



1. Operation Information

Operation ID P174000	Operation Name Environment and Urban DPF
Country Mexico	Practice Area (Lead) Environment, Natural Resources & the Blue Economy

Non-Programmatic DPF

L/C/TF Number(s) IBRD-91920	Closing Date (Original) 31-Dec-2021	Total Financing (USD) 750,000,000.00
Bank Approval Date 17-Dec-2020	Closing Date (Actual) 31-Dec-2021	
	IBRD/IDA (USD)	Co-financing (USD)
Original Commitment	750,000,000.00	0.00
Revised Commitment	750,000,000.00	0.00
Actual	750,000,000.00	0.00

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2. Program Objectives and Pillars/Policy Areas

a. Objectives

The program development objective (PDO) of this Development Policy Financing (DPF) operation as stated in the Program Document (PD, page 3) is:



" Support (i) strengthening environmental sustainability and resilience; and (ii) expanding access to resilient urban infrastructure and social housing".

b. Pillars/Policy Areas

There were two pillars/policy areas (PD, pages 23 and 30):

Pillar # 1. Strengthening environmental sustainability and resilience in agriculture, forestry and local government development.

Pillar # 2. Expanding access to resilient urban infrastructure and social housing.

c. Comments on Program Cost, Financing and Dates

Financing. An IBRD loan of US\$750.00 million financed this operation. The loan was fully disbursed.

Dates. The operation was approved on December 17, 2020, became effective on September 9, 2021 and closed as scheduled on December 31, 2021.

3. Relevance of Design

a. Relevance of Objectives

Country context. The Bank prepared this operation amid the COVID-19 pandemic in Mexico, beyond the health and human life consequences. The pandemic profoundly impacted employment and households. Total employment fell drastically in the early days of the pandemic (with five million jobs lost by July 2020 compared to 2019). The contraction in economic activity led to increased poverty (with the poverty rate increasing from 21% in 2019 to 27% in 2020). The crisis, however, provided an opportunity to complement the ongoing reforms to enable resilience from climate change and a better medium-term recovery. Resilience efforts to reduce the vulnerability to natural disasters, particularly those arising from climate change, were critical for the country. This was especially pressing for urban infrastructure and housing, serving poorer areas of the country and vulnerable households. Another challenge in Mexico is Ambient Air Pollution. The cost of health damages caused by air pollution amounted to US\$104.30 billion, equivalent to 4 percent of Mexico's Gross Domestic Product (GDP). In this context, the PDOs were highly relevant to the government strategy.

Government strategy. The 2019 - 2024 National Development Plan and the specific sectoral plans to implement the national plan reoriented public spending towards new and expanded social programs deployed in the wake of the pandemic. The Government's Programa Sectorial de Medio Ambiente (PROMARNAT) promoted climate change adaptations. The government's new housing approach aimed to address housing sector deficiencies and make the houses of poorer, vulnerable, and indigenous households resilient to natural disasters, including those stemming from climate change.

Bank strategy. The Bank's 2018 Systematic Country Diagnostic (SCD) for Mexico highlighted several environmental sustainability challenges that could undermine Mexico's economic development and poverty reduction efforts in the coming years. It underscored the country's high vulnerability to climate change and



environmental degradation, particularly regarding forests, agriculture, air quality, and climate-induced natural hazards. The policies supported by this operation were well-aligned with two objectives of the Country Partnership Framework (CPF) for 2020 - 2025. Objective Six stressed the need to provide sustainable urban infrastructure services, and objective seven underscored the need to support the government in reaching its climate change goals. This DPF operation was well-aligned with the Pillar Four of the Bank's COVID-19 Response Approach Paper (AP), "*Strengthening policies, institutions, and investments for building better.*"

Bank experience. The Bank has financed many climate change-related operations in Mexico. The Bank deemed a stand-alone DPF operation as appropriate for these reasons: (i) The instrument would provide the needed flexibility for supporting reforms; (ii) The Bank had financed DPF operations in Mexico, such as the Financial Access DPF operation and an operation to strengthen economic sustainability. (iii) Work to provide the analytical underpinnings was performed by the Bank in the recent past (discussed in section 3b); (iv) The Bank's assessed Mexico's macroeconomic framework as adequate and its public debt to be sustainable for supporting the operation, despite the deterioration of global and domestic economic conditions following the pandemic. When this operation was being prepared, Mexico had a precautionary Flexible Credit Line (FCL) with the International Monetary Fund (IMF) of US\$74.00 billion. This operation was part of a larger programmatic approach that helped the country to address urgently needed short-term reforms while also preparing foundations for a sustainable recovery in the mid and long term.

The Program Development Objective was appropriate in its ambition and relevant to the country and Bank strategy.

b. Relevance of Prior Actions

Rationale

Pillar # 1. Strengthening environmental sustainability and resilience in agriculture, forestry, and local government development. There were five prior actions (PAs) in this pillar.

PA # 1. The Government included a forest conservation provision in Mexico's most important agriculture support program (*Produccion para el Bienestar*) for small landholders. It published new rules for the program in the official Gazette on February 7, 2020.

Agriculture has been among the main drivers of deforestation in Mexico. Although agricultural support programs were crucial for supporting small-scale farmers, some programs in the past encouraged agricultural deforestation. This prior action enforced regulations for curtailing deforestation by rendering the small-holders ineligible for agricultural support if they caused further deforestation.

This prior action was based on analytical work conducted by the Bank such as: (i) World Bank 2019 - 2020: *Climate Change policies engagement/support*; (ii) World Bank (2019): *Systematic Country Diagnostic*; and (iii) World Bank (2016): *World Bank Group Forest Action Plan (2016 - 2020)*. The prior action aimed at making agricultural support programs for small-scale farmers contingent on forest conservation would likely help conserve forests and strengthen environmental sustainability. Therefore, the relevance of this prior action is rated as satisfactory.



PA # 2. The Government, through the Secretariat of Environment and Natural Resources (SEMARNAT), adopted guidelines for implementing the initial phase for implementing of the national Green House Gas (GHG) emissions trading system (ETS) on October 2019.

Mexico has made significant commitments to reducing greenhouse gas (GHG) emissions under the Paris Agreement. The ETS was a critical tool for helping combat climate change in the medium to long run.

The analytical underpinnings of this prior action were based on: (i) *Achieving the Mexican Mitigation Targets: Options for an Effective Carbon Pricing Policy Mix* (2017), developed by SEMARNAT and the German Cooperation for International Cooperation (GIZ); (ii) World Bank (2016): *Emissions Trading in Practice; A Handbook on Design and Implementation*; and (iii) World Bank (2019 -2020): *Climate Change Policies: engagement/support*.

The prior action was aligned with Mexico's Nationally Determined Contribution (NDC) under the Paris Agreement. This prior action would likely help the Government ensure that the main GHG emitters stay under an acceptable limit. Therefore, this prior action is rated as satisfactory.

PA # 3. Through the Secretariat of Environment and Natural Resources (SEMARNAT), the Government issued guidelines on November 20, 2019, for addressing the human health impacts of air contamination. The guidelines mandated standardized air quality monitoring and measurement and communication to the public about the environmental health risks in cities and the actions they could take to reduce exposure to such risks; and (ii) enabling the national and subnational governments to compile, analyze and publish air quality environmental health measurement of cities.

Ambient Air Pollution (AAP) is a significant environmental and development challenge for Mexico. In 1992, a comparison of the concentrations of air pollutants in several cities in the world by the United Nations showed Mexico City to be the most polluted city on the planet. Although Mexico City has reduced the concentrations of particulate matter pollution by over 70% since then, the national cost of premature deaths, increased morbidity, and losses of labor force productivity from AAP were still significant. Low-income neighborhoods living closer to pollution sources (such as factories, warehouses, and agricultural centers) were especially affected by AAP.

The analytical underpinnings of this prior action were based on: (i) World Bank (2019 - 2020): *Climate Change Policies engagement/support*; (ii) World Bank (2018): *Local Environmental Externalities due to Energy Price Subsidies: A Focus on Air Pollution and Health*".

This prior action would likely help in providing the information that can help the vulnerable groups in cities understand the risks of pollution levels and the actions they could take to reduce their exposure to such risks. Over the medium term and beyond the time frame of this DPF operation, reforms in this area will likely help reduce black carbon (BC) emissions by 2030. (BC) is one of the many types of particulate matter (PM) that influence the climate). Therefore, the relevance of this prior action is rated as satisfactory.

PA # 4. Through the Secretariat of Environment and Natural Resources (SEMARNAT), the Government established policy and institutional frameworks for guiding highly vulnerable municipalities to prioritize climate adaptation actions through the Official Gazette on July 7, 2020.

Mexico is one of the most exposed countries to natural disasters. On the adaptation side, enhancing disaster preparedness and other climate change adaptation measures was critical to Mexico. Given that subnational



government (municipalities) were responsible for making the investment decisions that affect vulnerability in Mexico, capacity building of the municipalities was important in the country's context.

The analytical underpinnings for this prior action were based on: (i) World Bank (2019-2020): *Climate Change policies: engagement/support*; (ii) Global Communication on Adaptation (2019): *Adapt Now; A Global Call for Leadership on Climate Resilience*; and (iii) World Bank (2017): *Unbreakable; Building the Resilience of the Poor in the face of Natural Disasters, Climate Change and Development*.

This prior action sought to identify Mexico's highly vulnerable municipalities that were at extreme risk of current and future climate change impacts. The new policy enabled the technical agencies under SEMARNAT to channel resources to the prioritized municipalities for developing instruments for increasing their resilience to climate change.

However, while PA # 4 was relevant to strengthening the capacities of the municipalities to prioritize climate adaptation actions, it was not sufficient and early in the results chain to significantly impact achieving the objective. The prior action was only expected to strengthen the utilities' capacity and hence insufficient to ensure the adoption of climate adaptation actions by municipalities. The framework, moreover, was for guiding municipalities. Hence, they were not mandatory and may not effectively enforce critical adaptation measures by municipalities. Therefore, the relevance of this prior action is rated as moderately satisfactory.

PA # 5. The Government amended the Forest Law on April 13, 2020, to include forests in and around urban areas under the legal definition of forestlands to broaden forest protection.

With an urbanization rate of 80% and increasing trends of urban concentration, urban and peri-urban forest reserves (forests in and around urban areas) were under constant pressure from real estate, industry, and tourism development in Mexico. Mexico's forest law 2018 failed to classify forests inside the limit of municipalities as forestland. This effectively left sizeable forest areas without sufficient protection.

This prior action aimed to rectify this by including forests in and around urban areas under the legal definition of forestlands. Under the modification of the forest law, any project or activity seeking to remove forest vegetation in and around urban areas would require land use authorizations and environmental impact assessments. The analytical underpinnings of this prior action were based on the World Bank's (2019): *Systematic Country Diagnostic for Mexico*. This prior action can help Mexico's national efforts to mitigate climate change via carbon sequestration. Therefore, the relevance of this prior action is rated as satisfactory.

Pillar # 1. Expanding access to resilient urban infrastructure and social housing. There were three PAs in this pillar.

PA # 6. The Government, through the Secretariat of Agriculture and Rural Development (SEDATU) on June 26, 2020, amended the operational rules of the Social Housing Program to prioritize targeting: (i) housing support to poor and vulnerable households; (ii) indigenous peoples and women-headed households; (iii) areas affected by natural disasters and increasing risk from climate impacts; (iv) sanitary deficiencies, overcrowding and structural vulnerabilities of low-income homes; and (v) expanding the stock of housing with higher resilience and environmental sustainability.

Between 28% and 45% of Mexican households lived in homes lacking durable roofs, walls, floors, or enough living space to meet the World Health Organization's (WHO) recommendations. In the context of the pandemic,



inadequate and overcrowded housing and lack of proper water and sanitation disproportionately exposed poor families to disease risk. The poorer southeastern states of Mexico were particularly vulnerable in this regard.

This prior action supported improved policies under the Social Housing Program. Under the new social housing policy, targeting mechanisms were introduced to ensure that funds are allocated to poor households with high rates of poverty and vulnerability (including indigenous peoples, older populations, female-headed households, households in marginalized regions (in the south) and those most exposed to natural disasters including those stemming from climate change.

The analytical underpinnings of this prior action came from the: (i) World Bank (2019 - 2020). Advisory Services and Analytics (ASA)/Technical Assistance (TA) on *Resilient and Inclusive Housing in Mexico*; (ii) World Bank (2016): *Mexico Housing Policy and Housing Finance - Analysis and Recommendations to Improve the Efficiency of the Main Up-Front Subsidy Program*; and (iii) World Bank (2016): *World Bank Group Support for Housing Finance*. Independent Evaluation Group.

This prior action will likely help by providing greater resilience in communities hard-hit by the current crisis. Therefore, the relevance of this prior action is rated as satisfactory.

PA # 7. The Government, through the Secretariat of Agriculture and Rural Development (SEDATU) on May 8, 2020, amended the operational rules of the Urban Upgrading Program to support mid-sized cities severely affected by the pandemic and with large shares of vulnerable populations through improved targeting and planning mechanisms for urban investments that contributed to climate mitigation and adaptation, while at the same time creating jobs.

Mexico's partly unplanned urban expansion over the past decades exacerbated spatial inequalities. It led to neighborhood developments and towns disconnected from social and urban services, devoid of urban infrastructure, and highly exposed to natural disasters. As a result, many Mexican mid-sized cities had high rates of poverty. This was particularly so in the poorer states in the south/southeast of Mexico.

This prior action aimed at prioritizing support from SEDATU to mid-sized cities and municipalities' urban infrastructure, mainly in the south/southeast of Mexico. The analytical underpinnings of this prior action were based on: (i) World Bank (2019 - 2020): ASA/TA on *Resilient and Inclusive Housing in Mexico*; and (ii) World Bank (2016). *Mexico Urbanization Review: Managing Spatial Growth for Productive and Livable Cities in Mexico, Directions in Development*. Targeted measures to expand urban planning capacities were likely to help increase urban resilience. Therefore, the relevance of this prior action is rated as satisfactory.

PA # 8. The Government, through the Secretariat of Agriculture and Rural Development (SEDATU) on April 2, 2020, established new operational rules for the National Reconstruction Program to ensure that improvements made to housing, education, and health facilities damaged by the earthquakes of 2017 and 2018 have increased resilience to natural disasters.

More than 180,000 housing units were either partially damaged or destroyed in the wake of the earthquakes of 2017 and 2018. Damages were concentrated in the southeastern part of Mexico, which already had Mexico's highest poverty rates. This prior action sought to support a new policy designed for "building back better" the damaged infrastructure with greater resilience to natural disasters, including those stemming from climate change.

The analytical underpinnings of this prior action were sound and based on: (i) World Bank (2019): ASA/TA on *Resilient and Inclusive Housing in Mexico*; and (ii) World Bank (2019):, *Improving Housing Resilience -*



Synthesis Report. Upgrading/reconstructing houses damaged by the earthquake and improving the structural integrity of housing units are likely to help strengthen resilience in the face of future natural disasters and climate change-related events. Therefore, the relevance of this prior action is rated as satisfactory.

The causal links between most of the prior actions under both the pillars, the intended program results, and their long-term outcomes were clear, direct, and logical. Both parts of the PDO were clearly stated, the first on strengthening environmental sustainability and climate resilience in agriculture, forestry, and local government development, and the second on expanding access to resilient urban infrastructure and social housing. The environmental sustainability measures supported critical areas for some of Mexico's key environmental challenges such as avoiding deforestation, reducing greenhouse gas (GHG) emissions, improving communication of air quality monitoring communication and protecting forests. The prior action aimed at improving climate resilience in highly vulnerable municipalities was problematic since this prior action only required SEMARNAT to establish guidelines for guiding the municipalities to prioritize climate adaptation measures. Since the guidelines were not mandatory, they may not be sufficient to enforce critical adaptation measures by municipalities effectively. The measures of the second pillar ensured support to municipalities and households with high rates of poverty and vulnerability, increasing their access to resilient urban infrastructure and social housing.

The prior actions, including upstream and downstream activities (such as in municipalities and cities), were based on solid analytical underpinnings. The PDOs were highly relevant to the Government and Bank strategy for Mexico. **Therefore, the relevance of the design is rated as satisfactory.**

Rating

Satisfactory

4. Relevance of Results Indicators

Rationale

Pillar # 1. Strengthening environmental sustainability and resilience in agriculture, forestry, and local government development. There were five results indicators (RIs) for this pillar.

RI # 1. This indicator measured the number of farmers receiving deforestation-free support under the agricultural support program. This indicator which measured the reach of the program (a proxy for the social and environmental size of the impact), clearly showed the contribution of the PA towards realizing the PDO objectives of strengthening environmental sustainability and resilience. Therefore, the relevance of this RI is satisfactory.

RI # 2. This indicator measured the percentage of national GHG emissions regulated under an aggregated annual GHG emissions cap when the operation closed. This indicator was directly related to Mexico's commitments to the Paris Agreement for strengthening environmental sustainability. Therefore, the relevance of this RI is satisfactory.



RI # 3. This indicator measured the number of Mexican cities with a population of over two million that had: (i) an operational air quality network; and (ii) the cities publicly disseminated information on air quality throughout the year. This indicator was directly related to the prior action of addressing human health impacts of air contamination. Therefore, this RI is rated as satisfactory.

RI # 4. This indicator measured the share of highly climate-vulnerable municipalities that adopted measures to improve their adaptive capacity to climate change. This indicator sought to measure the increase in climate change adaptation capacities of the vulnerable municipalities necessary to increase resilience.

However, while this indicator has good intentions in aiming to measure the increased climate responsiveness/ adaptive capacity of the municipalities, it fell short of its ambition. The definition of capacity is not well-defined and may vary across municipalities. The indicator only counted municipalities that have adopted at least one measure. A more appropriate approach would have been to target certain basic threshold of measures across the municipalities, which would demonstrate increased capacity. Moreover, the target for this indicator at 5% was conservative. Therefore, this results indicator is rated as moderately satisfactory.

RI # 5. This indicator measured the increase in the conservation area of the urban forest. This indicator, which aimed to measure the forest area protected by the change in the Forest Law definition, was directly attributable to the PA of environmental sustainability and resilience around urban areas and appropriate for achieving objectives. Therefore, this indicator is rated as satisfactory.

Pillar # 1. Expanding access to resilient urban infrastructure and social housing. There were four results indicators for this pillar.

RI # 6. This indicator measured the number of targeted poor households receiving benefits through the Social Housing Program. The number of poor households receiving benefits under the program (including indigenous peoples, older populations, female-headed households, households with marginalized regions in the south, and those most exposed to natural disasters, including those stemming from climate change) was directly attributable to the prior action and appropriate to the intended outcome of expanding access to resilient social housing. Therefore, the relevance of this indicator is satisfactory.

RI # 7. This indicator measured the number of targeted people who received benefits under the enhanced Urban Upgrading Program. The number of poor people who received benefits under the program was directly attributable to the prior action of supporting the poorer segments of the population in mid-sized cities. The indicator was verifiable and appropriate for the intended outcome of expanding access to resilient urban infrastructure. Therefore, the relevance of this results indicator is rated as satisfactory.

RI # 8. This indicator measured the number of households living in units damaged by the earthquakes in 2017 and 2018 who received technical and financial assistance through the National Reconstruction Program. This indicator was directly attributable to the prior action of "building back better" the damaged infrastructure with greater resilience to natural disasters, including those stemming from climate change. The indicator could be verified and was appropriate for measuring the intended outcome of expanding access to resilient urban infrastructure. Therefore, this indicator is rated as satisfactory.

Ri # 9. This indicator measured the share of female beneficiaries affected by the 2017 and 2018 earthquakes and received technical and financial assistance through the National Reconstruction



Program. As discussed above, this indicator was directly related to the prior action and appropriate for monitoring the PDO. Therefore, this indicator is rated as satisfactory.

The indicators were clearly defined and measurable. They could be verified. The data sources and the methodology for calculations were specified at appraisal. Targets were generally set using the best available information at the time of their definition. The indicators were attributable to the prior actions and appropriate for monitoring performance. Therefore, the overall relevance of results indicators is rated as satisfactory.

Table: Results framework indicating Prior Actions (PAs), targets, results, and the status of achievement of results.

RIs	Associated PAs	RI Relevance	Baseline (including targets)	Target (including units and dates)	Actual value of target	Actual change in target relative to targeted change	RI achievement rating
PDO (i) Strengthening environmental sustainability and resilience							
RI # 1. Number of farmers provided with deforestation-free agriculture support	PA # 1	Satisfactory	Baseline (01/2020): 0	Target (12/2021): 2.8 million	Actual (12/2021): 2.15 million	77% of the target	Substantial
RI # 2. Share of national GHG emissions regulated under an aggregated CHG cap	PA # 2	Satisfactory	Baseline (01/2020): 0%	Target (12/2021): 40%	Actual (12/2021): 37%	92.5% of the target	Substantial
RI # 3. Share of cities with a population of more than two million that: (i) had an air quality network in operation; and (ii) publicly disseminated information throughout the year	PA # 3	Satisfactory	Baseline (01/2020): 0	Target (01/2021): 100%	Actual (12/2021): 100%	Target realized	Substantial
RI # 4. Share of highly climate vulnerable municipalities that adopt measures to improve their adaptive capacity to climate change	PA # 4	Moderately Satisfactory	Baseline (01/2020): 0	Target (01/2021): 5%	Actual (12/2021): 16%	320% of the target	Substantial
RI # 5. increase in conservation area of urban forest	PA # 5	Satisfactory	Baseline (01/2020): 0	Target (12/2021): 1,000,000 ha	Between 1.42 million ha and 3.94 million ha	Target exceeded	High
PDO (ii) Expanding access to resilient urban infrastructure and social housing							



RI # 6. # of beneficiary households of the reprioritized Social Housing Program	PA # 2	Satisfactory	Baseline (01/2020): 0	Target (12/2021): 165,000	135,104	82% of the target.	Substantial
RI # 7. # of beneficiaries under enhanced Urban Upgrading Program	PA # 2	Satisfactory	Baseline (01/2020): 0	Target (12/2021): 1,078,000	5,211,922	483% of the target	High
RI # 8. # of households living in units damaged by the 2017 and 2018 earthquakes that receive technical and financial assistance through the National Reconstruction Program	PA # 2	Satisfactory	Baseline (01/2020): 0	Target (12/2021): 20,000	18,602	93% of the target	Substantial
RI # 9. Share of female beneficiaries affected by the 2017 and 2018 earthquakes supported under the National Reconstruction Program	PA # 2	Satisfactory	Baseline (01/2020): 0%	Target (12/2021): 52%	52.7%	101% of the target	Substantial

Rating

Satisfactory

5. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

Strengthening environmental sustainability and resilience.

PA # 1 -5. RIs # 1 -5.

Rationale

Theory of Change. The causal links between the pillars, the prior actions, and the intended outcomes were clear and logical. Since Mexico is highly vulnerable to increasing climate variability and extreme weather events (such as cyclones, heat waves, and floods), reforms aimed at protecting small-scale agricultural production and forests to safeguard the income opportunities of the rural population while protecting forests which are essential to the national efforts to mitigate climate change, enabling Mexico to meet its commitments under the Paris Agreement, reducing air pollution and supporting the adaptation capacity of the vulnerable municipalities to climate change impacts, were likely to strengthen the environmental sustainability and resilience of Mexico to increasing climate variability and susceptibility to extreme weather-related events,

Outcomes.



- 2.15 million farmers received deforestation-free agricultural support under the program. This represented 77% of the target of 2.80 million farmers. The program reached 6.3 million hectares (ha) of agricultural land with products not included in this type of support program before (such as amaranth, chia, cocoa, coffee, and honey). The target was not reached on account of the government's decision to include biodiversity-friendly production systems that are usually developed in large land plots. The ICR (para 27) noted that although the program focused on small-scale farmers who owned a maximum of 20 ha. However, within this threshold, the program included slightly larger lands than projected at appraisal to allow for biodiversity-friendly systems.
- 37% of national GHG emissions were regulated under an aggregated annual GHG emissions cap, representing 92.5% of the specified target of 40%. A national GHG Emissions Trading System (ETS) pilot was operational in 2021. The reform contributed to consolidating a market-based instrument for mitigating climate change and attaining Mexico's Nationally Determined Contribution (NDC) to the Paris Agreement.
- Six cities with a population of over two million monitored air quality as per the target (including the metropolitan areas of Mexico City, Guadalajara, Guanajuato, Monterrey, Puebla-Tlaxcala Toluca, and Tijuana). This information was disseminated through the National Air Quality Information System (SINAICA) website. In addition, three cities with a population of under two million (Ensenada, Leon, and Queretaro) monitored air quality. According to the recent demographic census (2020), the total population of metropolitan areas in Mexico with air quality monitoring surpassed 43 million people when the operation closed.
- 16% of the highly climate-vulnerable municipalities adopted measures to improve their adaptive capacity to climate change, exceeding the specified target of five percent. The ICR (para 30) observed that the initial target was exceeded because, during project preparation, there was high uncertainty regarding several variables related to policy, political decisions, and other context changes in the municipalities. Hence, the Bank team decided to stick to a conservative estimate of the target that could realistically reflect the size of expected change given the available information at that time.
- Between 1.42 million hectares and 3.94 million hectares of forest area entered conservation under urban and urbanization reserves categories, exceeding the specified target of one million hectares.

Given that most of the outcomes were realized, the efficacy of this PDO is rated as satisfactory.

Rating

Satisfactory

OBJECTIVE 2

Objective

Expanding access to resilient urban infrastructure and social housing.

PA # 2. RIs # 6 - 10.

Rationale

Theory of Change. The causal links between the prior actions and intended outcomes were clear and logical. Since Mexico has a housing deficit and the existing housing stock of many vulnerable households is susceptible to natural events, targeting mechanisms aimed to ensure funds are allocated to poor households,



vulnerable populations, and those exposed to natural disasters (including those stemming from climate change). Reforms aimed at enabling targeted financial and technical support for resilient urban infrastructure and to mid-sized cities (particularly in the southeast of the country), supporting a new policy that enabled the national capacity to "build back better" (that is, with greater resilience to natural shocks (including those that are climate-related), are likely to aid in expanding access to resilient urban infrastructure and social housing.

Outcomes.

- 135,105 households benefitted from the Social Housing Program, representing 82% of the target of 165,000 households. The shortfall in the target was due to pandemic-related capacity constraints and a reduction in the National Housing Commission's budget during 2020. The program reached poor and vulnerable households (targeting indigenous peoples and women-headed households).
- 5,211,922 people benefitted from the enhanced Urban Upgrading Program, exceeding the specified target of 1,078,000 (483% of the target). The target was exceeded due to two reasons: One, the Program's budget increased substantially during 2020 above what was initially approved by Congress; and two, operational rules regarding the program were amended during 2020 to increase the number of beneficiary cities by adjusting the eligibility criteria for cities (and incorporating smaller localities).
- 18,602 households living in units damaged by the 2017 and 2018 earthquakes received technical and financial assistance through the National Reconstruction Program in 2020, slightly short of the specified target of 20,000. The shortfall in the target was due to a reduction of resources allocated to the National Reconstruction Program during 2021 due to pandemic-related budget cuts. The program supported the reconstruction of housing units for vulnerable households damaged by the 2017 and 2018 earthquakes in south-southeast and central Mexico.
- 52.7% of the beneficiaries of the National Reconstruction Program were female, slightly exceeding the target of 50%.

Given that the outcomes were realized, for the most part, the efficacy of this PDO is rated as satisfactory.

Rating

Satisfactory

Overall Achievement of Objectives (Efficacy)

Rationale

The achievements of the ten indicators were rated as substantial or better. Therefore, overall efficacy is rated as satisfactory.

Overall Efficacy Rating

Satisfactory



6. Outcome

Rationale

The operation's development objectives are relevant to the Government strategy and the Bank strategy for Mexico. The prior actions were based on solid analytical underpinnings and were appropriate along the results chain for realizing the intended objectives of: (i) strengthening environmental sustainability and resilience; and (ii) expanding access to resilient urban infrastructure and social housing. The results indicators were appropriate for assessing the operation's performance. The relevance of design is rated as satisfactory. Overall efficacy was rated as satisfactory. Outcome is rated as satisfactory.

a. Rating

Satisfactory

7. Risk to Development Outcome

Government commitment. The ICR (para 53) observed that the government's commitment to fostering environmental sustainability and resilience and social housing remains high. Some prior actions of this operation were strengthened with further legal reforms. For instance, in April 2021, the Forest Law was modified to specify that no federal, state, or municipal institution could provide economic support to lands without proper land use change authorization from the Secretariat of Environment and Natural Resources (SEMARNAT). This law widened the scope of non-deforestation provision to all other government support programs.

The ICR noted that an adequate budget would be necessary to enforce these provisions. Although the environmental budget for 2022 and 2023 increased compared to 2021, the increase was mainly for water infrastructure. There was no real increase for the SEMARNAT and the National Institute for Ecology and Climate Change (INECC).

8. Assessment of Bank Performance

a. Bank Performance – Design

Rationale

The Bank prepared this operation based on the lessons from previous Bank-financed DPF operations in Mexico. The analytical underpinnings of the prior actions were sound and based on the World Bank's Systematic Country Diagnostics (2018), World Bank's ASA/TA work, and other analytical work conducted by the Bank and other development partners (discussed in detail in section 3). The Bank prepared this



operation in close collaboration with other development partners, including agencies from the United Kingdom, France, and Germany governments.

As discussed in Section 3, most prior actions were appropriate along the results chain for realizing the intended objectives.

The Bank identified several risks during preparation, such as substantial macroeconomic risk and the uncertainty associated with the duration of the pandemic and its economic, social, and health ramifications. The overall risk for the operation was rated as substantial. The Bank incorporated several mitigation measures. These measures proved adequate as the operation's performance was not undermined by the risks identified at appraisal.

Rating

Satisfactory

b. Bank Performance – Implementation

Rationale

The Bank maintained continuous communication with the implementing institutions and the technical teams to identify information needs and provided additional technical assistance (TA) when needed (such as providing TA on forest protection for prior action five). The Bank team reviewed progress in the implementation of the reform program through periodic reports from the government and the consultants. This process, besides providing robust information, also helped in generating additional data to better understand the results and impacts of the supported policies.

Rating

Satisfactory

c. Overall Bank Performance

Rationale

Overall Bank performance is rated as satisfactory.

Overall Bank Performance Rating

Satisfactory

9. Other Impacts



a. Social and Poverty

The ICR (para 37) notes that the policy measures supported by the program are likely to have a positive social impact on poor populations in the short, medium, and long terms. For instance, the improvement in the adaptation capacities of vulnerable municipalities to climate change is expected to improve marginalized populations' resilience and living conditions. The prior action benefitted mainly small landholders in rural areas. The amendments to the operational rules of the Urban Upgrading Program and the Social Housing Program addressed the housing needs of Mexico's poorest households and communities.

b. Environmental

The ICR (para 41) noted that policy measures under prior action one had positive effects on environmental conservation and natural resource management. The policy measures under prior action five aimed to avoid deforestation.

c. Gender

The policy supported under prior action one reached 2.15 million farmers, of which 33% were women.

d. Other

One important unintended impact of this DPF operation are the lessons learned from the implementation of the mechanism to avoid deforestation through agricultural support programs. This experience provided the knowledge, tools and institutional capacities that could be shared with other institutions at the federal, state and municipal level.

10. Quality of ICR

Rationale

The ICR is concise and very well-written. The ICR discusses the causal links between the prior actions under both pillars, the intended program results, and their long-term outcomes. The ICR provides a clear analysis of the results indicators and how these indicators were appropriate for monitoring the operation's performance. The quantitative evidence provided in the ICR is adequate to assess project performance. Where necessary, the ICR provides additional information, enabling the reader to assess the operation's performance better. The ICR draws suitable lessons from the experience of implementing this operation.



A minor shortcoming was that the narrative focused mainly on the short-term results, with only brief descriptions of the sustainability of the development outcomes. Overall, the quality of the ICR is rated Substantial.

a. Rating

Substantial

11. Ratings

Ratings	ICR	IEG	Reason for Disagreement/Comments
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Relevance of Results Indicators	---	Satisfactory	
Quality of ICR	---	Substantial	

12. Lessons

The ICR draws the following main lessons from the experience of implementing this operation.

- 1. Close collaboration by the Bank with the Government can help contribute to an operation's performance, even in social and challenging times like the COVID-19 pandemic.** The Government of Mexico, in this operation, modified operational rules and streamlined administrative procedures during the emergency. This enabled effective collaboration with beneficiaries while adhering to social distancing guidelines.
- 2. Complementing supervision activities with additional efforts can help increase the quality of monitoring of the outcomes of the prior actions.** In this operation, some of the selected results indicators for this operation required new data. The Bank responded to this by providing additional technical assistance. The new data proved invaluable as the generated information helped the stakeholders understand the positive impacts of these policies.
- 3. Prioritizing support using key development indicators can help maximize social impacts.** In Mexico, 30 million people are considered vulnerable due to social deprivations such as a lack of adequate housing and access to basic services. Given the scale of support needed, federal urban and housing programs need to be appropriately designed to target the vulnerable population. To this end, the policies supported under this operation introduced robust prioritization criteria for support based on household characteristics (such as poverty levels, social vulnerability, and exclusion).

13. Project Performance Assessment Report (PPAR) Recommended?



No