



# Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 12-Sep-2023 | Report No: PID111



**BASIC INFORMATION**

**A. Basic Project Data**

Project Beneficiary(ies) Brazil	Operation ID P500431	Operation Name Agroecology and Sustainable Rural Development in Pernambuco	
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date 29-Apr-2024	Estimated Approval Date 05-Sep-2024	Practice Area (Lead) Agriculture and Food
Financing Instrument Investment Project Financing (IPF)	Borrower(s) Government of Pernambuco	Implementing Agency SEMAS - Secretariat of Environment, SDA - Secretariat of Agrarian Development , SEPLAG - Secretariat of Planning	

**Proposed Development Objective(s)**

The proposed Project Development Objectives (PDOs) are to increase the adoption of Agroecological and Climate-Smart Agriculture (CSA) practices by the targeted family farmers, and the restoration of natural resources in selected rural areas of the State of Pernambuco; and, in case of an Eligible Crisis or Emergency, to respond promptly and effectively to it.

**PROJECT FINANCING DATA (US\$, Millions)**

**Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)?	No
Is this project Private Capital Enabling (PCE)?	Yes

**SUMMARY**

<b>Total Operation Cost</b>	<b>62.50</b>
<b>Total Financing</b>	<b>62.50</b>
<b>of which IBRD/IDA</b>	<b>50.00</b>
<b>Financing Gap</b>	<b>0.00</b>

**DETAILS**



<b>World Bank Group Financing</b>	
International Bank for Reconstruction and Development (IBRD)	50.00
<b>Non-World Bank Group Financing</b>	
Counterpart Funding	12.50
Local Govts. (Prov., District, City) of Borrowing Country	12.50
Environmental and Social Risk Classification	Concept Review Decision
Moderate	The review did authorize the preparation to continue

## B. Introduction and Context

### A. Country Context

#### Brazil Context

- After a strong rebound in 2021 and 2022 from the COVID-19 crisis, driven by the vaccination campaign and federal income support to the poor, growth in Brazil remained solid in Q1 2023.** GDP grew 1.9 percent on a quarter-on-quarter basis in 2023, mainly driven by the strong growth in agriculture. On the demand side, household consumption and government consumption registered 0.2 percent and 0.3 percent growth, respectively, due to the fiscal stimulus and income transfer’s support, and despite the monetary tightening and higher families’ indebtedness. CPI-inflation moderated to 3.2 percent in June 2023 from 12.1 percent in April 2022, falling within the inflation target interval (3.25 percent with a +/-1.5 tolerance interval). In August 2023, the Brazilian Central Bank (BCB) lowered the policy interest rate from 13.75 percent, where it had stood since September 2022, to 13.25 percent, and it is expected to continue to reduce it in the second semester of 2023. The 12-months current account deficit stood at 2.5 percent of GDP in May 2023, fully financed by net FDI inflows at 2.8 percent of GDP. International reserves stood at 17.3 percent of GDP (US\$ 343.5 bn) in May 2023. The exchange rate appreciated between 2021 and June 2023, from R\$/US\$ 5.58 to R\$/US\$ 4.82. After the improvement observed in 2022, fiscal balances have shown signs of deterioration in 2023 as one-off revenues vanished and social transfers increased. The 12-month primary surplus of the public sector reached 0.4 percent of GDP in May 2023, from 1.3 percent of GDP in 2022.
- Poverty and inequality in Brazil are projected to have decreased in 2022.** A stronger labor market and the major expansion of income transfer programs in terms of coverage (48 percent growth in 2022) and average benefits (170 percent growth in 2022) are expected to have led to a decline in the poverty rate from 28.4 percent in 2021 to 24.3 percent in 2022 (Poverty line = US\$6.85/day, 2017 PPP). Moreover, the overhaul of the flagship cash transfer program is estimated to have raised the income of the bottom 40 percent by 7 percent (2.2 percent annually) relative to its pre-pandemic level. Inequality is predicted to have slightly dropped from 0.535 in 2019 to 0.523 in 2022. Further



reductions in the poverty rate may occur if the economy recovers more quickly but remains volatile in the absence of stronger investments in human capital among the less well-off.

3. **Brazil faces significant climate change impacts compounded by deforestation and land degradation.** Climate change is altering temperature and rainfall patterns in the country, resulting in reduced water availability and extended droughts, and could push another 800,000 to 3 million Brazilians into extreme poverty as soon as 2030. Continued deforestation in the Amazon and Cerrado biomes remains a matter of urgency, as it has increased land-use emissions - the main source of greenhouse (GHG) emissions in Brazil. Strengthening resilience to climate change and protection of natural assets, especially the fragile ecosystems of the Amazon and Cerrado, is essential for environmentally sustainable economic growth.

### State Context

4. **Pernambuco is located in the Northeast region of Brazil and has an economy mostly based on services, with modest growth over the past two decades.** Pernambuco accounted for 1.2 percent of Brazil's territory, 4.5 percent of its population and 2.6 percent of its GDP in 2022. About 80 percent of the State's territory is semiarid<sup>1</sup>, which has been considered a constraint for socio-economic development.<sup>2</sup> Its economy heavily relies on the services sector (75 percent of the GDP as of 2022). Between 2002 and 2020, Pernambuco's economy grew at an average of 2.2 percent/year, like Brazil as a whole.<sup>3</sup> Pernambuco is the 10<sup>th</sup> largest economy among Brazil 27 federal units, its GDP/capita of R\$20,101 in 2020 occupies the 20<sup>th</sup> place nationwide and 3<sup>rd</sup> place among the 9 Northeast states.
5. **Pernambuco's population is mostly urban, while its rural residents are particularly vulnerable to water scarcity.** The State has a population of 9.67 million inhabitants, of which 83 percent is urban and mostly located near the coast.<sup>4</sup> Population is expected to peak at 10.37 million in 2044 and then start to decline.<sup>5</sup> While Pernambuco's urban population has been increasing, its rural one shrunk by 12 per cent over the past 20 years, from 1.83 million in 2000 to 1.6 million in 2019. This has been attributed to rural-urban migration as cities offer better services, including water supply and sanitation (WSS), and better economic opportunities than rural areas. Most of the rural population relies on agriculture and animal husbandry for its livelihood, which is generally of low productivity and vulnerable to droughts, with limited potential for irrigation due to water scarcity.
6. **Pernambuco is among the poorest states of Brazil.** In 2021, Pernambuco had the 4<sup>th</sup> highest poverty rate among the 27 states of Brazil and the 3<sup>rd</sup> of the Northeast region, with about 50 percent of its population below the poverty line, against about 30 percent for Brazil as a whole.<sup>6</sup> Extreme poverty rate in rural areas is more than double the rate in cities (23 percent against 10 percent with extreme poverty below US\$2.15/day, 2017 PPP). During the pandemic, between 2019 and 2021, Pernambuco's poverty increased by 8.14 points, the highest rise among Northeast states.<sup>8</sup> The average monthly household per capita income (R\$1,010) is among the lowest in the country, as Pernambuco stands at 24<sup>th</sup> among the 27 entities of the federation in 2022<sup>7</sup>. Poverty is concentrated in rural areas, characterized in many cases by low-productivity agriculture, as described below. Its Human Development Index (HDI) was 0.673 in 2010, ranked 19<sup>th</sup> in Brazil. Food insecurity remains a major problem in the State of Pernambuco, reaching 59.1 per

<sup>1</sup> The semiarid zone is an area that is defined by both a minimal amount of annual rainfall (i.e., 800 millimeters per year on average) and a concentration of that rainfall during only a few months per year. (World Bank, Living with the Semi-Arid and Proactive Drought Management In Northeast Brazil: a New Perspective, 2015)

<sup>2</sup> World Bank, Growth and Poverty Reduction in Pernambuco: Developing a Sustainable Development Framework, 2002

<sup>3</sup> IBGE. Sistema de contas regionais: Brasil 2020.

<sup>4</sup> IBGE. <https://cidades.ibge.gov.br/brasil/pi/panorama> [Access on 03.09.2023]

<sup>5</sup> IBGE, population projections, edition 2018.

<sup>6</sup> "Mapa da Nova Pobreza", Marcelo Neri – 40 págs., Rio de Janeiro, RJ – junho/2022 - FGV Social. <https://cps.fgv.br/MapaNovaPobreza>

<https://cps.fgv.br/en/NewPovertyMap>. The poverty line is estimated at R\$497 a day (equivalent to USD5.5/day, 2021 PPP). The states with higher poverty rates are Maranhão (57.90 per cent), Amazonas (51.42 per cent) and Alagoas (50.36 per cent).

<sup>7</sup> IBGE. <https://cidades.ibge.gov.br/brasil/pi/panorama> [Access on 02.03.2023]



cent<sup>8</sup> according to the II National Survey of Food and Nutritional Insecurity (2022). The access to food for residents of rural areas is even worse compared to urban areas, with food insecurity there reaching more than 60 per cent of rural households and acute insecurity, 18.6 per cent<sup>9</sup>. Recent data indicate that, in 2018, 1.5 million families (approximately 4.8 million people) in Pernambuco lived with some degree of food insecurity<sup>10</sup>. Following the national trend, this situation worsened in the context of the COVID-19 pandemic.

7. **In Pernambuco, family farming<sup>11</sup> holdings constitute the vast majority (82.6 per cent) of agricultural and livestock production units, much like almost the entire country<sup>12</sup>.** It is noteworthy that family farming represents a significant portion of the land, accounting for 51.9 per cent of the area. According to the 2017 Agricultural Census, the number of individuals employed in family farming holdings in Pernambuco exceeds 578,000. Taking into account all family members involved, this social group includes nearly one million people<sup>13</sup>, a tenth of the state population.
8. **In Pernambuco, climate change has impacted the well-being of its population, economy and environment principally through increased droughts, floods and water scarcity risks.** The Country Climate and Development Report (CCDR) for Brazil notes that the projected warmer climate could convert the semiarid Northeast into an arid region, and impact water availability for all uses, commercial and subsistence farming as well as population health, potentially forcing more people to migrate to other regions. Moreover, climate change coupled with deforestation has been a driver for desertification in rural areas.

## B. Sectoral and Institutional Context

9. **Agriculture is fundamentally important to Pernambuco's rural economy.** Even if agriculture accounts for only 4.8 percent of the state's GDP, it is the main source of economic activities in rural areas, particularly for smallholding family farmers. The agricultural sector provides work for 779,727 individuals and is directly related to food and nutritional security. According to the latest Agricultural Census, Pernambuco has 281,688 farms or agricultural production units, covering nearly 4.5 million hectares<sup>14</sup>. Around 83 percent of these farms are considered family farms (most of which are smallholders, with less than 20 ha), fulfilling the four criteria set out in the Brazil's Farming Law (Law 11.326/2006)<sup>15</sup>. These family farms work on 2.3 million hectares (or 52 percent of the area), and account for 37.3 percent of the Gross Production Value (GPV). Pernambuco's main agricultural products are sugar cane, grapes, mango, banana, cassava, corn, tomatoes, and beans. Animal rearing is also important in Pernambuco, including large herds of cattle, sheep and goats, as well as poultry.
10. **Pernambuco has a very significant number of Indigenous Peoples, Quilombolas, and other Traditional Peoples and Communities (PIPCT per the Brazilian acronym).** According to the Palmares Cultural Foundation, there are 47

<sup>8</sup> Rede-PENSSAN. (2022). *II VIGISAN - Inquérito Nacional sobre Insegurança Alimentar no Contexto da Pandemia da Covid-19 no Brasil. Suplemento I: Insegurança Alimentar nos estados*. Retrieved from <https://olheparaafome.com.br/wp-content/uploads/2022/09/OLHEEstados-Diagrama%CC%A7a%CC%83o-V4-R01-1-14-09-2022.pdf> [Access on 21/07/2023]

<sup>9</sup> Idem, as above.

<sup>10</sup> IBGE. Pesquisa de Orçamento Familiar (POF). 2018.

<sup>11</sup> fulfilling the four criteria set out in the Brazil's Farming Law (Law 11.326/2006). It defines family farmers as follows: (i) does not have under any tenure regime an area of more than four fiscal modules; (ii) predominantly relies on its own family labor; (iii) household income predominantly originates in the family farm; and (iv) family members operate the farm.

<sup>12</sup> SETTE, A. B. P.; FORTINI, R. M.; BRAGA, M. J. *Um novo retrato da agricultura familiar do estado de Pernambuco [recurso eletrônico] : a partir dos dados do censo agropecuário 2017*. Viçosa, MG: IPPDS, UFV Disponível em: [www.aksaam.ufv.br](http://www.aksaam.ufv.br), 2021. Disponível em: [www.aksaam.ufv.br](http://www.aksaam.ufv.br).

<sup>13</sup> Idem, as immediately above.

<sup>14</sup> IBGE. Censo Agropecuario 2017.

<sup>15</sup> Law 11.326 (2006) defines family farmers as follows: (i) does not have under any tenure regime an area of more than four fiscal modules; (ii) predominantly relies on its own family labor; (iii) household income predominantly originates in the family farm; and (iv) family members operate the farm.



quilombola communities (CRQ) in Pernambuco<sup>16</sup>, with an estimated 54,411 inhabitants (in 2020)<sup>17</sup>. There are also at least 12 Indigenous Territories (ITs) registered in the state, in different phases of demarcation procedure and occupying an area of 190,000 hectares<sup>18</sup>. According to the IBGE, the indigenous population living in ITs in Pernambuco was estimated at 80,000 inhabitants (for 2020). The Project will seek to work with part of these populations of Indigenous and Traditional Peoples and Communities<sup>19</sup>.

11. **Women in Pernambuco's rural areas face strong specific challenges.** Women are important social actors, particularly in the family farming sector, as 85 percent of women living in rural areas in Brazil regularly engage in agricultural activity. However, very significant gender inequalities exist, particularly for smallholder women farmers in rural settings. Current challenges include: (i) lower access to productive inputs, credit and land than men; (ii) insufficient access to information, technical assistance and extension services; and (iii) less time available to participate in learning events and producer organizations. Women farmers in Pernambuco face a number of gender-based constraints. Only 28 percent of rural producers who run agricultural establishments are women<sup>20</sup>.
12. **Family farming in Pernambuco is characterized by a low productivity, reduced production and high climate change vulnerability.** Peasant families in the state of Pernambuco are numerous and many work on small and often degraded areas. But the general trend, based on the needs of these farming families, has been the search for an intensification of production on their land, motivated by low productivity (and frequent harvest losses). Often, there has been the expansion of the traditional 'roçado' agricultural system, cultivated repeatedly on the same plots of land, eliminating rotation and the natural recovery of fertility by letting land lie fallow. In the search for innovations, the installation of monocultures, including pastures, has expanded significantly (often with buffel grass, in the semiarid region). These processes have made systems even more susceptible to the effects of droughts, thus increasing their vulnerability to the effects of climate change. The use of main-stream agricultural technologies, such as limestone and fertilizer application, is limited, with 38.7 percent of family farmers in the State using some sort of fertilizer and 22.1 percent using pesticides<sup>21</sup>. 13.4 percent of Pernambuco farms use irrigation<sup>22</sup>. Few farmers have implemented innovative climate-smart technologies or productive systems, such as adequate water harvesting systems or agroforestry plots. Underlying these low rates is a limited access to adequate new technologies and inputs, extension services (only 6 percent of family farms accessed this kind of service) and investments (only 4.5 percent of family farmers in the State access credit).<sup>23</sup>
13. **The state of Pernambuco faces important challenges in terms of environmental degradation.** As a result of increasingly intensive human occupation, the state of Pernambuco has lost a significant part of its original vegetation cover, both in the domain of the Atlantic Forest biome<sup>24</sup> and in that of the Caatinga biome<sup>25</sup>. Confirming this information, a recent study by SEMAS<sup>26</sup> states that the vegetation of the Semi-Arid zone biome has been greatly

<sup>16</sup> F. Cultural Palmares. Comunidades Certificadas: Certidões expedidas às comunidades remanescentes de quilombos (CRQ). Available at: <https://www.palmares.gov.br/wp-content/uploads/2015/07/quadro-geral-por-estados-e-regioes-30-06-2022.pdf>. [Access on 22/07.2023]

<sup>17</sup> IBGE. Dimensionamento emergencial de população residente em áreas indígenas e quilombolas para ações de enfrentamento à pandemia provocada pelo Coronavírus: subsídios para o Ministério da Saúde visando ao Plano Nacional de Operacionalização da Vacinação contra a COVID-19. Rio de Janeiro, 2020. Available at: <https://biblioteca.ibge.gov.br/index.php/biblioteca/catalogo?view=detalhes&id=2101859>. [Access on 25/05/2023]

<sup>18</sup> ANAI. Monitoramento Terras Indígenas no Leste e Nordeste do Brasil. Salvador, Associação Nacional de Ação Indigenista, 2021. Available at: <https://drive.google.com/file/d/1jxLwqplboSWlpySjotdNt623SeRtFXP/view> [Access on 02.08.2023]

<sup>19</sup> For more detailed information on PIPCT, please consult Annex 8

<sup>20</sup> IBGE. Censo Agropecuário 2017. Apud Sette, A. B. P., Fortini, R. M., & Braga, M. J. (2021). *Um novo retrato da agricultura familiar do estado de Pernambuco [recurso eletrônico]: a partir dos dados do censo agropecuário 2017*. Retrieved from [www.aksaam.ufv.br](http://www.aksaam.ufv.br) [Access on 19/06/2023]

<sup>21</sup> IBGE. 2017. Censo Agropecuario

<sup>22</sup> Idem.

<sup>23</sup> Idem.

<sup>24</sup> BRAGA, R.; COSTA JÚNIOR, A.; UCHOA, T. A Reserva da Biosfera da Mata Atlântica no Nordeste. In: 5º Congresso Nordestino de Ecologia, 1993, Natal, RN. – *apud* LIMA, M. L. F. d. C. **A Reserva da Biosfera da Mata Atlântica em Pernambuco. Situação atual, ações e perspectivas**. São Paulo: Conselho Nacional da Reserva da Biosfera da Mata Atlântica, 1998. 42 p. (Série 1 - Conservação e Áreas Protegidas)

<sup>25</sup> Cf. link: <https://www.diariodepernambuco.com.br/noticia/vidaurbana/2020/04/estudo-aponta-que-pernambuco-perdeu-mais-da-metade-da-caatinga.html>

<sup>26</sup> SECRETARIA-DE-MEIO-AMBIENTE-E-SUSTENTABILIDADE-DE-PERNAMBUCO. **Zoneamento das áreas suscetíveis à desertificação do estado de Pernambuco**. Recife, PE: 2020. 120 p.



altered due to anthropic action, showing land degradation process with systemic consequences and often cumulative effects. Deforestation is correlated with another problem: the processes of desertification. According to 2018 data, 40 per cent of the area studied had a severe degree of susceptibility. The binome: desertification and periodic droughts, aggravated by climate change, may result in a series of socioeconomic and productive challenges, such as increased unemployment, the worsening of migratory processes, the decrease in crop production, a greater concentration of income, and, consequently, worsening of food and nutritional insecurity.

14. **The state government has recently been working to implement a normative framework to mitigate the high level of vulnerability faced by family farmers.** In January 2021, the Legislative Assembly approved Law No. 17,158, which “institutes the State Policy for Agroecology and Organic Production and establishes the guidelines for the State Plan for Agroecology and Organic Production of the State of Pernambuco”. Once finished, it will define government policy and consequently the activities that will be put in place to support the transition from traditional family systems to agroecological and organic systems. In addition, Pernambuco created the Family Farming Purchasing Plan – PEAFF in 2020, in which the state procures food products from family farming with the goal of strengthening family farming, promoting economic and social inclusion, and supporting organic and agroecological production. In this domain, the State Policy for Coexistence with the Semiarid Region, the State Policy and Plan to Combat Desertification and Mitigate the Effects of Drought, the State Policy to Combat Climate Change in Pernambuco, as well as the Pernambuco Decarbonization Plan are to be noted.
15. **The implementation of the Environmental Registry of Rural Properties (CAR) in Pernambuco is ongoing (349,953 cadasters in the SICAR by April 2023, covering more than 7.4 million hectares).** Despite the progress in SICAR 's (the National System for Environmental Registry of Rural Properties) enrollment, which is based on farmers' self-declaration, the following steps are still necessary to achieve the CAR regularization: registries' analyses, resolution of data conflicts and inconsistencies; and support natural resources restoration plans. Challenges found by the State at this phase include: the high number and low quality of records, and scarce cartography data and technical and human resources to perform analyses, and support the preparation of restoration plans to meet the requirements of the Forest Code, as necessary.

### C. Relationship to CPF

16. **The project is fully aligned with the World Bank Group's (WBG) Brazil Country Partnership Framework (CPF - Report No. 113259-BR) for Brazil for the Period FY18-FY23 as revised by its Performance and Learning Review (PLR - Report No. 143636-BR).** The project will directly support Focus Area 3 (“Inclusive and Sustainable Development”), and is aligned with objective 3.1 “Support the achievement of Brazil’s Nationally Determined Contributions-NDCs with a particular focus on land use” through environmental restoration interventions in Pernambuco and expansion of continuous, efficient ATER services and objective 3.3 “Promote socio economic development of small rural producers and vulnerable groups” through investments in productivity enhancing, , infrastructure and access to water, value-adding and climate-resilient agricultural technologies, agroecological farming practices, access to certification processes and labels for organic and agroecological family agriculture products and increased market access through producers' organization.
17. **The proposed Project is also aligned with major World Bank priorities, such as closing the gender gap, increasing resilience to climate change, and achieving the Twin Goals.** The Project will apply a gender lens, by developing specific targeting approach to ensure outreach and capacity building tailored to women, as well as disaggregate beneficiary indicators to track their participation and to tackle some of the gender gaps identified following the WBG's Gender Strategy (2016-2023) and improve the economic vulnerability of women in rural Pernambuco. Gender gaps will also





be identified throughout the Project design phase to inform gender indicators to be proposed. Additionally, the Project will positively impact climate change adaptation, by the development of adaptation strategies in the agricultural sector with a view to ensuring food security and diagnosing vulnerability to climate change and will therefore contribute to the objectives set by the CCDR and World Bank Climate Change Action Plan. Overall, the Project will make a significant contribution to achieving the WBG's Twin Goals through an increase of agricultural and livestock productivity sustainably through agroecological practices and reduce economic vulnerability of farming families in the State of Pernambuco.

18. **Alignment with Government Objectives:** In addition to supporting the current administration program, the proposed Project is aligned with the State's longer-term Development Strategy for 2035<sup>27</sup>. It makes a direct and substantial contribution to two out of the five key strategic themes outlined in the Strategy. The first is enhancing the quality of life, achieved through the restoration of degraded lands and effective environmental management. The second is fostering prosperity by implementing value-added processes and commercialization strategies for organic and agroecological products stemming from family farming.

#### **D. Proposed Development Objective(s)**

The proposed Project Development Objectives (PDOs) are to increase the adoption of Agroecological and Climate-Smart Agriculture (CSA) practices by the targeted family farmers, and the restoration of natural resources in selected rural areas of the State of Pernambuco; and, in case of an Eligible Crisis or Emergency, to respond promptly and effectively to it.

#### **E. Key Results**

19. The achievement of the project development objectives will be measured through a combination of indicators that capture increased income, agricultural productivity, climate resilience, access to markets, and environmental enhancement. At the PDO level:
- Increase in adoption of agroecological and climate-smart agriculture (CSA) farming practices (Component 1);
  - Area (in hectares) restored and/or protected in the Project beneficiary farms (Component 2).

#### **F. Concept Description**

##### 1. Description

#### **Project Rationale**

20. Agroecology, as defined by the FAO<sup>28</sup>, offers a holistic and integrated approach that aligns with the goals and challenges presented by the Project. It involves the simultaneous application of ecological and social principles to create sustainable agri-food systems. By optimizing interactions between plants, animals, humans, and the

<sup>27</sup> Estratégia de Desenvolvimento de Pernambuco e Carteira de Projetos Públicos - Pernambuco 2035, 2014.

<sup>28</sup> A holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems. It seeks to optimize the interactions between plants, animals, humans and the environment while also addressing the need for socially equitable food systems within which people can exercise choice over what they eat and how and where it is produced.





environment, agroecology facilitates the design and management of resilient production systems. The agroecological practices and Climate-Smart Agriculture (CSA) approach supported by the Project will pursue the triple objectives of sustainably increasing productivity, adapting to climate change and reducing greenhouse gas emissions where possible. As highlighted by FAO<sup>29</sup>, this does not imply that every practice applied in every location in the Project should produce “triple wins”. Rather, the CSA approach will seek to reduce trade-offs and promote synergies by taking these objectives into consideration to derive locally-acceptable solutions.

### Proposed initiatives

21. The Project promotes a CSA and agroecological approach towards productive systems. They will have, as common features or principles, the enhancement of functional biodiversity, the constitution and management of stocks of productive resources and the intensive productive use of limited areas of high biological productivity<sup>30</sup>, materialized in diverse agroecosystems<sup>31</sup>. Special attention will be given to the topic of water harvesting and conservation, seeking to reinforce the 'water systems' of the family farms.

Concerning the environmental issues, the Project will implement a set of actions – such as initiatives to recover degraded areas, protect forest remnants, produce seedlings, etc. – which will aim to protect threatened environmental resources and recover degraded ones. It will also aim at environmental compliance with the Forest Code including through re-vegetation and afforestation on family farming areas. The Project proposes to make resources available to carry out investments and creating conditions for access to the necessary knowledge, with the provision of TA and other mechanisms for developing families' capacities. Additionally, the Project will implement initiatives aimed at adding value to farm products, improving access to markets and strengthening the organizations of the population served. The contribution of financial resources and the development of capacities will also be the instruments to be used in these cases.

### Main Beneficiaries

22. The main beneficiaries<sup>32</sup> of the project will be: (i) farming families and their organizations; (ii) indigenous peoples; (iii) other traditional communities, including quilombolas, fishing folk (PCTs). To ensure the inclusion of women, youth, and PCTs, the project will develop a specific targeting approach to ensure outreach and capacity building tailored to these groups, as well as disaggregate beneficiary indicators to track their participation.

### Components

23. The proposed Project has four components:
24. **Component 1 – Strengthening agroecological and organic family farming (US\$ 39.468.800,00).** This component aims at improving farm productivity and reverse environmental degradation caused by unsustainable production practices in the Project's intervention area. It will promote sustainable agri-food systems, based on agroecological, low carbon and organic principles, including the environmental regularization of properties. Family farmers will receive technical assistance for the implementation of farm-level Investment Plans with a special focus in reducing gender inequalities among women farmers. The needs of young people will also be addressed.

<sup>29</sup> FAO (2023) Climate-Smart Agriculture <https://www.fao.org/climate-smart-agriculture/overview/en/>

<sup>30</sup> PETERSEN, P.; SILVEIRA, L. M. D.; ALMEIDA, P. Ecossistemas naturais e agroecossistemas tradicionais no Agreste da Paraíba: uma analogia socialmente construída e uma oportunidade para a conversão agroecológica. In: PETERSEN, P.; SILVEIRA, L. M. D., *et al* (Ed.). **Agricultura familiar e agroecologia no semi-árido: avanços a partir do Agreste da Paraíba**. Rio de Janeiro: AS-PTA, 2002. p. 13 – 122.

<sup>31</sup> Such as polycultures, agroforestry systems, crop-livestock mixed systems, accompanied by organic soil management.

<sup>32</sup> For more details, Annex 3.



25. **Subcomponent 1.1 – Fostering agroecological family farming production.** This subcomponent will finance the preparation and implementation of farm-level Investment Plans to adopt agroecological productive systems (i.e. agroforestry, agroecological products, sustainable animal husbandry, apiaries, as well as harvesting, storage and productive use of water, among others). Furthermore, as part of the preparation of the investment plans, this subcomponent will finance the technical support and costs related to the environmental regularization of properties in order to enhance agroecological production.
26. **Subcomponent 1.2 – Strengthening marketing and processing initiatives.** The Subcomponent will seek to expand access to markets for families assisted with agroecological production (including organic and other certifications), by expanding marketing and processing initiatives. To this end, Investments Plans will be prepared and implemented that will work with: (i) the implementation/revitalization of local markets and other marketing channels for family farmers' agroecological/organic AF production; (ii) development of digital marketing platforms; (iii) support to facilitate access to public procurement programs; (iv) AF product processing units (such as honey, vegetables, fruits, etc.).
27. **Subcomponent 1.3 – Support for farmers' organizations.** This subcomponent will seek to strengthen associative organizations and the certification of family farming production, starting with the improvement of administrative and social management. The very process of identifying, preparing and implementing the Agroecological and Organic Investment Projects will be a central element of this process of organizational strengthening. The Project will also invest, where the conditions for this exist, in the creation or strengthening of participatory certification organizations (OCS<sup>33</sup> and OPACs<sup>34</sup>), as this certification can be an excellent instrument for adding value to Family Farming products.
28. **Subcomponent 1.4 – Capacity building for agroecological and organic production.** In order to develop the necessary skills for the development of agroecological and organic production, the Project will guarantee: (i) the provision of adequate Technical Assistance (TA) for the families and organizations served; (ii) holding training events on technical, administrative, commercial topics that will complement the contributions of TA teams hired by the Project, and (iii) the installation of equipment that promotes greater energy efficiency, such as 'ecostoves', biodigesters, windmills, photovoltaic panels.
29. **Component 2 – Environmental management (US\$ 13.858.600,00).** This component will seek to guide public actions aimed at preserving and recovering environmental resources, with the objective of maintaining and recovering natural areas in order to guarantee the provision of important environmental services for populations and for economic activities in Pernambuco. This Component will have a positive impact on combating desertification affecting various regions of the state. Simultaneously, they will contribute to reducing greenhouse gas emissions (GHGs). The Component will also raise awareness among community organizations and rural producers about the indispensable need for conservation of natural resources.
30. **Subcomponent 2.1 – Environmental protection and restoration.** The Project will prepare and implement activities aimed at: (i) the protection and conservation of water sources; (ii) restoration / protection of Permanent Protected Areas (APP) and Legal Reserve (RL) and other important areas for conservation, including payment for environmental services strategies;; (iii) the strengthening of forest seedling nurseries and seed banks/'seed houses', and (IV) structuring financing for renewable energy for family farmers.
31. **Subcomponent 2.2 – The Development of Capabilities for Environmental Management.** This sub-component is aimed at developing capabilities in the field of Environmental Management, through: (i) training Local Environmental

<sup>33</sup> Portuguese acronym: Organização de Controle Social

<sup>34</sup> Portuguese acronym: Organismo Participativo de Avaliação da Conformidade.



Agents to work in Reference Centers for Environmental Management; (ii) the provision of Technical Advice to provide support for the environmental initiatives to be implemented by the Component.

32. **Component 3 – Institutional Strengthening (US\$ 4.946.520,00).** This Component will aim to strengthen the institutional capacity (in the technical, organizational and operational spheres) of public and private organizations capable of offering services of crucial importance to the environment and environmentally appropriate agricultural production.
33. It will provide support for strategically important institutional initiatives related to environmental management and for the development of agroecological and organic agriculture in the state of Pernambuco. The prioritised institutional initiatives in this dimension are: (i) creation and operation of a Digital Platform, and Open Innovation Lab (OIL) in digital solutions, for Family Agriculture and Agroecological and Organic Production; (ii) creation of a Reference Center (concerning research and training) in Agroecology (in the municipalities of Carpina (CETREINO) and Vitória de Sto. Antão); (iii) Expansion and modernization of Laboratories for the production of seedlings in vitro (biofactory), and for the production of agricultural bioinputs (in the municipalities of Goiana and Recife) (iv) creation of a Transversal Institute of Regenerative Economy, to provide support for environmental and agroecological management; (v) design and implementation of a training program for public and private bodies involved with the execution of the Project, aiming at creating affinities and synergies between these organizations.
34. **Component 4 – Project Management (US\$ 4.226.080,00).** This Component will support Project coordination and management, including: (i) Project management and administration; (ii) financial management (FM); (iii) procurement; (iv) monitoring and evaluation (M&E) of Project performance and impact; (v) environmental and social risks management and grievance redress mechanism (GRM); and (vi) communication and outreach). Regarding the Project Environmental and Social Commitment Plan (ESCP) and engagement the approach will include a system to monitor the implementation on an ongoing basis. The Project will be implemented by a Project Management Unit (PMU). Stakeholders' engagement the approach will include a system to monitor the implementation on an ongoing basis.
35. **Component 5 – Contingency Emergency Response Component (CERC):** The CERC component will provide for an immediate response to eligible emergencies. In the event of such an emergency (as defined in the Contingency Emergency Response Operational Manual to be prepared and adopted by the State of Pernambuco), this component will finance emergency activities and expenditures through the reallocation of funds from the project.

## 2. Overall Risk and Explanation

36. **Financial Management Risk is rated as Moderate at this stage** and based on the action plan<sup>35</sup> agreed upon to mitigate some risks associated with the State PFM. Even though the State's public financial management system and framework are solid, the state will further benefit from implementing this Project by strengthening the current processes, controls, and financial management support.
37. **Significant shortcomings were noticed throughout the implementation of the previous Bank Project executed by the State (Pernambuco Rural Economic Inclusion – P120139).** The Project's provision of the timely and reliable information required to manage and monitor project implementation was affected by (i) weak monitoring of subproject funds flow, (ii) improper reconciliation of the Designated Account, (iii) payments made for goods not delivered; and (iv) inadequate budget allocations, and Federal Government fiscal constraints that impacted both the

<sup>35</sup> P180430 - Brazil: Pernambuco Rural Water and Sanitation Project



loan and counterpart financing resulting in low disbursement rates, especially during the Project's final years. The new Project has addressed these shortcomings by: (i) giving SEPLAG a leading role in fiduciary management; (iii) centralize all procurement in an overarching agency with high-caliber and trained employees; (iv) improving internal control through on-going World Bank guidance.

38. Regarding ineligible expenditures, the internal control arrangements could not prevent procurement and bidding errors or the misuse of funds. Fortunately, after the Bank's intervention, all FM issues were fully and satisfactorily resolved, and the Project closed with no pending FM issues. The FM risk will be recalibrated once the Financial Management Assessment is finalized.
39. **Social Risk is rated Moderate at this stage.** The social risk rating will be revised during project preparation if there is new information and details that change the previously identified nature and risk of the project. Project interventions are small-scale and community-based in nature, which are not expected to have any significant or unmitigated social impacts and are unlikely to have adverse impacts linked to resettlement or land acquisition. The project will be implemented in all rural territories of the State and will target family farmers who are over-represented among the state's poor population. The latter include quilombolas, indigenous groups and artisanal fishermen, among other traditional groups. The Project also aims to ensure that women, youth, indigenous peoples and other vulnerable rural groups benefit equitably from the Project's benefits. The Borrower will develop during Project preparation an Indigenous Peoples Planning Framework (IPPF) and a Stakeholder Engagement Plan (SEP), considering different views, aspirations and needs and proposing measures to ensure that these social groups can fully participate in the Project. During Project preparation the PMU will also complete an Environmental and Social Management Framework (ESMF) that describes how the E&S aspects of the project will be managed to meet ESF requirements.
40. **Environmental Risk is rated Moderate at this stage.** It is expected the Project will generate a positive impact on improving the quality of life for the benefited rural families, as well as a paradigm shift in relation to production practices in its intervention area. The Project encourages and promotes sustainable production systems, resulting in positive environmental impacts, such as the conservation of natural resources and the reduction of GHG emissions. The planned activities, which include the establishment/revitalization of local markets, processing units, creation of reference centers, small agriculture trading warehouses, and installation of energy efficiency equipment (windmills and photovoltaic panels) may generate environmental impacts common to small-scale construction, such as waste production, dust and noise emissions, vibrations and traffic disturbances. These impacts are predictable and reversible, and can be controlled with known E&S measures of control and mitigation, such as the Good International Industry Practices as defined in the WB EHSs. To limit environmental risks, the Project is not expected to finance water supply systems dependent on existing dams, nor the use of pesticides. For the installation of energy efficiency equipment, visual, environmental (fauna, noise and vibration), and social impacts can be predicted. Known measures of control and mitigation will be applied to minimize these impacts, including the acquisition of equipment produced with socially and environmentally sustainable practices, and specific studies for installation to reduce impacts on sensitive habitats, bird migratory routes, and residential areas. Although some subprojects are expected to support beneficiaries located inside protected areas (small farming or artisanal shellfish harvesting), as the project is by design meant to promote sustainable practices, these subprojects are not expected to generate new adverse impacts to the protected areas, and loss or degradation of habitats. Whilst Component 3 is not expected to result in significant negative environmental risks or impacts, Component 4 includes a Contingency Emergency Response Component (CRERC), which may result in adverse impacts. The environmental risk rating will be revised during project preparation, based on the elaboration, by the Borrower, of an Environmental and Social Management Framework (ESMF).



Legal Operational Policies

Triggered?

Projects on International Waterways OP 7.50

No

Projects in Disputed Area OP 7.60

No

Summary of Screening of Environmental and Social Risks and Impacts

The social and environmental risks are rated Moderate at this stage and will be revised during project preparation if there is new information and details that change the previously identified nature and risk of the project. It is expected the Project will generate a positive impact on improving the quality of life for the benefited rural families, as well as a paradigm shift in relation to production practices in its intervention area. Nevertheless, moderate risks and impacts are expected from small scale farming such as small consumption of water for artisanal irrigation, use of fertilizers and living natural resources. To limit environmental risks, the Project will not finance water supply systems dependent on existing dams, nor the use of pesticides. The project will also support the improvement of small food trading and processing facilities such as honey packing, artisanal shellfish processing, farmer’s markets, and small agriculture trading warehouses. It is expected that the construction and operation of these activities will generate small to moderate amount of wastes and impacts that can be mitigated with the adoption of Good International Industry Practices as defined in the WB EHSs. Although some subprojects are expected to support beneficiaries located inside protected areas (small farming or artisanal shellfish harvesting), as the project is by design meant to promote sustainable practices, these subprojects are not expected to generate new adverse impacts to the protected areas, and loss or degradation of habitats. Project interventions are small-scale and community-based in nature, which are not expected to have any significant or unmitigated social impacts and are unlikely to have adverse impacts linked to resettlement or land acquisition. The project will be implemented in all rural territories of the State and will target family farmers who are over-represented among the state's poor population. The latter include quilombolas, indigenous groups and artisanal fishermen, among other traditional groups. The Project also aims to ensure that women, youth, indigenous peoples and other vulnerable rural groups benefit equitably from the Project's benefits. The Borrower would develop during Project preparation an Indigenous Peoples Planning Framework (IPPF) and a Stakeholder Engagement Plan (SEP), considering different views, aspirations and needs and proposing measures to ensure that these social groups can fully participate in the Project. During Project preparation the PMU will also complete an Environmental and Social Management Framework (ESMF) that describes how the E&S aspects of the project will be managed to meet ESF requirements.

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