

Concept Note

Enhancing the resilience of vulnerable families in Mexico City to the impacts of climate change on water

Mexico | FundacionAvina

25 June 2020



Simplified Approval Process Concept Note

Project/Programme title:	Enhancing the resilience of vulnerable families in Mexico City to the impacts of climate change on water
Country(ies):	Mexico
National Designated Authority(ies) (NDA):	Ministry of Finance and Public Credit (SHCP)
Accredited Entity(ies) (AE):	Fundación Avina
Date of first submission:	6/25/2020 V.1
Date of current submission:	6/25/2020 V.1
Version	1



Eligibility for SAP is determined by the review of the concept note and the ESS screening.

A. Project / Programme Summary (max. 1 page)													
A.1. Project or programme	<input checked="" type="checkbox"/> Project <input type="checkbox"/> Programme	A.2. Public or private sector	<input checked="" type="checkbox"/> Public sector <input type="checkbox"/> Private sector	A.3 RFP	Not applicable								
A.4. Indicate the result areas for the project/programme	<p><u>Mitigation:</u> Reduced emissions from:</p> <p><input type="checkbox"/> Energy access and power generation: 0%</p> <p><input type="checkbox"/> Low emission transport: 0%</p> <p><input type="checkbox"/> Buildings, cities and industries and appliances: 0%</p> <p><input type="checkbox"/> Forestry and land use: 0%</p> <p><u>Adaptation:</u> Increased resilience of:</p> <p><input checked="" type="checkbox"/> Most vulnerable people and communities: 50%</p> <p><input checked="" type="checkbox"/> Health and well-being, and food and water security: 50%</p> <p><input type="checkbox"/> Infrastructure and built environment: 0%</p> <p><input type="checkbox"/> Ecosystem and ecosystem services: 0%</p>												
A.5. Impact potential	<table border="1"> <tr> <td>A.5.1. Estimated mitigation impact (tCO2eq over project lifespan)</td><td></td></tr> <tr> <td>A.5.2. Estimated adaptation impact (number of direct beneficiaries)</td><td>58,000 direct beneficiaries</td></tr> <tr> <td>A.5.3. Estimated adaptation impact (number of indirect beneficiaries)</td><td>2,242,875 indirect beneficiaries</td></tr> <tr> <td>A.5.4. Estimated adaptation impact (% of total population)</td><td>1.7% of the country's total population</td></tr> </table>					A.5.1. Estimated mitigation impact (tCO2eq over project lifespan)		A.5.2. Estimated adaptation impact (number of direct beneficiaries)	58,000 direct beneficiaries	A.5.3. Estimated adaptation impact (number of indirect beneficiaries)	2,242,875 indirect beneficiaries	A.5.4. Estimated adaptation impact (% of total population)	1.7% of the country's total population
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A.6. Financing information													
A.6.1. Indicative GCF funding requested (max 10M)	Amount: 6,000,000 Currency: USD Financial Instrument: Grants												
A.6.2. Indicative co-financing	Amount: 3,500,000 Currency: USD Financial Instrument: Grants Institution: SEDEMA												
A.6.3. Indicative total project cost (GCF + co-finance)	Amount: 9,500,000 Currency: USD												
A.7. Implementation period:	disbursement period: 48 repayment period, if applicable:	A.7.2. Total project/ Programme lifespan		120									
A.8. Is funding from the Project Preparation Facility needed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	A.9. Is the Environmental and Social Safeguards Category C or I-3?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
A.10. Provide rationale for the ESS categorization (100 words)	The project will increase adaptive capacities of most vulnerable families that lack access to water in Mexico City affected by rain variability due to climate change through access to rainwater harvest systems at the household level. The project is categorized as C given that activities include capacity building, climate knowledge and information sharing< management support and implementation of small scale water collector systems with no												

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	social and environmental impacts.		
A.11. Has the CN been shared with the NDA?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	A.12. Confidentiality	<input type="checkbox"/> Confidential <input checked="" type="checkbox"/> Not confidential
A.13. Executing Entity information	Fundación Avina		
A.14. Project/Programme rationale, objectives and approach of programme/project (max 100 words)	<p>Climate-driven changes in precipitation are resulting in increasing deficits in surface and ground water availability as well as floods in Mexico City. The risks that Mexico City faces from flooding and water scarcity will have increasing livelihood impacts, affecting the most vulnerable.</p> <p>The project seeks to enhance resilience of vulnerable families - particularly women - to manage increasing climate risks on water availability and floods that negatively affect their livelihoods through improved local knowledge and capacity building; improved access to water through rainwater harvest systems and; enhanced direct access to finance particularly for women-led households for the implementation of rainwater harvest systems.</p>		
B. Project / Programme information			
B.1. Context and Baseline (500 words)			
<p>Mexico City is one of the largest cities in the world. The estimated population is 21.82 million people, representing 17% of the population of Mexico. Mexico also faces high levels of poverty and inequality. According to the OECD, 7 of every 10 Mexicans are living in poverty or vulnerability, while the wealthiest 20% of the population earns 10 times as much as the poorest 20%. By the year 2030, authorities estimate that population will grow to 30 million people[3] posing an enormous challenge in access to resources, including water. At the same time as demand for water is expected to grow, increased temperatures and changed precipitation patterns are affecting water availability in Mexico City[4]. Water availability depends on the precipitation, the surface run-off and aquifers recharge. About 70% of the precipitation in the City basin evaporates and the remaining runs-off on the surface or goes to lower layers of the terrain, down the aquifer[5]. A decrease in precipitation and an increase in temperature influences negatively the water balance as increases the evapotranspiration rate, decreasing the precipitation runoff and aquifer recharge rates, and decreasing, overall, the water availability[6].</p>			
<p>Scientific data projects annual precipitation in Mexico city is decreasing; however, data also shows an increase in the intensity of rainfall during short periods, leading to an increase in frequency of floods. Consequently, millions of people, particularly the most vulnerable in the poorest neighbourhoods of Mexico City are at risk of water insecurity</p>			
<p>At the present, increasing water demands in Mexico City cannot be met by the existing infrastructure and natural water availability. Existing practices transfer water from distant watersheds[1], over 100 kilometres away or pumped up from hundreds meters underground to the city, which is located at 2,400m above sea level. Providing water supply in an efficient, equitable, sustainable and timely manner in light of climate change presents a difficult management and investment challenge, which simply cannot be met under the existing conditions. As a result, about 70% of residents in the city receive only up to 12 hours of running water per day. In the hardest-hit areas[1], 18% of the population have to wait several days for water supply[2][3].</p>			

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The poorest families in Mexico City are the worst impacted, affecting women more. In homes without access, women and children are normally tasked with the responsibility of collecting water, investing large amounts of time and energy in the process. They are very vulnerable to the impacts of climate change as they experience the greatest exposure to the precipitation related hazards, given their level of sensitivity and their limited capacity[4] to cope, manage and respond to these hazards.

As a response to the increasing risks of water shortage, the Government of Mexico City launched a program in 2019 to implement rainwater-harvesting systems at the household level in the poorest neighbourhoods of Mexico City, in two particular areas: Iztapalapa and Xochimilco[1]. To date, over 10.000 rainwater harvest systems have been successfully installed. The program directly benefited 56000 vulnerable people, most marginalized and with least access to water. The project has been successful in bringing an accessible, sustainable, tailored adaptation solution to vulnerable households in Mexico City and it is now seeking support of the Green Climate Fund to scale up support.

In 2012, Mexico adopted the Mexican General Law on Climate Change, which defines and integrates policy tools and mechanisms, including a National Strategy on Climate Change and the Special Programme on Climate Change (PECC) that promote adaptation measures in key sectors. Its key priority is to reduce the vulnerability of the population; increase their resilience to climate change impacts; and promote actions to reduce climate risks on urban and rural population. PECC presents models that evidence the climate change impacts on water resources, which are expected to be high[2], presenting a scenario in which large part of the country will become dryer and droughts will become more frequent. Consequently, there will be a higher demand for water in urban areas[3]. As a response, PECC provides a strategy to reduce vulnerability in urban areas through the provision of rainwater harvest systems for domestic use at the household level, in areas of marginalization and poverty. In addition, the Mexican NDC commits to increasing the population's adaptive capacity and reducing vulnerability. Furthermore, the Ministry of Environment of Mexico City's (SEDEMA) climate change vision for 2025[4] calls for adopting a resilience strategy that fosters water resilience and develop adaptive capacities to reduce risks in the different sectors[5]. The Climate Change vision provides valuable information on water vulnerability, showing that by the year 2025, the expected water reduction derived from climate change will be between 13-17%. The document also identifies the delegations (neighborhoods) that will be affected the most. The delegations include Iztapalapa, Álvaro Obregón, Tlalpan, Tláhuac, Xochimilco y Milpa Alta.

Access to water from non-conventional sources is fundamental to promote a paradigm shift among citizens in Mexico City on water management in light of climate change impacts. This opportunity can sustain the transformational change towards climate-resilient livelihoods in Mexico City in the near future, enabling vulnerable families, in particular women, to enhance their livelihood conditions, increase their welfare and reduce their climate risks on water access. In order to implement the above presented solution in an effective manner, several barriers must be overcome:

-Climate change-induced precipitation variability is increasing the need for greater investment in reliable, non-conventional and replicable water access technology to enhance climate-resilience of the most vulnerable people long-term.

-Most vulnerable families in Mexico City have no or very limited access to reliable water and must cope with water scarcity under conditions of climate-driven precipitation variability. Existing water access systems are unable to meet the corresponding growth in water demand in light of climate change.

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-Investments in rain-water collector systems at the household level for vulnerable people in Mexico is limited given their existing limited socio-economic capacities, which are further undermined by climate change.

-Vulnerable families have limited access to financial support to sustain access of technologies that promote resilient livelihoods in light of increasing water insecurity.

-To engender a shift to climate-resilient technologies to cope with water stress and sustain investments in access, operations and maintenance of rainwater collector systems, vulnerable families need to secure adequate access to such systems.

Finally, as climate risks continue to evolve, the burden of financial requirements to continue to cope with water insecurity will increase. Sustaining and scaling up the provision of decentralized rainwater harvest systems at the household level to secure water for vulnerable families requires access to financial support long -term.

B.2. Project / Programme description (1000 words)

The goal of this project is to generate a transformational change on how water is accessed and distributed in Mexico City in light of climate change. The project will increase access to water for vulnerable families in poor neighbourhoods of Mexico City- particularly women - and reduce the increasing climate risks associated to precipitation variability and its impacts on water access, through the scaling up of and implementation of rainwater harvest systems at the household level. The project directly contributes to GCF impact areas of (1.0) increased resilience and enhanced livelihoods of the most vulnerable people, communities, and regions and (2.0) increased resilience of health and well-being, and food and water security. To achieve its objective, the project will enable poor families in Mexico City to adapt to climate-driven precipitation variability. The project will have three main outcomes.

1. Improved local knowledge and capacities on managing risks associated to climate induced precipitation variability.
2. Improved access to rainwater collector systems in poor neighbourhoods, in the face of climate-induced precipitation variability.
3. Enhanced direct access to finance for women led households in poor neighbourhoods for long-term investments on rainwater harvest systems.

Outcome 1: Local knowledge and capacities enhanced on managing risks associated to climate induced precipitation variability.

Local stakeholders in the poorest neighborhoods of Mexico City, including potential beneficiaries, water service providers and local authorities, have limited knowledge on the extent to which climate change is affecting water availability in the city. In addition, access to information on potential available solutions to cope with water stress, through rainwater collector systems are limited. Access to information on available options is fundamental to take advantage of increasing rainwater availability, while reducing the impacts on flood frequency.

Furthermore, in order to secure appropriation of adaptation solutions at the local level, effective

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engagement with local stakeholders is paramount for increasing knowledge on access modalities and benefits associated with the implementation of the rain- water collector systems. In addition, securing local engagement for the long- term effective implementation and maintenance of the solutions proposed is crucial.

Finally, under this component the project will proactively engage with mayoral offices of targeted neighborhoods with the view to increase collaboration to sustain the adoption and promotion of these type of adaptation solutions that help coping with lack of water availability.

Under this component, activities will contribute to overcome barriers to lack of knowledge on the impacts of climate change on water availability.

Some of the activities proposed are:

Activity 1.1: Conduct capacity-building activities to local stakeholders in target neighborhoods on climate change impacts on water availability; opportunities and benefits of accessing rainwater harvest systems as well as access modalities to engage and benefit from the implementation of the proposed solutions.

Activity 1.2: Create cooperation agreements with participating mayoral offices to adopt and promote the implementation of the adaptation solutions proposed.

Activity 1.3 Provide capacity building to local water services providers on climate risks on water availability with the view to enhance their knowledge.

Activity 1.4 Disseminate information to citizens on climate change impacts on water availability; opportunities and benefits of accessing rainwater harvest systems.

Outcome 2: Improved access to rainwater collector systems in poor neighbourhoods, in the face of climate-induced precipitation variability.

Outcome 2 will provide scale up access to 10.500 rainwater harvest systems at the household level to increase water availability, as well as improve water use efficiency; enabling poor, vulnerable families to reduce their climate risks on water that negatively affect their livelihoods. The Output proposed will enable vulnerable families in poor neighbourhoods of the city to gain access to rain water harvest systems in the short term[1]. Target beneficiaries will be identified during output 1. Co-financing will be provided by the existing government -led program to collect rainwater called SCALL, and partial contributions provided by beneficiaries[2], through financial and/or in-kind contributions. Beneficiaries will commit to engage on capacity building processes, including learning skills needed to provide maintenance to the systems long-term as wells the provision of technical support services to peer neighbours, with the view to commit to the maintenance of systems long-term.

Activity 2.1: Update criteria and requirements for access modalities for rainwater harvest systems at the household level.

Activity 2.2: Install 10.500 rainwater harvest systems in targeted poor neighbourhoods in Mexico City[3].

Activity 2.3: Provide capacity-building support to beneficiaries (women and men) on system's maintenance.

Activity 2.4: Provide capacity-building support to local stakeholders interested in gaining skills for the provision of technical support services[4] for the operationalization of the systems within their

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neighbourhoods.

Outcome 3: Enhanced direct access to finance for women led households in poor neighbourhoods for long-term investments on rainwater harvest systems

This component will support the effective operationalization of an existing financial mechanism, dedicated to support environment related projects, to include among its operations, long -term investments for the continued implementation of rainwater harvest systems while scaling up access to such systems to new beneficiaries, in particular women.

The Government of Mexico City has a trust fund in place called Public Environment Fund. This fund is dedicated to develop and implement projects on prevention and control of environmental contamination as well as climate change mitigation and adaptation measures. The project will provide support to the development of dedicated lines of support within the trust, to develop innovative financial instruments[1] tailored to vulnerable groups and to secure long-term support for the implementation of rainwater harvest systems as well as dedicated lines of support to enhance direct access to finance for women-led households.

Activity 3.1: Provide technical support to operationalize a line of support within Mexico City's Public Environment Fund, dedicated to support the implementation of rainwater harvest systems long-term, through customized and innovative access modalities tailored to the needs of beneficiaries, in particular women-led households.

Activity 3.2: Provide capacity-building support to women-led households that seek to increase their financial capacities for savings and direct access to the Fund for investments in rainwater harvest systems

Project rationale

The project aims to increase the adaptive capacity of vulnerable people, living in the poorest neighborhoods in Mexico City to reduce climate-related risks on water availability through scaling up access and implementation of rainwater harvest systems at the household level.

The solution proposed will scale up access and implementation of rainwater harvest systems that have been implemented under the SCALL program in Mexico City. The adaptation solution proposed will contribute to reduce risks on water availability due to climate change. The SCALL program has already implemented rainwater harvest systems to part of the vulnerable population leaving in the delegations of Iztapalapa and Xochimilco and will now seek to scale up access to additional vulnerable habitants of the delegations above as well as more beneficiaries in other vulnerable delegations.

The project is seeking grant support from the GCF given that financial resources will directly benefit a very vulnerable group of people living in Mexico City with limited socio-economic conditions to access finance for implementing adequate adaptation solutions. The project will scale up solutions that have proven to be effective in reducing risks on water availability due to climate change. The solution proposed is consistent with local climate change strategies and policy and responds to concrete priorities and needs of both the government of Mexico and the government of Mexico City. Scaling up access to effective adaptation solutions will foster transformation under climate change for many vulnerable families. Contributing to shift from vulnerability and dependence on government assistance

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to enhance self-reliance and resilience via community-driven, locally implemented and managed solutions.

The neighborhoods were solutions would be implemented; concentrate some of the lowest human development indexes all over Mexico City so the need of the recipients is clearly established. In addition, climate finance has been historically targeted to mitigation activities in Mexico despite an increase need for supporting adaptation measures. Furthermore, Fundación Avina is a regional direct access entity, accredited to only access and provide grants from the Green Climate Fund.

B.3.Expected performance against the GCF investment criteria

Impact potential: This project offers an innovative tailored technological solution to target access to water barriers affected by climate change. The project will directly benefit over 56000 vulnerable people will have obtained access to water to overcome climate risks on water availability that affect their livelihoods, reducing the impact of climate change-related precipitation variability. The recipients will directly benefit from access to the implementation of rainwater harvest systems and increased capacities and skills to use and effective maintain these systems long- term at the community and household level. In addition, up to 2,242,875 million people will indirectly benefit from the project's interventions, and will result in their capacities enhanced on climate change impacts on water availability. Indirect beneficiaries of the project will also (local stakeholders and water service providers) gain knowledge, capacity and information on means to cope with climate change affects water availability. The project will also contribute to the empowerment of local stakeholders and replicate such practices in other delegations in the city. Furthermore, the project will promote access to innovate financial instruments that enable access to adaptation solutions for vulnerable communities in need.

Paradigm shift: The project proposes a paradigm shift in the access and management of water resources sensitive to the impacts of climate change in Mexico City. By increasing climate change knowledge and awareness, is expected to generate a catalytic effect, promoting peer learning and promoting a long period of cultural change in water access; addressing adaptation needs among vulnerable people, through a bottom-up approach to empower vulnerable families - especially women led households - with the knowledge and resources to manage climate risks on water availability in an effective manner. From a replicability standpoint by scaling up the SCALL program, the project will help increasing awareness on climate change impacts on water availability among Mexico's cities broader population and notice in modalities to access water through non- conventional systems.

The proposed adaptation solution contributes to improving the livelihoods of the most vulnerable people to the effects of climate change on water. In addition, it contributes to the establishment of long-term financial arrangements to continued support for the implementation of the adaptation solution, aiming at engaging new beneficiaries that are also vulnerable.

Sustainable development: The project will have strong contributions in fostering climate-resilient sustainable development by strengthening the adaptive capacity of vulnerable families in the poorest neighbourhoods in Mexico City in the face of water variability. The program has had strong contributions to increase gender balance and reduce burden associated to household work that are normally conducted by women. 66% of beneficiaries of the SCALL program were women. A detailed

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and more comprehensive analysis to better understand the gender dimension of the project will be made during project design, as well as means to increase gender balance.

From an economic perspective, the project will directly contribute to significant economic savings in household related services. At the present, poor families have to buy water per litre, spending large sums of money to access water for domestic purposes. For families that are connected to the water networks, they incurred in paying additional water fees based on use, incurring in expensive payments to access water. For vulnerable families with limited socio-economic capacities and high levels of poverty, the cost to access water is a constant stressful situation. According to information provided by beneficiaries of the Scall program that were benefited by the implementation of rainwater systems in 2019, some beneficiaries claimed that since the implementation of the rainwater systems, their household savings were up to 90% respect to the costs destined to access water[1].

Furthermore, the project brings social benefits. Securing water access for poor and vulnerable families in Mexico City that today live under high stress and social conflicts is paramount to the effective attainment of their human rights to water. With the implementation of rainwater harvest systems, vulnerable families are enhancing their livelihoods and reducing exposure to heath related issues associated with lack of access to water. In addition, the project contributes to reduce dependence of unsustainable sources of water, including water bought in plastic bottles or through truck pipes.

Finally, the project will bring a number of environmental benefits; taking advantage of increased precipitation in short periods to reduce risks associated with droughts and floods. The SCALL program estimated that the water collected through the implementation of 10.000 systems was about 8.2 million litres of rainwater harvested.

Needs of Recipients: Climate change is expected to severely affect water availability in Mexico City in the short term, affecting primarily vulnerable, poor families. Vulnerability is strongly correlated to poverty and gender inequality. Such inequalities influence local adaptive capacities, and pose disaster risk management and climate change adaptation challenges. Socio-economic inequalities and differences in access to water determine how vulnerable poor families are. Thus, the project targets the most vulnerable groups in Mexico City and respond to concrete needs, reducing climate risks on water availability.

Country Ownership: The proposed project is fully aligned with climate change needs and priorities of Mexican policies and programmes at the country and local level, contributing to the effective implementation of targets and measures stated in policy instruments; fostering adaptive capacity and climate resilience among beneficiaries. These policy instruments include Mexico's General Law on Climate Change, the Strategy on Climate Change, and the Mexican NDC and Mexico city's vision for climate change for 2025.

In addition, the proposal has been designed in close collaboration with the Ministry of Environment of Mexico City (SEDEMA) as the main authority in charge of implementing the climate agenda in the City.

This project builds from an existing initiative that has proven to be successful in providing an adequate short-term solution to the increasing climate needs of vulnerable people in Mexico City. The project seeks to contribute to continued support for scaling up access to adaptation solutions and improve the existing practices to unlock finance long-term.

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Efficiency/effectiveness: A detailed economic analysis will be presented in the full proposal. However, given that this is a proposal that seeks to scale up an existing adaptation solution, the project is building from existing analysis and data used to demonstrate that the solutions proposed are feasible, cost- effective and accessible to vulnerable families with limited capacities to finance the costs of implementing the systems without government support. The capacity to pay and contribute to co-finance the implementation of rainwater harvest systems by the beneficiaries will be equivalent to a small percentage of the total cost, which will be analysed and documented during the Feasibility Study. In addition, the legal and financial arrangements to secure that Public Environment Fund is able to provide long- term financial support through innovative financial instruments for the implementation of additional and future rainwater harvest systems will be also analysed and documented.

B.4 Stakeholders consultation and engagement (300 words)

This proposal has been developed in close coordination with the Ministry of Environment from Mexico City (SEDEMA). SEDEMA is the entity in charge of implementing the SCALL program, which involved collaboration with the Water Systems of Mexico City (SACMEX) as well as local governments in which systems were installed. The project will continue fostering and strengthening collaboration with public sector entities and key stakeholders with the view to scale up a successful program that responds to the adaptation needs of Mexico City.

The concept note development also involved early engagement with the NDA to secure country ownership and support for the development of this initiative.

C. Indicative financing information (max. 2 pages)

C.1. Financing by components

Please provide an estimate of the total cost per component and disaggregate by source of financing.

Component	Output	Indicative cost (USD)	GCF financing		Co-financing			
			Amount (USD)	Financial Instrument	Type	Amount (USD)	Financial Instrument	Name of Institutions
Improved local knowledge and capacities on managing risks associated to climate induced precipitation variability.		500,000	500,000	Grant		0	Grant	
Improved access to rainwater collector systems in poor neighborhoods, in the face of climate-		8,000,000	4,500,000	Grant	Public	3,500,000	Grant	SEDEMA

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induced precipitation variability.								
Enhanced direct access to finance for women led households in poor neighborhoods for long-term investments on rainwater harvest systems		1,000,000	1,000,000	Grant		0	Grant	
Indicative total cost (USD)	9,500,000	6,000,000		3,500,000				

For private sector proposal, provide an overview (diagram) of the proposed financing structure.

C.2. Justification of GCF Funding Request (300 words)

The GCF can play a catalytic role in financing this project and help reducing the risks associated with investing in small-scale adaptation measures at the household level. The implementation of the proposed solution will help reduce the economic burden lack of access to water creates on vulnerable people. Targeted beneficiaries in Mexico City are very vulnerable to the impacts of climate change on water.

GCF resources will help scale up adaptation solutions that are currently financed by the Mexican Government contributing to increased water access due to climate change impacts; increase resilience of the most vulnerable groups and implementation of innovative financial instruments for the long-term support of the solutions proposed under this proposal.

Although the SCALL program has been already implemented successfully, government resources are limited to achieve the scalability required to tackle adaptation needs in Mexico City for climate impacts on water in the urban sector, targeting the most vulnerable groups long-term. Historically climate finance tracked in Mexico has often been directed to mitigation efforts despite that climate change policy instruments clearly identify the urgent need to support adaptation needs. The project itself has already made substantial contributions to reduce the vulnerability of poor families by providing access to a limited amount of adaptation solutions, however, without the GCF support, the project has limited capacity to scale up the solutions needed long-term and to the scale that responds to the demand of a growing city.

C.3. Exit Strategy and Sustainability (300 words)

The proposal is seeking to scale up access to an existing adaptation solution that have proven to be successful in reducing climate risks on water availability for vulnerable families in the poorest neighbourhoods of Mexico City. The project is seeking GCF support for scaling up interventions through the Simplified Approval Process while enhancing the effective operationalization of an existing financial mechanism, the Public Environment Fund, which will secure that long-term investments are available for rainwater harvest systems once GCF resources end.

The proposal presents a number of essential elements to secure barriers identified are addressed in a systemic manner. Among these, elements of sustainability were considered to secure efforts

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continue long- term. For example, the project will:

- promote diversification of water access for the most vulnerable population, reducing their dependence and use to groundwater and other unsustainable sources of water, reducing costs for poor families in Mexico.
- create capacities among vulnerable people to strengthen knowledge on climate impacts on water as well as opportunities to cope with the problem.
- strengthen institutions such as the Public Environment Fund of Mexico City to provide innovative financial instruments targeting women and most vulnerable people for investment on adaptation solutions.
- For each water harvest system provided, a support scheme for the operation as well as maintenance of systems long-term will be prepared.

All actions provided under this proposal as well as access to the technology proposed are easily replicable in other cities with similar conditions. Furthermore, activities proposed contribute to enhancing resilience of the most vulnerable people in Mexico City, promoting water security, which is key to support livelihoods, including long term -impacts to people's health, food security and capacities to cope with climate change impacts.

D. Annexes

- ESS screening check list (Annex 1)
- Map indicating the location of the project/programme (as applicable)
- Evaluation Report of previous project (as applicable)

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Annex 1: Environmental and Social Screening Checklist

Part A: Risk Factors

Please indicate your answers to the questions below and provide an explanation on the response selected. In cases when the TBD response has been selected please explain briefly why you are not able to determine now and when in the project cycle the question will be addressed.

If the criteria is not applicable to the project you may write N/A in the justification box.

Exclusion criteria	YES	NO
Will the activities involve associated facilities and require further due diligence of such associated facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No associated facilities will be required under the project		
Will the activities involve trans-boundary impacts including those that would require further due diligence and notification to affected states?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No transboundary impacts are expected with the project		
Will the activities adversely affect working conditions and health and safety of workers or potentially employ vulnerable categories of workers including women and children?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No proposal will not affect working conditions and health and safety of workers.		
Will the activities potentially generate hazardous waste and pollutants including pesticides and contaminate lands that would require further studies on management, minimization and control and compliance to the country and applicable international environmental quality standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NO hazardous waste and pollutants will be generated under the project proposed.		
Will the activities involve the construction, maintenance, and rehabilitation of critical infrastructure (like dams, water impoundments, coastal and river bank infrastructure) that would require further technical assessment and safety studies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NO construction will be done under the project		
Will the activities potentially involve resettlement and dispossession, land acquisition, and economic displacement of persons and communities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No resettlement and dispossession will be required to implement activities under the project proposed		
Will the activities be located in or in the vicinity of protected areas and areas of ecological significance including critical habitats, key biodiversity areas and internationally recognized conservation sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Activities wont be located in protected areas or vicinity		
Will the activities affect indigenous peoples that would require further due diligence, free, prior and informed consent (FPIC) and documentation of development plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Activities wont involved indigenous peoples		
Will the activities be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Activities wont be implemented in critical cultural heritage areas. they will be implemented in Urban areas.

Part B: Specific environmental and social risks and impacts

Assessment and Management of Environmental and Social Risks and Impacts	YES	NO	TBD
Has the E&S risk category of the project been provided in the concept note?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the rationale for the categorization of the project been provided in the relevant sections of the concept note?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are there any additional environmental, health and safety requirements under the national laws and regulations and relevant international treaties and agreements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No additional legal requirements are needed to implement the project proposed,			
Are the identification of risks and impacts based on recent or up-to-date information?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project seeks to scale up activities implemented by an existing program that has been implementing activities during 2019 and 2020			
Labour and Working Conditions	YES	NO	TBD
Will the activities potentially have impacts on the working conditions, particularly the terms of employment, worker's organization, non-discrimination, equal opportunity, child labour, and forced labour of direct, contracted and third-party workers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activities under the project do not expect to have impacts on working conditions given that all procurement services will be conducted by Avina, following guidance from institutional policy instruments on this matter, national law and international guidelines applicable.			
Will the activities pose occupational health and safety risks to workers including supply chain workers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No risks related to health and safety are expected under this project			
Resource Efficiency and Pollution Prevention	YES	NO	TBD
Will the activities generate (1) emissions to air; (2) discharges to water; (3) activity-related greenhouse gas (GHG) emissions, (4) noise and vibration; and (5) wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No emissions will be generated by activities proposed. Rainwater systems will be acquired from Mexico.			
Will the activities utilize significant amount of natural resources including water and energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activities will take advance of rainwater which is currently not collected.			
Will there be a need to develop detailed measures to reduce pollution and promote sustainable use of resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No pollution from the implementation of activities is expected therefore there wont be a need to develop additional measures.			
Community Health, Safety, and Security	YES	NO	TBD

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Will the activities potentially generate risks and impacts to the health and safety of the affected communities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The project will only bring positive impacts to the health of communities benefiting from project activities			
Will there be a need for an emergency preparedness and response plan that also outlines how the affected communities will be assisted in times of emergency?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
There wont be a need to prepare a response plan for the type of activities proposed under the project.			
Will there be risks posed by the security arrangements and potential conflicts at the project site to the workers and affected community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No risks by security arrangements will be need given the type of activities proposed			
Land Acquisition and Involuntary Resettlement	YES	NO	TBD
Will the activities likely involve land acquisition and/or physical or economic displacement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activities wont require land acquisition or displacement			
Biodiversity Conservation and Sustainable Management of Living Natural Resources	YES	NO	TBD
Will the activities potentially introduce invasive alien species of flora and fauna affecting the biodiversity of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The project wont require the introduction of invasive alien species of flora and fauna			
Will the activities have potential impacts on or be dependent on ecosystem services including production of living natural resources (eg.agriculture, animal husbandry, fisheries, forestry)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activities under the proposal will not impact water ecosystem servicies or living natural resources.			
Indigenous Peoples	YES	NO	TBD
Will the activities potentially have any indirect impacts on indigenous peoples, ethnic minorities, or vulnerable and marginalized groups?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activities will only bring positive and additional benefits to marginalized groups affected by lack of water availability due to climate change.			
Cultural Heritage	YES	NO	TBD
Will the activities restrict access to the cultural heritage sites and properties?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activities wont take place in restrict areas or cultural heritage sites or properties.			
Will there be a need to prepare a chance-find procedure in case of the discovery of cultural heritage assets?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
However we don't believe it will be necessary to prepare a chance find procedure as systems will be implemented in private households.			
Stakeholder engagement and grievance redress	Yes	No	TBD
Will the activities include a continuing stakeholder engagement process and a grievance redress mechanism and integrated into the management/implementation plans?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Activities will engage stakeholders during project implementation. From beneficiaries to interested			

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parties. Information available Redress mechanisms of those existing in Fundación Avina and the GCF will be shared with stakeholders.			
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Part C: Sign Off

Sign-off: *Specify the name and designation of the person responsible for the environmental and social screening and any other approvals as may be required in the accredited entity's own management system.*

Chiaki Kijo Risk management committee Andrea Rodriguez Osuna Climate Action Program, Manager Fundación Avina