitoring requirements for assessing adaptation outputs and outcomes. The iTAP notes that the current proposal, in response to the earlier assessment, now includes methods and procedures for mitigation and adaptation assessments of investments in the operating manual, using a clear and straightforward approach. Additionally, it views as positive that the proposal now incorporates more realistic assumptions about the

likely success rate of start-ups when estimating both mitigation and adaptation impact potential.

16. Additionally, the iTAP supports the inclusion of disqualification criteria to ensure that only projects with demonstrable climate impacts receive support. The updated investment criteria and scoring system will now be applied across both the Venture Accelerator and the Climaventures Fund, enhancing the overall cohesion between these two components.

17. Another positive improvement, based on the iTAP assessment recommendations, is the inclusion of an AE-nominated climate expert – approved by the Secretariat – on the Investment Committee. While it remains unclear whether this climate expert will have veto power over investments on climate grounds (which the iTAP would prefer), their inclusion in the investment decision-making process is a welcome development.

18. The strengthened cohesion between the two components in this funding proposal, along with efforts to address the mismatch between the funding request and the investment opportunity set in Pakistan, leads the iTAP to raise its assessment of the potential impact to medium to high.

1.3 Paradigm shift potential

19. Overall, Climaventures' investments in early-stage start-ups are positioned to catalyse a potential paradigm shift towards a low-carbon and climate-resilient economy. The Climaventures Fund will be Pakistan's first climate-focused fund.

20. There is a lack of early-stage investment capital in Pakistan generally and even more so when considering climate technology investments. Nevertheless, this is a rapidly growing space and in the last decade Pakistan has seen tremendous growth of entrepreneurs and investors in electronic commerce, financial technology and logistics ventures. However, there is a significant lack of involvement from investors in financing climate-focused initiatives owing to the perception of high risks.

21. The iTAP believes that seeding the climate market landscape through venture-backed equity investments, supplemented by grants for early-stage ventures, can significantly increase the emergence of scalable and sustainable climate-oriented businesses. This would enhance the availability of climate solutions, leading to reduced GHG emissions and greater resilience to climate change impacts. If successful, this approach could also incentivize other investors to enter the climate market, ultimately increasing the flow of climate financing into Pakistan. Currently, most venture funding in Pakistan comes from foreign sources. While the proposed Climaventures Fund aims to raise most of its funding from abroad, the iTAP is optimistic about using GCF concessionality (in the form of first-loss protection for senior investors) to encourage local private sector investors to begin funding climate technology.

22. The iTAP also views the paradigm shift potential of the Venture Accelerator component favourably. The combination of building a pipeline and generating interest through communication strategies, including calls for proposals and cash grants, is a proven model. Achieving a paradigm shift involves altering the current trajectory of a country towards a low-carbon, more resilient future. A crucial element of a successful shift is developing an ecosystem of products, service providers and funders dedicated to this new future. The Venture Accelerator has the potential to initiate the expansion of the climate solutions landscape in Pakistan.

23. In addition to providing direct technical assistance for projects, the funding proposal includes various subcomponents aimed at building a more robust climate venture ecosystem. This will involve engaging with public and private sector stakeholders to develop policy advocacy materials and address policy gaps in the climate sector. Activities such as facilitating

knowledge exchange between climate experts and industry leaders on current climate trends and innovations will produce valuable knowledge products. NRSP is well positioned to conduct these stakeholder engagements, particularly in addressing public sector barriers.

24. The iTAP also supports the use of reimbursable grants to finance the transition from concept to viable business. The reimbursable nature of these grants can add commercial rigour to the selection process and ensure that recipients make the best use of the funding and other in-kind support.

25. The iTAP views positively the funding proposal's requirement that, prior to the disbursement of the second tranche of the USD 5 million reimbursable grants, a dedicated report be requested to capture key learnings and suggestions. Additionally, it is encouraged by the commitment to establish a contractual linkage between the size of the grant component and the venture fund. This aligns with the iTAP recommendation that future disbursements be tied to metrics such as the percentage of grantee businesses that successfully secure their next round of funding and their anticipated climate contributions.

26. The iTAP strongly encourages the Secretariat to ensure that this linkage mechanism, currently under negotiation, is effective and capable of ensuring that GCF grant funding – highly limited and valuable – is being used optimally to achieve climate impact and mobilize climate finance. From the perspective of the iTAP, it would be more efficient and impactful to allocate GCF grant funds to support a smaller number of grantees (as 100 is not inherently a significant figure) if a higher percentage of them can ultimately secure follow-on funding and advance along the viability curve.

27. The iTAP believes that the venture fund has the potential, as a pilot, to validate the investment case for climate ventures in Pakistan. The funding proposal highlights a significant gap: the absence of dedicated climate equity funds or ideation-stage climate venture accelerators in both the public and the private sector. By launching the first dedicated climate fund, supported by multiple international financial institutions and an ideation-stage accelerator project, this initiative aims to create a demonstration effect within the climate financing ecosystem, potentially attracting more investors.

28. The potential paradigm shift is assessed as medium to high.

1.4 Sustainable development potential

29. The SAP proposal aims to contribute to the achievement of the following Sustainable Development Goals (SDGs): SDG 5 (Achieve gender equality and empower all women and girls); SDG 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all); SDG 9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation); SDG 10 (Reduce inequality within and among countries); SDG 13 (Take urgent action to combat climate change and its impacts); and SDG 17 (Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development).

30. The iTAP assesses that this SAP proposal can contribute to the SDGs beyond climate mitigation and adaptation outcomes. A notable area of contribution is economic co-benefits, such as job creation and increased financing for start-up businesses. While it is challenging to predict other co-benefits owing to uncertainties around the eventual make-up of the grant and investment portfolios, it is reasonable to expect several positive outcomes, as set out in paragraphs 31 and 32 below.

31. Environmental co-benefits: the AE expects that many supported climate ventures will yield positive environmental impacts. These include improved land-use and soil conservation practices through enhanced agricultural processes, reduced water stress in regions with limited

access to adequate water sources by minimizing water consumption and contamination, and improved access to safe drinking water and sanitation. Additionally, transitioning to renewable energy sources and electric mobility will improve air quality, leading to significant health benefits for the population by reducing air pollution.

32. Gender co-benefits: women are significantly underrepresented among entrepreneurs and venture founders in Pakistan. According to the funding proposal, the project will implement measures to actively source women-led ventures, preferentially score women-led ventures during selection processes for pre-acceleration and acceleration projects, and equip all supported ventures, as well as other ecosystem actors, including accelerators and venture funds, with tools and frameworks to strengthen gender aspects of their operations.

Furthermore, the project will build mentoring and support networks to encourage and guide women climate entrepreneurs.

33. In summary, this SAP proposal aims not only to address climate challenges but also to foster economic growth, environmental sustainability and gender equity, thereby contributing to broader SDGs.

34. Sustainable development potential is assessed as medium to high.

1.5 Needs of the recipient

35. Pakistan is highly vulnerable to the impacts of climate change, particularly droughts and floods. The country's nationally determined contribution outlines ambitious targets for renewable energy, and its national adaptation plan focuses on agriculture, water resources, health and disaster risk reduction. While Pakistan's climate needs are substantial, solutions face significant hurdles due to a lack of finance. The country's heavily indebted public economy and tight capital markets make access to climate finance challenging.

36. The funding proposal aims to provide financial tools and technical support for scaling up climate solutions in this challenging context. The venture fund is designed to offer early-stage financing for climate technology businesses, addressing a critical funding gap. The goal is to demonstrate that such investment can yield substantial returns for investors, creating a ripple effect in Pakistan's investment environment. If these enterprises grow and deliver strong financial results, they are expected to attract increased attention and investment from both local and global actors. This will enhance the credibility and attractiveness of Pakistan's investment landscape, showcasing the potential for profitable and sustainable ventures within the country. If successfully implemented, the SAP investment can lead to the deployment of much-needed climate technology solutions for mitigation and adaptation, which will help to reduce GHG emissions in transport, supply chains, energy and agriculture, while also addressing adaptation needs and increasing resilience among vulnerable populations, micro, small and medium-sized enterprises, business value chains, ecosystems and built infrastructure.

37. Needs of the recipients is assessed as high.

1.6 Country ownership

38. The SAP objectives are fully aligned with the country's nationally determined contribution. The iTAP notes that this funding proposal is the first GCF proposal of NRSP as one of only two direct access entities in Pakistan.

39. The iTAP understands that the funding proposal was designed after extensive stakeholder engagement by the AE, which included consultations with the Government of Pakistan and industry participants, including incubation centres, accelerators and venture

capitalists. The AE has received a no-objection letter from Pakistan's national designated authority, the Ministry of Climate Change and Environmental Coordination.

40. The programme's design incorporates input from the domestic private sector, including collaboration with the venture capital community. The expectation is that the venture fund will raise a portion of its senior equity tranche from the local Pakistani private sector. However, it is anticipated that all the grant funding and most of the investment capital will come from sources outside of Pakistan.

41. Country ownership of the funding proposal is assessed as medium to high.

1.7 Efficiency and effectiveness

42. The funding proposal states that the overall cost of GHG emission reduction is USD 7.1 per t CO₂ eq for GCF funding and USD 14.2 per t CO₂ eq for total project funding. If accurate, this represents an efficient cost basis for emission reductions. However, as discussed above, there are substantial challenges in forming a reliable estimate of emission reductions from a venture capital approach. If the programme maintains ambitious standards in investment and grantee selection, the iTAP can be confident that GHG emissions will be reduced, although the exact amount and cost remain indeterminate.

43. The Venture Accelerator plans to fund 100 ventures over the 10-year tenure of this programme, utilizing USD 5 million in reimbursable grants. These grants become reimbursable if the ventures secure additional capital from outside investors within three years of grant disbursement. The iTAP considers that the use of reimbursable grants is a commendable practice in the context of project readiness and development. This approach not only enhances the decision-making process around grantee selection but also shifts recipients away from a grant mentality that often prioritizes expenditure over outcomes. Instead, it encourages a focus on generating results that could lead to commercial success.

44. The concerns of the iTAP regarding the Venture Accelerator stem from its apparent lack of cohesion with the Sarmayacar-operated venture fund. In the initial funding proposal, the two appeared as distinct initiatives, raising questions about their alignment and synergy. The iTAP encouraged the AE to foster a mutually supportive relationship between these two vehicles to ensure that GCF funding is used as efficiently and effectively as possible.

45. The iTAP suggested that having a clear path to follow-on venture financing for grantees of the Venture Accelerator would enhance both the selection process and the "hand-holding" that NRSP intends to manage. The iTAP seeks to avoid a scenario where 100 ventures are supported, but none evolve sufficiently to attract investment from the venture fund. Strong communication and direct engagement in selecting and mentoring grantees should lead to the application of real-world investment criteria.

46. In the current proposal, the proponents have made efforts to improve cohesion between the Venture Accelerator and the Climaventures Fund through shared decision-making. Specifically, the Disbursement Committee and Experts Panel of Component 1 will now include managing partners of Climaventures. This means that Climaventures Fund managers will have some decision-making responsibility over grant disbursements. Additionally, EE partners will provide direct mentorship to some climate technology grantees, which should increase the venture fund management team's vested interest in ensuring that the Venture Accelerator produces an investable pipeline.

47. In its initial assessment, iTAP encouraged the venture fund to set specific investment targets for a number of grantees, including a commitment to reimburse the initial grant. iTAP believes this would deepen the venture fund's level of engagement. In response, the current funding proposal indicates that the Climaventures Fund will source approximately 20 percent of

its pipeline from the Venture Accelerator. While this represents an improvement—especially since the previous funding proposal showed minimal connection between the two components—we remain concerned that "pipeline sourcing" could be too vague a target. There is significant potential for gaming the system by adding start-ups to the pipeline without any real intention to invest, which would undermine efforts to build meaningful cohesion between the accelerator and the fund. Greater clarity is needed on how pipeline sourcing will be defined and measured to ensure that this process fosters genuine complementarity. Notably, this 20 percent commitment is a key factor in allowing this proposal to barely meet the threshold for an endorsement.

48. Conversely, the Climaventures Fund's ability to refer promising but not yet investable opportunities to the Venture Accelerator for further development is a welcomed improvement, as it helps build a more synergistic relationship between the two components.

49. The initial B.39 funding proposal contained a major red flag: the sole climate technology venture fund manager appeared uninterested in the only incubator offering free equity to its potential portfolio companies. While more could be done to improve cohesion between the two components, the changes in the current proposal address enough of the concerns of the iTAP to permit a positive assessment, albeit just minimally.

50. Other areas of concern remain unaddressed in the current funding proposal. In its earlier assessment, the iTAP raised doubts about the feasibility of raising and deploying the USD 50 million target for the venture fund, as well as the suitability of certain commercial terms. While it generally acknowledges the capabilities of the EE and the background of its managers, the iTAP advocated for stronger safeguards to prevent GCF funding from being underutilized or leading to overcapitalization of the venture fund. It suggested adjustments to the GCF contribution cap and flagged commercial terms that appear out of market (e.g. hurdle rate).

51. The iTAP believes that this project has the potential to generate significant climate impacts by channelling resources towards early-stage ideation and market-ready climate ventures. However, structural concerns with the initial proposal led to a discounted assessment of its efficiency and effectiveness. The current proposal reflects changes that address some of the concerns, particularly in terms of improving cohesion between components. With these improvements, the iTAP now assesses the funding proposal's efficiency and effectiveness as medium.

II. Overall remarks from the independent Technical Advisory Panel

52. The funding proposal makes a solid attempt to address a significant climate finance need in Pakistan. The iTAP is encouraged by the improvements in the current version, particularly the enhanced cohesion and complementarity between the Venture Accelerator and the venture fund. In reaching its assessment, the iTAP has also taken into account that this is a SAP proposal. The iTAP recommends that the Board approve this funding proposal.

53. The iTAP notes, however, that some of the proposed improvements are still being finalized. It will be crucial for the Secretariat to remain engaged and diligent to ensure that these final outcomes fully address the concerns. The iTAP recommends that particular attention be paid to the following:

- (a) Achieving and measuring the start-up integration target: the AE has committed that approximately 20 percent of the venture fund pipeline will be sourced from the Venture Accelerator. As noted earlier, the iTAP prefers that this target focus on the percentage of start-ups actually receiving investment from the venture fund, rather than simply being included in the pipeline. However, the specific mechanisms for achieving, incentivizing, and measuring this target are yet to be determined. This provides an opportunity for the Secretariat to strengthen the target by establishing clear due diligence and engagement

metrics for start-ups to qualify as part of the "pipeline," and to require reporting on these criteria.

- (b) Linking the grant envelope to the size of the venture fund: it is essential to develop this system in a meaningful and effective way to ensure that the grant component is right-sized in relation to the venture fund; and
- (c) Addressing concerns around commercial terms: given the open questions about the appropriateness of commercial terms, one potential solution could involve allowing follow-on investors with more commercial interests to determine the appropriate hurdle rate, with GCF following their lead. The aim of the iTAP is to avoid agreeing to terms that could hinder fundraising efforts or be seen as excessive.

Response from the accredited entity to the independent Technical Advisory Panel's assessment (SAP047)

Proposal name:	Climaventures: Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan
Accredited entity:	National Rural Support Programme (NRSP)
Country/(ies):	Pakistan
Project/Programme size:	USD 50M

Impact potential

The Accredited Entity (AE) appreciates the thorough and detailed assessment conducted by ITAP in this submission round. It is evident that ITAP has gained a clear understanding of the programme's potential, objectives, and expected outcomes, which we greatly value.

ITAP's feedback highlighting the lack of cohesion between the two components, which was less apparent in the initial proposal, has been instrumental in enabling the AE to further crystallise the linkages within the Funding Proposal. The AE sincerely acknowledges ITAP's constructive input in this regard.

Furthermore, the AE is grateful for ITAP's reassessment, which resulted in an elevated programme rating of 'medium to high.'

Paradigm shift potential

The AE appreciates ITAP's recognition of the Venture Accelerator component, which integrates pipeline development, communication strategies, calls for proposals, and pre-seed financing, as a proven model for catalysing the climate ecosystem. Additionally, the AE values ITAP's acknowledgment of the Climaventures Fund as Pakistan's first climate-focused investment fund.

Together, these two components are well-positioned to address the critical barrier of limited early-stage investment capital in Pakistan, particularly for climate technology ventures. By seeding the climate market through venture-backed equity investments, complemented by grants for ideation-stage ventures, the programme is expected to significantly enhance the emergence of scalable and sustainable climate-focused businesses.

Sustainable development potential

The AE appreciates ITAP's assessment of 'medium to high' against this criterion.

Needs of the recipient

The AE appreciates ITAP's assessment of 'high' against this criterion.

Country ownership

The AE appreciates ITAP's assessment of 'medium to high' against this criterion.

Efficiency and effectiveness

The AE notes two concerns raised by the ITAP:

- 1. The 20% commitment:** ITAP's assessment in Paragraph 47, specifically the statement regarding the potential for 'gaming the system' by adding start-ups to the pipeline without genuine intent to invest. The AE wishes to clarify that the term "20% sourcing" meant "20% investing" – clearly a formulation error.

For further clarity, the 20% commitment pertains to both sourcing AND investing in ventures. The AE will ensure that approximately 20% of the fund's pipeline is consistently reserved for investments in ventures from the Venture Accelerator throughout the six-year investment period.

This commitment has been further reinforced in the final Funding Proposal, where the AE has detailed clear mechanisms for achieving, incentivising, and measuring this target during the implementation phase.

- 2. The hurdle rate:** In Paragraph 50, ITAP has raised concerns regarding the hurdle rate being out of market. This has also been addressed by the AE.

As per the most updated Term Sheet: The fund is committed to a preferred return of minimum 4% to the GCF, per annum, compounded on an annualized basis in US Dollars. The Preferred Return may be revised upwards to be aligned with Preferred Returns agreed with co-investors taking up Class A Interests and Class B Interests into the Fund.

The AE hopes this modification adequately addresses ITAP's concerns regarding the hurdle rate.

Overall remarks from the independent Technical Advisory Panel:

The AE is pleased to inform that all three concerns outlined in Paragraph 53 have been fully addressed in the latest iteration of the Funding Proposal.

The AE greatly appreciates ITAP's recommendation for the Board to approve this Funding Proposal. We extend our gratitude to ITAP for its guidance throughout the proposal development process, particularly for facilitating discussions during B.39 and collaboratively determining the specific way forward. We value our collaboration with ITAP and look forward to maintaining communication with the evaluators, as their continued guidance will be invaluable in the next ten years of the programme.



Annex 4: Gender Assessment and Action Plan (GAAP)

Part I – Gender Assessment

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Acronyms and Abbreviations

SME	Small and Medium Enterprise
USD	United States Dollar
SMEs	Small and Medium Enterprises
CRCC	Climate Resourcing Coordination Center
FATA	Asian Development Bank
UNDP	United Nations Development Programme
ECP	Election Commission of Pakistan
PKR	Pakistani Rupees
ILO	International Labor Organization
SMEDA	Small & Medium Enterprise Development Authority
GEDI	Global Entrepreneurship and Development Institute
GDP	Gross Domestic Product
BOI	Board of Investment
EPB	Export Promotion Bureau
CBR	Central Board of Revenue
VC	Venture Capital
PBS	Pakistan Bureau of Statistics
WB	World Bank
GHG	Greenhouse Gas
GGCA	Global Gender and Climate Alliance

KP	Khyber Pakhtunkhwa
GB	Gilgit Baltistan
IFAD	International Fund for Agricultural Development
FAO	Food and Agriculture Organization
PARC	Pakistan Agriculture Research Council
BRT	Bus Rapid Transit
SDG	Sustainable Development Goal
STEM	Science, Technology, Engineering and Mathematics
EV	Electric Vehicles
NEVP	National Electric Vehicle Policy
OEMs	Original Equipment Manufacturers
TCO	Total Cost of Ownership
ICE	Internal Combustion Engine
SUVs	Sports Utility Vehicle
KIIs	Key Informant Interviews
NICS	National Incubation Centers
BICs	Business Incubation Centers
MoTT	Ministry of Information Technology and Telecommunication
HEC	Higher Education Commission
HEI	Higher Education Institutions
WASH	Water, Sanitation, and Hygiene
GBV	Gender-Based Violence



Acknowledgments

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1. Executive Summary

Pakistan, the 5th most populous country globally with a population of nearly 227 million (49.2% female) currently holds the 154th position out of 189 countries, according to the United Nations Human Development Index 2020, indicating a slight decline from its previous ranking of 156. The country grapples with multi-dimensional inequality, where economic growth appears to have disproportionately favored a select few, leaving the majority deprived. Various manifestations of inequality are evident, spanning income disparities, uneven distribution of assets, disparities in access to public services, and distinctions between rural and urban areas as well as among different regions. The multifaceted challenges in Pakistan's environmental, economic, SME, and entrepreneurial landscapes result in substantial economic and social costs for its society. In the environmental context, Pakistan ranks eighth among the countries most affected by climate change. The nation is frequently plagued by heatwaves, droughts, river and flash floods, landslides, and storms, including cyclones, resulting in an estimated annual cost of USD 38 billion. Particularly affected are Pakistani women and girls, especially those in impoverished rural areas, religious and ethnic minorities, including tenants and landless laborers. They emerge as the largest and most vulnerable group unduly victimized by climate change-triggered disasters. Due to a lack of resources, education, and voice, they also lack the adaptive capabilities to respond and adapt to climate changes.

Pakistani society is deeply patriarchal, characterized by entrenched gender norms that prescribe distinct roles for men and women. Men are traditionally expected to be primary breadwinners and hold positions of authority, whereas women are often relegated to domestic roles as caregivers and homemakers. These rigid gender norms significantly restrict opportunities for women to engage in public life and decision-making processes. Women are commonly confined to traditional roles, facing a myriad of socio-cultural constraints that act as barriers to their progress. These constraints include limited access to education, restricted employment opportunities, and diminished participation in public spheres, collectively impeding women's empowerment and full societal participation.

The gender inequality exacerbates economic disparities, positioning Pakistan as one of the most unequal countries for women globally, women are not typically considered as the breadwinners, nor are they encouraged to start their own businesses. Even those women who do venture into business often struggle to be taken seriously by financiers and financial institutions. They remain in a disadvantaged position compared to men when it comes to accessing financial resources, largely due to socio-cultural barriers. These barriers include the informality of their businesses, their inability to make economic decisions, lack of financial literacy, absence of credit history, and failure to meet the lending criteria of financial institutions. Additionally, financial institutions often do not view women as a profitable market segment, despite evidence showing that women are more loyal customers than men and represent one of the fastest-growing consumer segments in the global economy. Women have contributed to the bottom line of those financial institutions that have focused on them as a key client base.

The economic landscape highlights significant gender disparities, with women's labor force participation at 22.63%, earning only 16.3% of their male counterparts' income. The informal sector, where 81% of 5.26 million individuals are women, illustrates the economic vulnerabilities they face. The gender pay gap, a staggering 34%, underscores systemic challenges. In SMEs, women-owned establishments constitute only 3%, hindering the full potential of women's participation in the private sector.

The entrepreneurial landscape has evolved positively, witnessing a surge in activity, incubators, accelerators, and investors. However, a significant gender gap persists, with only 1% of women engaging in entrepreneurship. Pakistan ranks 148th globally in the gender gap index, highlighting challenges in economic participation, education, health, and political empowerment for women entrepreneurs. Despite these hurdles, startups with female founders are gaining traction, reflecting the

potential for improved gender inclusivity. Encouragingly, donor funds are actively supporting women-led companies, signaling positive steps toward a more inclusive entrepreneurial ecosystem.

The project, "Climaventures" aim to catalyze Pakistan's domestic private sector for climate action, leveraging funding from the Green Climate Fund (GFC). This initiative aligns strategically with the GFC's objectives, intending to address the existing challenges and barriers faced by Pakistan's private sector in the realm of climate action. A total of 3,779,108 persons will benefit from the project directly, while 2,127,000 persons will be benefiting from the project indirectly. Of these 1,832,867 women will be the direct beneficiaries, while 1,031,595 women will be indirect beneficiaries.

The primary goal of " Climaventures" is to provide comprehensive support to climate focused startups and small to medium-sized enterprises (SMEs). This project serves as a critical enabler for climate-focused ventures, fostering innovation, ideation, and incubation within a specially crafted venture accelerator environment.

The project's multi-faceted approach addresses various aspects of climate action. It involves creating a conducive space for initiating climate discourse, encouraging innovative solutions, and providing necessary resources for the incubation of green initiatives. Furthermore, the initiative aims to mitigate financial risks associated with climate ventures at different stages, including developing proof of concept (PoC), minimum viable product (MVP) and scaling of such solutions. This is achieved through a combination of equity and reimbursable grant investments, strategically designed to accelerate the growth and impact of climate-focused businesses.

Beyond financial support, the project is committed to offering technical expertise to climate startups and SMEs. This dual approach, blending financial and technical assistance, is geared towards empowering these companies to develop and implement sustainable, climate-friendly products and solutions. By supporting the private sector in contributing to the country's sustainable development goals (SDGs), this project aims to play a pivotal role in fostering a robust and impactful climate action ecosystem in Pakistan.

To address the funding gap and limited access to finance for climate entrepreneurs, the project provides seed funding and support to scale their businesses. Moreover, the project is committed to fostering innovation with a gender-responsive approach, particularly in sectors such as clean energy, sustainable agriculture, waste management, and other climate-related areas. A comprehensive gender assessment is being undertaken to ensure the project recognizes and addresses gender-specific challenges and opportunities within these industries. This approach aims to guarantee that women entrepreneurs have equal access to resources, opportunities, and support, contributing to a more inclusive and equitable climate action and startup/SME ecosystem.

2. Situational Analysis

2.1 Gender in the Environmental Landscape

Pakistan has been ranked as one of the top ten countries most affected (currently ranked 8th) by climate change in the past 20 years. In recent times, Pakistan has found itself situated among the 15 countries globally that are most susceptible to the far-reaching impacts of climate change, a stark reality emphasized in the Germanwatch 2021 report¹. Over the course of the last decade, the nation has experienced a disconcerting surge in the frequency of extreme weather events, ranging from poor air quality and devastating floods to violent storms, prolonged droughts, and scorching heat waves. These climatic phenomena not only lead to the tragic loss of human life but also inflict immeasurable suffering on communities, disrupting their normal course. The aftermath is profound, causing the destruction of livelihoods and significant damage to both land and property.

The cumulative effects of climate change have palpable and direct implications for Pakistan's economy, amounting to an estimated annual cost of USD 38 billion, according to reports by the World Bank (WB) and the Asian Development Bank (ADB) in 2021. **Compounding these challenges is the pervasive issue of gender inequality, which further exacerbates economic disparities, hindering the active participation of half the population in social, political, and economic spheres.** Pakistan stands out as one of the most unequal countries for women globally, ranking 153rd out of 156 countries in 2021 as per the World Economic Forum (WEF 2021), it has declined in the United Nations Human Development Index, slipping to the 154th position out of 189 countries in 2020, down two places from the previous year (UNDP 2020a). Communities in Pakistan, particularly *women, are increasingly facing heightened vulnerability to displacement triggered by disasters*. The phenomenon of climate migration is on the rise in Pakistan, becoming an undeniable reality. Projections indicate that by 2050, Pakistan could witness approximately 2 million climate migrants, excluding those who might be forced to relocate abruptly due to the sudden occurrence of climate-related disasters like floods and cyclones.

2.2 Economic Landscape

It is also important to highlight that Gender inequality is of significant concern in Pakistan. According to the Global Gender Gap Index Report 2022, Pakistan ranks 145/156 for economic participation and opportunity, 135/156 for educational attainment, 143/156 for health and survival. Furthermore, Pakistan ranks 130/139 countries on the Rule of Law Index of the World Justice Project.² The World Economic Forum's Global Gender Gap 2022, ranks Pakistan higher on political participation at 95/146 as more women than ever before are participating in political activity.³ Women, however, continue to remain underrepresented in leadership roles and are restricted from taking up positions in the political/public sphere due to systemic challenges arising from patriarchal notions. According to the Election Commission of

¹ Germanwatch. 2021. Global Climate Risk Index 2021. <https://www.germanwatch.org/en/cr/>.

² [World Justice Project 2020: Pakistan slips down in absence of corruption, rule of law index.](#)

³ [Global Gender Gap Report 2022, World Economic Forum](#)

Pakistan (ECP), there is a gender gap of around 12.5 million in Pakistan's electoral rolls. According to UN Women's calculations, at the current rate of progress, gender parity in national legislatures will not be achieved before 2063.

On the economic landscape, the participation of women in the labor force is dishearteningly low, standing at a mere 22.63 percent, while men dominate with a substantial 84.79 percent representation.⁴ The stark reality is that, on average, a Pakistani woman's income constitutes only 16.3 percent of her male counterpart's earnings. Delving into the informal sector, a significant 81 percent of the 5.26 million individuals engaged in this sector in Pakistan are women.⁵

Despite their noteworthy contribution, accounting for 65 percent of the PKR 400 billion (USD 2.8 billion) informal economy in Pakistan,⁶ women face the harsh reality of earning a meager PKR 3,000-4,000 (USD 15-20) per month. This economic disparity subjects them to a myriad of vulnerabilities, including low-income security, inadequate nutrition, occupational health challenges, a lack of social protection, and heightened economic susceptibility during times of crisis.

Highlighting the severity of the gender pay gap, the Global Wage Report 2019-20 by the International Labor Organization exposes a staggering 34 percent difference in earnings between men and women in Pakistan.⁷ This substantial wage inequality underscores the systemic challenges that women face in the economic realm. A closer examination reveals overarching constraints that hinder economically active women from realizing their full income potential. Cultural limitations on free mobility, restricted opportunities for acquiring essential business management and expansion skills, and a lack of direct access to markets and technology are among the multifaceted challenges that perpetuate this gender-based economic disparity. Addressing these barriers is crucial for fostering an environment where women can actively and effectively participate in economic activities, contributing not only to their individual well-being but also to the overall economic growth and development of the nation.

2.3 Gender in the SME Landscape

In Pakistan, harnessing the untapped potential of women's participation in the private sector is not merely a matter of gender equity; it holds the promise of bolstering the nation's economic vitality and fostering a more inclusive and prosperous society. It is well known that women-owned small and medium enterprises (W-SMEs) make a significant contribution to the growth of economies by generating employment, creating wealth, empowering women entrepreneurs, and improving the social wellbeing of society.

⁴ Determinants of Female Labour Force Participation in South Asia: A case study of Pakistan

⁵ Labour Force Survey 2017-18, Government of Pakistan

⁶ UN Women's Status Report on Women's Economic Participation and Empowerment in Pakistan (2016)

⁷ Determinants of Female Labour Force Participation in South Asia: A case study of Pakistan

Despite significant progress in various sectors of the Pakistani economy, women's participation in the private sector has remained the lowest among the South Asian nations. According to the Pakistan's labor force survey 2020-21, out of 67.25 million employed labor force, 15.34 million (23 percent) are women, the proportion of females in the total number of persons employed in managerial positions is only 5.7 whereas there are only 70,658 (3% of total economic establishments) women-owned economic establishments⁸. According to SMEDA, as per the Global Entrepreneurship and Development Institute (GEDI) Female Entrepreneurship Index 2015, Pakistan ranks at 77 – the lowest ranked country, the index consists of key pillars that measure the entrepreneurship ecosystem across countries. Among the indicators, at the individual level, “willingness to start” has the highest score. In Pakistan SMEs constitute nearly 90% of all the enterprises; employing 80% of the non-agricultural labor force; and their share in the annual GDP is 40%⁹.

Although SMEs are deemed more efficient in resource allocation compared to large scale industry, in Pakistan efforts seems to be focused on these large-scale industries through the establishment of institutions like the Board of Investment (BOI), Export Promotion Bureau (EPB), and Central Board of Revenue (CBR) - to facilitate business activities.

2.4 Gender in the Entrepreneurial Landscape

The entrepreneurial landscape in Pakistan has undergone significant transformation over the past decade, marked by a notable increase in activity and the emergence of various players. In 2012, there were only two major business incubators and accelerators in the country, alongside a limited number of investors and funding sources. In 2019, the numbers increased to over 24 incubators and accelerators actively contributing to the entrepreneurial ecosystem. The number of investors has also seen a substantial rise, with approximately 20 formal investors in Pakistan, catering to startups from pre-seed to pre-Series “A” stages¹⁰

The startup landscape in Pakistan reflects a significant gender gap in entrepreneurship, as indicated by the Global Entrepreneurship Monitor's 2012 data, revealing that merely 1% of women engage in entrepreneurial activities compared to 21% of men. This gender disparity extends to broader indices, with Pakistan ranking 148th globally in the gender gap index, showcasing challenges in economic participation, educational attainment, health, survival, and political empowerment. The sub index specifically focusing on 'Economic Participation and Opportunity' paints a concerning picture, placing Pakistan at 146, further emphasizing the hurdles faced by women entrepreneurs in comparison to benchmark countries.

Despite these challenges, there is a notable inclusion of startups with female founders in the study, shedding light on the gender breakdown within managerial positions. On average, startups display a composition of 30% female employees and 70% male employees. The venture capital landscape in Pakistan demonstrates both

⁸ Census of Economic Establishments 2005, Pakistan Bureau of Statistics

⁹ Gendered Review of SME Policy 2011, ILO Country Office for Pakistan
(Health, food and water security / E-mobility / Energy generation and access / Buildings, cities and appliances / Transport / Livelihood/community/agriculture – Famdar)

¹⁰ PAKISTAN STARTUP ECOSYSTEM REPORT 2019



progress and disparities, with 17% of global VC investments in 2018 allocated to women-led startups, but only 3.26% (\$6 million) of the total amount raised from 2015-2019 attributed to women-led businesses in the country. Investor perspectives reflect a desire for increased deal reviews led by women, emphasizing the need for improvements in the overall pipeline of female-led companies. Encouragingly, donor funds and organizations are actively supporting women-led companies through grants and early-stage investments, signaling positive steps toward fostering gender inclusivity in Pakistan's startup ecosystem.

3. Gender in The Target Sectors of The Project

3.1 Livelihood/ community/agriculture

Agriculture stands as the largest sector in Pakistan's economy, employing nearly half of the nation's workforce and constituting 23% of the GDP (PBS 2022a, WB 2022a). However, it is also among the most susceptible sectors to the adverse effects of climate change, grappling with escalating pressures on agricultural land, growing water scarcity, and shifting weather patterns that jeopardize food security (Asim et al. 2020). Concurrently, agriculture significantly contributes to greenhouse gas (GHG) emissions, underscoring the imperative to enhance adaptive capacity while mitigating net emissions (UNDP and GGCA 2016b).

The significance of agriculture extends to the livelihoods of Pakistani women, particularly those residing in rural areas, the majority of whom actively participate in various agricultural activities. This heightened involvement renders women especially vulnerable to the repercussions of climate-related stresses on agricultural production. Despite this, initiatives aimed at agricultural development and food security predominantly target men. This can be attributed, in part, to the undervaluation of women's contributions and the fact that their labor often goes unrecognized and unpaid. This is important as the agri-space is one of the key areas which the project is aiming to target.

The Sindh Women Agriculture Workers' Act of 2019 is a significant law recognizing and protecting women in agriculture. It ensures equal pay, limits working hours, and provides maternity leave. Women gain access to government services, credit, and subsidies while being safeguarded against discrimination and harassment. Complementary policies, such as the National Food Security Policy of 2018 and the National Sustainable Development Strategy of 2012, emphasize sustainable agriculture, women's empowerment through land allotments, and mainstreaming women's contributions. The KP Women Empowerment Policy of 2017 focuses on enhancing women's participation in sectors like agriculture.

Only a limited number of projects have exclusively focused on women or integrated them into capacity-building activities. These include:

- The Better Cotton Initiative - aims to create opportunities for women in agriculture, providing training in sustainable farming techniques. It has trained close to 120,000 women across the country
- Economic Transformation Initiative (GB), concluded in 2022, aimed to increase agricultural income and employment with a focus on women. It has trained women producers in innovative agricultural techniques and provided support for harvesting and marketing (IFAD 2020).
- The Sindh Agricultural Growth Project, concluded in 2021, one of its areas of focus was to ensure nutrition and food security for women, and to train women producers (WB 2022d).
- Sindh, the Improved Land Tenancy project, concluded in 2020, established field schools to train farmers, including women, in improved practices (FAO 2021).
- Other initiatives in the province have provided skills training to small scale livestock producers, including training for women in livestock management, farm management, disease prevention, farm sanitation and hygiene, and feeding (PARC n.d.).

3.2 Transport

In the realm of transportation, also one of the key project areas, it's crucial to emphasize that, in 2021, the carbon emissions from Pakistan's transport sector reached 56 metric tons. Transportation significantly molds the lives of individuals in both urban and rural areas, influencing livelihoods, education, access to critical services, and participation in social and political activities.

Women's dependence on public transport and the limitations imposed on alternative means of travel contribute to their unequal experiences. Safety concerns, as evidenced by high levels of harassment reported in studies, lead many women to curtail their use of public transport. This not only influences their daily mobility decisions but also has far-reaching impacts on employment opportunities, job choices, educational pursuits, and daily activities. Gender disparities are evident in travel behaviors, with women making 50% fewer trips on average and being nearly four times less mobile than men.

Additionally, modes of travel, such as walking and non-motorized options, exhibit slight variations between genders. The purpose of travel also diverges, with women participating less in social and cultural activities. Recognizing the intersectionality of factors influencing women's mobility, including age, marriage, and income, is crucial for developing inclusive and effective transport policies that address these disparities and promote equitable access for all. This recognition underscores the existing capacity gap in understanding and catering to the diverse needs of women in transportation planning and implementation.

The National Transport Policy (2018) aims to establish a safe, affordable, efficient, and environmentally friendly transportation system, ensuring universal access to jobs, markets, education, and services without regard to location, income, gender, age, race, or disability. Recognizing the impact of restricted mobility on women's access to essential services, the policy emphasizes the necessity for a secure, accessible, and inclusive transport system to facilitate women's employment and empowerment. Principle 5 emphasizes addressing the needs of vulnerable populations, including women, through stakeholder consultations and social surveys. Objective 1 focuses on improving connectivity and accessibility for all, specifically targeting the removal of barriers hindering transport access for women and vulnerable groups. The Updated Nationally Determined Contributions (2021) of Pakistan highlight the transport sector's potential to reduce emissions, recommending the promotion of mass transport in urban areas, aligning with women's transportation needs. The National Policy for Development and Women's Empowerment (2002) advocates for barrier-free transport access and convenient connectivity for all, irrespective of gender.

A few noteworthy, eco-friendly projects that address gender concerns include, Bus Rapid Transit (BRT) Peshawar, Lahore, Karachi and Rawalpindi/Islamabad, the Orange Line in Lahore and the Green bus in Quetta and Karachi.

3.3 Energy generation and access building cities and appliances

Approximately 54 million people in Pakistan, constituting 26% of the population, lack access to electricity, and 106 million individuals (51%) do not have access to clean cooking facilities, constraining household-level income-generating activities, especially in rural areas. Rising prices of oil and gas further compound challenges

for low-income households seeking access to energy and fuel. The intersection of gender and energy is evident in the time women and children in rural communities spend gathering fuel, impacting their health. Globally, around 2.6 billion people, mostly women and children, face health risks from open fires or stoves burning kerosene, biomass, and coal, contributing to approximately 4 million premature deaths annually (WHO 2021).

Pakistan's energy sector is governed by policies like the National Energy Policy (2021), National Energy Efficiency and Conservation Authority Strategic Plan 2020-25, National Electric Vehicle Policy (2019), and Alternative and Renewable Energy Policy (2019), lacking gender considerations. The National Energy Conservation Policy (2006) stands out as the only policy with a dedicated goal for gender mainstreaming, recognizing women's unique energy needs in rural settings. In contrast, the Alternative and Renewable Energy Policy overlooks gender aspects. Gaps in the SDG National Framework compound the issue, neglecting the intersection between gender equality and energy access. The Policy for Development of Renewable Energy for Power Generation (2006) minimally addresses women, indicating the need for greater gender sensitivity in energy policies.

Despite these critical issues, the traditional energy paradigm does not sufficiently address the energy needs of women. Energy access is often treated as a supply or technology issue, sidelining women's concerns. Women's underrepresentation in policy development, management, and decision-making roles in the energy sector, along with limited enrollment in STEM education, exacerbates the problem. Societal norms restricting women's mobility further impede their access to education and training opportunities. The absence of women in energy planning hampers the consideration of their needs, highlighting the urgent need for gender-disaggregated data on energy consumption to integrate women's priorities into energy policies and foster their participation in related fields.

A few projects that address gender concerns in energy sector includes provision of solar energy solutions for girls' schools and creating opportunities for women to establish small solar businesses:

- Off grid solar power to 1,200 schools in Khyber Pakhtunkhwa, with a significant number being girl's schools, and training of 4,000 parent-teacher council members for system operation and maintenance.
- Under the Women in Energy Pakistan initiative – establishment of a network for women in the energy sector, fostering career growth and leadership development through workshops on gender equality and energy access, along with solar energy training for female engineers.
- In the private sector, the Lighting a Million Lives project targeted women in remote rural areas, providing solar lanterns for small businesses and training on operating solar charging stations.

3.4 Health, food and water security.

Pakistan faces significant water stress, particularly alarming due to the country's heavy reliance on agriculture, employing nearly half of the labor force. Agriculture consumes the majority of water resources, with about 95% of surface water and nearly all fresh groundwater diverted for this sector. Freshwater sources, dependent on snowmelt, glacier melt, and monsoon rains, are vulnerable to climate change, impacting water availability. Pakistan ranks among the top 10 countries globally with the largest population lacking access to safe drinking water. Disparities exist between rural and urban water access, exacerbating the risk of contamination in poorer districts relying on handpumps.

Climate change intensifies water scarcity, disrupting supply replenishment and increasing demand, leading to projected extreme water stress in the future. This poses threats to the economy, human development, health, energy generation, industrial production, and food security. The impact is particularly severe on women, who constitute around 65% of those engaged in agriculture and land use, contributing significantly to household income in low-income rural communities. Water scarcity jeopardizes women's livelihoods and the well-being of their families, emphasizing the disproportionate impact on women in sectors affected by climate change.

The National Climate Change Policy (2021) recognizes the critical link between water availability and climate change in Pakistan. The National Water Policy (2018) acknowledges water scarcity and its threat to food security, but only briefly mentions women in the context of domestic water use, overlooking their significant role in agriculture. The Pakistan Approach to Total Sanitation (2011) briefly mentions women in the context of discouraging open defecation. The National Drinking Water Policy (2009) aims for women's participation in water supply schemes, and the National Sanitation Policy (2006) calls for public toilet facilities for women and women's empowerment through sanitation programs.

Donors and agencies are actively executing water and sanitation projects across the nation, with a specific emphasis on women and girls. These initiatives encompass the improvement of toilet facilities and the provision of menstrual hygiene education. Notably, women frequently take on roles as community mobilizers, actively contributing to Water, Sanitation, and Hygiene (WASH) education efforts. The afore mentioned projects include:

- Punjab Rural Sustainable Water Supply and Sanitation Project, launched in 2021, the project aims to train local women to carry out awareness raising for improved WASH practices within their communities.
- Similarly, the Sanitation for Millions project that concluded in 2022, has provided sanitation facilities to more than 650,000 people, 52% of whom are women.

Nationwide projects focus on school water and sanitation, including toilets, menstrual hygiene, teacher training, and curriculum integration. In Balochistan, a project targets 55,000 women for WASH improvement and provides safe facilities for 4,500 schoolgirls. Past initiatives, like the Safe Drinking Water and Hygiene Promotion project (2010) and the Punjab Community Water Supply and Sanitation Sector Project (closed in 2007), aimed at clean water provision and hygiene, training women in various roles.

3.5 E-mobility:

The pace of electric vehicle (EV) integration in Pakistan poses a complex and nuanced challenge. Nevertheless, four pivotal factors are poised to shape the trajectory of EV adoption in the country over the next decade: policy support, global battery costs, charging infrastructure, and the localization of the supply chain.

The launch of Pakistan's first National Electric Vehicle Policy (2019) (NEVP) marked a significant step toward advancing electric mobility in the country. However, it's notable that the policy lacks explicit gender considerations, such as financial incentives, subsidies, or specific programs supporting women in adopting electric vehicles (EVs). To enhance the inclusivity of the NEVP, there is a need to introduce initiatives like educational programs for women on the benefits of EVs, training opportunities for women in the EV industry, and the promotion of training and recruitment initiatives targeting women. Additionally, there should be ongoing evaluations to ensure that policies do not disproportionately affect women, with necessary adjustments made accordingly. With further policy and regulatory support, this initiative has the potential to accelerate the transition to electric mobility.

The NEVP with supplemental policy and regulatory backing, this endeavor holds the potential to hasten the transition, targeting three primary objectives;

- I. Reduce Fuel Imports and Enhance Energy Security: The NEVP seeks to diminish fuel imports, thereby bolstering Pakistan's energy security.
- II. Lower Energy Intensity in Road Transport: By harnessing the superior efficiency of electric vehicles (EVs) compared to conventional vehicles, the NEVP aims to decrease the energy intensity of road transport.
- III. Mitigate Carbon Footprint and Vehicular Emissions: The policy endeavors to curtail the carbon footprint and particulate matter emissions from vehicles, contributing to an improved urban environment.

The NEVP sets an ambitious 2030 targets: 30% of new passenger vehicle sales and 50% of two-wheelers, three-wheelers, and buses to be electric. It offers incentives like duty concessions, duty-free imports for assembly, and exemptions from fees and taxes. While the government supports local EV manufacturing, there's a lack of purchase incentives, hindering adoption. Globally, subsidies bridge price gaps. Incentivizing imported EV components may be justified early on. Stakeholder consultations show private sector interest, but a clear government policy is needed. Pakistan's EV market is nascent, focused on two-wheelers and three-wheelers, with limited OEMs involved.

According to Total Cost of Ownership (TCO) analysis, electric two-wheelers (2W) and three-wheelers (3W) have already reached TCO parity with their Internal Combustion Engine (ICE) counterparts for both personal and commercial use. Electric cars are economically viable for commercial fleet operations with high daily utilization, although TCO parity for personal use is not currently compelling. In the case of buses, there is a significant upfront cost difference (>100%) primarily attributed to the large battery size. It is anticipated that TCO parity can be attained with daily usage exceeding 250 km.

There is a dire need for establishment of a widespread and easily accessible public charging infrastructure network to bolster a thriving electric vehicle (EV) market. Globally, the development of charging infrastructure poses a classic "Chicken and Egg" dilemma. Investors are hesitant to commit to this emerging market, while consumers remain cautious about adopting EVs without the assurance of a reliable and widely available charging infrastructure. Therefore, the success of this transition hinges on the swift establishment of a sufficient charging infrastructure to drive widespread EV adoption

The road transport sector in Pakistan has experienced substantial growth, with the total registered vehicles reaching 29 million in 2019. Notably, two-wheelers or motorbikes dominate, constituting over 75% of the total vehicles, with an annual sales average exceeding 2 million. Over nine years, two- and three-wheel vehicles have demonstrated an impressive annual growth rate of 17%.

The prominence of motorbikes is particularly significant in the context of the EV policy, as they account for approximately 50% of the country's total petrol consumption. Consequently, elevated motorbike sales correlate with a substantial 23% year-on-year increase in petrol consumption. If this pattern persists, the import bill for petrol could escalate to unsustainable levels. In contrast, passenger sedan cars and SUVs have grown at an average annual rate of 8%, while buses and trucks have recorded a more modest average annual growth of 3% over the same period.

It is envisaged that E-mobility can play a catalytic role in enhancing gender equality by breaking down traditional barriers in the automotive and energy sectors and creating a more inclusive and sustainable future through:

- **Job Opportunities:** As the EV industry grows, it creates job opportunities across various sectors, including manufacturing, research and development, sales, and maintenance. Women can actively participate in these roles, promoting gender diversity and economic empowerment.
- **Skill Development:** The EV sector demands a diverse skill set, from engineering to sales and marketing. Encouraging women to acquire skills related to EV technology and management can empower them to participate in a rapidly evolving and innovative industry.
- **Entrepreneurship Opportunities:** The rise of EVs can foster entrepreneurship, with women playing a key role in establishing and managing businesses related to EV charging stations, battery technology, and other related services.
- **Access to Sustainable Transport:** Subject to the assurance of necessary infrastructure, electric vehicles (EVs) have the potential to enhance sustainable and affordable transportation. The increased accessibility to electric vehicles can empower women by offering safer and more reliable transportation alternatives, particularly in areas where women's mobility is constrained.

4. Findings from Primary Research

During the gender assessment, consultations were carried out with equity funds and grant programs (including those that are led/managed by women) to evaluate the gender responsiveness of the companies they have invested in or work with to improve impact outcomes. Key Informant Interviews (KIIs) were conducted with women working at senior management level at National Incubation Centers (NICs), Business Incubation Centers (BICs) and Small & Medium Enterprise Development Authority's (SMEDA's) Women Development Cell, Women Chamber of Commerce and Industry (KP and Lahore), and Women Parliamentarians.

- The National Incubation Centers (NICs): Pakistan-based startup incubation program operating through a public-private partnership with the Ministry of Information Technology and Telecommunication (MoTT) and other entities in Pakistan, including the Ignite National Technology Fund. Under the Programme eight NICs are established throughout Pakistan.
- Business Incubation Centers (BICs): Established by Higher Education Commission (HEC) in thirty-eight¹¹ Higher Education Institutions (HEIs) across Pakistan. These centers aim to provide essential infrastructure and related facilities for researchers and young entrepreneurs interested in developing early-stage business ventures. The primary objective of a business incubator is to nurture and guide ventures to the point of financial viability and independence, ensuring their success beyond the program.
- Small & Medium Enterprise Development Authority (SMEDA): Is an autonomous institution of the Government of Pakistan under the Ministry of Industries and Production. Established in October 1998, SMEDA's primary mission is to encourage and facilitate the development and growth of small and medium enterprises (SMEs) in the country. Beyond its role as an SME policy advisory body for the government of Pakistan, SMEDA actively collaborates with various stakeholders to address their SME development agendas. SMEDA has established a dedicated Women Development Cell for facilitation of women entrepreneurs.
- Women Chamber of Commerce and Industry KP and Lahore: Are representative bodies of women representing Industry, Trade and Service sectors. The women chambers look after and safeguard the interests of the women entrepreneurs for the promotion of trade & Industry in their respective provinces.

¹¹ <https://www.hec.gov.pk/english/services/universities/EBIC/Pages/Established-BICs.aspx>

4.1 Findings from Consultations with Startups

The assessment also undertook consultation sessions with start-ups which were chosen based on convenience sampling methodology. To further narrow down the list of start-ups, only those start-ups were consulted which had documented and validated data. Among the start-ups that were looking to raise active funding from equity funds, only two reported having gender policies along with dedicated facilities for Water, Sanitation, and Hygiene (WASH) and prayer. One of these also mentioned compliance with the Protection against Harassment of Women at the Workplace (Amendment) Act, 2022.

Women founders highlighted the difficulties faced by women in fundraising. They attributed these challenges to the absence of mentorship for women, limited mobility, and the gender blindness of incubation facilities.

The main reasons for the challenges mentioned above were concluded to be attributed to the following reasons:

- **Lack of Awareness:**

Lack of awareness in organizations of the importance of gender-disaggregated data and the need for specific measures to promote gender equality along with lack of understanding about how gender considerations can positively impact business outcomes.

- **Limited Capacity:**

Start-ups and SMEs might lack the internal capacity and resources to collect, analyze, and report gender-disaggregated data. This limitation could extend to the development and implementation of gender-sensitive measures within their business models.

- **Perceived Irrelevance:**

The organizations perceive gender-related initiatives as irrelevant to their core activities or business goals. This perception is the one of the causes of lack of prioritization and integration of gender considerations into their overall strategy.

- **Lack of External Pressure:**

Organizations have no external pressures or incentives, such as regulatory requirements or stakeholder expectations, to incorporate gender-related measures. In the absence of external motivators, the organizations are not prioritizing these aspects.

- **Resource Allocation Priorities:**

Due to the limited resources of startups, they are allocated to areas other than gender-related initiatives. They prioritize different aspects of their operations, and gender considerations are not perceived as a priority within their resource allocation framework.

In addition to the reasons mentioned above, it was also observed that traditional industry norms in sectors where gender disparities are deeply entrenched contribute to organizations adhering to conventional practices, overlooking the significance of gender equality initiatives. Moreover, there exists a pervasive lack of awareness

regarding the benefits of diversity and inclusion within these industries. Additionally, the lack of motivation to integrate gender considerations into business practices can be attributed to the absence of a culture that prioritizes gender within the institution.

4.2 Finding from Key Informants

According to key informants, including the National Incubation Centers (NICs), Business Incubation Centers (BICS), and the Small and Medium Enterprises Development Authority (SMEDA), the lack of gender policies and limited gender sensitivity in enterprises and startups can be attributed to the predominant focus of startups on attracting investments. Meeting investor expectations, primarily centered around return on investment and managing the inherent risks associated with startups, takes precedence. Consequently, there is a notable absence of external pressures or incentives from investors to prioritize gender considerations. These organizations operate without being bound by regulatory requirements or stakeholder expectations that would mandate the integration of gender-related measures into their operational practices.

The key informants attribute the dearth of women-led startups and SMEs to socio-cultural barriers. Women are typically not considered the breadwinners, nor are they encouraged to start their own businesses in many societies. Even when women do venture into business, they often struggle to be taken seriously by financiers and financial institutions due to a lack of financial literacy, absence of credit history, and failure to meet the lending criteria of financial institutions, such as providing collaterals. This leaves women in a disadvantaged position compared to men when it comes to accessing financial resources. Additionally, financial institutions often do not view women as a profitable market segment, despite evidence showing that women are more loyal customers than men.

The key informants emphasized that they themselves have implemented gender policies and anti-harassment mechanisms. Their facilities are purposefully designed to cater to the diverse needs of individuals, including those with special requirements, actively fostering women's empowerment through support for women entrepreneurs. NICs and SMEDA go a step further by advocating for gender diversity, encouraging enterprises to appoint women directors and founders. Additionally, they organize regular sessions addressing critical topics such as gender-based violence (GBV), gender mainstreaming, and women's empowerment. As highlighted earlier by the key informants, the envisioned outcomes can only materialize when startups are compelled by regulatory requirements or stakeholder expectations that mandate the incorporation of gender-related measures and ensure that green investments are not only gender-responsive but also contribute to gender equality and women's empowerment.

5. Barriers and Recommendations

5.1 Barriers

The sections above set the context with regards to gender-specific barriers which exist in the entrepreneurial space. They also cover gender-specific barriers in each of the target areas of the project – this is important as these challenges have tendencies to trickle down into the climate ventures which are operating in each space. **All barriers have been bolded and underlined for the convenience of the readers.**

This section consolidates the barriers detailed in sections above and provides clear recommended pathways to overcoming them. Therefore, to summarize:

- **Social and Cultural Barriers:** Women entrepreneurs in Pakistan encounter significant social and cultural resistance, including traditional gender roles that prioritize domestic responsibilities over entrepreneurial activities. There is prevailing societal pressure which discourages women from establishing new businesses and achieving business success, often leading to a fear of failure and limited support from their family and community.
- **Financial Barriers:** Access to finance is another major hurdle. Women often struggle with obtaining credit and are less likely to secure debt and equity financing compared to their male counterparts. Financial institutions sometimes view women as high-risk borrowers, which can result in smaller loan amounts and higher interest rates. Although initiatives like the Refinance and Credit Guarantee Scheme for Women Entrepreneurs by the State Bank of Pakistan aim to address these issues, challenges remain due to high interest rates, complex procedures, and inadequate collateral.
- **Educational and Professional Network Barriers:** There is also a disparity in networking opportunities and educational resources available to women. The lack of access to business networks and mentorship opportunities limits their ability to connect with potential investors and advisors, which is crucial for business growth.
- **Regulatory and Infrastructure Challenges:** Women entrepreneurs face administrative and infrastructure challenges, including dealing with corruption and inadequate business facilities like electricity, roads, and telecommunications. These infrastructural deficiencies can increase operational costs and hinder business performance.

Outlined below is a further breakdown of barriers faced by women entrepreneurs in Pakistan, which have been identified across the various sectors of the project:

- **Transport:**
 - Safety Concerns: Women often face safety issues while using public or private transport systems, deterring them from effectively conducting business or traveling to remote areas.
 - Cultural Restrictions: Social norms may restrict women's mobility without male accompaniment, limiting their ability to manage businesses that require travel or transportation of goods.
- **Energy Access and Energy Efficiency:**

- Access to Resources: Women in rural areas often have limited access to reliable and affordable energy, impacting their ability to run energy-dependent businesses.
- Technical Knowledge: There is a significant gender gap in technical training and knowledge related to energy systems, which can prevent women from adopting energy-efficient technologies and practices.
- **Food and Water Security:**
 - Resource Control: Women frequently have less control over land and water resources, crucial for businesses in agriculture and food production.
 - Climate Vulnerability: Women-led agricultural enterprises are particularly vulnerable to climate change impacts, which can affect water availability and crop yields.
- **Livelihood of Communities:**
 - Economic Opportunities: Women often have limited access to economic opportunities in their communities, which restricts their potential for business growth.
 - Community Support: Cultural norms may also limit community support for women who aspire to be entrepreneurs, particularly in sectors traditionally dominated by men.

Addressing these barriers requires targeted interventions that include policy recommendations, community engagement, and specific support measures such as training, access to resources and safety improvements. Efforts to empower women in these sectors not only contributes to their individual success but also enhances the overall development and resilience of their communities and the country's private sector ecosystem.

5.2 Recommendations

To ensure that "Climaventures" not only ensures green investments are gender-responsive but also contributes to gender equality and women's empowerment, as well as promotes innovation with a gender-responsive approach, it is recommended that the project implements the following measures:

- Ensure that gender considerations are integrated at all stages of the investment process, from planning to evaluation. This includes having women represented and their perspectives considered in project design and implementation.
- Formulate and enforce comprehensive gender equity policies at the venture level that outline clear procedures for addressing discrimination and ensuring equal pay for equal work.
- Implement flexible work policies that accommodate the needs of women, particularly for those with caregiving responsibilities. This could include options for remote work, flexible hours, and part-time positions.
- Address structural barriers that limit women's access to green investments. This may involve advocating for policy changes that promote gender equality in the financial sector or working with financial institutions to develop gender-sensitive products and services.
- Increase women's access to green investments by providing training and capacity-building programs. This will help women entrepreneurs and business owners understand the benefits of green investments and how to access them.
- Focus on promoting the adoption of green investments among women. This may involve raising awareness about the benefits of green technologies and practices, as well as provision of incentives for women to invest in them.
- Organize awareness campaigns and training programs in collaboration with incubation centers to educate entrepreneurs about the importance of gender-disaggregated data, emphasizing its positive impact on business outcomes. Additionally, integrate gender sensitization modules into employee training programs to enhance understanding and awareness across all organizational levels.
- Provide capacity-building workshops and resources to start-ups and SMEs to enhance their internal capabilities in collecting, analyzing, and reporting gender-disaggregated data. Cultivate partnerships with organizations or agencies specializing in gender-related data collection and analysis, extending support and expertise to address any capacity gaps.
- Showcase case studies and success stories highlighting the positive impact of gender-related initiatives on organizational success, demonstrating the relevance of these measures to core business activities.
- Facilitate discussions with organizational leaders to align gender considerations with overarching business goals and underscore the strategic importance of implementing gender-inclusive practices.
- Advocate for and support the establishment of industry standards promoting the integration of gender-related measures within organizations. Emphasize the competitive advantage attained by organizations prioritizing gender equality, positioning it as a key selling point in the business ecosystem.

- Explore cost-effective methods to integrate gender-related initiatives, underscoring that these measures can be implemented without imposing significant financial burdens. Highlight the long-term benefits of gender-inclusive practices, illustrating that prioritizing gender considerations aligns with sustainable business practices and contributes to overall organizational success.
- Introduce incentives for organizations that actively implement gender equality initiatives. Recognize and reward organizations that demonstrate commitment to creating an inclusive and diverse workplace.
- Establish metrics for measuring gender equality progress and require organizations to report on these metrics. Transparency in reporting can drive accountability and encourage organizations to prioritize gender-related considerations.

The above recommendations have been reflected within the Gender Action Plan (GAP) below, promoting gender-responsive green investments and women's empowerment. Integrating gender considerations and increasing women's involvement in decision-making within the private sector ecosystem for climate action. Addressing structural barriers to enhance stakeholder capacity for gender mainstreaming, complemented by mentorship programs and seed grants for women-led ventures. Awareness campaigns and training programs promote inclusivity and active participation of women and vulnerable groups, with targeted campaigns and collaborations with local women's groups. Establishing metrics and reporting mechanisms ensures transparency and accountability, aligning with the GAP's framework for monitoring implementation. The GAP, developed with feedback from relevant stakeholders, aims to support women-led startups through financial support, integrate gender considerations throughout the project's lifespan, enhance women's participation and empowerment and prioritize monitoring and evaluation for gender impacts. These efforts collectively advance the participation, inclusion, and empowerment of women in the private sector's climate action initiatives.

6. Conclusion

Addressing the barriers faced by women in the startup ecosystem and SME sector in Pakistan requires a multifaceted approach that tackles social, cultural, financial, and structural challenges. Women entrepreneurs encounter significant resistance and limitations due to traditional gender roles, financial constraints, limited networking opportunities, and infrastructural deficiencies. Sector-specific barriers in transport, energy, food security, and community livelihoods further complicate their entrepreneurial journey.

To overcome these challenges and ensure that projects like "Climaventures" are both gender-responsive and effective, it is crucial to integrate gender considerations at all stages of the investment process. Implementing comprehensive gender equity policies, promoting flexible work arrangements, and increasing access to training and capacity-building programs are essential steps. Additionally, raising awareness about the benefits of green investments and providing incentives for women to adopt these technologies can foster a more inclusive and sustainable business environment.

By showcasing success stories, facilitating discussions with organizational leaders, and advocating for industry standards that promote gender inclusivity, we can create a supportive ecosystem for women entrepreneurs. Encouraging transparency in reporting gender equality progress and recognizing organizations that actively implement gender initiatives will drive accountability and reinforce the importance of gender-responsive practices.

Ultimately, prioritizing gender equality not only empowers women but also contributes to the overall development and resilience of communities, leading to a more vibrant and sustainable economy. It is through these targeted interventions and systemic changes that we can unlock the full potential of women entrepreneurs in Pakistan and beyond.

Part II – Gender Action Plan

Objectives:

The Gender Action Plan (GAP) for "Climaventures" provides a comprehensive roadmap for advancing gender equity and empowering women. The goals, indicators, and targets outlined in the GAP underscore the project's commitment to fostering gender equality/equity throughout its lifecycle. The main objectives of the GAP are developed based on the feedback received from various relevant stakeholders, which includes women working at senior management level at National Incubation Centers (NICs), Business Incubation Centers (BICs) and Small & Medium Enterprise Development Authority's (SMEDA's) Women Development Cell, Women Chamber of Commerce and Industry (KP and Lahore), and Women Parliamentarians.

1. **Supporting women-led startups through patient capital such as grants:** To ensure the growth and success of women-led startups by provision of financial support and resources to overcome the initial hurdles they face and develop into thriving businesses. Additionally, such support can help address the gender gap in entrepreneurship and empower more women to pursue their business ventures.
2. **Integration of Gender Considerations:** To ensure the seamless integration of gender considerations into all policies and programmes throughout the project's lifespan. This involves creating an inclusive environment that recognizes and accommodates diverse gender identities, fostering a culture of equity and diversity within the climate action initiatives.
3. **Enhanced Participation and Empowerment of Women:** To prioritize and actively work towards enhancing the participation and empowerment of women. This includes preventing gender-based discrimination and exploitation, promoting equitable access to opportunities, and implementing targeted awareness campaigns and capacity-building programmes to improve stakeholder understanding of gender issues in the context of climate action and the start-up/SME ecosystem.
4. **Gender-Disaggregated Data and Representation:** To emphasize the importance of gender-disaggregated data for informed decision-making and work towards increasing the representation of women and marginalized communities in leadership roles. This objective seeks to address gender data gaps, promote diversity in decision-making, and create pathways for women's meaningful participation within the climate ventures and ecosystem.
5. **Monitoring and Evaluation for Gender Impacts:** To prioritize the monitoring and evaluation of gender impacts of climate ventures in alignment with national and international gender equality standards. Establish mechanisms to assess the effectiveness of gender design elements, ensuring that tangible benefits accrue to women and men, particularly those from vulnerable communities. This objective aims to enhance accountability and track progress towards gender equity goals within the project.

Gender Action Plan (GAP):

Activities	Indicators of success/targets	Baseline	Target	Timeline for hiring services / Frequency of event	Responsibilities	Costs (USD)
<p>Impact statement: The project endeavors to establish a lasting impact by promoting the active participation of women and vulnerable communities in the Private Sector Ecosystem for Climate Action in Pakistan</p> <p>Outcome statement: Empowered participation and active engagement of women and vulnerable communities in the Private Sector Ecosystem for Climate Action in Pakistan, leading to sustained positive transformations in their representation and involvement with gender-inclusive climate solutions over the long term.</p> <p>Output statement: Enhanced participation and inclusion of women and vulnerable communities in the labour force, greater access to funding for female entrepreneurs, as well as guidelines for gender-inclusive climate policies and projects.</p>						
<p>1. Objective: To promote inclusivity and actively engage women and vulnerable groups in Pakistan's private sector ecosystem for climate action.</p>						
1.1 Develop and implement targeted awareness campaigns to reach women and vulnerable communities, emphasizing the benefits and opportunities of active participation in the private sector ecosystem for climate action	# of awareness campaigns developed to reach women and vulnerable communities	0	10	Annual	AE and EE	No Additional Cost (costs embedded within Activity 'Idea Mining' and 'Initiate Climate Conversations – see sub-activities 1.1.1.1 and 2.1.1.2 in Annex 3a)
1.2 Collaborate with local women's groups and community	# of collaborative events	0	10	Annual	AE and EE	No Additional Cost (costs embedded within Activity 'Idea Mining' and 'Initiate

organizations to amplify awareness efforts						Climate Conversations – see sub-activities 1.1.1.1 and 2.1.1.2 in Annex 3a)
1.3 Working with portfolio companies' beneficiaries to curate service offerings for women and vulnerable groups through workshops and FGDs	# and adoption of products launched by marginalized groups / women of the total beneficiary count	0%	15%	Year 1-10	AE and EE	USD 35,000
1.4 Development of e-learning modules with comprehensive content on the significance of involving women and vulnerable communities in climate initiatives.	# of e-learning modules developed	0	2	Year 1 and Year 5	AE and EE	No Additional Costs (Costs embedded within Activity 'Initiate Climate Conversations' – See sub-activity 2.1.1.2 in Annex 3a)
Objective 1: Total = USD 35,000						
2. Objective: To facilitate capacity building of women entrepreneurs and increase their access to investor networks for mainstreaming gender in the climate space.						
2.1 Providing mentorship to female led start-ups by providing them network access, fundraising support, trainings and more.	# of participants enrolled into the programme	0	15 per year	Year 1-10	AE and EE	USD 10,000
2.2 Provide seed grants to women led early-stage climate ventures	# of seed grants provided to women led early-stage business ventures	0	Not possible to determine at this stage	Year 1-10	AE	No Additional Costs Required Note: The project has budgeted a total of \$5m for supporting ideation

						<p>stage climate ventures through grants (see Component 1B). This amount includes the seed amount (average cheque size of \$50k) which will be provided to women-led climate ventures. It is not possible for the project to anticipate how many women-led climate ventures it will enroll.</p> <p>Please note that, through Activity 3.1.1.3, the project will identify gender-specific baselines of the climate ventures through implementation of the IEF (Annex 13) – this includes gender-specific indicators. These baselines will help identify gender-specific gaps which will be filled through the readiness programme where climate ventures will be provided with bespoke TA services.</p>
2.3 Hosting an annual networking event to connect potential partners with organizations	# of events hosted	0	10	Annual	AE and EE	<p>No Additional Cost (Costs embedded into the costs for Project Annual</p>

excelling in gender-inclusive climate action, followed by a collaborative strategy session involving key stakeholders to develop a joint action plan that incorporates gender considerations across all stages of climate ventures.						Event – See sub-activity 2.1.1.1 in Annex 3a)
2.4 Curate Training Programmes for portfolio companies and employees to address gender barriers and gaps	% of portfolio company employee base completing training programs	0%	80%	Annual	AE and EE	USD 42,000
2.5 Facilitation of safe and affordable transportation options for women (for women in portfolio companies & VA/Fund teams)	# of women utilizing the service to commute to and from work	0	Up to 20 per year	Year 1-10	AE and EE	USD 10,000
2.6 Establishment of a day care facility	01-day care facility	0	1	Year 1	AE and EE	USD 5,000 for establishment & USD 3,000 P/A for salaries and supplies
Objective 2: Total = USD 97,000						
3. Objective: To address governance challenges by increasing active involvement of women in decision-making processes.						
3.1 Appointment of gender focal	01 gender focal person appointed	0	1	Year 1	AE	Focal person USD 14,400 P/A

3.2 Conducting one workshop and capacity-building session per year to facilitate understanding and implementation of gender-inclusive climate policies for relevant government officials, policymakers, and stakeholders.	# of participants	0	30-40 per year	Annual	AE and EE	USD 10,000 P/A
						Objective 3: Total = 244,000
4. Objective: To develop a framework to monitor progress on GAP implementation to strengthen gender-responsive action.						
4.1 Design a comprehensive framework for monitoring and evaluating the implementation of the Gender Action Plan (GAP).	Comprehensive framework for monitoring and evaluating the implementation developed	0	2	Year 1 and Year 5 (second module - post mid-term assessment)	AE and EE	No Additional Costs (consultancy costs embedded within the broader budget)
4.2 Implement the monitoring framework for Gender Action Plan	Compliance with GAP according to the framework	0%	100%	Annual (findings reported in APR)	AE and EE	No Additional Costs (consultancy costs embedded within the broader budget)
4.3 Organize forums and roundtable discussions to engage with stakeholders involved in the private sector ecosystem to validate and test the	# of forums and roundtable discussions organized	0	10	Annual	AE and EE	No Additional Cost (Costs embedded into the costs for Project Annual Event – See sub-activity 2.1.1.1 in Annex 3a)

findings of M&E reports to map way forward						
						Objective 4: Total = NIL
						Total Cost (Objectives 1-4) = USD 376,000
						Total Cost as reflected in Annex 3a with PKR spot rate incorporated = USD 407,961

References:

- 1- [Factors Affecting Growth of Women Entrepreneurs in Pakistan](#)
 - 2- [Barriers to Women's Entrepreneurship in Pakistan](#)
 - 3- [Factors affecting women entrepreneurs' success: a study of small- and medium-sized enterprises in emerging market of Pakistan](#)
 - 4 - [Barriers constraining the growth of and potential solutions for emerging entrepreneurial SMEs](#)
-