IFAD
Investing in rural people

Federative Republic of Brazil

Productive Development and Capacity-Building Project in the State of Ceará – Paulo Freire Project

Project Completion Report (PCR)

Main report and annexes

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CURRENCY EQUIVALENTS

Currency Unit	=	Brazilian Reais (BRL)
USD 1.00	=	BRL 1.750
BRL 1.00	=	USD 0.571

WEIGHTS AND MEASURES

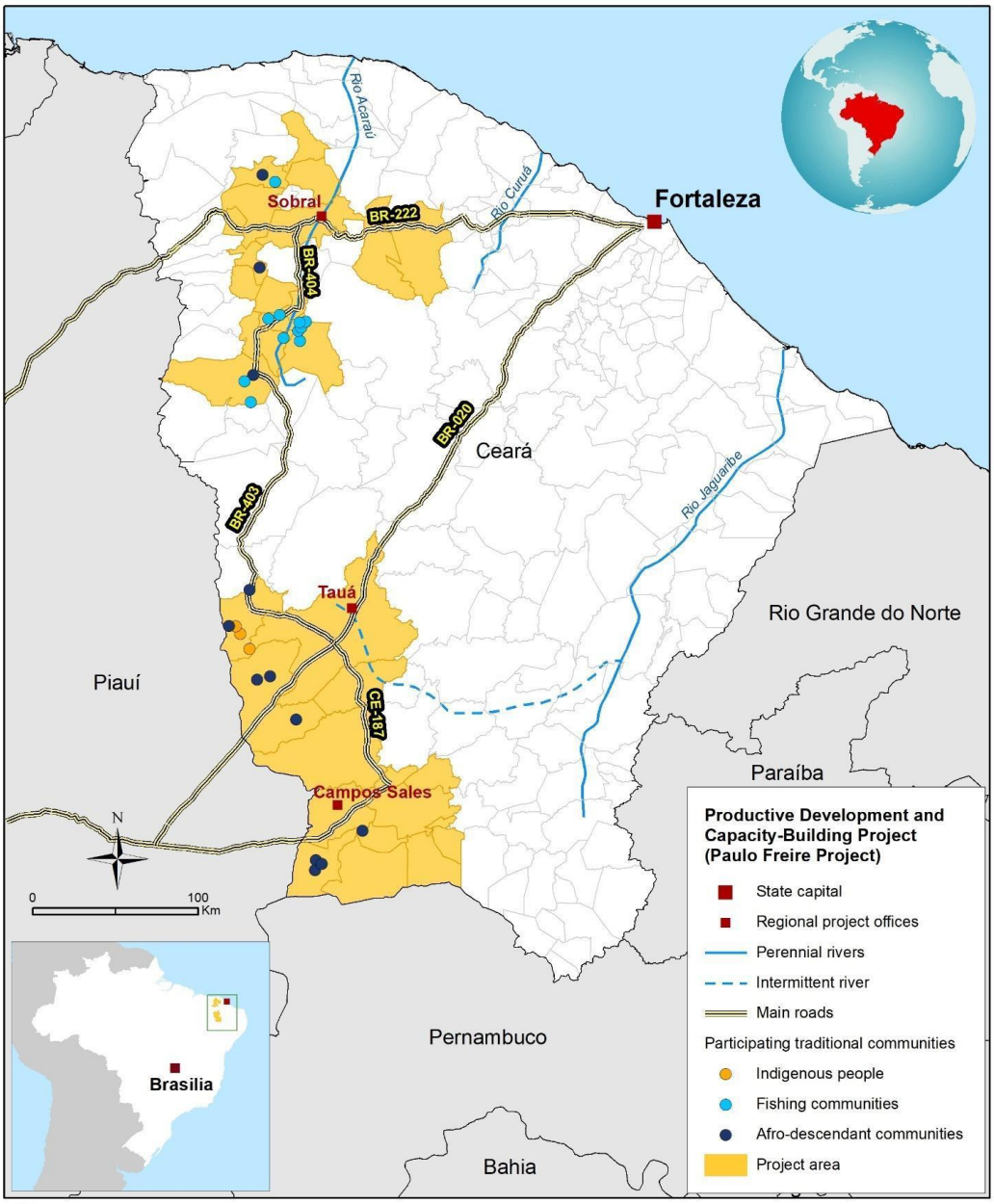
1 kilogram (kg)	=	1,000 g
1,000 kg	=	2,204 pounds
1 kilometer (km)	=	0.62 miles
1 meter	=	1.09 yards
1 square meter	=	10.76 square feet
1 acre	=	0,405 hectares
1 hectare	=	2,47 acres

ABBREVIATIONS AND ACRONYMS

ADAGRI – Ceará State Agricultural Defense Agency [Agência de Defesa Agropecuária do Ceará]
AGE – Office of the State Auditor General [Auditoria Geral do Estado]
AKSAAM – Adapting Knowledge for Sustainable Agriculture and Access to Markets
ANATER – National Agency for Technical Assistance and Rural Extension [Agência Nacional de Assistência Técnica e Extensão Rural]
APP – Permanent Protection Area [Área de Preservação Permanente]
AWPB – Annual Work Plan and Budgeting
B/C – Benefit/Cost
BRL – Brazilian Real
BTO – Bank Transfer Order
CACTUS –Center for Supporting the Sustainable Development of the Semiarid Region [Centro de Apoio ao Desenvolvimento Sustentável do Semiárido]
CDC – Diocesan Caritas of Crateús [Cáritas Diocesana de Crateús]
CEALTRU – Center of Studies and Assistance to Rural Worker Struggles [Centro de Estudos e Assistência às Lutas do Trabalhador Rural]
CEDRS – Ceará State Council for Rural Development [Conselho Estadual de Desenvolvimento Rural]
CETRA – Center of Labor Studies and Worker Assistance [Centro de Estudos do Trabalho e de Assessoria ao Trabalhador]
COI – Core Outcome Indicator
CNDs – Debt Clearance Certificates
COÁGUA – Coordination of Water Supply and Sewage [Coordenadoria do Abastecimento de Água e Esgotamento]
COCRED - Coordination of Rural Credit [Coordenadoria do Crédito Rural]
CODAF – Coordenadoria de Desenvolvimento da Agricultura Familiar [Coordination of Family Farming Development]
CODEA – Coordenadoria do Desenvolvimento dos Assentamentos e Reassentamento [Coordination for the Development of Settlements and Resettlement, Traditional Peoples and Communities]
CODECE – Coordination of Territorial Development, Cooperativism, Commercialization and Solidarity Economy [Coordenadoria de Desenvolvimento Territorial, Cooperativismo, Comercialização e Economia Solidária]
COEMA – Conselho Estadual de Meio Ambiente [Ceará State Environmental Council]
CONAB – [Brazilian National Food Supply Company [Companhia Nacional de Abastecimento]
COODEF – Inhamuns Region Family Economy Development Cooperative [Cooperativa de Desenvolvimento da Economia Familiar da Região dos Inhamuns LTDA]
COSOP – Country Strategic Opportunity Programme
COVID-19 – Coronavirus disease
CPP – Social Security Employer Contribution [Contribuição Patronal Previdenciária]
CTA – Continuous Technical Assistance
DAKI – Dryland Adaptation Knowledge Initiative
DG – Development Goal
DOF – Document of Forest Origin [Documento de Origem Florestal]
EFA – Economic and Financial Analysis
EFAs – Family Farming Schools [Escolas Família Agrícola]
EGS – Social Gastronomy School [Escola de Gastronomia Social Ivens Dias Branco]
EMATERCE – Ceará State Company of Technical Assistance and Rural Extension [Empresa de Assistência Técnica e Extensão Rural do Ceará]
EMBRAPA – Brazilian Agricultural Research Company [Empresa Brasileira de Pesquisa Agropecuária]
ESP – School of Public Healyh [Escola de Saúde Pública]
ESPLAR – Research and Advisory Center [Centro de Pesquisa e Assessoria]
ETA – Water Treatment Station [Estação de Tratamento de Água]
FAO – Food and Agriculture Organization
FECOP – Ceará State Fund to Combat Poverty [Fundo Estadual de Combate à Pobreza]
FETRAECE – Federation of Rural Workers and Family Farmers of the State of Ceará [Federação dos Trabalhadores Rurais Agricultores e Agricultoras Familiares do Estado do Ceará]
GTA – Animal Transit Guide [Guia de Transporte Animal]
HDI – Human Development Index
IAC – Antônio Conselheiro Institute of Support, Assistance and Research for Human Development [Instituto Antônio Conselheiro de Apoio Assessoria e Pesquisa para o Desenvolvimento Humano]
IBGE – Brazilian Institute of Geography and Statistics [Instituto Brasileiro de Geografia e Estatística]
IFAD – International Fund for Agricultural Development
IFP – Flor do Piqui Institute [Instituto Flor do Piqui]

IICA – Inter-American Institute for Cooperation on Agriculture
INFOCOS – Rede de Parcerias Educacionais para o Desenvolvimento Sustentável [Network of Educational Partnerships for Sustainable Development]
INSS – National Institute of Social Security [Instituto Nacional do Seguro Social]
IPECE – Ceará State Institute of Economic Research and Strategy [Instituto de Pesquisa e Estratégia Econômica do Ceará]
IPs – Investment Plans
IRR – Internal Rate of Return
ISS – Tax on Services [Imposto Sobre Serviços]
LF – Logical Framework
M&E – Monitoring and Evaluation
MDA – Ministry of Agrarian Development [Ministério do Desenvolvimento Agrário]
MDG – Millennium Development Goals
MDS – Ministry of Social Development and Fight Against Hunger [Ministério de Desenvolvimento Social e Combate à Fome]
MPI – Multidimensional poverty index
NGOs – Non-governmental organizations
P1MC – One Million Cistern Program [Programa Um Milhão de Cisternas]
PAA – Food Acquisition Program [Programa de Aquisição de Alimentos]
PAA Leite – Milk Acquisition Program [Programa de Aquisição de Leite]
PCR – Project Completion Report
PDHC – Dom Helder Câmara Project [Projeto Dom Helder Câmara]
PDHC II – Dom Helder Câmara Project – Phase II [Projeto Dom Helder Câmara - Fase II
PGE – Ceará State Attorney General [Procuradoria Geral do Estado]
PIM – Project Implementation Manual
PMBOK – Project Management Body of Knowledge
PMU – Project Management Unit
PNAE – National School Feeding Program [Programa Nacional de Alimentação Escolar]
PNATER – National Policy for Technical Assistance and Rural Extension for Family Farming and Agrarian Reform [Política Nacional de Assistência Técnica e Extensão Rural para a Agricultura Familiar e Reforma Agrária]
PPF – Paulo Freire Project
PROCASUR – Programme for Rural Development Training
PRONAF – Programa Nacional de Fortalecimento da Agricultura Familiar [National Program for Strengthening Family Farming]
PSI – Semear International Program [Programa Semear Internacional]
PSJ IV – São José Project [Projeto São José]
RENASEM – National Register of Seeds and Seedlings [Registo Nacional de Sementes e Mudas]
RIMS – Results and Impact Management System
RPA – Autonomous payment receipt [Recibo de pagamento autônomo]
RPA – Rural Participatory Appraisal
SAN – Food and Nutrition Security [Segurança Alimentar e Nutricional]
SDA – Ceará State Secretariat of Agrarian Development [Secretaria do Desenvolvimento Agrário do Estado do Ceará[]
SDG – Sustainable Development Goals
SDR – Special Drawing Right
SEFAZ – Ceará State Secretariat of Finance [Secretaria da Fazenda]
SEMACE – Ceará State Superintendence for the Environment [Superintendência Estadual do Meio Ambiente]
SEPIR – Ceará State Secretariat for the Promotion of Racial Equality [Secretaria de Promoção da Igualdade Racial]
SG – Strategic Goals
SIRAF – Family Farming Regional Information System [Sistema de Informação Regional da Agricultura Familiar]
SOE – Statement of Expenditure
TARE – Technical Assistance and Rural Extension
UECE – State University of Ceará [Universidade Estadual do Ceará]
UFC – Federal University of Ceará [Universidade Federal do Ceará]
UNICAFES – National Union of Family Farming and Solidarity Economy Cooperatives [União Nacional das Cooperativas da Agricultura Familiar e Economia Solidária]
UNILAB – University for International Integration of the Afro-Brazilian Lusophony [Universidade da Integração Internacional da Lusofonia Afro-Brasileira]
USD – United States dollar

MAP OF THE PROJECT AREA



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 17-03-2022

PROJECT OVERVIEW

The information in this table is automatically generated by the Operational Results Management System (ORMS), except for the highlighted fields.

Region Latin America and the Caribbean	**Project at Risk Status**
Country Brazil	**Environmental and Social Category** B
Project Name Productive Development and Capacity-Building Project in the State of Ceará – Paulo Freire Project	**Climate Risk Classification** 3
Project ID 1100001619	
Project Sector Family Farming	
CPM Claus Reiner	
Project Area Northeastern Ceará	

Key Dates

IFAD Approval	**Signing**	**Entry into Force**	**Mid-Term Review**	**Original Completion**	**Actual Completion**
09/21/2012					
		Original Finance Closure	**Actual Finance Closure**		
Date of Last SIS Mission	**Number of SIS Missions**	**Number of extensions**	**Effectiveness lag**		

Actual Costs and Financing (USD '000)
as at the time of PCR submission

Outreach

Direct Beneficiaries						
Estimated HH	Total HH	Women	Youth	Indigenous	Quilombolas	Fishermen
60.000	54.999	28.567	8.770	112	726	651
Indirect beneficiaries						
Total HH						
208.996						

Project Objectives

The main objective of this project is to reduce poverty and raise the living standards of family farmers in the State of Ceará, northeastern Brazil (31 municipalities), by developing human and social capital and enhancing the sustainable productive base of targeted households, with a primary focus on the youth and women. In specific, the project aims: to increase beneficiaries' access to water for domestic use; to generate and increase income for beneficiaries—via diversification of agricultural and non-agricultural production—to achieve food and nutrition security and to access markets in favorable conditions; to improve beneficiaries' capacities by strengthening their organizations—with emphasis on the youth, women, quilombola communities, indigenous peoples and fishers—to improve the management of production systems and natural resources.

Country Partners

Executing Institution	Ceará State Secretariat for Agrarian Development (SDA/CE)
Implementing Institutions	Support Center for the Sustainable Development of the Semiarid Region (CACTUS) Diocesan Caritas of Crateús (CDC) Center of Studies and Assistance to Rural Worker Struggles (CEALTRU) Center of Labor Studies and Worker Assistance (CETRA) ESPLAR Research and Advisory Center Antônio Conselheiro Institute of Support, Assistance and Research for Human Development (IAC) Flor do Piqui Institute (IFP)

PROJECT COMPLETION MISSION

Mission date: February 14-25, 2022.
Members of the hybrid mission (in-person and remote): IFAD's Project Completion Mission was composed of: Hardi Vieira (Country Programme Officer and Head of Mission); Emmanuel Bayle (Technical Coordinator and Specialist in Rural Development and Environment); Pedro Meloni (Specialist in Productive Investments and Commercialization); Rodrigo Dias (Specialist in Planning, Monitoring, and Evaluation); Conceição Dantas (Specialist in Focalization – gender, youth, and traditional communities); Diogo Nascimento (Operation Analyst and Specialist in Acquisitions and Contracts); Danilo Pisani (Specialist in Financial Management); Luís Dias (Specialist in Economic and Financial Analysis – FAO Investment Centre) and Gabriel Zimath (Specialist in Economic and Financial Analysis – FAO Investment Centre).
Locations visited: During the Project Completion Mission, part of the team that was attending in person visited the three regions covered by the Project (Sobral, Inhamuns, and West Cariri) and 8 municipalities of the 31 served by PPF: Assaré, Quiterianópolis, Parambu, Pires Ferreira, Santana do Cariri, Sobral, Senador Sá and Tauá.

Project Completion Rating Matrix

COUNTRY: Brazil	
PROJECT NAME: Productive Development and Capacity-Building Project in the State of Ceará – Paulo Freire Project	
PROJECT ID:	
BOARD APPROVAL DATE:	
ENTRY INTO FORCE:	
PROJECT COMPLETION DATE:	
LOAN CLOSING DATE:	
IFAD LOAN AND GRANT (USD MILLION):	
TOTAL PROJECT FINANCING:	
IMPLEMENTING AGENCY:	
Criterion	**PCR Rating**
Project performance	
- Relevance	6
- Effectiveness	5
- Efficiency	5
- Sustainability	5
Rural poverty impact	**5**
- Households' incomes and assets	5
- Human and social capital	5
- Food security	5
- Agricultural productivity	5
- Institutions and policies	5
Additional evaluation criteria	
- Gender equality and women's empowerment	5
- Innovation	6
- Scaling up	5
- Environment and natural resources management	6
- Adaptation to climate change	5
- Targeting and outreach	5
- Access to markets	5
Partners performance	
- IFAD's performance	5
- Government performance	5
Overall project achievement	**5**

EXECUTIVE SUMMARY

1. The Paulo Freire Project (PPF) was the first loan agreement (Nº I–882-BR & E-17-BR) between the State of Ceará and the International Fund for Agricultural Development (IFAD), totaling USD 94.9 million, of which USD 40 million were invested by IFAD, USD 40 million by the state government and USD 14.9 million by the beneficiaries. The Project's area of operation comprised 31 municipalities with low levels of human development (HDI), benefiting 600 rural communities in the semi-arid region of Ceará and 54,999 households. Of this total, 28,567 are women-headed households; 8,770 are youth-headed; 726 are quilombola families; 651 of artisanal fishing families and 112 are indigenous families. Initially, the execution period was set at 6 years, being later extended by 30 months. Field work ended in December 2021, and the financial closure was in June 2022.

2. Components. PPF was structured in four components: 1 - Capacity Building; 2 - Productive development and environmental sustainability; 3 - Project Management; 4 - Monitoring and Evaluation.

3. Relevance of the Project (score: 6 – highly satisfactory). PPF initiatives were included in Ceará's rural development strategy. In addition, the experience and the methodology developed within the Project served as reference for other projects implemented by the Ceará State Secretariat of Agrarian Development (SDA). Productive investments and technical assistance increased income and strengthened communities, especially for the youth, women, and traditional communities. They also proved to be coherent and effective in addressing issues linked to rural poverty and climate change (See Appendices 12 and 13).

4. Overall performance (score: 5 – satisfactory). PPF achieved its objectives, targets, and results on most of the indicators presented in the Logical Framework (LF). All components were implemented throughout the coverage area. For some indicators, target values were surpassed. Among the most vulnerable groups (thr youth, women, indigenous people, quilombolas, and artisanal fishers), PPF was successful in targeting and selecting beneficiaries.

5. Fulfillment of outcome goals: Component 1 – Out of the 31 indicators presented in the LF, the Project reached or exceeded the target value for 18 of them; surpassed 50% of the goal for 11; and stayed below 50% for 2.

6. Outcomes of Component 2 – To measure the results of the second component, 17 indicators were assessed. Of these, PPF reached or exceeded the established goal for 7 of them; exceeded 50% of the target value for 7; and failed to reach 50% for 3.

7. Outcomes of Component 3 – The percentage of interventions/activities effectively carried out as planned on the Annual Work Plan and Budget (AWPB) was the indicator used, being measured annually and on a non-cumulative basis. In 2021, the Project reached 75% of the established goal, i.e., 3/4 of planned initiatives were in fact conducted.

8. Outcomes of Component 4 – The M&E System generated studies, evaluations, systematizations, and other products for both knowledge management and project management, achieving 104% of the established goal. Outcome surveys, informative bulletins, and knowledge management products stand out among M&E outputs.

9. Households' incomes and assets (score: 5 – satisfactory). On average, the total amount of household assets grew by more than 28% between 2015 and 2020. Most of households' income corresponded to self-consumption, which accounted for 56% (52%) of total in 2015 (2020). Conversely, the participation of the sales of agricultural products in households' income grew from 44% to 48% between 2015 and 2020. Interestingly, this percentage coincides with that obtained by the 2019-2020 Agroecological Logbooks survey (49%). Except for animals, the average income from the sales of all production groups increased during the 2015-2020 period. In fact, the sales of products of animal origin, plants, and products of plant origin grew by 82%, 92%, and 292%, respectively.

10. Human and social capital (score: 5 – satisfactory). PPF contributed significantly to the development of human and social capital through a methodology for integrating production, training, and capacity-building activities, which focused on the empowerment of households and community organizations. Supported associations increased the capacity to plan social and productive actions and to manage financial resources. Continuous technical assistance was fundamental in this process, especially for priority groups. The inclusion of a gender-focused approach highlighted the conduction of contextualized actions that dialogue with the particularities of each group and promote their self-affirmation, leading to the sustainability of project outcomes. The 2021 Outcomes Survey registered that 92% of the 533 productive organizations benefiting from PPF will continue to develop their activities in the community after Project completion. Therefore, by working with these organizations, PPF was able to promote continuity and a greater permanence in collective work. The percentage of members reporting that organizations provided new or improved services reached 356% of the initial goal. The number of households that adopted new or improved inputs, technologies, or practices exceeded the target value by 60%, while the number of households that reported increases in production reached 106% of the established goal.

11. Nutrition and Food Security (score: 5 – satisfactory). The impact evaluation study indicated that 61% of beneficiaries improved food consumption. The investment in 4,591 agroecological productive backyards—75% of which are women-led—associated with 2,189 greywater reuse systems, increased the access and

availability of nutritious and diversified foods in adequate quantity and quality. Agroecological logbooks recorded 683 different types of products grown in productive backyards. The following data evidence the positive impact of PPF on food security: the number of households producing for self-consumption grew by 10%, whilst the number of those with improved food diversification increased by 83%. Furthermore, access to quality drinking water was ensured to 22,152 households (more than 1/3 of the beneficiaries) with the installation of 20,528 cisterns for human consumption, 30 of which were school-based. Food was produced free of physical, chemical, and biological contaminants as 100% of PPF investments adopted agroecological practices and sustainable production techniques.

12. Institutions and Policies (score: 5 – satisfactory). In total, 533 community and productive organizations were strengthened with the proper structure, governance, and management systems, thus exceeding the target value by 10%. Data from the Outcomes Survey revealed that 86% of these organizations reported that "the association experience within the PPF was important to strengthen management", whilst 79% declared that "the experience acquired by the organization will enable the continuity of the work after Project completion". As for formal partnerships, agreements, or contracts with public or private entities, 81% of the organizations were successful. In regard to changes in the political and institutional structure, the State Fund to Combat Poverty (FECOP) was an important partner in guaranteeing resources for the financial execution of the Project as it invested roughly BRL 129 million. By sharing and reflecting on the implementation of targeting strategies and action plans, PPF contributed to redefine the design and dynamics of the São José Project (PSJ) with respect to the integration of youth and gender in stage IV. It is also worth mentioning the relationship between PPF and the Dom Hélder Câmara Project (PDHC), which is carried out by the Federal Government. CTA entities such as CETRA and Flor do Piqui, in addition to EMATERCE, performed technical assistance services on both the PPF and PDHC. Although they covered different territories, the two projects were developed in the state of Ceará with IFAD support in order to tackle rural poverty and inequalities in the semi-arid region. PPF also developed an important partnership with COAGUÁ to guarantee water access to beneficiaries.

13. Overall Impact on Rural Poverty (score: 5 – satisfactory). PPF initiatives led to the reduction of multidimensional poverty from 44% to 34% between 2015 and 2020. This is equivalent to a 23% reduction in the poverty and extreme poverty conditions of beneficiaries.

14. Gender Equality and Women's Empowerment (score: 5 – satisfactory). The PPF gender strategy and action plan led to the achievement of 87.5% of gender objectives and indicators presented in the LF. Some of the goals were exceeded, such as women-led associative investments (185%) and women in leadership positions of rural organizations (272%). Furthermore, the Project was significant in promoting economic and political empowerment of women as well as the equitable distribution of domestic workload, thus meeting the objectives of IFAD policy on gender equality and women's empowerment. In terms of economic empowerment, it is worth stressing that 52% of the 54,999 benefited households are women-headed, the majority being black. In addition, women are holders of 10,039 Investment Plans (IPs) and women's production was strengthened with the installation of 4,591 productive backyards and 363 agroecological stoves, and their inclusion in other productive activities supported by the Project. In the search for an equal balance of power, the following PPF results worth highlighting: 115 women's groups were supported, 732 women held management positions in the supported associations; 1,000 women participated in procurement commissions; and women represented 55% of those trained in public policies. With regard to domestic workload, the implementation of social technologies reduced women's working time, whilst training and awareness campaigns broadened women's critical perspective on the fair division of domestic work. In terms of focus on the youth, the Project benefited 2,336 households headed by young women with IPs.

15. Adaptation to climate change (score: 5 – satisfactory). PPF developed actions of coexistence with the semi-arid in line with knowledges on agroecology and climate change adaptation. Social technologies and agroecological-based productive investments were the main initiatives related to this theme, aiming at production diversification with practices adapted to the local context. As for quality drinking water, 20,528 domestic cisterns were installed. For small-scale irrigated production, 895 production cisterns and 2,189 greywater reuse systems were built, both equipped with micro-sprinkling and drip irrigation systems, allowing, among other activities, the implementation of 4,591 productive backyards. Polyculture areas were implemented for the development of forage support to lessen the pressure on native vegetation and for the storage of forage for the dry season. The focus was on local varieties and intercropped rainfed crops, with 1,658 hectares of forage palm and 994 hectares of forage sorghum. Focusing on the reduction of firewood consumption, 363 eco-efficient stoves and 1,583 biodigesters were built to improve households' access to energy.

16. Environment and natural resources management (score: 6 – highly satisfactory). The environmental theme is an integral part of the vision, actions, and objectives of Components 1 and 2, with agroecology permeating PPF set of actions. The work of the seven entities of continuous technical assistance (CTA) were based on agroecology and their assistance practices were anchored in the coexistence with the semi-arid. Considering agricultural production, it is worth stressing that agroecological practices and the sustainable management of natural resources were permanently encouraged and promoted. As a result, new practices—

such as the use of natural pesticides and native seeds, the adoption of intercropping systems, the production and storage of forage, and the use of cover crops—were introduced and adopted by beneficiary households. Additionally, it is worth mentioning that all actions conducted within Ips complied with the state environmental legislation.

17. Strengthening the production of animals adapted to the regional context was strategic for rural communities in terms of the coexistence with the semi-arid. The implementation of 1,658 hectares of forage palm and 994 hectares of sorghum led to the production of roughly 49.7 million tons of sorghum silage, thus lessening the pressure on the native vegetation during the dry season. It total, 20,528 structures for water catchment and storage were built, strengthening households' resilience to climate change and guaranteeing the access to drinking water via domestic cisterns. Associated with production cisterns, small irrigation systems based on micro-sprinkling and capillary watering were able to spread practices of efficient use of water and coexistence with the semi-arid. Water reuse for plant production contributed to cultivation around beneficiaries' homes. PPF promoted beekeeping, a species-conserving activity, fulfilling all the requirements of the sustainability tripod (economic, social, and environmental).

18. Agricultural Productivity (score: 5 – satisfactory). The impact evaluation study showed that 64% of the households benefiting from PPF experienced increases in production value, surpassing the target value (60%) established in the LF. Increases in the quantity produced were also reported by 88% of the beneficiaries interviewed in the virtual Outcomes Survey conducted by the Project in 2020. Positive results were perceived for most of the productive chains supported by PPF, with emphasis on beekeeping as the average honey production increased 86% in the treatment group and 546% in the control group. For pig and poultry production, the average herd size of households benefiting from PPF grew by 140% and 117%, respectively. For non-beneficiaries, in turn, the average herd size decreased by 9% for swine, while increasing by only 1% for poultry. The increase and strengthening of production are directly related to the infrastructure financed through the 533 IPs, which includes 7,252 poultry aviaries, 5,307 sheepfolds, 2,556 pigsties, and 8,069 hives. In addition to the investments, PPF positive results reflect the CTA model adopted as well, with continuous action for 4 years in each community, advising households on the agroecological transition and the coexistence with the semi-arid.

19. Access to markets (score: 5 – satisfactory). According to the Outcomes Survey , 82% of participating organizations were involved in formal partnerships, agreements or contracts with customers at the institutional (public) and private (local market) levels. Commercialization took place in homes, communities, fairs, door-to-door, and other retail businesses. The institutional market—Food Acquisition Programme (PAA) and National School Feeding Plan (PNAE)—was accessed by 22% of beneficiaries' social organizations. Among the 533 community organizations, family farming fairs accounted for 57% of marketing modalities. Of the 294 fairs, 160 were held at the community level, 96 at the municipal level, and 38 at the regional level. Basically, the products sold at the fairs originated in productive backyards and swiddens. The "Knowledge of the Semi-arid Project", conducted in the Sobral territory, is strengthening the processes of commercialization and access to solidarity markets. In response to the Covid-19 pandemic, virtual fairs were held via social media, becoming an important initiative for surplus commercialization and income generation. The Outcomes Survey indicated that 52% of beneficiary organizations endeavored in new marketing approaches, especially via websites and social networks, with emphasis on WhatsApp (48%) and Facebook (22%). Online sales and virtual fairs tend to continue even with the end of the pandemic. SDA has developed a digital tool called "Family Farming Portal", a space for the interaction between the supply (producers) and demand (buyers) sides of the market. This initiative will be permanent after the Project completion. PPF provided an important link between beneficiaries and players that supply inputs such as construction materials, seedlings, animal feed, vaccines, and medicines. All purchases planned within IPs were carried out through bidding processes conducted by a commission made up of 3 beneficiaries from each of the 533 organizations with the support of CTAs. By following this process, beneficiaries began to negotiate purchases with suppliers more efficiently.

20. Targeting and Outreach (score: 5 – satisfactory). The Project reached the intended target groups, achieving 89% of the goal established for the number of family farming households served. The public directly benefited by PPF actions amounted to 54,999 households (91% of the goal) or 208,996 individuals (family members). Of these, 28,567 are women-headed households (190% of the goal), 8,770 are youth-headed households (58% of the goal), 112 are indigenous families (22% of the goal), 726 are quilombola families (72.6% of the goal) and 651 are artisanal fishing families (651% of the goal). Therefore, the targeting was successful in reaching the most vulnerable groups. Additionally, it is worth highlighting that 17,763 households were benefited with CTA and IPs (89% of the goal). Within the benefitted communities, black populations were also served, reaching a racial share of beneficiaries that was not initially foreseen by the time the Project was designed. The low reach of indigenous people was primarily due to the dimension of the territory. The state of Ceará houses 14 ethnic groups located in 18 municipalities. Among them, only the municipality of Quiterianópolis is covered by the Project.

21. Innovation (score: 6 – highly satisfactory). a) Water access interventions benefited 22,152 households with drinking water from cisterns. There was the construction of 20,528 cisterns, of which 30 are school-based, and the provision of water treatment services carried out with Mobile Water Treatment

Stations (ETA), which supplied 5,528 cisterns. b) Project Management. New procedures and routines were built with CTAs and associations, expanding the governance and management capacity. PPF also influenced legal processes at the government level, whose novel procedures increased the speed of processes in 70% due to de-bureaucratization, without weakening transparency and control tools. c) PPF + HEALTH. The initiative aimed at training community leaders and PPF technicians on health education, focusing on the main health problems faced by the communities assisted by the Project. A total of 65 health education actions were carried out, which covered various themes. Six virtual conversation circles were also held in partnership with the Ceará State Public Health School, which focused on the prevention of Covid-19. d) Virtual work and remote CTA. During the COVID-19 pandemic, PPF maintained the communication with socially isolated communities via virtual meetings, CTA monitoring, and conversation circles. In this modality, it was held a youth-focused photography contest. The was a management monitoring of CTAs as well. e) Social technologies integrated to production systems. PPF carried out the following integrated actions: agroecological productive backyards with free-range chicken, maintained by water reuse systems; biodigesters-adapted pig production; and sheep/goats production complemented with areas of forage support (sorghum, palm and grass). Production systems, in conjunction with social technologies, were able to potentialize the strategies of coexistence with the semi-arid and climate resilience. f) Gender and Generational aspects. An intersectoral gender commission was constituted with the objective of promoting training, organization and production. PPF developed strategic initiatives for the productive inclusion of the youth, women, and traditional communities. Furthermore, the commission contributed to the connection of different initiatives conducted by the Project. In this case, the innovation lies in the creation of an instance involving all CTAs, which is able to plan and monitor the initiatives developed by them.

22. Project management efficiency (score: 5 – satisfactory). Originally budgeted at USD 80 million, the Project had a financial execution of USD 82 million. Of this total, USD 36,285,323.11 came from IFAD funds—corresponding to 100% of the agreed funding, which was achieved in 2019, the original date of project completion—and USD 45.7 million came from state counterpart funds—representing 117% of the contracted value. In addition to the fact that procurements occurred as scheduled, an efficient project management enabled the introduction of new activities like precast and school-based cisterns, ETAs and the PPF + Health initiative. State arrangements were satisfactory for most of the Project time, especially from the middle onward. The organization and personnel were adequate, internal control was efficient, and reliable expenditure statements were generated. The Project maintained reasonable procedures and practices, achieving a satisfactory performance of its administrative, financial, and accounting functions. In addition to overcoming pandemic-related issues, PPF monitored the fair use of funds and the accountability of IPs to associations, as well as the calculation and final registration of beneficiaries' counterpart funds. The general economic analysis of both the Project and the productive activities examined implementation stages according to the time by which resources were made available. Comparative scenarios—with and without PPF—were used for two periods of time: 2017-2021 (real time series) and 2017-2026 (projected time series), with the cost of capital set at 6.75% p.a. and 10% p.a., respectively. Starting with the general context of PPF, indicators point out that the Project was economically viable, being able to generate significant returns as evidenced by IRR and NPV values. Similarly, the benefit-cost ratio is positive and greater than BRL 1.00 in all stages. From the beginning (2017) to the completion (2021) of the Project, it is observed that for every BRL 1.00 invested, benefits of BRL 4.77 (cost of capital of 6.75% p.a.) and BRL 4.11 (cost of capital of 10% p.a.) were generated. The second stage was the one that generated the highest benefit-cost ratio. Resources relating to PIs varied in terms of the dates they were made available. For the first stage covenants, transfers took place between 2016 and 2021. For the second and third stages, in turn, transfers took place between 2018 and 2021. Dates varied due to the schedule of resource availability as well as legal impediments of some associations.

23. Effectiveness (score: 5 – satisfactory) - Despite the pandemic having significantly affected Project's fieldwork, the mitigation measures carried out in 2020-21 were satisfactory and PPF was able to move forward with the execution. An example is the implementation of domestic cisterns (C1), whose goal was achieved. PPF totaled 533 IPs (C2), which corresponds to 89% of the target value. PPF benefits 54,999 households (92% of the goal), of which 28,567 are women-headed (190% of the target value).

24. Scaling up (score: 5 – satisfactory) - The social technologies of coexistence with the semi-arid disseminated by the PPF—cisterns, water reuse systems, ecological stoves—have a strong potential for replication. Wider dissemination is already taking place at different levels, having been supported by some programs like the One Million Cisterns Programme (P1MC). Other innovative practices like agroecological backyards, which require minimal investment, have also been disseminated. PPF carried out a relevant plan for knowledge management and social communication, having several systematizations that provided inputs for the strengthening and expansion of public policies and the improvement and expansion of CTA services. Interventions for water access such as ETAs also allowed the pilots implemented by the Project to be scaled up. In fact, the lessons learned from these systematizations are being adopted in the building of a partnership with IFAD/IDB for a new project in Ceará and in the World Bank-funded São José IV Project.

25. Partners performance (score: 5 – satisfactory). a) IFAD performance – PPF monitored and supported all areas of knowledge (components, management, and coordination) for its physical and financial

execution, contributing to a decision-making focused on achieving the planned results and objectives. IFAD generated some opportunities for external partnerships, aggregating additional support to the implementation of the Project as well as the dissemination of its results. Programa Semear Internacional (PSI): It was an important partner in the area of knowledge management through the systematization of experiences and various publications, the conduction of national and international exchange of experiences, the support for the creation and operation of the working group on gender equality, and the conduction of researches. PROCASUR: Promoted international exchanges with the support of PDHC II through the IFAD office. AKSAAM. Was a partner that intensified knowledge management through collaborative agreements, such as the Slow Food movement. b) State government performance - The government of Ceará guaranteed the disbursements for the implementation of PPF initiatives while contributing effectively with resources management and political commitment. In general, contractual clauses were complied with (disbursement, data presentation, audits, and others), with follow-up and compliance with the recommendations and agreements signed with IFAD.

26. Sustainability Assessment (score: 5 – satisfactory). Four stages were defined: 1) Transition of households to the SDA system; 2) Operationalization, by SDA, of implementing actions; 3) Implementation of actions by the SDA system, which is formed by EMATERCE, PSJ IV, CODEA, CODAF, COÁGUA, COCRED and CODECE; and 4) Monitoring of system actions. The transition of households benefiting from PPF began in March 2021 with the institutional presentation of the Project to the entire SDA system. In addition, PPF created synergies with PDHC II through CTA initiatives.

27. Lessons learned and knowledge generated. a) Relevance of strategic partnerships to strengthen rural youth - The Project built a solid pool of strategic partnerships to develop youth-targeted actions, such as caravans and festivals, with various entities like public institutions for the social promotion of youth, Agricultural Family Schools (EFAs), universities, trade unions, social associations, and other federal, state and municipal agencies. b) Strengthening of knowledge management processes with increased visibility of PPF - PPF developed activities linked to both knowledge management and popular communication, with a special focus on the youth and women. Content production and systematization was intensified for several areas of the Project, expanding the channels of dissemination as a way to direct attention to PPF initiatives. c) Valuing the experience accumulated by the CTAs contracted for technical assistance - The Project benefited from both CTAs knowledge networks—which have long been working in the semi-arid region—and CTAs ability to articulate and mobilize other government programs for the benefit of participating households. Working with these entities throughout the Project has valued agroecological experiences and innovations on a larger scale as well as local knowledge. d) Technological innovations - PPF developed a system for registering beneficiary households through the use of tablets (both online and offline) in order to insert beneficiaries' personal data during fieldwork. e) Access to water resources - A lesson learned through the PPF experience refers to the importance of meeting the water demand for domestic and productive uses. To this end, there was the implementation of social technologies and the reuse of water.

28. Conclusions and recommendations. PPF achieved positive results. The impact evaluation study evidenced that the Project significantly increased the active participation of the youth and women in community actions, the access to public policies, and the adoption of sustainable agroecological practices. According to the multidimensional poverty index (MPI), the poverty rate of PPF beneficiaries decreased from 44% to 34%, i.e., a reduction of 10 p.p. Of the 62 indicators describe in the ORMS, the Project achieved the established goal (100%) for 28 of them while reaching more (less) than 50% of the target value for 28 (6) of these indicators. For many of beneficiary households, the design of IPs was an unprecedented and innovative experience since they had never received CTA before. The capacity-building experience, which articulated individuals and territories, enabled a better establishment of productive projects by addressing community needs and defining the means by which the CTA should be initiated. CTA actions are important to the sustainable development of rural communities since they enable households to become autonomous. Finally, the permanent strengthening of water access for human consumption and agricultural production is one of the first conditions for a dignified life in rural areas.

A. INTRODUCTION

29. The Paulo Freire Project (PPF) was the first loan agreement (Nº I–882-BR & E-17-BR) between the State of Ceará and the International Fund for Agricultural Development (IFAD), totaling USD 94.9 million, of which USD 40 million from IFAD, USD 40 million from the state government and USD 14.9 million from beneficiaries. SDA was the executing agency of the Project.

30. The Project aimed to combat rural poverty in the semi-arid region of Ceará. PPF contents and guidelines were aligned with public policies for social inclusion, focusing on productive development and capacity-building. Specifically, the Project sought to increase household income in the 600 rural communities of the 31 most vulnerable municipalities selected and served by PPF. A total of 54,999 beneficiary households were reached, which represented 92% of the initial target.

31. In general, the target audience consisted of family farmers. In specific, traditional peoples and communities with experience in family farming were targeted. By using participatory methodologies, the Project established a horizontal management and, consequently, a shared governance system. This

involved the dissemination of numerous innovations, from agroecological management to social technologies for water access for domestic and productive use, with emphasis on food and nutrition sovereignty and security. Dialogic allowed the sharing of knowledge accumulated by community leaders, as well as the traditional knowledge of quilombolas, indigenous peoples and artisan fishers. The Project was a milestone in terms of the provision of continuous technical assistance in the state of Ceará, given the execution in partnership with organized civil society. It also strengthened collaborative networks around public policies aimed to the sustainable rural development of family farming. The effective execution of the Project took place between 2015 and 2021, since from 2013 to 2015 PPF was setting up the Project Management Unit (PMU) and the regional offices, as well as selecting personnel and the technical advisory bodies.

32. The CTA contracting process took more than 12 months, thus delaying the start of field activities. During its implementation, the Project faced contextual events of great magnitude. First, there was a severe drought in northeastern Brazil from 2011 to 2018, leading the Project to develop a water access strategy and actions. Second, there was the discontinuity of several public policies aimed at the target audience, such as the Cistern Programs and the PAA. Third, from March 2020, there was the advent of the COVID-19 pandemic, which extended until the completion of the Project. In the institutional aspect, the Project took longer in the implementation stage. Among possible causes, the low institutional maturity and experience of the PMU deserve to be highlighted.

33. The Project Completion Report was a collective construction of the PPF team, its main partners, and beneficiaries. The Project's Completion Mission took place in a hybrid manner (on-site and remote), between February 14-25, 2022, with field trips carried out by IFAD and PMU technicians, in addition to remote meetings.

B. PROJECT DESCRIPTION

B1. CONTEXT

34. Agricultural activities that depend exclusively on rainfall—which is generally irregular and scarce—prevail in the semi-arid region of Ceará. Therefore, rainfed agriculture is the main activity of many family farmers, having a great relevance both in the composition of household income and the promotion of food security. Family farmers that have little access to technology mainly grow beans, cassava and maize, which are usually cultivated between February and May, the region's "rainy season". Although family farmers raise some cattle, it should be noted that goat and sheep farming is the main livestock activity of this social group, as well as poultry farming. Another economically relevant and environmentally sustainable activity is beekeeping.

35. The Ceará territory is vulnerable to climatic adversities related to water scarcity, which are exacerbated by prolonged periods of drought, thus hampering the state economic and social development. Long droughts provoke a set of economic and social disturbances, which disorganize the productive system of the caatinga biome (semi-arid) and contribute to its degradation. Climate change intensifies and induces these problems with longer periods of climate variability and drought, harming the economic and social development of the state.

36. The incidence of rural poverty in the municipalities of Ceará is high, varying between 30.3% and 56.4% for the rural population in extreme poverty (IPECE, 2012). Food insecurity is also expressive. There is also potential for the development of sustainable production practices in the area, whether agricultural or not.

B2. OBJECTIVES

37. The general objective of PPF was to reduce rural poverty in the semi-arid region of Ceará through capacity-building. The Project was based on the sustainable generation of agricultural and non-agricultural income in 31 municipalities from the semi-arid region of Ceará, with the main focus on the youth, women, and traditional peoples and communities.

38. PPF goal was to reduce rural poverty in 31 municipalities from the semi-arid region of Ceará. As a result of technical assistance and productive investment, extreme poverty was reduced by 35% at the end of the Project and household assets increased by 30%.

39. The Project Development Goal was to increase the income and quality of life of the target population through the development of social capital and the achievement of sustainable productive development, with a focus on women, youth and traditional peoples and communities. Therefore, there was a direction to strengthen the individual and collective capacities of beneficiaries for the management of community and economic organizations, the improvement of production, the management of family businesses and the access to markets with improved income.

40. Expected Results: i) strengthened capacities of family farmers and their organizations; and ii) family farmers inserted in a sustainable and profitable way in production chains and markets.

41. PPF Components: The Project was structured in four components: Capacity-Building (Component 1); Productive Development and Environmental Sustainability (Component 2), Project Management (Component 3) and Monitoring and Evaluation (Component 4).

Table 1. PPF components and actions

Component	Action
1- Capacity-Building	a) Training in public policies; b) Strengthening of local initiatives and leadership development; c) Capacity development for the production and management of environmental resources to strengthen agroecology; d) Organizational development and training for management and marketing; e) Training of young people; f) Strengthening the capacities of technical assistance teams; g) Mobilization and social control; h) Gender actions aimed at strengthening and empowering women; i) Access to water for human consumption; j) Support traditional communities like indigenous and quilombola peoples; k) Popular Communication.
2- Productive Development and Environmental Sustainability.	a) Support for activities to strengthen the production, processing and marketing of agricultural and non-agricultural products via Investment Plans (IPs); b) Encouraging innovative initiatives and practices; c) Promotion of activities for the protection and recovery of natural resources.
3- Project Management	a) Project Management; b) Planning and supervision of the execution of activities according to AWPB and the procurement plan; c) Articulation with other SDA programs and projects; d) Establishment of partnerships with public and private organizations.
4- Monitoring and Evaluation	a) Assessments and Knowledge Management; b) Monitoring the goals and results defined in the Logical Framework; c) Preparation of the Project's physical-financial performance reports.

Source: Elaborated by the PMU-PPF (2022).

B3. IMPLEMENTATION MODALITIES

42. Implementation structure: PPF had the following implementation instances: PMU, regional offices, local committees and CEDRS. The structure of the PMU consisted of General and Technical Coordinations, two Supervisions, Procurement, and Legal Management, Financial Management for Accountability, and Monitoring Management. The three regional offices were decentralized structures distributed in the Project territory in order to guarantee the capillarity and field presence of PPF. Each regional office had a team composed of specialists, having operated between 2014 to 2018. In addition, CTA entities had their own field structure, comprising 334 technicians. Project Management. SDA, the Project executing institution, elevated the PMU to the same hierarchical level as its programmatic coordinators. PMU delt with the organization of expenses related to budgetary and financial management of PPF resources. Field teams connected the PMU with the technical teams of contracted CTAs.

43. PPF Management was guided by technical, democratic and dialogic management, prioritizing the technical, administrative and financial quality of the Project. It aimed at the effectiveness of the physical and financial planning of Project initiatives. In order to achieve the established goals and to follow execution schedules, the management team coordinated the preparation and execution of the AWPB, the Procurement Plan, and the budget and annual reports. Management enabled the integration of the entire Project team, in addition to ensuring the articulation of partnerships with other public and private institutions.

44. Implementation strategy. The Project was carried out in three stages. The first stage (2015) involved 62 communities. The second and third stages (2017) included the selection of 538 communities. The execution was based on the capacity-building of organizations and households, structuring productive activities. CTA entities were contracted to perform field services and prepare the IPs. Financial transfers for the implementation of the IPs were carried out through covenants between the SDA and the associations.

45. Partner Institutions – Since the design stage, PPF has foreseen partnerships between public and private institutions focused on rural development. During the execution stage, partnerships initially planned with civil society were strengthened through unions, FETRAECE, community associations, rural women's movements, and NGOs, which strongly contributed to the social control of PPF actions. Throughout the Project, other partnerships were added during the implementation stage. Municipal Secretariats of Family Farming, Municipal Secretariats of Social Assistance, and local social protection systems were important partners in meeting the demands of the communities benefiting from PPF. Institutions such as UFC, through the Agrarian Residency Program, contributed decisively to the training of the field team. Other partner institutions are ESP, EGS, AKSAAM, Semear Program, PSI, SEPIR, IPECE, UNILAB and UECE.

46. Budget and Funders – The Project was originally budgeted at USD 80 million, with funding shared between IFAD and the State of Ceará. There was also beneficiaries' counterpart, which amounted to BRL 14.9 million. The execution was equal to BRL 82 million of IFAD and state funds. In specific, IFAD funds totaled BRL 36,285,323.11, corresponding to 100% of the total financing (value after exchange rate variation), and state funds reached BRL 45.7 million. Beneficiaries' counterpart amounted to BRL 7 million, so that PPF resources totaled BRL 89 million.

47. Two deadline extensions were necessary. In 2019, an 18-month extension was approved, with fieldwork and financial completions set to 12/31/2020 and 06/30/2021, respectively. In 2020, however, another extension was approved, moving deadlines by 12 months. Therefore, fieldwork and financial

completions were set to 12/30/2021 and 06/30/2022, respectively. For more details on budgets and expenses, see Section E.

48. Procurements. Procurements made under the Project were satisfactory. The decentralized execution model allowed Project objectives to be achieved with the support of implementing institutions: Instituto Agropolos and IICA. Within the scope of the PMU/PPF, the bids were executed by CEL04/PGE, a state agency specialized in bidding processes conducted with resources from international organizations. Documentation archiving followed a chronological order and was organized by activity. Continuous qualification, through courses, seminars and/or lectures during the execution of other projects, was a relevant strengthening action. All documents regarding the procurement processes presented both the IFAD anti-corruption policy and the IFAD policy to preventing and responding to sexual harassment, sexual exploitation and abuse .

49. Continuous Technical Assistance – CTA was conducted by 07 entities with presence, experience and knowledge of the PPF territory. It was characterized as a multidimensional technical-pedagogical intervention, based on agroecology and the coexistence with the semi-arid. Benefiting households received continuous technical assistance for 4 years, with fortnightly or monthly visits. CTA teams were composed of professionals with technical or higher education in the areas of agricultural sciences, social sciences and humanities. As a selection criterion, PPF required each CTA institution to guarantee that at least 30% of field technicians were women. The technical assistance process took place in the communities, as well as during the procurement and accountability processes. During the pandemic, CTA entities started using digital tools (e.g., WhatApp) to keep in touch with benefiting communities and households and to provide guidance and support in production and marketing issues.

50. Monitoring and Evaluation (M&E). In order to monitor PPF initiatives, a database was constructed with information on benefiting households and field interventions. The Family Farming Portal, where the information is stored, was structured following the necessary group divisions, such as the youth, women, and traditional communities. The PPF system for IPs monitoring was used to register and monitor productive investments. M&E contributed to the impact evaluation study by providing reliable data for the dissemination of results and the evaluation of the progress of the Project. Researches on the impact and results of PPF were carried out to feed the LF indicators and to support the Project management and decision-making processes.

B4. TARGET AUDIENCE

51. Targeting criteria. The Project sought to assist poor and extremely poor rural households. The focus was on: (i) family farmers, with or without land, working in the agriculture and/or non-agricultural rural activities, with willingness and potential to develop sustainable, diversified production practices with growth potential; (ii) at least 50% of these farmers are eligible for PRONAF A or B; (iii) rural women; and (iv) rural youth (individuals between 15 and 29 years old).

52. In its targeting strategy, the Project focused on vulnerable and marginalized rural communities and households in situations of poverty and extreme poverty. Priority was given to some groups: the youth, women, indigenous peoples and quilombolas). The participatory methodology assured the sample to be representative of all these subgroups. In the case of communities with no access to land, the Project provided opportunities for non-agricultural enterprises to generate income. The social targeting strategy adopted a demand-driven approach based on the involvement of beneficiaries. The implementation of such strategies stimulated the participation of local actors and ensured the inclusion of the most marginalized and priority groups.

53. PPF action strategy relied on partnerships with local entities that have relevant knowledge of rural areas. Thirty-one local committees were created, characterized as PPF deliberative instances, being constituted by representatives of rural communities and their social and productive organizations. In total, it reached 600 rural communities in 31 municipalities, of which 15 are Quilombolas, 13 are artisanal fishers and 03 are indigenous. Of the initial target of 60,000 households, the total number of benefited households was 54,999 (91% of the established goal), with 28,567 being women-headed, 8,770 being youth-headed, 726 quilombola families, 651 artisanal fishing families, and 112 indigenous families.

54. Gender equity and women's empowerment. The Project developed and implemented its gender strategy: (i) to guarantee that women and men could access and benefit from the Project activities and incentives with equity (the target set for women was exceeded: 52% of households benefiting from PPF were women-headed); (ii) to strengthen the capacity of women, so that they can play an active role and be socially recognized as relevant subjects in the economic-productive household and community spheres (women community leaders were trained); (iii) to increase women's economic power through access and control over key resources (2,851 women who received IPs and CTA increased their income by at least 30%); (iv) to promote gender equity within and outside households (there was a 14% increase in the participation of women in associations between 2015 and 2020). PPF adopted a transversal gender approach in the development of its components' activities while maintaining specific lines of action and operational mechanisms. The project had 8 gender indicators in the LF, oriented to encourage and guarantee the involvement of women in its activities and in the economic-productive community sphere and to promote

gender equity in general. Furthermore, the Project established the target of 30% of technical assistants to be women, which facilitated the dialogue with beneficiaries in the communities.

55. Youth. The youth constituted a priority population within the Project target group. Children, adolescents, and young people are the age groups most affected by extreme poverty. In rural and urban areas, more than 50% of the youth live in households with a per capita income of up to 1/2 minimum wage. In the Project, 15% of benefiting households were youth-headed. To reach this group, the Project had a specific line of training and access to opportunities for the youth. The main activity in this regard considered young people—between 15 and 29 years old—who wanted to develop different types of economic enterprises, both in agriculture and in other areas. A group of young social mobilizers, composed of 34 individuals was formed (22 women), aiming at strengthening the participation of households, communities, youth and leaders in the Project, in order to facilitate communication between the various audiences and partners. The strategy arose through a partnership with FETRAECE. Among the main results of the youth strategy and action plan, the following worth highlighting: the establishment of the Semi-Arid Youth Network, which benefited 4,151 youth-headed households with IPs; and the training of 8,770 young people in access to public policies and the training of 107 young leaders in the areas of community self-management, rural succession, solidarity economy and fair trade. Furthermore, PPF interventions enabled 255 young people to reach management positions in community associations.

56. Traditional Peoples and Communities (PCTs). Rural Quilombola communities are ethnic groups predominantly made up of the rural black population, who define themselves based on their relationships with the land, kinship, ancestry, traditions and their own cultural practices. Quilombola communities, with or without a recognition process started, were considered a priority for the Project. PPF served 15 Quilombola communities, benefiting 726 households (reaching 72% of the target). Regarding indigenous peoples, the Project served 3 communities of the Tabajara ethnic group, benefiting 112 households that are concentrated in the territory of Inhamuns (reaching 22% of the target). It is important to highlight that, of the 14 Indigenous Peoples present in Ceará, only 1 (Tabajara) is in the PPF area. For this reason, the achievement of this goal was relatively low. Traditional communities of Artisanal Fishers are characterized by the fact that fishing is the main activity developed in their territories, which is conducted using traditional techniques and instruments to guarantee the collection, preparation and processing of fish both for household consumption and commercialization. PPF served 13 artisanal fishing communities, benefiting 651 households.

C. PROJECT RELEVANCE

57. Project relevance was considered highly satisfactory (score: 6). The formulation of PPF was based on the PDHC I experience. The Government of Ceará took the successful and innovative experience of PDHC and developed, through the PPF, a PNATER-inspired project of CTA in the SDA, which has a strong presence of TARE-related civil society entities. PPF proved its relevance by achieving the proposed goals, thus becoming a methodological reference for public policies and actions in the SDA. For instance, the targeting strategy as well as the participatory and demand-oriented methodologies developed throughout the execution of the Project have influenced other state projects, such as the World Bank-funded São José IV Project.

C1. RELEVANCE REGARDING THE EXTERNAL CONTEXT

58. Convergence with national policies. The PPF was developed through three presidential terms: Dilma Rousseff (2013-2016), Michel Temer (2016-2019) and Jair Bolsonaro (2020-2021). In the first period, when the Project was prepared and started to be implemented, the Federal Government defined poverty reduction as its main priority, expanding public policies to combat poverty. The Project established synergy with several federal programs and policies, such as PDHC II, Bolsa Família, PNAE, PAA, PRONAF and Cisterns Programme, among other national initiatives of social protection.

59. At that moment, considering the national context, PPF goals not only converged to the national policy but also made it possible to act in a region that has one of the highest poverty levels in the country. As of 2016, the Federal Government introduced new premises articulated around the “Bridge for the Future” program, a platform that guided new policy directions that significantly interfered in the synergy previously established. Such redirections strongly affected the poor rural population, especially with the extinction of the Ministry for Agrarian Development (MDA). With the extinction of the MDA, programs like PRONAF, PAA, and PNAE were significantly diminished, while the TARE national policies were also redesigned. Both Temer and Bolsonaro administrations were characterized by the worsening and/or discontinuity and significant modifications of public policies aimed at the rural area and the social security system. Such a negative scenario, especially since 2016 when the PPF started to implement its field initiatives, demonstrates the relevance of the Project in the face of the unfavorable national and state context. Thus, the initiatives conducted became even more relevant and necessary. Notably, CTA, social technologies and the promotion of productive structuration were fundamental for the beneficiaries as, between 2018 and 2020, they possibly became the only public initiatives present in the territories served by the Project.

60. Complementarity with state policies. In contrast to the context observed at the federal level, the State Government kept it commitment in meeting the objectives of the Project. PPF initiatives aimed at reducing

poverty and extreme poverty in rural areas and at coexisting with the semi-arid dialogued with and were complemented by other state programs. Such convergence was evident in the scope of state policies focused on combating poverty and on climate resilience. Among the programs and policies complemented by the Project, there are the State Fund to Combat Poverty (FECOP), the state PAA/PNAE, the "Garantia-Safra" and the Time to Plant Program. In the last seven years, the State has developed public policies in the social area that converge with the territories where PPF operates. As an example, there is the "Mais Infância" Program, which provides conditional cash transfers and social assistance for the poorest households that have children up to 6 years old. Regional initiatives supported by the IFAD—such as the Forum of State Secretaries of Family Farming (supported by the Semear International Project), several initiatives from the AKSAAM project, the Consortium of Governors of the Northeast Region, and the Forum of Secretaries of the Northeast Region—played a key role in articulating and formulating family farming policies in northeastern Brazil. The Semear International Project and the AKSAAM supported the Project in the conduction of strategic actions in food safety, knowledge management, commercialization, socio-biodiversity and health.

61. Alignment with IFAD policies. The objective of the Project was aligned with IFAD's strategy and policies, in the case of the National Strategic Opportunities Program (COSOP 2008-2013) and its review in 2016. In this sense, PPF contributed to achieving the following IFAD strategic objectives (SO) for Brazil: SO 1 – Increase the commercial agricultural production of small-scale farmers with access to markets in remunerative and sustainable conditions; SO 2 - Improve the access of the rural poor to jobs and non-agricultural activities in rural areas, including small towns and villages; SO 3 - Improve, via knowledge generation and dissemination, the capacity of the rural poor and the relevant institutions from northeastern Brazil to coexist with the semi-arid conditions, adapting to climate change and making better use of the development potential of the region; SO 4 - Deepen the discussion of poverty reduction policies at the national and international levels. In addition, the COSOP review identified another important strategic objective: building the capacities of family farmers and their organizations/associations, particularly with a focus on youth and women. Strategic objectives 1 and 2 are fully reflected in the PPF Components 1 and 2. SO3 is related to the dissemination of experiences and knowledge generated by farmers in the semi-arid region. Therefore, the IFAD provided opportunities and contributed to the construction of PPF articulations with AKSAAM, PSI and DAKI projects, which supported actions to strengthen the coexistence with the semi-arid at both the local and international levels. Such convergence of PPF with IFAD's global objectives can also be evidenced by considering the latest update of COSOP (2020), in which three programmatic lines were reclassified: a) improve agricultural production, food and nutrition security, and market access; b) improve policies and programs focused on rural development and rural poverty reduction through pilot programs, experimentation and scaling up of best practices; and c) strengthen the capacities of government institutions and of organizations of the rural poor to implement policies and programs. In these objectives, the synergy between PPF Components 1 and 2 of substantially advanced towards the fulfillment of the COSOP, such as, for example, households that received CTA and the 23% reduction of poverty among beneficiaries according to the impact evaluation study. Considering the Sustainable Development Goals (SDGs), PPF actions meet the following goals: SDG 2 – Zero hunger; SDG 3 – Good health and well-being; SDG 5 – Gender equality; SDG 6 – Clean water and sanitation; and SDG 7 – Affordable and clean energy.

62. Coexisting with the semi-arid – As for strategies of coexistence with the semi-arid, PPF favored, through advice on food and water storage practices, the implementation of social technologies: cisterns for human consumption and production, water reuse systems, productive backyards, ecological stoves, biodigesters, ecological septic tanks and the implementation of forage support.

C.2. INTERNAL LOGIC

63. The design of the Project as well as the logical framework and its changes were realistic in meeting results, which enabled the achievement of objectives. Activities were relevant for the Project area and for beneficiaries, while the risks assumed (such as reduced technical staff, low articulation of the Federal Government within the scope of the Project, and the diminishing of public policies offered) were appropriate to its implementation trajectory. However, two incidental events of great magnitude, not foreseen in the LF and in the Theory of Change (ToC), negatively affected the reach of some indicators: the discontinuity of public policies aimed at the Project target audience and the effects of the COVID-19 pandemic that began in March 2020.

64. The COVID-19 pandemic. The approaches and methodologies carried out by the Project until early 2020 suddenly became inappropriate due to social isolation requirements, the main preventive measure for the COVID-19. During this period, training actions and processes, production and dissemination of content, and remote assistance were reinforced, with the virtual environment standing out as the main innovative channel of articulation and communication with beneficiaries. Among innovations, a virtual survey was carried out with 1,600 households in order to respond to eight indicators of the Project LF.

65. Face-to-face CTA was partially interrupted and the implementation of IPs was suspended for six months, especially in terms of procurement activities. The pandemic also interfered with the commercialization of parts of the agricultural production, interfering with the dynamics of in-person fairs, the

displacement of producers and the production. One of the strategies adopted to reverse this situation was the promotion of virtual agroecological fairs.

66. Institutional partnerships were strategic for the Project at that time, among which stands out the Ceará State School of Public Health. Through the Slow Food/AKSAAM partnership, there was the project "Strengthening territorial identity, valuing the food culture and socio-biodiversity of traditional communities and rural youth in the state of Ceará", with interventions with the Tremembé people in Barra do Mundaú and the Tabajara people in Quiterianópolis – Inhamuns. In partnership with the School of Social Gastronomy (EGS), a nutrition and health class was held with the participation of technicians from the Technical Advisory Entities, the SDA and PPF beneficiaries from traditional communities.

67. Discontinuity of public policies aimed at the Project target audience. The changes promoted by the Federal Government from 2016 onwards led to a reduction of public policies offered in PPF territories, according to data from the impact evaluation study carried out in June 2021, which indicates that both the treatment and control groups presented a decrease in the access to public programs and policies between 2015 and 2020. The following results were identified: -56% for the Bolsa Família program, -96% for the Brasil Sem Miséria Program, -84% for the "Garantia-Safra" and -58% for the supply of drinking-water by tanker trucks.

68. Adequacy of work teams. Some adaptations needed to be made on the PMU and CTA teams. In 2013, the PMU team consisted of 04 people; in 2014, it reached 15 professionals; in 2016, there were 35 individuals working at the PMU and the 03 PPF regional offices; in 2017, there was a readjustment of the organizational chart, with the incorporation of 02 specialists (Gender, Race and Ethnicity, and Youth, with the theme of communication also being added) and the creation of technical coordination and action for water access. In 2018, PPF staff was adjusted and expanded. This change aimed to strengthen the operational capacity of the team, regarding the legal and administrative-financial areas to reinforce the preparation of Investment Plans and professionals for the operation of mobile ETAs. In 2019, a management alignment was carried out focusing on the completion strategy. PMU demobilized the three regional offices, becoming the sole physical and administrative reference for the Project. The staff was reduced in 30% of the original design. In terms of CTA services, the first stage started in September 2015 with a team of 01 technician for every 02 communities; in 2017, 01 technician for every 03 communities; in 2019, 01 technician for every 04 communities; and in 2020 and 2021, a further reduction in the number of field technicians was made.

C3. ADEQUACY OF CHANGES MADE TO THE DESIGN

69. Deadline extensions. PPF had two dealine extensions. The 18-month deadline extension firstly approved aimed to ensure the implementation of all IPs, with a three-year CTA guarantee. In response to the COVID-19 pandemic, it was requested a second 12-month deadline extension. The Government of Ceará provided the additional funds (BRL 9.5 million) necessary for the maintenance of PPF and CTA teams until December 2021, the (post-extension) deadline set for the physical completion of the Project.

70. Counterpart funds. After reviewing the Declaration of Specifc Expenses, IFAD agreed with the inclusion of investments from other state programs conducted by the SDA in PPF territories as a complement to the beneficiaries' counterpart funds specified in contract.

71. Reduction of financial values per benefiting households. When the Project was firstly designed, IPs had a financial limit per households of up to USD 3,500 executed in the 1st stage. The 2017 Midterm Review mission renegotiated the maximum value per household to USD 1,500 in the second and third stages. The renegotiation took place with the objective of expanding the Project reach to more households. With this new configuration, the Project was able to support 17,763 households, reaching 88.82% of the goal established in the LF. It is worth noting that the Midterm Review took place at a time of a serious water crisis that affected the semi-arid region of northeastern Brazil.

72. Change in the PMU management model. It occurred specifically in the management area, with the inclusion of the Project Accountability Unit, and the creation of several roles like Technical Coordination, Legal Counsel, and Specialist in Gender and Youth. The actions of the local offices were centralized in the PMU.

73. Incorporation of the health education dimension through the PPF + Health initiative.

74. Water access initiatives: Access to water was planned since the original design of the Project. However, the drought that hit the whole Northeast region of Brazil from 2012 to 2017 decisively influenced the initial reorientation of "investing in water for small irrigation systems". This change was also supported by the discontinuity of public policies complementary to the Project like the Cisterns Program. As previously described, the impact evaluation study showed that the initiatives of access to water for human consumption conducted by the Cisterns Program decreased 45% among PPF beneficiaries. The lack of rain and the decrease in the main policy of access to water in rural areas led to the redesign of the topic by the SDA and IFAD. The construction of cisterns became a priority since there was a confirmed demand for cisterns by 6,000 households benefiting from PPF. Thus, this topic, which was planned to primarily focus on small irrigation systems, was redesigned to strengthen the water capacity of households through the construction of 16,000 liters cisterns for human consumption, school-based cisterns, and the introduction of drinking water supply provided by mobile ETAs. It comprises a set of equipment mounted on a mobile platform

(trailer), used to turn dirty and/or contaminated water into drinking water. The operation is equivalent to that of a conventional ETA. It is normally used in emergency situations caused by droughts and floods. Its basic characteristics are: mobility, robustness, sustainability and low operating cost.

75. Computerization of CTA activities. PPF developed a system for planning, monitoring and managing CTA actions and for registering benefiting households and communities (including household geocodes and photos). The system also has two apps for tablets and smartphones, the “ATER CADASTRO” and the “ATER ATIVIDADES”, which automatically transmit the data collected by CTA teams during fieldwork.

76. The implementation of strategies of knowledge management, social communication, and gender, race and ethnicity. Although not initially planned, the Project team developed and implemented strategies for these topics in an integrated and transversal manner for all PPF components. Knowledge management products developed by PPF provide important inputs for the strengthening and expansion of rural public policies conducted by the state government, as well as for the improvement and expansion of CTA services. The main lessons learned from PPF were systematized in the following products: agroecological techniques, social technologies, work methodology, and the PPF targeting approach.

77. Execution of Productive Projects. The preparation of business plans for the implementation of community production projects was foreseen during PPF design stage. They considered a transfer value per family of up to USD 3,500 (approximately BRL 13,000 at the time), plans focused on a unique productive activity, and a 30% counterpart from beneficiaries. After selecting communities according to beneficiary eligibility criteria, it was identified the need for adjustments in Project design due to the characteristics of the target audience. The counterpart amount decreased from 30% to 10%, which could be offered as goods and services. In addition, the limit of only one financed productive activity per community was lifted, requiring a minimum of 5 households per activity. Another change regards the move from a model based on business plans to one based on investment plans (IPs), which are comparatively simpler, considering that PPF deals with small productive projects focused on food security and income increase. Subsequently, the SAF-PP methodology was adopted for the economic and financial analysis of IPs. The PMU team and CTA entities received training on such methodology. The Project Midterm Review analyzed resources availability, requiring the adjustment of the transfer cap, reaching USD 2,000 and posteriorly USD 1,500 per family (approximately BRL 4,725).

78. Youth and Communication. PPF redefined its youth strategy, starting with the hiring of a consultancy specializing in youth and communication (2017). In this sense, a new strategy was developed, with an action plan focused on productive development, skills development and popular communication. As a result, there was a strengthening of political and social participation and organization, economic empowerment, and the protagonism and expressions of rural youth. Visibility, publication and dissemination of good practices and project results were ensured.

79. Change in the Logical Framework. After the Midterm Review, some indicators had their nomenclature changed and target values reduced. The following indicators were revised: 24,000 rural households receive continuous technical assistance in organizational strengthening, agricultural and non-agricultural production, business management and access to markets (RIMS 1.1.9, 1.6.2); 12,000 rural households receive specialized technical assistance (reference 01.02.02.01); and 30,000 households benefiting from productive investments financed by the Project. These indicators thus became, respectively: 18,000 households receive only continuous technical assistance; 6,000 households receive only specialized technical assistance; and 20,000 households benefited from productive investments. Another three indicators had their target values changed: 484 community and productive organizations strengthened with proper structure, governance and management systems (the previous goal was 604); 482 community organizations (the previous goal was 600); and 2 productive organizations (the previous goal was 4). Only one indicator was excluded from the LF: 500 households receive investment for small irrigation systems.

80. New indicators were incorporated into the LF. In addition to the demands presented during the Midterm Review, other indicators were included due to the need for result accountability. The indicators added were: Households reporting an increase in production (CI 1.2.4) (60%); Rural farmers’ organizations involved in formal partnerships/agreements or contracts with public or private entities (CI 2.2.3); Support from organizations to rural farmers and members reporting new or improved services provided by their organization (CI 2.2.4) (30%); Households reporting the adoption of new/improved inputs, technologies or practices (CI 1.2.2); 30% of the households benefiting from technical assistance are headed by women or young people; Individuals trained in production practices and/or technologies (CI 1.1.4); Supported farmers who are members of a rural farmers organization (CI 2.1.4); Supported rural farmers organizations (CI 2.1.3); Cisterns implemented and Farmers who access production inputs and/or technological packages (CI 1.1.3).

D. PROJECT EFFECTIVENESS

81. The PPF development goal (DG) is “to increase the income and quality of life of the target population as a result of the expansion of social capital and sustainable productive development, with a focus on women and youth”. To measure the DG, two physical targets (M) were considered: M1 – 30,000 households receive technical assistance and productive investments; and M2 – 80% of the 30,000 households served by

CTA and IPs increase their average income by at least 30% (comparing to data from the baseline survey). The results obtained for M1 and M2 were, respectively, 17,763 and 7,015 households.

82. The Project consists of 11 products (P) organized as follows: a) Component 1 comprises 6 products: (P1) Project beneficiaries and their organizations receive continuous and specialized technical assistance; (P2) Beneficiary organizations strengthened for production, management and access to markets; (P3) Autonomy and empowerment of women; (P4) Rural youth develop their skills to become entrepreneurs and access land; (P5) CTA providers have their qualifications improved to provide a high-level service; and (P6) Access to drinking water. b) Component 2 comprises 3 products: (P7) Through access to innovations and the introduction of irrigation methods, beneficiaries achieve increased productivity and production, obtaining better quality products and greater added value; (P8) Beneficiaries improve their access to markets (including institutional markets, public procurements and family farming policies); (P9) Family farmers adopt innovative agroecological practices and sustainable production techniques. The last two products are (P10) Project Management: Activities performed as planned; and (P11) Monitoring and Evaluation: Assessments and Knowledge Management.

D1. GOALS AND RESULTS

83. To guide Project goals, two results (R) were considered: R1 - Family farmers and their community and economic organizations have their capacities strengthened; and R2 - Family farmers and other small-scale farmers have access to production chains and markets in a sustainable and profitable manner. The results were covered by Component 1 (R1) and Component 2 (R2).

84. The Project involved a total of 54,999 households, of which 28,567 are women-headed and 8,770 are youth-headed. As shown in Table 2, the Project reach for families belonging to Traditional Peoples and Communities stands out: artisanal fishing families (651%), quilombolas (72%) and indigenous peoples (22%).

Table 2. Project Beneficiaries

PROJECT BENEFICIARIES	GOAL	RESULT	OUTREACH
60,000 family farming households and other small-scale farmers are directly benefited from the Project, with all of them trained on the access to public policies.	60,000	54,999	91%
Women-headed Households	15,000	28,567	190%
Youth-headed Households	15,000	8,770	58%
Indigenous families	500	112	22%
Quilombola families	1,000	726	72%
Artisanal fishing families	100	651	651%
Households receiving technical assistance and productive investments.	30,000	17,763	59%

Source: UPM-PPF (2022).

85. Overall performance (score: 5 – satisfactory). Table 3 contains the most relevant activities for Project implementation. Among these activities, there are the selection of communities, the hiring and conduction of CTA services, the training in public policies, and the elaboration and implementation of investments, among others. Thus, the Project managed to implement all these activities throughout its territories, benefiting the priority and most vulnerable segments (youth, women, indigenous people, quilombolas and artisanal fishers), achieving success in targeting and selecting beneficiaries, reaching a satisfactory performance.

Table 3. The most relevant activities for the implementation of the Project.

Activities	2013	2014	2015	2016	2017	2018	2019	2020	2021
Signing of the Loan Agreement									
Implementation of the organizational structure, including the PMU and Regional Offices									
Selection of 62 communities (1st stage)									
Hiring of CTA services (1st stage)									
Preparation of CDPs									
Hiring of CTA services (2nd and 3rd stages)									
Selection of 538 communities (2nd and 3rd stages).									
Preparation of CDPs									
Baseline study									
Hiring of FETRAECE to monitor social mobilizers									
Hiring of entities to implement precast cisterns									
Hiring of entities to carry out public policies training									
Training in public policy									
Workshop on the Guide for the Development of Production Projects									
Selection, hiring and commencement of 44 social mobilizers									

Preparation of IPs (1st, 2nd, and 3rd stages)									
Gender, Race and Ethnicity actions									
Youth Actions, Popular Communication and Knowledge Management									
Installation of drinking water cisterns									
PPF + Health actions									
Food and Nutrition Security actions									
Training on the analysis of IP procurements									
Implementation of 533 IPs									
Virtual surveys									
Impact evaluation									

Source: PMU-PPF (2022).

86. Achievement of the goals of Result 1: Family farmers, other small-scale farmers and their community and economic organization have their capacities strengthened – Component 1: Capacity-building. Table 4 presents the main indicators considered for achieving R1 goals and the results obtained by the Project.

Table 4. Indicators related to R1 – Component 1

INDICATORS	GOAL	RESULT	OUTREACH
60% of households reported production increase (CI 1.2.4)	60%	64%	106%
80% of community and productive organizations strengthened and sustainable (RIMS 2.6.3)	385	532	138%
70% of beneficiaries of technical assistance and investment plans access public policies	21,000	15,809	75%
30,000 rural households also received continuous technical assistance	30,000	23,766	79%
484 investment plans prepared and submitted for consideration and funding from the Project and other sources	484	565	117%
300 technicians providing technical assistance received training to improve service provision (RIMS 1.2.1)	300	334	111%
484 farmer organizations involved in formal partnerships, agreements or contracts with public or private entities (CI 2.2.3)	484	395	82%
145 farmers and organization members reported new or improved services provided by their organization (CI 2.2.4)	145	517	356%
484 community and productive organizations strengthened with proper structure, governance and management systems	484	533	110%
60,000 households received training in access to public policies (RIMS 1.8.1; 1.8.2)	60,000	38,766	67%
30,000 households benefited with technical assistance (continuous and/or specialized)	30,000	23,766	79%
18,000 households received continuous technical assistance	18,000	23,699	132%
Individuals trained in production practices and/or technologies (CI 1.1.4)	30,000	23,766	79%
Farmer organizations supported (CI 2.1.3)	484	533	110%
Supported farmers who are members of a farmer organization (CI 2.1.4)	30,000	23,766	79%
1,200 community leaders trained (RIMS 1.6.3)	1,200	475	40%
484 Participatory Rural Appraisals elaborated	484	601	124%
482 Development Plans prepared in a participatory manner	482	533	110%
1,200 rural youth received training and support to initiate or strengthen economic initiatives	1,200	6,045	504%
Cisterns implemented for human consumption	20,528	20,528	100%
484 community and productive organizations strengthened with proper structure, governance and management systems	484	533	110%

Note: CI = Core Indicator; RIMS = Results and Impact Management System.
Source: PMU/PPF (2022).

87. Continuous Technical Assistance was implemented by 7 third sector organizations (NGOs) selected through a competitive process to serve 600 rural communities. These organizations provided direct support for a period of 3 to 4 years, benefiting 23,766 households, which represent 79% of the target value of 30,000 households. The average cost per family per year was BRL 1,086. The adopted strategy built the capacities of households with new knowledge and knowledge exchange. It introduced and strengthened practices based on the coexistence with the semi-arid, on agroecology, on food and nutrition security, on the promotion of equity and equality of gender and race/ethnicity, on the protagonism and expression of rural youth and on popular communication and knowledge management. In addition, CTA boosted households' productive capacity through IPs. Of the 23,766 households, 17,873 (approximately 75%) had access to TARE services for the first time, which represented a milestone, expanding and organizing the capacity for producing food for consumption, generating income and preserving the environment. In order to maintain the in-person dynamics observed prior to the advent of the COVID-19 pandemic and to keep results as they were, remote activities were developed.

88. 60% of households reported production increase (106% of the goal was achieved). The increase in households' agricultural and non-agricultural production is a result of the technical learning obtained from CTA in terms of household access to equipment and inputs (through IPs) and the implementation of social

technologies. This operating model provided important results, especially in households that did not have the economic conditions to make production viable. Some results from the impact evaluation study are worth highlighting. Comparing the years of 2015 and 2020, the following activities have shown an increase in production: beekeeping (+297%); poultry farming (+79%), sheep and goat farming (+34%), pig farming (+140%). Production increase is related to the appropriation of agroecological practices that reduce the mortality rate of animals, the diversification of fruits and vegetables (polyculture – staggered production) and crop rotation, among others. Production increase is also related to the diversity of species produced. Women have a fundamental responsibility for production diversity. It was possible to infer this from the Agroecological Logbooks initiative, as 683 different products were registered by participating individuals: foods of plant origin (271), animal origin (100) and mixed origin (67), handicrafts (127), seedlings and seeds (53), medicinal plants and preparations (38), and other products (17).

89. 80% of community/productive organizations strengthened and sustainable (138% of the goal was achieved). According to the results of the remote survey, 532 community organizations were created and/or strengthened by the Project. Before PPF, 24% of communities did not have an organization; 25% already had some organization, which were regularized with PPF assistance; and 51% already had some organization, which were regularized. The strengthening process took place through CTA services. Productive investments generated knowledge related to the administrative and financial management of investments. Formative actions strengthened and constituted community leaders—with a focus on the youth and women—and enabled the democratization of organizations' board composition in terms of members' gender and age. The youth and women accounted, respectively, for 151 and 732 leadership positions in community/productive organizations. It is also worth noting the organizational quality of communities that promoted access to the São José IV Project public notices, since the youth accounted for 34 of selected individuals. In addition, 8 associations were approved in the notice of access to markets, 3 in the notice of social and productive inclusion, and 2 in notice of water supply.

90. 70% of households benefiting from technical assistance and investment plans have access to public policies (75% of the goal was achieved). The impact evaluation study showed that 15,809 beneficiaries accessed public policies, with emphasis on: cisterns for production (+21%), PAA (+11%), agrarian reform and land credit program (+50%), program to combat rural poverty (+50%) and crop insurance (+600%). The training and workshops on public policies focused on the access to policies as a right, dialoguing mainly with gender, generational, race and ethnicity issues. These initiatives were important for achieving this result as the youth and women accounted for 26% and 46% of the trained public, respectively. Throughout the Project, other training processes were developed with a focus on the youth, women, and black/quilombola communities, which enhanced access to specific public policies for these audiences. In this sense, the publication of the booklet "Public Policies for the People of the Semi-arid Region – Advances and Challenges" must be stressed as an instrument for disseminating people's rights and the access to public policies. The impact evaluation study showed a decrease in the access to public policies between 2015 and 2020: "Plano Brasil sem Miséria" (-97%), the Bolsa Família program (-56%), the National Cistern Program (-45%) and the PNAE (-29%). This reduction is probably related to the national political scenario, which was marked by the discontinuity of some public policies aimed at family farming, such as the 94% budget reduction between 2014 and 2020 in the Cisterns Program, and the PNAE, which was penalized with the Law 3.292/2020, excluding the priority given to indigenous peoples, quilombola communities and settlers from agrarian reform, as well as the closing of schools during the pandemic.

91. Rural producer organizations involved in formal partnerships, agreements or contracts with public or private entities (82% of the goal was achieved). As a result, 395 organizations are involved in formal partnerships, agreements or contracts, as reported in the Outcomes Survey.

92. Cisterns for human consumption implemented (100% of the goal was achieved). The Project reached 100% of the established goal by implementing 20,528 cisterns, 30 of which were school-based. As a consequence, access to drinking water in sufficient quantity for human consumption was provided for 81,992 household members and 1,654 school teachers, students and staff. Therefore, a total of 83,646 individuals were directly impacted in terms of health and food and nutrition security. The construction of cisterns directly impacts women's lives, since they are historically responsible for getting and managing water for the whole family. These initiatives reduce work time and effort, also reducing the distance to access water. According to CAVALCANTI (2003 apud PONTES, 2013) rural women, with the help of children, walk between 3 to 6 km each day carrying water cans of 16 to 18 liters on their heads, which is equivalent to 2,700 liters of water per month.

93. Community and productive organizations strengthened with proper structure, governance and management systems (110% of the goal was achieved). The 533 organizations benefiting from PPF had their physical structure strengthened through the acquisition of computers, sound systems and furniture, as well as improvements in the condition of the physical spaces where community meetings are held. The procurement process was carried out in a participatory manner, with the contribution of 533 purchasing committees made up of community members, which involved approximately 1,000 women. PPF strengthened the capacities of associative and economic organizations through specialized CTA that promoted a set of training sessions focused on: governance; associative self-management (shared

management of all members); planning; collection and administration of resources; basic accounting as an accountability tool; political participation and articulation; communication; and others. These actions led to the development of new associative organizations as well as the regularization and strengthening of those that already existed.

94. Achievement of the goals Result 2: Family farmers and other small-scale farmers have access to production chains and markets in a sustainable and profitable manner – Component 2: Productive Development and Environmental Sustainability. Table 5 contains the main indicators considered for the achievement of R2 goals and the results obtained by the Project.

Table 5. R2 Indicators – Component 2.

INDICATORS	GOAL	RESULT	OUTREACH
60% of households reporting the adoption of new/improved inputs, technologies or practices	60%	91%	151%
10,000 households accessing other sources of funding for productive investment (not related to the Project)	10,000	3,090	31%
At least 30% of associative ventures will be led by women	180	334	185%
At least a 30% increase in production volume for households benefiting from productive investment	30%	23%	76%
60% of products generated by productive investments go through some stage of value adding	60%	57%	95%
At least 30% increase in the sale of beneficiaries' products, as a result of productive investments	30%	34%	113%
At least 70% of households benefiting from productive investments access public policies such as PRONAF, "Garantia-Safra" and/or institutional markets/public procurements (PNAE, PAA etc.)	14,000	17,052	121%
At least 70% of households benefiting from productive investments participate in family farming and agroecological fairs	14,000	1,535	11%
30,000 family farmers adopt innovative agroecological practices	30,000	23,766	79%
20,000 households benefiting from productive investments	20,000	17,763	89%
Farmers who access production inputs and/or technological packages (CI 1.1.3)	20,000	17,763	89%
100% of the investments made apply agroecological practices, soil conservation or sustainable management of the caatinga biome	484	533	110%
100% of processing units meet environmental standards for effluent treatment	100	100	100%

Source: PMU/PPF (2022).

95. Households benefiting from productive investments (89% of the goal was achieved). Productive encompassed different activities guided by the demands of benefiting households, being focused on self-consumption and small sales. The productive activities accessed by 17,763 households were: poultry farming; sheep and goat farming; pig farming; beekeeping; artisanal fishing; handicraft; agricultural and mixed activities, as shown in Table 6.

Table 6. Participation of women, youth, and traditional peoples and communities in PIs.

Productive	Total		Women*		Youth*		Indigenous		Fishers		Quilombolas	
Activity	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Poultry farming	7,491	42.17	5,199	69.41	1,602	21.38	65	0.87	188	2.51	282	3.76
Sheep and goat farming	6,162	34.69	2,712	44.24	1,132	17.76	21	0.34	25	0.41	136	2.21
Pig farming	2,636	14.84	1,401	53.17	566	21.47	6	0.23	99	3.76	21	0.80
Beekeeping	753	4.24	223	29.60	199	26.49	9	1.20	-	-	7	0.93
Artisanal fishing	247	1.44	213	32.16	60	16.37	-	-	129	52.25	-	-
Handicraft	256	1.39	83	87.38	40	20.93	-	-	-	-	11	4.45
Multiple activities funded that do not correspond to the items above	218	1.23	138	63.30	54	24.77	-	-	-	-	-	-

*The share of women and youth overlap. Example: a benefiting individual can be a young woman.

Source: PMU/PPF (2022).

96. A total of 533 IPs were implemented, 532 with associations and 1 with a cooperative (COODEF). Family agroecosystems were characterized as a combined production of annual crops (swiddens), livestock raising (poultry, sheep, goats and swine), and the production of fruits, vegetables, and medicinal plants in productive backyards. COODEF's IP was aimed at the organization of primary production, with the structuring of vegetable production and sheep farming.

97. 60% of households reported the adoption of new/improved inputs, technologies or practices (151% of the goal was achieved). It was found that 16,215 households adopted innovative agroecological practices, which were integral parts of the day-to-day life of benefiting communities, such as: water and soil conservation techniques; use of agroecological pesticides; sustainable management techniques for the caatinga in general (swidden consortium, use of manure and crop residues, crop rotation, composting, etc.)

and reforestation practices. It is worth highlighting CTA actions as these practices were considered in 1,185 workshops, 386 exchanges, 435 field days and more than 34 itinerant fairs. For many benefiting households, the development of agroecological techniques was an innovation that generated many opportunities, such as diversification and self-consumption (ensuring food and nutrition security), generating production surplus for sale in the neighborhood and at local fairs.

98. At least 30% of associative enterprises will be led by women (185% of the goal was achieved). The number of women leading enterprises is expressive and they represent 63% of IPs. The indicator's outreach was enhanced due to the implementation of the Gender and Race/Ethnicity Strategy and Action Plan conducted by PMU and CTA technical teams since 2017, when the 2nd and 3rd stages of the Project began. The transversality between components 1 and 2, through the strengthening of the topic among technicians who carried out the field monitoring in the productive topic. They were sensitized on the presence of women in productive activities. PPF targeting also contributed to this achievement, as well as the requirement that 30% of CTA technical teams hire women technicians, with the PPF reaching 38% of the target value.

99. 60% of the products generated by productive investments go through some stage of value-adding (95% of the goal was achieved). Research results showed that 57% of products went through some stage of value-adding. For example, eggs are cleaned and packaged for sale, cassava is scraped, washed and crushed to produce flour and its derivatives, fruits and vegetables harvested in productive backyards are sanitized, cut and packaged, and honey is extracted and stored in proper packaging for sale.

100. At least a 30% increase in the production volume of households benefiting from productive investment (76% of the goal was achieved) / At least a 30% increase in the sale of beneficiaries' products, as a result of productive investments (113% of the goal was achieved). The focus of the activities developed was on strengthening and developing the productive capacities of 17,763 benefiting households, which led to a 23% increase in the volume of production and a 34% increase in sales. Commercialization was positively affected by the investments made, including the monitoring conducted by CTAs.

101. At least 70% of households benefiting from productive investments access public policies such as PRONAF, "Garantia-Safra" and/or institutional markets/public procurements (PNAE, PAA etc.). (121% of the goal was achieved). The impact evaluation study showed that only 11% of household benefiting from PPF did not access public policies. In 2020, beneficiaries had access, on average, to approximately 10% of the public policies listed in the questionnaire. The most accessed public policies were cisterns for human consumption (43% of surveyed households), social electricity tariff (36%) and Bolsa Família (36%). Regarding emergency assistance, about 69% of the treatment group was benefited.

102. At least 70% of households benefiting from productive investments participate in family farming and agroecological fairs (11% of the goal was achieved). A total of 1,535 households participated in family farming fairs (with the participation of representatives of 57% of the supported organizations). Agricultural fairs were a strategic action for market access developed by the Project. The investments made were strengthened with the support of CTA to improve organizational forms and negotiation skills. In total, 294 fairs were supported (at the community, municipal and regional levels, as well as virtual ones) with women accounting for 75% of marketers.

103. Family farmers adopt innovative agroecological practices (79% of the goal was achieved). Through CTA, the Project reinforced the practices of coexistence with the semi-arid as well as climate resilience and agroecological transition, encouraging and training households in production diversification, forests protection, alternative pest and disease control, composting and soil protection, among other practices. The results of these initiatives are presented in Table 7, which were extracted from the impact evaluation study.

Table 7. Agricultural practices identified in the Project impact evaluation study

Agricultural practices	**Variation (2015/2020)**	
	Treatment	**Control**
Use of irrigation	89%	11%
Use of fire for land clearing	0%	25%
Use of pesticides	-71%	-39%
Use of organic compost	900%	425%

Source: Impact Evaluation Study (2022).

104. However, the PPF did not reverse the situation in relation to the use of fire for land clearing, but at least no increase was identified among beneficiaries in opposition to what was observed to the control group.

105. 100% of processing units meet environmental standards for effluent treatment (100% of the goal was achieved). In total, the Project invested in 14 processing units: 4 flour mills, 2 honey processing units, 2 bakery units, 1 community kitchen, 3 handicraft sheds and 2 fruit processing units. In these units, engineering projects were prepared to contain all the technical specifications—including the sanitary plant—in compliance with the current environmental regulations. The regulations for the treatment of effluents were

complied with the proper environmental license issued by SEMACE. In total, 280 households were benefited, 48 of which were Quilombolas.

106. Results of Component 3 – Project Management. The percentage of interventions/activities effectively carried out as planned in the Annual Work Plan (AWP) was the indicator considered and its measurement is annual and not cumulative. In 2021, the Project achieved 82% of the established goal.

107. Results of Component 4 – Monitoring and Evaluation (M&E). The M&E system generated studies, evaluations, systematizations and other products for knowledge and project management, achieving 104% of the goal. It is worth highlighting the virtual outcomes survey, informative bulletins, knowledge management products, AWPB, and progress reports.

D2. IMPACTS ON RURAL POVERTY

108. Overall Impact on Rural Poverty. The overall impact on rural poverty and extreme poverty is rated as satisfactory (score 5). The Project achieved a 23% reduction in the proportion of benefiting households in condition of poverty and extreme poverty.

i) Household income and assets:

109. Household income. For the composition of household income, the following items were considered: agricultural production, pensions, and social benefits. a) Agricultural production: Two ways of estimating income were considered: i) one referring to the sales of production, which increased from 44% to 48% between 2015 and 2020; ii) one referring to the self-consumption of production, which moved from 56% to 52% between 2015 and 2020. This percentage coincides with the data presented in the 2019-2020 Agroecological Logbooks survey (49%). As shown in Table 8, the average value of self-consumption between the treated was BRL 2,942.14 in 2015 and BRL 3,516.84 in 2020, which translates into a positive variation of 20%. For controls, on the other hand, an average value of BRL 2,108.74 was observed in 2015 and of BRL 2,519.53 in 2020, a variation that, in relative terms, was comparatively smaller than that observed for the treatment group. Except for animals, the average income from the sales of all production groups increased during the 2015-2020 period. In fact, the sales of products of animal origin, plants, and products of plant origin grew by 82%, 92%, and 292%, respectively. b) Pensions: There was a positive variation for both groups, which was greater among the treated, who obtained an increase of 57% versus a 22% growth for the control group. The annual average calculated for the treatment group was BRL 4,044.14 in 2015 and BRL 6,334.38 in 2020. For the control group, the values were BRL 8,083.35 in 2015 and BRL 9,858.14 in 2020. Values were higher for controls because this is a comparatively older group. c) Social assistance: For both groups, there was a considerable drop in the average values obtained via social assistance. As an example, there is the Bolsa Família program: on average, the treatment group received BRL 2,069.69 in 2015 and BRL 693.43 in 2020, while the control group received BRL 1,551.00 in 2015 and BRL 464.23 in 2020. At first glance, this drop may represent an improvement in the population quality of life, but national data indicate a general decrease in the access to social benefits. Emergency aid transfers (COVID-19) were not considered in the impact evaluation study as a question about it was not included in the baseline survey.

Table 8. Sources of household income

Source of income	Treatment					Control				
	2015	%	2020	%	Var.	2015	%	2020	%	Var.
Sales of animals	BRL 1,532.06	29	BRL 1,424.64	21	-7%	BRL 878.26	23	BRL 1,259.97	26	43%
Sales of products of animal origin	BRL 390.18	7	BRL 710.31	10	+82%	BRL 246.37	6	BRL 384.24	8	56%
Sales of plants	BRL 328.10	6	BRL 959.27	14	+192%	BRL 516.01	13	BRL 620.93	13	20%
Sales of products of plant origin	BRL 48.75	1	BRL 191.16	3	+292%	BRL 113.11	3	BRL 8.32	0	-93%
Self-consumption	BRL 2,942.14	56	BRL 3,516.84	52	+20%	BRL 2,108.74	55	BRL 2,519.53	53	19%
Total income	BRL 5,241.23	100	BRL 6,802.22	100		BRL 3,862.49	100	BRL 4,792.99	100	

Source: Impact Evaluation Study (2022).

110. Household assets. According to data from the impact evaluation study, the treatment group showed an increase in some assets like plow and/or traction disk harrow (+120%), automobile (+105%) and corral and/or stable (+58%). The control group, in turn, had an increase of 200%, 9% and 14%, respectively, for these same assets. For the treatment group, some assets presented a negative variation between 2015 and 2020, such as bicycle (-35%), sewing machine (-19%), and radio (-19%). For the control group, the variation for these same assets was -42%, -56% and 1%, respectively. The Table 9 presents data regarding household assets.

Table 9. Household assets.

Household assets	Variation (2015-2020)	
	Treatment	Control

House	14%	10%
Corral, stable	58%	14%
Well, pond	-10%	-46%
Plow, traction disk harrow	120%	200%
Automobile	105%	9%
Hydraulic pump	33%	-5%
Wain, carriage, bullock cart	33%	-43%
Motorcycle	11%	6%
Satellite dish	-8%	-6%
Sound system, radio	-19%	1%
Bicycle	-35%	-42%
Gas stove (2 burners or more)	6%	3%
Freezer	-6%	-30%
Refrigerator	5%	5%
Sewing machine	-19%	-56%
Telephone (mobile or landline)	17%	8%
TV	3%	4%

Source: Impact Evaluation Study (2022).

111. Drought effects on property. The impact evaluation study showed that the share of households affected by droughts over the last 5 years was similar for both groups. It is worth noting that there was an expressive decrease in this percentage for both groups, which was equal to 40% for the treated and 36% for control.

112. As for the sale of assets in response to drought effects, the treatment group showed a drop of 50% in the number of households that needed to sell assets. For the control group, the variation was greater, with a decrease of 74%. Table 10 shows the assets and property usually sold in the face of drought, but that households of both groups did not need to sell.

Table 10. Assets and property sold due to drought effects.

Assets/property sold	**Variation (2015-2020)**	
	Treatment	**Control**
Animals	-44%	-61%
Motorcycle and other durable goods for transport or work	-57%	-100%
Electrical appliances	-67%	-100%
Land or house	-100%	-100%
Total	**-50%**	**-74%**

Source: Impact Evaluation Study (2022).

ii) Human and Social Capital:

113. PPF contributed significantly to the development of human and social capital. It employed a methodology that integrated production and training activities, empowering households and community organizations. Associations supported by the Project increased the capacity to plan social and productive actions and to manage financial resources. Continuous technical assistance was instrumental in this process, especially with respect to priority groups: youth, women, traditional peoples and communities. The demand-driven strategic focus on gender, race and ethnicity dialogued with their needs, respecting the particularities of each group, which are essential factors for sustainability. The survey carried out in 2021 recorded that 92% of the 533 farmer organizations benefiting from the Project will continue to develop their activities in the community after PPF completion, which indicates that Project initiatives have a high potential to be sustainable.

iii) Food security:

114. PPF has contributed to the nutritional improvement of benefiting households in several ways. The preliminary impact evaluation study indicated that 61% of beneficiaries improved their food intake. There was a significant investment in agroecological productive backyards (4,591 units)—75% of which were women-led—associated with 2,189 greywater reuse systems. Consequently, there was an increase in the access and availability of nutritious and diversified foods in adequate quantity and quality. In fact, Agroecological Logbooks registered more than 500 different types of products grown in productive backyards. The main foods produced by the 144 women participating in this initiative were coriander, chives, starch, beans, cashew nuts, fava beans, mangoes, tapioca, papaya and bananas.

115. The positive impact of PPF on food security is evidenced by data gathered from the impact evaluation study: a 10% increase in the number of households producing for self-consumption and an 83% improvement in food diversification.

116. Access to drinking water was assured for 22,152 households (more than 1/3 of those benefiting from PPF) through the installation of 20,528 cisterns, 30 of which were school-based.

117. The following factors favored the focus given to food security: IPs associated with productive backyards, social technologies for greywater reuse and agroecological practices; 100% of PPF investments adopt agroecological practices and sustainable production techniques, ensuring the production of food free

of physical, chemical, and biological contaminants; technical cooperation with the School of Public Health (ESP) and the School of Social Gastronomy (EGS) with activities focused on nutrition, food safety and health. The partnership with EGS had an impact on nutrition education through the training of 135 individuals, including community health agents, technical assistants and community leaders. This partnership was systematized by an e-book written in Portuguese and Spanish, thus increasing its scale and reach. It also allowed the diagnosis of the main health problems faced by the population from the area served by the Project, among which the need for nutritional awareness was identified.

iv) Agricultural productivity:

118. Before entering the Project, most households had insufficient production for their subsistence, which was limited only to the wet season. In addition, they did not have access to CTA and practices for producing in the semi-arid, such as social technologies. Since PPF activities started operating, households began to have qualified technical assistance for productive activities in terms of soil management, spacing, pest and disease management, production scheduling, sanitary and reproductive management of the herds, silage production and palm production, among others. With the various structures, inputs, tools and animals financed through production projects, it was possible to leverage an existing production activity or to start a new one.

119. The greywater reuse system enables the efficient reuse of wastewater with the use of small drip irrigation systems, increasing and diversifying the production of fruits and vegetables due to the expansion of the offer of products for the whole year. Greywater reuse also contributes to the sanitation of the backyard near the houses, reducing the risk of contamination and diseases for people, animals and crops.

120. Based on the results of the impact evaluation study, it was possible to conclude that beneficiaries presented an increase in the production of the main activities supported by PPF. Table 14 presents the variation in the average quantity produced and average sales value for both groups between 2015 and 2020.

Table 14. Variation in the sales of livestock products between 2015 and 2020, treatment and control groups

Item	Variation (2015-2020)	
	Treatment	Control
	Poultry	
Quantity	117%	1%
Sales value	41%	36%
	Eggs	
Quantity	-73%	-90%
Sales value	117%	-35%
	Sheep	
Quantity	88%	63%
Sales value	68%	35%
	Goats	
Quantity	24%	1%
Sales value	31%	-41%
	Swine	
Quantity	140%	-9%
Sales value	111%	67%
	Honey	
Quantity	806%	546%
Sales value	556%	-

Source: Impact Evaluation Study (2022).

121. Both groups presented a reduction in the quantity produced only for eggs, which was more pronounced for the control group (-90%) than the treatment group (-73%). For the average sales value, the variation registered between 2015 and 2020 was positive in 117% for the treatment group and negative in 35% for the control group. With regard to swine, the average quantity increased by 140% for the treated, while decreasing by 9% for controls after the implementation of PPF. In the analyzed period, swine sales value also increased: +111% for the treatment group and +67% for the control group. In all other activities related to livestock, there was an increase in the quantity produced, which was always more expressive among the treated. Sales value followed the same trend, presenting a greater increase for the treatment group. Still according to the impact evaluation study, there was a 23% expansion in the total value of agricultural production and a 34% increase in the sale of agricultural products.

122. These results reflect the direct action of the Project and the following worth highlighting. In sheep and goat farming, animal mortality was reduced through better sanitary control, implementation of a forage support areas to assist in the feeding of the herd during the dry season, acquisition of high-quality breeders for the improvement of the herd, acquisition of equipment such as fodder, castration pliers and vaccination pistol, and guidance for the control of mounting and disposal. The implementation of a shelter for the animals helped in the management and protection against predator attacks. In poultry farming, there was the acquisition of 1-day-old chicks to increase the size of the herd, the implementation of a shelter to protect against predators and a grazing area to complement feeding, and the provision of guidance for sanitary control and acquisition of equipment such as forage and incubators. Egg production decreased due to the initial focus being on meat production. In pig farming, PPF implemented adequate shelters for animals, allowing the disposal of feces through septic tanks or biodigesters, and also provided guidance on the ideal sanitary and food management for animals. In beekeeping, hives were acquired to expand apiaries, honey species were planted to enrich bee pasture, and equipment for beekeeping management was acquired. Two honey processing units were built and fully equipped to improve the conditions for honey extraction, and training was provided to strengthen the groups for marketing. PPF enabled an important increase in production, so the Project performance was evaluated as satisfactory.

v) Institutions and Policies:

123. The capacities of benefiting organizations were expanded through the use of a methodology that involved collective participation, cooperation and the engagement of households in the development process of the community, becoming driving forces of endogenous transformation capacities. The assosciativism-based organizational typology created and improved a flexible environment through the interaction of actors seeking to align collective interests. Specialized technical support for the formation of associations was essential for the creation, development and reflection of their local role. The development of beneficiaries also involved training in management and organization, where the association itself conducted the processes of price research, bidding and the checking of materials acquired via IPs. Associations were also responsible for accountability, which was transparent to the community, the state and the IFAD. Thus, beneficiaries have expanded their capacities in the management area, being currently able to seek and execute other investment projects. In this perspective, data from the Outcomes Survey revealed that 86% of the 533 organizations reported that “participating in the Project was important to strengthen management”, while 79% declared that “the experience acquired by the association will provide continuity of work after PPF completion”. As for changes in the political and institutional structure, FECOP was an important partner in guaranteeing resources for the financial execution of the Project within the governmental structure. The total amount invested by FECOP was approximately BRL 129 million. The objectives of FECOP and PPF converge on the fight against poverty.

124. PDHC II coincides with PPF in terms of runtime. Although focused in different areas, the two projects are developed within the Ceará state territory with the support of IFAD to combat rural poverty and inequalities in the semi-arid region. Two CTA entities are also executors of the PDHC II. The projects conducted an integrated initiative with Agroecological Logbooks (planning, training, and exchange). In the SDA system, PPF contributed to redefining the design and dynamics of PSJ IV in terms of youth and gender integration. This was possible through dialogue and training with the PSJ IV technical team, in a process of sharing and reflecting on the implementation of PPF strategies and action plans for the youth, gender, and race/ethnicity. As an example of these results, it is worth highlighting: the review and adjustments of the “São José Jovem” public notice, the participation of the Committee of Proposals Selection for this public notice, and the appropriation of the methodology from the Agroecological Logbooks.

125. Despite the decrease in the availability of public policies at the federal level, the provision of training on the subject strengthened the self-management of organizations and opened a debate on the importance of searching for available policies for social and economic development.

126. Overall Impact on Rural Poverty (score: 5 – satisfactory). The impact evaluation study calculated the multidimensional poverty index (MPI), which considers poverty as a phenomenon of multiple dimensions, including different types of deprivation other than lack of income, such as social capital, human capital, food security, housing conditions and sustainability. As per the evaluation results, the poverty rate dropped for both groups. In the treatment group, there was a drop of 23%. For the control group, in turn, the MPI had a

drop of 7%. It must be noted, however, that the goal established in the LF—a 35% reduction—was not achieved.

127. It is necessary to consider that the points presented below may have influenced the non-achievement of the aforementioned goal: i) the delay in carrying out field investments, which were concentrated in the last years of the project; ii) the COVID-19 pandemic, which hampered the production and marketing of products; iii) the severe drought that spanned from 2012 to 2017; and iv) the reduction of public policies, as previously cited.

vi) Access to markets

128. The simultaneous strengthening of benefiting organizations and the surplus-based production structure created a fertile environment as well as favorable conditions for the development and creation of spaces for commercialization, with emphasis on family farming fairs. In the survey carried out by PPF in 2021, 82% of organizations reported engaging in formal partnerships, agreements and contracts with clients at the institutional (public) and private (local market) levels. Commercialization took place in homes, communities, fairs, door-to-door and other retail businesses. The same survey indicated that 22% of the beneficiaries' social organizations were able to access institutional markets such as the PAA and the PNAE, for example.

129. Still, according to this same survey, family farming fairs accounted for 57% of the marketing modalities accessed by the 533 community organizations surveyed. Of the 294 fairs, 160 are at the community level, 96 at the municipal level, and 38 at the regional level. The products sold at the fairs originated in productive backyards and swiddens and are very diverse, with the most sold being: beans, sweet potato, pumpkin, tomato, coriander, chives, peppers, carrots, lettuce, bananas, guava, acerola, pitanga, mango, cashew, ata, ciriguela, cassava, gum, manioc flour, cheese, eggs, medicinal plants, honey, chicken, regional dishes, various cakes, pamonha, tapioca, coffee, homemade sweets, crafts, essential oils and soaps.

130. There are already pre-established circuits for products such as sheep and goats, honey, and cashew nuts. The marketing process is carried out mainly by cooperatives and middlemen. In the specific case of honey, marketing is carried out through different channels, which vary depending on the quantity produced, the location of the apiary, and the presence of honey extraction units, among other factors. When the production volume is sufficiently large and there are nearby places to extract honey, the channels most used by beekeepers to sell their products are cooperatives or buyers representing private companies, usually based in the South and Southeast regions of the country. In unfavorable market conditions, the production is sold fractionally in smaller packages, at fairs or in the local commerce.

131. In the case of handicrafts, some artisans benefiting from the Project are trading directly with the institutional space CEART, in addition to other traditional spaces such as fairs and exhibitions.

132. In Sobral, the access to markets theme built synergies and focused on actions related to the feasibility of implementing and consolidating a fixed space for commercialization (agroecological kiosk), supported by AKSAAM and carried out by CETRA. This project came with the objective of strengthening the agroecological marketing processes in the territory, based on the activities carried out with the agroecological and solidarity networks of PPF. In this sense, the project implemented, in addition to the physical marketing space itself, a training process with farmers in the production chains of maize, free-range chicken and productive backyards.

133. With the pandemic, it was necessary to maintain social distancing, which led to the closing of both borders and fairs for a long period. Consequently, the social vulnerability and food insecurity of households increased, while household income was reduced due to the impossibility of selling agricultural products. On the other hand, these weaknesses represented an opportunity that spurred changes in the way food was sold, enabling the emergence of new socially just and environmentally sustainable alternatives. PPF, with the participation of the CTAs, started to support beneficiaries in terms of the conduction of virtual fairs and the delivery of products. The Outcomes Survey indicated that 52% of benefiting organizations endeavored in new marketing approaches, with emphasis on websites and social networks—WhatsApp (48%) and Facebook (22%). Online sales and virtual fairs tend to continue after the end of the pandemic.

134. SDA has developed a digital tool called “Family Farming Portal”, a space for the interaction between the supply (producers) and demand (buyers) sides of the market. This initiative will be permanent after the Project completion. In addition, still in 2022, the SDA will provide infrastructure and logistical support for the assembly of fairs.

135. Another important result of the Project was the strengthening of the beneficiaries' capacities to relate to the market that supplies inputs such as vaccines, medicines, seedlings, animals and other items. All purchases planned in the IPs were carried out through bidding processes, conducted by a commission made up of 3 beneficiaries from each of the 533 community organizations, with support from CTAs. With this process, beneficiaries started negotiating purchases with the supplier market more efficiently.

136. Project initiatives were crucial for beneficiaries to develop or improve their knowledge to access markets to sell their products more fairly. Therefore, in terms of access to markets, the Project performance is considered satisfactory.

D3. GENDER EQUALITY AND WOMEN'S EMPOWERMENT (GEWE)

137. PPF's Gender and Race/Ethnicity Equality Strategy had the general objective of ensuring that the gender and race/ethnicity approach was integrated into social and productive development, promoting equitable and egalitarian relations between women and men, and strengthening the quilombola and indigenous populations in guaranteeing their rights. The specific objectives were: 1. Strengthening the social condition and political participation of women; 2. Promote equal access for women and men to productive activities and sustainable management of natural resources in the semi-arid region; 3. Increase women's income and economic autonomy; 4. Ensure conditions to implement the Gender and Race/Ethnicity Strategy in the PPF. Considering that the strategy outlined refers to race and ethnicity, the approach to conceptions and practices took place from an intersectional perspective in relation to markers of gender, generation, race and economic classes.

138. The PPF Gender Strategy is in line with the 3 objectives of the IFAD Gender Policy: (i) Economic empowerment; (ii) Expansion of social participation with the active voice of women in social organizations; (iii) reduction of domestic workload. PPF has developed a work strategy that makes a substantive contribution to achieving gender equity and equality and the empowerment of women. The implementation of the strategy and its own action plan made it possible for the PPF to integrate the gender theme into activities. It then led to changes in women's lives, reflecting on Project results and impacts, especially during the second and third stages. Following are the main results and impacts achieved with the implementation of the PPF gender strategy. Of the 54,999 households that benefited from Project initiatives, 28,567 are women-headed (52% of the total), which is really important in a context where women represent only 19% of rural property owners in Brazil (IBGE, 2017).

139. Economic Empowerment. At the beginning of PPF, the goal of granting IPs and CTA to 15,000 youth- and women-headed households was set. Slightly more than 99% of this goal was achieved. The vast majority of households achieving this goal were women-headed, representing 60.62% of the 17,763 households.

Table 11. Main productive activities developed by women

Main productive activities developed by women		
Productive activity	**Households**	**Women-headed households**
Poultry farming	7,252	5,034
Sheep farming	5,307	2,348
Pig farming	2,556	1,359
Beekeeping	666	197
Handicraft	235	205
Artisanal fishing	189	61
Total	**16,205**	**9,204**

Source: PMU/PPF (2022).

140. CTA was important for women to adopt techniques of coexistence with the semi-arid and agroecology practices, also contributing to the implementation of IPs. Therefore, it effectively impacted the increase in women's agricultural production.

Table 12. Women occupations

Occupation	Treatment		Control	
	2015	2020	2015	2020
Agriculture and livestock	84.85%	89.02%	75.66%	65.04%
Public service (school, health center, etc.)	10.23%	3.79%	9.73%	0.88%
Service provision (maid, manicurist, nanny, seamstress, etc.)	7.58%	1.14%	7.96%	0.88%
Processing or manufacturing of products	3.79%	20.45%	3.98%	12.39%
Handicraft	10.61%	13.26%	9.29%	8.85%

Source: Impact Evaluation Report (2022).

141. Regarding women's occupations, the impact evaluation study indicated that women predominantly work in agriculture, which is true for both in the treatment and control groups. For the treatment group, there was a slight increase between 2015 and 2020. This increase may be related to the significant reduction in the share of women working in the public service and in service provision. The proportion of women occupied in the processing or manufacturing of products had a positive variation in both groups, with emphasis on the treated. For handicraft, in turn, it was registered a growth for the treatment group and a slight decrease for the control group.

142. As for income, according to the impact evaluation study, in 2015, most women-headed households were in the income category between 1/8 and 1/4 minimum wage (30%), while in 2020, most of them rose for the category between 1/4 and 1/2 minimum wage. Data from Agroecological Logbooks indicate that social technologies for access to water favored an increase in income within PPF, considering that the average monthly production value of women who have access to cisterns for human consumption is BRL 443.00 while that of those who do not have access to cisterns is BRL 366.00. When it comes to the access

to production cisterns, the average value is BRL 533.00, while that of those who do not have access is BRL 335.00.

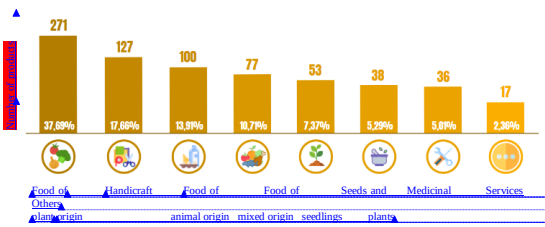
Table 13. Total production value per socioeconomic relationship.

SOCIOECONOMIC RELATIONSHIP	VALUE (BRL)	SHARE
Donation	70,568.55	11%
Exchange	5,964.35	1%
Sales	295,931.43	49%
Consumption	234,583.75	39%
Total	607,048.08	100%

Source: Final Analytical Report on the Use of Agroecological Logbooks – PSI (2021).

143. The 4,591 productive backyards implemented by the Project mainly benefited and potentiated the production of women, who expanded their production, self-consumption and commercialization. From a qualitative point of view, they started to re-signify and value backyards, expanding and giving visibility to agroecological knowledge and practices, as well as food and nutritional security. The experience of the Agroecological Logbooks, which directly involved 144 women, boosted their production. It also impacted household income, expanding the economic autonomy of women. Figure 1 present some results related to income, the diversity of species produced and the values of monetary and non-monetary income produced by the four socioeconomic relationships: consumption, donation, exchange, and commercialization.

Figure 1. Product diversity: PPF quantity without repetition.



Source: Final Analytical Report on the Use of Agroecological Logbooks – PSI (2021).

144. Agroecological logbooks gave visibility to women as productive, political and economic subjects, effectively contributing to their empowerment and autonomy. Associated with other Project actions, the agroecological logbooks favored the role of women in the territories, in relation to their production and commercialization. It is possible to identify how diverse the production of women is and how it strengthens agroecology. An example of this was the registration of 719 different products, mainly in food production.

145. Expansion of social participation with the active voice of women in social organizations. Training in Public Policies, whose initial goal was to involve 15,000 women-headed households, reached 28,567 households, representing 190% of the goal. One of the aspects that favored the participation of women was the adoption of recreational spaces for children, an important strategy as child care has been historically considered as responsibility of women.

146. Around 600 training activities took place on topics such as women's rights, gender relations, sexist violence, racism, fair division of domestic workload, women's political organization, feminism, and agroecology. They were attended by around 7,000 people, 77% of whom were women. The training expanded women's knowledge of public policies, the awareness of their rights, their ability to speak and critically analyze gender relations, and their active participation in the household, association and communities.

147. Women's participation. The impact evaluation study revealed that the proportion of households with women who actively participate in community activities in the treatment group is higher than in the control group. Among the treated, it went from 64.77% to 80.68%. For controls, in turn, women's participation went from 45.58% to 48.67%. In addition, 115 women's groups were formed, involving 1,150 participants. Organized for productive or socio-political purposes, women expanded solidarity relations among themselves, collectively faced challenges, developed or enhanced their leadership capacity and gave visibility to their demands.

148. It is worth noting the participation of around 1,000 women in the 533 Purchasing Committees made up of community members, which favored learning, leadership and democratization of this shared management and decision-making space. In addition, 732 women integrated the boards of community associations.

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149. Reduction of domestic workload. According to the report of the Women's Focus Groups (UFV), “PPF contributed to changing the workload distribution within households, thus reducing the burden on women who started to have their rights recognized”.
150. Social technologies, which mainly benefited women, reduced and facilitated their work. The Project developed training and educational campaigns on the fair division of domestic workload. Focus groups revealed an advance in women's perception of the activities they perform. They started to perceive domestic activities as occupations and to make a critical analysis of the overload they assume.
151. Other aspects. The PMU, together with CTA entities, followed up on situations of violence against girls and women, helping to welcome victims, to mediate their care with the state and local assistance network and to guarantee/preserve their health, integrity and life. Violence against women was one of the topics addressed in the training processes with technical teams and women in the communities.
152. It is worth noting that PMU was composed mostly of women, who occupied 58% of the positions on the Project management team.
153. The Gender and Race/Ethnicity Commission and the Gender Equity Working Group played an important role in the planning and monitoring of gender actions. They consolidated themselves as an instance of sharing the processes developed in communities, CTAs, PMU and projects supported by IFAD. This initiative favored: i) greater knowledge of the reality of women, gender relations and traditional peoples and communities; ii) better assessment of the feasibility of the proposed actions; iii) identification of the limits and possibilities of Project actions; iv) a leveling of concepts, methodologies and practices adopted by each CTA and the PMU; and v) enhancement of the Agroecological Logbooks Project.
154. PPF generated results with traditional peoples and communities as well. It served 30 traditional communities, especially in terms of economic empowerment via IPs. Three indigenous communities (146 households), 14 quilombola communities (988 households) and 13 fishing communities (485 households) were served. These households were supported with CTA, training, IPs and the strengthening of ethnic-racial identity and recognition. The support of PSI/IFAD was relevant in the translation (Spanish and English), the online publication of the research developed by the Free Feminist University with women from traditional peoples of Ceará, which had the participation of 3 beneficiaries of PPF.
155. The training of 278 CTA technicians on contents like feminism, agroecology, fair division of domestic workload, inclusive TARE, and women's political organization was fundamental for assisting and supporting ethnic-racial issues. In fact, it favored a better understanding of the reality of traditional peoples and communities, enhancing their ability to face racism and social exclusion within their own community and boosting their participation in decision-making spaces.

D4. ADAPTATION TO CLIMATE CHANGE

156. PPF developed initiatives of coexistence with the semi-arid in line with agroecological knowledge and the adaptation to climate change. Social technologies and agroecological productive investments have contributed to reducing vulnerability to droughts, through the following actions: i) access to drinking water for human consumption (20,528 cisterns installed); ii) 895 production cisterns (with efficient micro-sprinkling irrigation systems); iii) 2,189 greywater reuse systems; iv) polyculture with local varieties and intercropped rainfed crops; v) 1,658 hectares of forage palm and 994 hectares of forage sorghum for the production and storage of forage; vi) 363 eco-efficient stoves; vii) 1,583 biodigesters; and viii) 4,591 productive backyards. Among the public served, 79% adopted agroecological practices adapted to the coexistence with the semi-arid (Chart 9). According to the Outcomes Survey (APPENDIX 19), the innovative practices generated impacts on the reduction of the vulnerability of the caatinga biome, which arises from the environmental conditions of water scarcity and fertile soils. Productive investments were linked to social technologies or methods of climate change mitigation. As an example, there are investments in: i) sheep and goat farming associated with forage production; ii) pig farming associated with biodigesters and septic tanks; and iii) productive backyards associated with poultry farming and greywater reuse. The set of actions developed by the Project leads to the strengthening of households in the face of environmental and climate vulnerabilities.

D5. ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT

157. The environmental topic is an integral part of Project actions and objectives. In this context, agroecology was the main approach adopted by the PPF. The coexistence with the semi-arid was addressed through sustainability and environmental recovery within the scope of IPs and through capacity-building. In specific, it included the adoption of social technologies for the better use of water and animal waste, which enabled the production of fuel gas and biofertilizers via biodigesters and the irrigation of vegetables and fruit trees through greywater reuse, in addition to encouraging the creation of small animals adapted to the semi-arid climate.
158. In terms of the coexistence with the semi-arid, it is worth stressing that the strengthening of the production of small animals (sheep and goats) adapted to the region has been strategic for rural communities, sustainably ensuring animal food stock. The implantation of 1,658 hectares of forage palm and 994 hectares of sorghum allowed the production of approximately 49,700 tons of silage, thus reducing the pressure on native vegetation during the dry season. In sheep and goat farming, each family received

between one to two sheep or goat females, having also been provided with physical facilities (covered sheepfold) that generated animal welfare, allowing the strengthening of the activity and greater resilience of herds. Through technical assistance, farmers started to introduce and/or apply management techniques that favored the increase and improvement of the activity. In terms of the use of cisterns as water storage systems, 20,528 structures for water collection and storage were built, which has strengthened the resilience of households in the face of climate change, ensuring, in the case of domestic cisterns, access to drinking water. Coupled with production cisterns, small irrigation systems by micro-sprinkler and capillary watering disseminate practices of efficient use of water and coexistence with semi-arid climate in food production. The construction of eco-efficient stoves, in addition to the reduction in the consumption of firewood by more than 50% also improves the environment in kitchens and homes. It also reduces the time dedicated to wood collection. The beekeeping activity was encouraged by the Project considering the production potential of the 3 territories where PPF operates. Beekeeping is a species-conserving activity. Additionally, it fulfills all the requirements of the sustainability tripod: economic, because it generates income for farmers; social, because it uses family labor, reducing rural exodus; and ecological, because it is not deforested to raise bees.

D6. TARGETING AND OUTREACH

159. The Project reached the intended target groups, achieving 89% of the established goal. There is a total of 54,999 benefiting households. Of these, 28,567 are women-headed, 8,770 are youth-headed, 112 are indigenous, 726 are quilombolas, and 651 are artisanal fishers. PPF targeting was successful in reaching the most vulnerable populations as 17,763 households benefited from CTA and IPs. Within benefiting communities, black populations were also served, reaching a racial share of beneficiaries not initially foreseen in the Project design. The low reach of assistance to indigenous people was due to the absence of these groups in the PPF territory. The state of Ceará houses 14 ethnic groups located in 18 municipalities, of which only the municipality of Quiterianópolis is covered by the Project.

Table15. Target audience indicators

INDICATORS	GOAL	RESULT	OUTREACH
60,000 family farming households and other small-scale farmers are directly benefited by the Project, with all of them trained on public policy access	60,000	54,999	91%
At least 50% of beneficiaries are women or young people	30,000	27,476	91%
Women-headed households	15,000	28,567	190%
Youth-headed households	15,000	8,770	58%
Indigenous families	500	112	22%
Quilombola families	1,000	726	72%
Artisanal fishing families	100	651	651%
30,000 households receive technical assistance and productive investments	30,000	17,763	59%

Source: PMU/PPF (2022).

160. Targeting and outreach: Youth. PPF reached significant results in the initiatives aimed at the rural youth. The youth was empowered in terms of productive activities, considering the 4,151 IPs accessed. It is also worth highlighting the expansion of political participation and decision-making, as the youth occupy 255 leadership and management positions in community associations. PPF developed and leveraged the Semi-Arid Youth Network, as an important instrument for the youth to articulate and express themselves. PPF communication actions for the semi-arid region strengthened the agendas of this public in the territories. Table 16 shows that young people are an important part of the priority audience for PPF actions. The work carried out with this public strengthened the identity of rural youth and the understanding of their role as active subjects in the communities.

Table 16. Youth-focused activities.

ACTIVITIES	TOTAL
Youth- and women-headed households receive Continuous Technical Assistance to develop their capacities and productive investment plans	14,892
The youth actively participate in associations and were trained in practices of coexistence with the semi-arid, following agroecological principles	4,151
Youth-headed households received training in accessing public policies	8,700
The youth access production inputs to implement investment plans, focusing on agroecological practices	7,500
The youth received training and support to initiate and strengthen economic initiatives	6,045
The youth occupy leadership and management positions in community associations	255
The youth are trained to access land and design projects for land acquisition, together with land credit	161

ACTIVITIES	TOTAL
Young community leaders trained in themes of community self-management, rural succession, solidarity economy and fair trade, among others	107

Source: PMU/PPF (2022).

161. Strategy and methodological approach for outreach and targeting. The strategy and methodological approach applied to the selection of municipalities, rural communities and beneficiaries fit the public that the Project sought to reach. The verification of the extreme poverty situation of the 600 rural communities was possible through the studies and maps of IPECE, which pointed out the 31 municipalities with the lowest levels of human development, facilitating the selection process. This work had an expressive impact on PPF target audience, where 91% of benefiting households have a monthly income per capita of up to 1 minimum wage, according to baseline data (2015). Therefore, the focus and scope that the Project obtained were compatible with its objectives.

D7. INNOVATION

162. Access to water. Access to water through cisterns for human consumption had two types of intervention and innovation in the Project: i) 20,528 cisterns for human consumption, 30 of which were school-based; and ii) water supply and treatment services carried out with mobile ETAs, which made it possible to supply quality water to cisterns. The 20,528 first-water cisterns benefit: i) 30 schools (1,654 people benefited); and ii) 20,498 households, with 5,528 cisterns being supplied via ETA. The availability of water to beneficiaries triggered good living conditions. Consequently, this innovation corroborated the democratization of water access. This social technology also made it possible for the Project to consolidate strategies for the coexistence with the semi-arid region.

163. The responsibility for water management by households has opened up a range of habits and uses of water resources that focus on satisfying rural people's real needs and demands, inserted directly into the reality encountered.

164. Specialized technical assistance. The hiring of specialized technicians by CTA entities opened a range of relevant and necessary actions that were conducted with households, such as issues of gender, race and ethnicity, youth, indigenous peoples and traditional communities. Specialized services brought quality and relevance to CTA initiatives, approaching themes with an analytical focus on the processes of change in personal, collective, environmental, family, cultural, economic, political and institutional relationships. The methodological resources employed sought to generally understand the values and practices of households and, in particular, the values and practices that constitute what can be called their political culture. During the period that CTA entities operated, the contact between technicians and households was carried out in person and, occasionally, remotely. During the pandemic, with the restriction of physical access to communities, contact with households was exclusively remote, with this being the main form of communication and execution of field services. This methodology remained even after the end of the restrictions.

165. Participatory approach. The implementation of a participatory methodology enabled the generation of knowledge on local issues. Knowledge exchanges guided actions carried out by the farmers themselves and by the interdisciplinary CTA team, as can be seen in the participatory rural appraisals, community development plans and investment plans. The collective construction of investments facilitated community participation, providing greater transparency to the process, as well as empowerment and responsibility of beneficiaries in executing the Project.

166. Production systems adapted to social technologies. PPF carried out several integrative actions, such as: agroecological productive backyards maintained by water reuse systems with the production of free-range chicken; pig farming adapted with biodigesters; sheep and goats farming complemented with forage support areas of sorghum, palm and grasses; and beekeeping strengthened with bee pasture. Production systems in conjunction with social technologies have enhanced the strategies of coexistence with the semi-arid region and climate resilience.

D8. SCALING UP

167. Social technologies aimed at coexisting with the semi-arid region that were disseminated by the Project—cisterns, water reuse systems, ecological stoves—have strong potential for replication. Wider dissemination is already taking place at different levels, supported by many programs such as the P1MC. Other productive activities—such as beekeeping—are attracting a lot of interest from farmers. Other innovative practices, such as agroecological backyards, which require minimal investment, are also being disseminated. PPF executed a relevant Knowledge Management and Social Communication plan, with several systematizations, which provides inputs for the strengthening and expansion of public policies and the improvement and expansion of the services provided by CTA entities. Lessons learned from these

systematizations are being adopted in the construction of the new partnership with IFAD/IDB in an area of greater extension.

168. PPF worked on several innovative agroecological practices disseminated by CTA entities, which require little or no investment. In general, these 'best practices' are based on the sustainable use of resources available at the property. Their low cost and, at the same time, the growing demand for products grown without pesticides make them have an interesting potential for dissemination on a wider scale. Many of these practices—such as fertilizing swiddens and backyards with organic fertilizers or replacing insecticides with homemade sprays made with plants or non-toxic products—were developed with benefiting households, without them being part of the IPs. Results of the PPF impact evaluation study show that, among PPF beneficiaries, the number of households using pesticides has decreased considerably and the use of different types of organic fertilizer has increased notably. This is an indication that the knowledge accumulated by CTA entities and the exchange of information and experiences between households in the same community or between communities can promote the dissemination of this type of practice, allowing a spontaneous propagation, pointing to a positive scenario with regard to sustainability and the multiplication of these experiences.

169. Other innovative technologies, such as domestic and production cisterns, biodigesters, eco-efficient stoves, sheepfolds, corrals and apiaries, among others, spread spontaneously with more difficulty, as they require resources to make the investment, in addition to the necessary knowledge. However, many of these innovations have already been incorporated by programs of a certain scale, which support large-scale deployment. In the context of the state of Ceará, the dialogue between PPF and the project São José IV has created an approach that make it possible to envision that several innovations worked on by the PPF can also be supported by the PSJ IV.

170. An important element of the PPF legacy is its focus and work methodology, which allowed accurate targeting. Consequently, the Project promoted strong social mobilization, a necessary element for participating households and communities to embrace the proposed innovations, so that they are strengthened, and prioritize the sustainability of actions.

E. PROJECT MANAGEMENT EFFICIENCY

171. The overall performance of PPF was satisfactory (score: 5). The analysis of the efficiency of the Project includes the following topics: Costs and Financing; Management Quality; Partner Performance; Quality of Support and Implementation; and Economic Indicators (Internal Rate of Return, Net Present Value and Benefit/Cost Ratio).

E1. PROJECT COSTS AND FINANCING

172. Total Project Costs. The Project original budget was USD 80 million, jointy funded by IFAD and the state of Ceará. Beneficiaries would contribute with USD 14.9 million. Project's execution amounted to USD 82 million, of which USD 36,285,323.11 from IFAD, USD 45.7 million from the State Government, and USD 7 million of counterpart funds from the beneficiaries, totaling USD 89 million.

Table 17. Total Project Cost.

PLANNED EXECUTION			REAL EXECUTION	
FINANCER	**VALUE (CONTRACT CURRENCY)**	**VALUE (USD)**	**VALUE (CONTRACT CURRENCY)**	**VALUE (USD)**
IFAD I-882-BR	SDR 20,624,403	32,000,000	SDR 20,621,302	29,390,612
IFAD E-17-BR	EUR 5,948,482	8,000,000	EUR 5,948,482	6,894,710
STATE	USD 40,000,000	40,000,000	USD 45,741,033	45,741,033
SUBTOTAL (USD)		80,000,000		82,026,355
COUNTERPART FROM BENEFICIARIES	USD 14,900,000	14,900,000	USD 6,989,083	6,989,083
TOTAL (USD)		**94,900,000**		**89,015,438**

Source: Elaborated by the PMU (2022).

173. Costs per component: Expenses with capacity-building and training in access to public policies, continuous technical assistance, specialized technical assistance, social mobilizers, water investments were foreseen in Component 1. Investments in productive activities were concentrated in Component 2. Project management costs, including equipment, wage payments and Project operating costs comprised Component 3. Monitoring and evaluation activities were under Component 4. Table 18 presents the costs of the Project by component.

Table 18. Costs per component.

Estimated cost per component			Execution	
Component	**Value (USD)**	**%**	**Value (USD)**	**%**
C1: Capacity-building	33,100,000	35%	44,568,138	50%
C2: Productive Development and	49,800,000	52%	32,625,949	36%

Environmental Sustainability				
Project Management	10,400,000	11%	10,590,363	12%
Monitoring and Evaluation	1,600,000	2%	1,230,988	2%
TOTAL	**94,900,000**	**100%**	**89,015,438**	**100%**

Source: Elaborated by the PMU/PPF (2022).

174. Costs per category. Table 19 presents the originally estimated costs per category.

Table 19. Estimated costs per category

Estimated costs per category			
Category	**IFAD value ($)**	**Ceará state value ($)**	**Beneficiaries value ($)**
Cat 1: Comp 1 - Capacity Development	20,209,000	12,855,000	-
Cat 2: Comp 2 - Productive Development and Environmental Sustainability	17,465,000	17,465,000	14,900,000
Cat 3: Project Management	2,006,000	8,400,000	
Equipment and vehicles		375,000	
Staff	1,845,000	7,348,000	
Operational cost	162,000	647,000	
Cat 4: Monitoring and Evaluation	320,000	1,280,000	
TOTAL	**40,000,000**	**40,000,000**	**14,900,000**

Source: Elaborated by the PMU/PPF (2022).

175. Disbursement by financer: The initial allocation to the Designated Account was carried out by advance payment through four disbursement requests (in 2013 and 2016) totaling USD 5,032 million. The other disbursements took place through evidence of Project actions, with the exception of 2 additional advance payments: one in 2017, totaling USD 2,062 million, and another in 2018, in the amount of USD 5 million, to meet a large demand for liquidity at the time, being promptly attended by IFAD. In 2019, IFAD made its last disbursement totaling an amount of SDR 20,621,302 (99.98%) from the I-882-BR and EUR 5,948,482 (100%) from the E-17-BR, summing approximately USD 36.2 million. These funds were applied during 2019 and 2020, and their evidence was finalized in the disbursement request sent to IFAD in July 2021.

176. Until 2017, government counterpart funds were steadily deposited in the Designated Account as necessary to execute PPF expenses. In 2017, Brazil as a whole experienced economic difficulty. Cash liquidity was affected and the Project requested the IFAD that the measurement of implementation pace was carried out every six months and not at each expense, which was authorized as the state government commited to balance funding values until the end of the Project. The state government honored the commitment made with IFAD and exceeded the amount estimated in the contract. This happened because the state government assumed Project costs in the two deadline extensions approved by IFAD, amounting to approximately USD 46.8 million (117%) until December 2021. The beneficiaries' counterparts were made up of contributions to investment plans and access to other government public policies. Up to December 2021, the amount of USD 7 million (47%) was declared.

177. Insertion of new activities and reallocation of resources: The USD-BRL exchange rate varied significantly during the execution of the Project. It enabled the insertion of new activities from the 2017 Midterm Review, such as: precast cisterns, school-based cisterns, mobile ETAs and Health Projects. In 2019, the reallocation of funds was approved, transferring the unallocated amount to category I – Capacity Development.

178. Execution of the main groups of activities: During the execution of the Project, two main groups of expenses can be highlighted, with the following activities: CTAs, IPs, access to water, operational expenses and M&E. Table 20 presents the expenses with the main activities of the Project.

Table 20. Execution – Main Activities.

Execution – Main Activities			
Activities	**IFAD value (USD)**	**Ceará state value (USD)**	**Beneficiaries value (USD)**
CTA	12,125,117	12,160,285	-
IPs	13,160,550	9,948,790	6,989,083
Management	1,641,768	8,348,278	
M&E	262,350	968,637	
Access to water	3,959,890	1,499,488	

Source: Elaborated by the PMU/PPF (2022).

179. AWPB – Programming vs. Execution: The execution of the AWPB during the course of the Project had a great variation. Low executions happened in the years that the Project was in bidding processes, with these processes taking more than a year to be finalized for entities to be contracted. This was observed in

the years 2013/2014 and 2015 and 2016 and 2017. After 2017, the project expanded its execution, reflecting the percentage executed in relation to the planned, even during the pandemic period, as shown in Table 21.

Table 21. Programming and execution.

Year	AWPB	Executed	% Outreach
2013/2014	13,309,452.01	1,152,203.86	9%
2015	15,335,639.55	6,999,708.53	46%
2016	49,446,294.74	8,799,333.34	18%
2017	141,041,664.05	34,893,404.00	25%
2018	187,442,366.47	86,614,207.85	46%
2019	197,771,988.53	144,477,934.89	73%
2020	64,116,155.55	50,488,268.07	79%
2021	60,533,115.77	49,715,100.22	82%

Source: Elaborated by the PMU/PPF (2022).

180. Budget Availability: During the Project execution period, there was always budget availability. Exeptions were the years of 2017 and 2018, when the country and the state experienced economic difficulties, which affected cash liquidity. In other years, the state honored the commitment made with IFAD, even exceeding the amount estimated in the contract. This happened because the state government assumed Project costs in the two deadline extensions approved by IFAD, accumulating the approximate amount of USD 46.8 million (117%) until December 2021.

E2. PROJECT MANAGEMENT QUALITY

181. PPF advanced significantly in 2016 and 2017. The Project team was constituted, physical structures were set, implementation arrangements were concluded and the work of CTA entities was operationalized. In the following years, the Project accelerated its physical and financial execution. Throughout the implementation stage, the Project management mediated strategic decisions with the SDA and the IFAD, which made possible the development of the Project.

i) Acquisitions and contracts

182. The performance of the procurement team was essential for the purchase of required goods, in addition to the contraction of services and consultancy necessary for the implementation of the Project. The activities conducted within the Project were technically organized by components with the direct participation of procurement teams to execute and/or support the bidding processes fundamental to the PPF dynamics.

183. The arrangements used by the state government were satisfactory for most of the Project time, especially from the middle onwards, given the adequate organization and personnel, efficient internal controls, and the generation of reliable expenditure statements. The Project maintained procedures, practices, and the performance of administrative, financial and accounting functions in a satisfactory manner. In addition to overcoming the pandemic, PPF carried out a fair monitoring of the use of funds and the accountability of IPs, as well as the calculation and final registration of beneficiaries' counterpart. The Project economic analysis examined Project's implementation stages, considering the time in which resources were released.

ii) M&E and knowledge management

184. Project activities were monitored in the context of the LF and its indicators. Actions were integrated with management and components 1 and 2, ensuring the implementation of the goals set out during the planning, replanning and evaluation of the Project, in order to guarantee the proposed objective.

185. Initially, the information regarding the monitoring of the LF was conducted using electronic spreadsheets, being later migrated to the IFAD M&E system in 2016. In 2020, information was migrated again, now to the most recent version of the IFAD M&E system, called DATA.FIDA. It was implemented with the support of the Semear International Project, where it remains up to date.

186. Within the scope of the SDA/PMU, an additional system was developed to serve as a repository of beneficiary information, called the TARE Management System (Family Farming Portal), where the database of households and project actions is stored.

187. M&E management was also responsible for the preparation of technical documents, such as: quarterly progress reports, annual operating plan, preparation of institutional presentations containing the main results achieved.

188. The routine monitoring of LF indicators during the execution of the Project allowed the identification of the absence of some results. To solve this gap, two remote surveys were carried out with beneficiaries. The first one conducted in 2020 with a portion of benefiting households, which had the participation of 1,753 households benefiting from IPs. The second one conducted in 2021 with benefiting organizations, chich had the participation of all associations benefiting from IPs.

189. Regarding the impact evaluation study, data were collected for a sample of households through the application of questionnaires at two different times: baseline (2016, base-year 2015) and endline (2021, base-year 2020). Baseline data covered a total of 1,247 households, 694 belonging to the treatment group and 553 belonging to the control group. In the post-intervention period, questionnaires were applied between July and August 2021 to a total of 694 households, 320 in the treatment group and 374 in the control group.

190. For the elaboration of the PCR, the M&E team provided information regarding LF results, the impact evaluation study and the generation of disaggregated data. They also collaborated in the writing of the report.
191. In relation to actions of knowledge management and communication, although not initially foreseen, the team prepared and implemented strategies related to these themes in an integrated and transversal way to all PPF components. Knowledge management products developed by the Project provide important inputs for the strengthening and expansion of rural public policies by the state government, as well as for the improvement and expansion of the services of CTA entities. The main lessons learned with PPF were systematized in these products: agroecological techniques, social technologies, work methodology and the PPF targeting.
192. PPF produced 10 strategic products with high replication potential. These products have different formats and reach broad audiences with accessible and inclusive language. The Knowledge Management and Communication Plan articulates with the main innovations and lessons learned with PPF, including cross-cutting themes of gender, youth, traditional communities, environment and nutrition. The PPF information management allows easy access to the general public since knowledge management material is available on the SDA website.

E.3. QUALITY OF FINANCIAL MANAGEMENT

193. Financial Management: Overall fiduciary risk was rated as low after the second half of Project execution. The arrangements used by the government state were satisfactory for most of the Project time, especially from the middle to the end. There was adequate organization and personnel, efficient internal controls and the generation of reliable expense statements in BRL, USD and EUR, enabling the issuing of PPF Financial Reports. The Project maintained procedures, practices, and the performance of administrative, financial and accounting functions in a satisfactory manner. In addition to overcoming the pandemic situation, PPF carried out a fair monitoring of the use of funds and accountability of IPs. It is worth noting that PPF reached its full disbursement in 2019 and that the funds from the state government exceeded the target (117%).
194. Cash Flows: The state government presented some difficult in making resources available in 2017 and 2018, thus requesting the IFAD to break the parity and to replenish the Designated Account. However, after this period, the state balanced the amounts invested, exceeding by 14% the value planned to be executed.
195. Project Asset Transfer Plan: PMU assets have been registered in the SDA Property System and they will remain in the SDA upon Project termination. The assets acquired by those benefiting from IPs were governed by a contractual clause and their terms of receipt were attested by the community.
196. Accounting Software: The project used government systems for payments and the elaboration of statements of expenses. The financial statements and reports were prepared in Excel spreadsheets, fed with information from the Government's financial systems.
197. Auditors' Performance: Audits were carried out by private companies contracted through a bidding process. In the first years, the project was audited by the company Sá Leitão. The 2018 audit was carried out by the company RACC, and was not initially accepted by IFAD as its reports were incomplete, which required further fieldwork to complete it. In 2019 and 2020, the company that won the bidding processes was Controller Auditores. These last audits were sent outside the contractual deadline, but with the authorization of IFAD, due to the COVID-19 pandemic.
198. Ineligible Expenses: From the execution of the Project to the date of preparation of this report, there were no ineligible expenses.
199. Archiving of Project records: SDA has a digital repository where Project documents are saved. Physical documents are filed in lockers at the PMU and the responsibility for these records will be borne by the SDA.
200. Project Financial Procedures Manual: During the implementation of the Project, a Financial Procedures Manual was prepared. It presented updates to suit IFAD demands and PPF needs, but these updates were not made annually.
201. Clompetion Activities: The last withdrawal request was made in 2019 and the rendering of accounts' final balance was carried out in 2021, with expenses executed until 2020.
202. Management of Agreements with Associations: The 533 IPs of associations received BRL 95.1 million (USD 23.1 million) in funding, 51% of which from IFAD and the remaining 49% from the state government. Until the Project completion date (12/31/2021), 100% of this amount was executed, as well as an additional BRL 1.5 million (USD 365,000) referring to financial income earned by the associations. As a result, the total execution value is BRL 96.6 million (USD 23.47 million). Of the 533 IPs, 88% are managed through the government "E-partnership" system, which is used both for approving payments and for the online rendering of accounts. The remaining IPs, which were the first ones to be implemented, are followed up in the traditional way, i.e., by sending the proper documentation to the PMU.
203. Accountability of Associations. Partial: IP funds were transferred in installments (2 or 3), and the transfer of installments other than first one was conditioned on technical opinion of the manager of

Component 02, which was responsible to analyze the documentation presented by associations. Such documentation consists of bimonthly or quarterly reports on the physical execution of IPs in the form of a partial accounts rendering, prepared by associations and verified by PMU field technicians. Additionally, in order to pay suppliers/service providers, the associations needed to provide the necessary documentation and them generate a bank transfer order (BTO). During the execution of IPs, the PMU Accountability Sector verified the compliance of the documentation via partial accountability, having analyzed, until 02/15/22, approximately BRL 51 million, which corresponds to 53% of the total amount spent by associations. The complete verification of the documentation will be carried out in the final accountability stage. In addition to the monitoring conducted concomitantly to the execution of IPs, some verification through the annual audits of the Project, as shown in Table 22.

Table 22. Audit Monitoring.

Monitoring	2016	2017	2018	2019	2020	TOTAL	% of IPs audited
Number of IPs audited	3	3	37	36	35	114	21%
Number of current IPs	15	46	533	533	503		
% of sampling	20%	7%	7%	7%	7%		

Source: Elaborated by the PMU/PPF (2022).

204. Final rendering of accounts: Upon completion of their IPs, tha associations must send a Physical-Financial Execution Report to the PMU, returning the unused balance when applicable. At this stage, in addition to the analysis of the tax documentation of BTOs, compliance verification is also carried out regarding tax regularity and other rules. It is observed that some occurrences that require regularization measures by the associations may delay the conclusion of the analysis. These occurrences are often related to the absence of: i) attestation stamp on the invoice and the autonomous payment receipt; ii) proof of payment and payment of taxes (ISS, INSS and CPP); iii) Animal Transit Guide – GTA; iv) Document of Forest Origin – DOF; v) Contract with the supplier; vi) Debt Clearance Certificates (CNDs); and, vii) National Register of Seeds and Seedlings (RENASEM). It should be noted that, from November 2021 to January 2022, 90% of benefiting associations (474 PIs) submitted the final rendering of accounts to the PMU and about 8% (48 PIs) have already returned the remaining balance. Of the 474 final rendering of accounts received, 183 was already analyzed: 78 were approved and 105 are in the process of settling pending issues. In February 2022, there were still 291 final rendering of accounts to be analyzed and many others yet to be sent by associations.

E4. PROJECT'S INTERNAL RATE OF RETURN

205. A sample of 18 IPs was analyzed to calculate the Project's internal rate of return. Benefiting households who invested in four different activities were interviewed: poultry farming (42.5% of the total invested by Component 2); sheep and goat farming (33%); pig farming (14.5%); and beekeeping (3.9%). Total results of each activity were extrapolated to the total number of projects in the same category, and the weighted average of these results was applied to the unanalyzed activities, which represent 6.1% of the investment.

206. From a financial perspective, the sample's internal rates of return had a high variance. In fact, 30% of IPs showed a negative return for a 10% discount rate and a 10 years period. The rest obtained a very wide range of results, with the highest IRR being 73%. The NPV ranged from negative to BRL 282,700 (beekeeping). The average IRR of Component 2 extrapolated the sample result in 31% and the NPV by BRL 56.5 million.

207. In general, investments are successful and justified. Pig farming has invested in clean aggregating technologies (biodigester), while poultry farming has also invested in productive backyards for improved food self-sufficiency for the herd and greater food security for households. In successful cases, the returns proved to be significant for productivity and household income.

Table 23. Ex-post average annual results of the Economic and Financial Analysis

Item	Unit	Activities			
		Sample (poultry farming)	Sample (sheep and goat farming)	Sample (pig farming)	Sample (beekeeping)
Without the project					
Costs	R$	3,680,865	2,515,386	1,616,103	402,558
Revenue	R$	2,264,261	1,173,114	1,040,654	1,442,638
Margins	R$	*- 1,416,604*	*- 1,342,272*	*- 575,449*	*1,040,080*
With the project					
Costs	R$	4,616,609	2,278,675	2,449,715	631,550
Revenues	R$	4,839,798	1,662,811	2,677,157	2,678,703
Margins	R$	*220,190*	*- 615,864*	*227,442*	*2,047,153*
Incremental margin	R$	1,636,794	726,408	802,891	1,007,072

Item	Unit	Activities			
		Sample (poultry farming)	Sample (sheep and goat farming)	Sample (pig farming)	Sample (beekeeping)
IRR	%	34%	21%	50%	51%
NPV	R$	480,100	137,400	286,600	382,900
B/C ratio	N°	1.1	0.7	1.1	4.2

Source: PPF Economic and Financial Analysis (2020).

Table 24. Annual net margin increment per household (sample)

Activity	Annual net margin per household		Monthly increment
	Without the Project	With the Project	
Poultry farming	-1,171	322	124
Sheep and goat farming	-2,782	-1,056	144
Pig farming	-1,518	620	178
Beekeeping	2,857	5,885	252

Note: Project's net margin includes costs related to family labor, which can reach 80% of total costs in activities such as poultry farming. A negative net margin is not synonymous with negative cash flow. However, it indicates that the activity does not remunerate the work of households according to the stipulated amount (national minimum wage adjusted by the occupancy rate in Ceará).
Source: PPF Economic and Financial Analysis (2020).

Table 25. Increase in hourly remuneration for family work (BRL per hour worked)

Activities	Hourly remuneration of work		Increment
	Without the project	With the project	
Poultry farming	1.4	4.6	3.2
Sheep and goat farming	0.6	2.2	1.6
Pig farming	0.8	4.6	3.7
Beekeeping	19.9	31.3	11.4

Source: PPF Economic and Financial Analysis (2020).

208. All four main types of supported activities are financially justified (on average). However, Tables 23 and 24 demonstrate the subsistence nature that these activities presented before the implementation of the Project, as all of them, with the exception of beekeeping, presented negative average net margins. Beekeeping was the only activity that paid the work of households above the minimum wage, while sheep and goat farming still does not. However, on average, all activities increased the net margin, significantly improving household labor remuneration. The results presented also reflect some lack of maturity of the activities resulting from the concentration of the application of resources in the last three years of PPF (2019, 2020 and 2021) combined with difficulties such as organization and access to the market, as well as the COVID-19 pandemic.

209. In response to the overall economic results of the project, the IRR was estimated at 8%, with an NPV of BRL 7.8 million for a discount rate of 6.75%. In comparison with the Project Report, the economic and financial expectation was below the initial forecast, but still very close to the figures set at the review carried out in 2018 to extend the project term. The IRR and NPV values generated a cost-benefit ratio of 3.10, meaning that for each BRL 1.00 invested in the Project, another BRL 3.10 was generated in benefits.

Table 26. Compared results of the Economic and Financial Analysis

	Project Report	Top-up	PCR
fIRR	40%	27%	31%
fNPV (BRL 1,000,000)	1,4	-	56
eIRR	29%	10%	8%
eNPV (BRL 1,000,000)	857	4	8
Discount rate	6,75%	10%	6,75%
Period of analysis	20 years	10 years	10 years

Source: PPF Economic and Financial Analysis (2020).

210. The Project focused on assisting the poorest and most vulnerable households in the state of Ceará rather than the potential return on its investments. This is a characteristic that may have contributed to the selection of projects with lower economic returns. There were also investments in the technical qualification of beneficiaries and in technical assistance aimed at the preparation and execution of investments, which were not possible to quantify. Additional benefits regarding the management of productive activities arose as well (e.g., increased birth rate of swine and sheep/goats, and the introduction of supplementary food for beekeeping).

Paulo Freire Project
Ex-post Economic and Financial Analysis

FIDA
Investindo nas populações rurais

GLOBAL Economic

IRR	NPV (BRL)
8,0%	R$ 7.813.095

Productive Projects Financial Analysis

	fIRR	fNPV
Poultry farming	34%	R$ 480.091,84
Sheep and goat farming	21%	R$ 137.353,02
Pig farming	50,26%	R$ 286.591,41
Beekeeping	51%	R$ 382.866,56

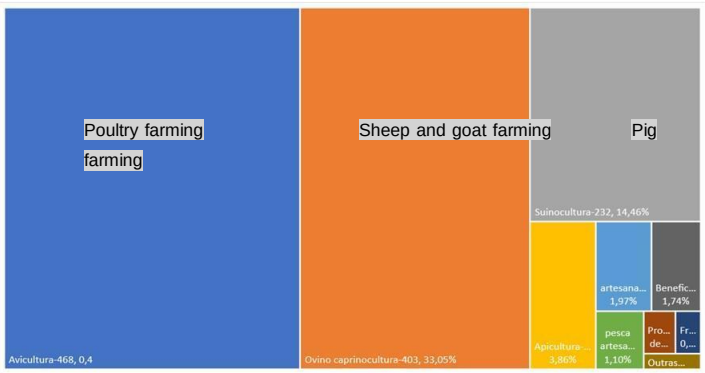
Productive Projects Economic Analysis

	eIRR	eNPV
Poultry farming	31,5%	R$ 437.431,14
Sheep and goat farming	21,3%	R$ 134.336,26
Pig farming	62,6%	R$ 357.526,11
Beekeeping	55,2%	R$ 455.559,61

Activities financed

	# of projects	%
Poultry farming	468	42,50%
Sheep and goat farming	403	33,05%
Pig farming	232	14,46%
Beekeeping	74	3,86%
Handicraft	37	1,97%
Artisanal fishing	13	1,10%
Fruticulture	10	0,42%
Horticulture	9	0,54%
Processing	18	1,74%
Other activities	-	0,35%

Investment share vs. Number of projects



F. PERFORMANCE OF PARTNERS

211. Municipalities and Municipal Secretariats played an essential role in PPF activities, articulating policies at the local level (e.g., the access to PNAE), supporting the organization of Family Farming Fairs, and participating in the Selection Committee and validation of the communities.

212. SEPLAG. The Secretariat monitored the Loan Agreement together with SEFAZ. The entire Project budget is approved by SEPLAG's MAPP and FECOP. There was a dialogue with IPECE, which is an autarchy of SEPLAG, for providing support in the selection of communities and for the elaboration of the baseline ToR.

213. São José Project (PSJ). Financed by the World Bank, contributed to the sustainability of PPF actions in benefiting organizations through public call notices.

214. EMATERCE. It made employees available to compose the PPF team and provided facilities for training events. It also provided specialized technicians who supported cassava production and irrigation activities in PPF communities. EMATERCE played an important role within the Selection Committee in the community selection stage.

215. CODEP assumed technical support in the selection of animals, in addition to animal nutrition issues.

216. COÁGUA. The coordination is part of the SDA system and was an important partner in building first-water cisterns and managing water treatment stations (ETAs).

217. ADAGRI. Cooperation for the licensing of processing units and the registration of beneficiaries of animal production as breeders.

218. SEMACE. Contributed to environmental licensing actions for productive investments supported by the Project.

219. IICA and AGROPOLOS. The institutions supported the management of the Project, especially in terms of the hiring process of collaborators, services, and consultancies, which greatly boosted Project actions.

220. Semear Program and International Semear Project. Semear was a partner in the area of knowledge management through: the systematization of experiences and various publications; the conduction of national and international exchanges of experience; the support for the creation and operation of the Gender Equality Working Group; the conduction of research such as the "Training and Dissemination Project for the Conscious Use of Agroecological Logbooks in the Projects Supported by IFAD in Brazil"; the research on the impacts of Covid-19 on women's lives, agri-food systems, and illiteracy in the semi-arid region; Exchange with Traditional Communities in Argentina; Virtual exchange Brazil-Africa on the agroecological logbooks; and the Semear International Journalism Award.

221. AKSAAM. In total, there were four direct actions regarding knowledge management and capacity-building: i) Slow Food and AKSAAM – initiative to strengthen territorial identity, valuing the food culture and socio-biodiversity of traditional communities and rural youth in two indigenous communities (Tabajaras and Tremembés); ii) CETRA; iii) IComradio/UBIQUA – Nestante; iv) UNICAFES INFOCOS – Agriagencia; v) Rotas Platform and vi) SIRAF System.

222. Ceará State School of Public Health (ESP). PPF + Health was an initiative for integrating public policies and is the result of the Technical Cooperation Agreement signed between SDA, ESP, and the

Department of Collective Health of UECE, with the operationalization of the PMU/PPF and the Health Educational Board of ESP. Oriented to the training of health professionals, Community Health Agents and Community Agents of Endemic Diseases, it aims to develop and deepen knowledge, skills, and attitudes for the identification and confrontation of the main health problems affecting the rural communities of the 31 Ceará municipalities in the regions covered by PPF.

223. School of Social Gastronomy (EGS) and Food and Nutrition Security. The partnership's goal was to train TARE technicians to build strengthening strategies that could foster healthy and sustainable eating habits in benefiting communities and promote knowledge dialogue and experience-sharing. This would enable the establishment of a cooperation network between communities to combat malnutrition and chronic diseases in peasant, indigenous, fishers and quilombola populations, especially among children and women. The formative experience allowed for the appreciation of local products and encouraged short production and consumption circuits, emphasizing relationships of reciprocity and solidarity.

224. Federal University of Ceará (UFC). Technical support in the preparation of the economic results survey carried out in 2018. The Agricultural Residency Program, of the Agricultural Sciences Center, participated in the preparation of public policy booklets and the process of training CTA teams.

225. State University of Ceará (UECE). Collaboration on the subject of collective health and pandemic. Research and scientific support in health work at PPF + Health. Participation in virtual conversation circles with training and qualifications.

226. Rural Youth Movements. Articulation in the territories, proposition of policies, and organization.

227. All social organizations mobilized with PPF in the execution and articulation with households of their needs, becoming important cooperators for the development of actions such as: gender, race and ethnicity issues, rural youth, implementation of projects, access to markets, access to water, nutrition and food security, and knowledge management, so these partnerships were satisfactory (score: 5).

F1. IFAD PERFORMANCE - SUPERVISION QUALITY AND IMPLEMENTATION SUPPORT

228. IFAD performance. In addition to the Missions and technical support, IFAD maintained a constant and permanent dialogue, facilitating the communication with the Project. PPF had monitoring and support in all areas of knowledge (components, management and coordination) for its physical and financial execution, contributing to decision-making focused on achieving the planned results and objectives. Opportunities for external partnerships generated by IFAD can be highlighted, adding additional support to the implementation of the Project and the dissemination of its results, evidencing the good practices of PPF, which served as a model for other IFAD Projects in the Brazilian northeast. The partnership with PSI favored the dissemination of the experiences of PPF beneficiaries to the whole world through several publications in books and websites. It also contributed to the M&E and the dissemination of PPF actions systematizations. In the preparation of development and investment plans, the Project obtained direct support from IFAD with the training of the PMU technical team and CTA technicians when implementing the financial feasibility analysis of investment plans through the use of the SAF-PP (system of financial analysis of production projects). The training carried out by IFAD in the areas of the Project were: a) Component 1: Gender: Exchange of Knowledge in the Semi-arid Region of Latin America; Training in participatory mapping; Seminars on Agroecological Logbooks; b) Component 2: Workshops on SAF-PP; Strategic learning route Paraíba and Rio Grande do Norte; Course in Agricultural Cooperativism; Exchange of Innovation in Family Farming Public Policies in America; Learning Territories of Colombia; and Exchange on Strategic Methodologies for Implementing Strategic Plans and Productive Investments in the State of Piauí. c) Administrative Financial Management: IFAD Program M&E; Fiduciary and Procurement Workshop in Brazil; Project Management – Generating Results; Online Course: an overview of IFAD's financial management practices and procedures; Training Workshop on non-objection monitoring system (notus) – IFAD; Financial Management Workshop – Brazil – IFAD; and Training Program "Achieving Excellence in Financial Management Projects – APEX". d) Procurement Management: Workshop on Fiduciary Training for Procurement and for Monitoring and Evaluation of IFAD Projects in Brazil; Seminar on IFAD Portfolio Acquisitions in Brazil; Training course in the DATA.FIDA system, focusing on the modules of Project Management, Finance and Accounting, Investment Plan; Acquisitions; Human and Social Capital and Monitoring and Evaluation; and Training Course on the contract monitoring platform - IFAD Client Portal. IFAD 2020. e) M&E: Fiduciary training for procurement and for monitoring and evaluation of IFAD Projects in Brazil; Working Group on M&E of all IFAD Projects; Training in the DATA.FIDA system; Training in Impact Assessment and Logical Framework promoted by PRIME.

F2. STATE GOVERNMENT PERFORMANCE

229. The state government guaranteed disbursements for the implementation of PPF actions. In general, the contractual clauses were complied with (disbursement, data presentation, audits and others), fulfilling the recommendations and agreements signed with IFAD.

F3. PERFORMANCE OF OTHER PARTNERS

230. Union of Rural Workers. They supported the Project in the selection and validation of communities, as well as in the articulation and mobilization of households. Logistical support for PPF and technicians, offering their physical spaces for meetings and dormitories.
231. FETRAECE. Articulation with the state government and IFAD to make the project viable. The institution was hired to monitor the social mobilization action from an operational and methodological point of view.
232. BNB. Initially, the Project approached BNB with a focus on providing access to rural credit policies (mainly PRONAF) for benefiting households. Throughout the implementation trajectory, beneficiaries accessed lines of credit such as Agroamigo, Crediamigo and PRONAF B, through the support of CTA.
233. EMBRAPA GOATS AND SHEEP. Training of PMU technicians, CTA entities and benefiting farmers in the areas of production and processing of family farming products.
234. EMBRAPA VEGETABLES. Exchange in Brasilia on vegetable production.
235. EFAs. They promoted the entry of farmers' children as students with contextualized technical training. PPF strengthened the partnerships between the EFAs and the CTAs, which began to absorb students and interns and hire young graduates for technical assistance. It also promoted partnerships for holding training events such as exchanges, meetings, and others.
236. PROCASUR. It promoted exchanges between Brazil-Central America, Brazil-Mozambique and Brazil-Uruguay (South-South Cooperation) on rural youth and nutrition through the Semear Program, PDHC II or the IFAD office.
237. UBIQUA. Partnership with the NESTANTE app project in the Digital Reporter course, involving the youth of the projects supported by IFAD, in which the PPF participated.
238. NGOs and ASA CEARÁ Network. The PPF built partnerships with the organized civil society in various themes and areas. For instance, civil society organizations supported and strengthened territorial actions and water access initiatives. In the partnership with the DAKI-SV Project, an IFAD donation, various community experiences were systematized and various materials were shared.

G. SUSTAINABILITY EVALUATION

239. The sustainability of the proposed investments was achieved through a strategic articulation between 5 coordinators (CODEA, CODAF, COÁGUA, CODECE and COCRED), EMATERCE and the PMU of the São José IV Project. All these agencies and institutions belong to the SDA and their interventions aim to assure the permanence of what has already been established and to continuously strengthen local collective actors and beneficiaries. Their work is oriented to avoid the discontinuity of actions already developed in the communities. The SDA system plays a fundamental role in helping beneficiaries search for microcredit or in promoting the creation of a local solidary revolving fund with support and articulation with other public policies and productive and social inclusion programs. In this way, the SDA system will operate in the 600 communities with productive investments for another 12 months. During this period, the work should focus—in addition to continuous assistance in the various modalities such as gender, youth, marketing and production—on the guidance of those households interested in expanding their investments through microcredit provided mainly by the BNB, or even the construction of a solidarity rotation, as well as the elaboration and implementation of 58 Investment Plans referring to the 58 communities that did not have enough time to mature their proposals.
The strategy has 4 stages: i) 1) Transition of households to the SDA system; 2) Operationalization, by SDA, of implementing actions; 3) Implementation of actions by the SDA system, which is formed by EMATERCE, PSJ IV, CODEA, CODAF, COÁGUA, COCRED and CODECE; and 4) Monitoring of system actions. The transition of households benefiting from PPF began in March 2021 with the institutional presentation of the Project to the entire SDA system. After that, PPF forwarded the database of all investments to the coordinators, PMU, PSJ IV and EMATERCE. The transition ends in August 2022.

H. LESSONS LEARNED AND KNOWLEDGE GENERATED

240. Investment Plans. a) Initially, a minimum of 10 households was required and only one productive activity was chosen. During fieldwork, the Project found a smaller number of households than planned, in addition to verifying the need for households to diversify their investment. After reviewing these criteria in order to adapt to the reality experienced in the field (average of 5 households per activity and the need for households to opt for more than one investment), this decision was approved by IFAD in the Midterm Mission. Thus, there was an expansion of the PPF service capacity, increasing the participation of households and their adhesion to the Project, providing opportunities for the insertion of the youth and women. b) An adjustment was made to the financial limit of IPs, from up to USD 3,500 to up to USD 1,500 per household, with the objective of expanding the scope of the promotion of productive inclusion to more households; c) The process of elaborating and implementing IPs was carried out with the intense involvement of the beneficiaries at each stage. In addition, the IPs served as a planning tool and allowed monitoring during their implementation. d) Diversification of IPs: Initially, the IPs contemplated only one type

of productive investment for the entire community. In this way, the participation of those households that did not have a vocation for the chosen activity would be unfeasible. After the dialogue with IFAD, this rule was changed to reflect the community's real needs. Thus, the diversification of productive activities was allowed, which was a conquest for beneficiaries, most of whom had never experienced a policy such as that of the Project. e) The Project understood that IPs do not consist only in the transfer of machinery and equipment, construction of productive structures, acquisition of animals and others, as that, in isolation, would not solve the problem of the autonomy of households. f) It was perceived that providing CTA prior to the investments allowed the results to arrive faster, reducing the learning period and improving the technology adoption rate. g) The e-partners system: The computerization of the financial execution processes (such as transfers and payments) and acquisitions provided efficiency in the management and controls of these procedures both for the beneficiaries and for the PMU.

241. Gender Commission. The constitution of the Gender and Race/Ethnicity Commission, which took place in June 2018, was an important learning experience. It contributed to the formation and appropriation of concepts and methodologies in the Planning, Monitoring and Evaluation processes, and in the co-responsibility of actions by the PMU and the CTAs. The Commission played an important role in managing gender and race/ethnicity actions. It consolidated itself as an instance for sharing the processes developed in the communities, CTAs and PMU. This favored: a greater knowledge of the reality of women, gender relations and traditional peoples and communities; a better evaluation of the feasibility of the proposed actions; the identification of the limits and possibilities of the Project's action; a leveling of concepts, methodologies and practices adopted by each CTA and PMU; the enhancement of the Agroecological Logbooks Project. In addition, it constituted a space for political-professional training of its members, strengthening them to act in a more qualified way in their work due to structural patriarchy (machismo) and racism.

242. Agroecological Logbooks. The experience of agroecological logbooks in the Project involved training and research, which favored the learning of the three parties involved: rural women, CTA and PMU. (i) Rural women: understanding that the activities carried out on a daily basis, including the domestic ones, are work and not just help; self-perception of their agricultural and non-agricultural production and their contribution to household income; re-signification and valorization of their backyards and perception of their productive capacity, mainly as a source of food and nutritional security. (ii) CTAs and PMU: appropriation of the methodology of agroecological logbooks; expansion of their ability to systematize and measure the volume of women's production and the value of their monetary and non-monetary income, based on the 4 types of socioeconomic relationships in which they were involved: consumption, donation, exchange and sale; the logbooks constitute an effective political-pedagogical instrument in the empowerment and autonomy of women; expansion of the visibility of women as productive, political and economic subjects. (iii) PMU: importance of implementing the use of agroecological logbooks integrated into public policies for rural development and the promotion of gender equity; agroecological logbooks are effective instruments for monitoring and evaluating the results of projects, programs and public policies.

243. It is noteworthy that, despite the positive results regarding the use of this instrument, the need to increase the number of participating women remains as a lesson learned, in order to have a more expressive result. It is also important to have a specific plan for the use of the logbooks, with the objective of guaranteeing the continuity of their use, increasing the number of users during the project implementation.

244. Formative processes. As a way of guaranteeing greater levels of sustainability, the formative processes played a fundamental role and sought to strengthen the role of people through the deepening of topics such as: Agroecology, Solidarity Economy, Coexistence with the Semi-arid, Gender Relations, Feminism, Race and Ethnicity, and Rural Youth. One of the methodological processes supported are the exchanges, which work building knowledge and valuing the specific experiences of farmers.

245. The Role and Model of the CTA. Continuous assistance has a regular and constant local presence with benefiting households. Teams were dimensioned according to the number of households served (in an approximate ratio of one technician for each 80-120 households), with exclusive dedication to serving this public. The multidisciplinary technical team adopts a participatory, constructivist and critical-reflexive approach, prioritizing the real needs and demands of beneficiaries. The approach is based on agroecology and the management of natural resources, thus ensuring greater sustainability.

246. Youth, Communication and Knowledge Management. The process of articulation, mobilization and participation of young people has generated substantial results in the incidence of public policies focused on the insertion of the youth in social and productive activities, thus expanding actions that culminate in rural succession in the state of Ceará. Given this scenario, considerable advances and challenges were identified: a) Specialized Youth Advisory and Youth Strategy and Action Plan and Communication: elaboration, implementation and monitoring of the Strategy and Action Plan specific to rural youth; b) CTA: training of entities focused on youth actions and themes; c) Continuous formative processes: training and exchanges in themes and techniques; festivals and caravans; d) Popular communication and ICTs: Strengthening of “youth” agendas through the media, languages and communication techniques; appropriation and use of techniques and media; systematization and dissemination of good practices, local knowledge and results; space for training, information and expression of youth; e) Productive inclusion and economic empowerment:

implementation and development of productive investments. Need to define targeted and specific investments for the youth and insertion of more young people in IPs; encouraging young people to join EFAs for professional qualification; stimulation of processes and innovations in commercialization, such as social media. f) Self-organization and political and social participation of youth: Networking, with the creation of the Semi-Arid Youth Network, as a space for youth social and political action in debates and promotion of public policies for rural youth. Formation and/or strengthening of youth groups, leadership and participation; enabled the inclusion of some young people in associations, unions and other propositional and decision-making spaces. g) Strategic use of communication tools and instruments in times of the Covid-19 pandemic: The Covid-19 pandemic has brought many challenges for the most vulnerable populations, especially the youth, to remain mobilized and connected. One of the strategies was to hold weekly online conversation circles.

247. Relevance of building strategic partnerships to strengthen Rural Youth. The Project built a solid base of strategic partnerships to develop youth actions—such as caravans and festivals—with various public equipment for the social promotion for youths, EFAs, Universities, unions and social associations, in addition to other federal, municipal and state agencies. The creation of the Technical Board of Rural Youth in the SDA will be on the agenda in the next period.

248. Strengthening of knowledge management processes with increased PPF visibility. PPF made progress in the development of activities linked to both knowledge management and popular communication, with a special focus on women and the youth, intensifying the production and systematization of content in the various areas of the Project and expanding dissemination channels as a way of giving visibility to PPF actions.

249. Valuing the accumulation of knowledge by CTA entities. The Project benefited from the knowledge accumulation and knowledge networks of CTA entities, which have a long history of work in the semi-arid region. Benefits also arose from their ability to articulate and mobilize other government programs for the households benefiting from PPF. In working with these entities, the Project valued on a larger scale the agroecological experiences, innovations and gender training that these CTA entities have already accumulated, as well as local knowledge. The benefit was a two-way street: institutional strengthening within the PMU, internalizing the lessons learned from working with the CTA and the associations themselves, through training workshops, and the experiences developed during the execution of the Project. PPF methodological approach has been guided in the sense of strengthening traditional knowledge, the principles of agroecology through participatory processes, and the effective participation of people, strengthening the construction of a sustainable TARE model. The continuous assistance method requires permanent monitoring, involving all the moments from the entity's arrival in the community to the intervention.

250. Simplified means of management and accountability of agreements by associations. As a lesson to be replicated in other IFAD projects in Brazil, PPF allowed community associations to perform their accountability through digital means (e.g., the state system called e-partnerships) advised by the CTA and its field technicians, as well as the PMU. This measure accelerated the management process of the agreement.

251. Application of participatory operational tools in the selection of communities. Within the scope of PPF, the institution of Local Committees was characterized as an important tool for the selection of communities with households meeting the eligibility criteria selected in order to prioritize households with a higher rate of social vulnerability. Created by the Project, these committees had the objective of supporting an initial identification of communities, integrating the main local actors. Subsequently, they began to play a relevant role within the Project, ensuring the active participation of beneficiaries, supporting the selection and review of investment plans, and monitoring the progress of the Project actions.

252. Technological innovations. Use of technology for in-site registration, monitoring and evaluation of beneficiaries. PPF developed a system for in-site registration of benefiting households through the use of tablets, enabling the real-time insertion of beneficiaries' personal data—such as household composition, income, documents, etc.—by the CTA technicians. The Remote Outcomes Survey developed by PMU made it possible to obtain beneficiaries' results via free internet tools and with a low implementation cost, consolidating itself as a viable instrument that has been replicated to other projects supported by IFAD in the Northeast region of Brazil.

253. Access to water resources. Through the PPF experience, it was learned the importance and the need to meet the demand for water for human consumption. It is not just about responding to a fundamental social demand; the scarcity of water and the difficulty of accessing it are factors that negatively condition, and may even prevent, the possibility of success and sustainability of Project initiatives. As of 2017, PPF began to invest in the construction of cisterns, thus contributing to mitigating the critical availability of water resources in the semi-arid region, positioning itself in a central place for dialogue with beneficiaries and the state of Ceará. This action was complemented by mobile ETAs, which were used for the 1st time in the state.

254. Manual for the Preparation of Productive Investment Plans (SAF-PP) and Business Plans (SAF-PN). The manual was created by the Semear Project and was intended to support the preparation of Investment Plans in order to guarantee their quality as well as their technical, economic and financial feasibility. CTA and PMU teams were trained to use the Manual. This was particularly important in the PPF due to the high volume of funded IPs (533).

I. CONCLUSIONS AND RECOMMENDATIONS

255. Positive impacts of PPF. The Project achieved positive results such as the targeting, territoriality and diversification of financed activities. The impact evaluation study showed that the Project significantly increased the youth and women active participation in community actions, the access to public policies and the adoption of sustainable agroecological practices. The multidimensional poverty index showed that the poverty rate decreased in both groups between 2015 and 2020, whilst this drop was much more expressive for the treated, going from 44% to 34% (a reduction of 10 percentage points). In the control group, the poverty rate went from 45% to 42%. Of the 62 indicators described in the ORMS, the Project reached or exceeded the target value for 28, surpassed 50% of the goal for 28 and stayed below 50% of the target for only 6 of them.

256. Sustainable Practices of Coexistence with the Semi-arid Region. One of the Project's strategies is the Coexistence with the Semi-arid Region. In this dimension, PPF achieved significant results by incorporating sustainable practices through the implementation of social technologies (reuse of greywater, agroecological stoves and biodigesters), which strengthened family income and increased consumption of healthy foods. The implementation of biodigesters had a positive impact on the environmental, economic and energy dynamics of the territory. The construction of eco-efficient stoves, in addition to reducing the consumption of firewood, also improved air quality and reduced the time dedicated to wood collection. The implementation of greywater reuse systems made it possible to create a new productive destination for wastewater, which used to be discarded in the environment.

257. PPF actions took place in a context characterized by a severe drought, a COVID-19 pandemic and an economic crisis with reduced supply and access to policies for poor households. The drought that hit the entire Northeast region (Ceará state included) from 2012 to 2017 had consequences in relation to the need to guarantee investments in access to water through the implementation of cisterns for human consumption, since the country's political and economic scenario was marked by the discontinuity of policies aimed at family farming.

258. In addition, a health crisis hit the country from March 2020 onwards with the COVID-19 pandemic. Even in the face of all these challenges, the Project managed to apply new, adapted forms of provision of CTA, production, commercialization and management.

259. Strengthening of Community Organizations. PPF results measured in the 2021 Outcomes Survey showed the Project's efforts to support the creation and development of new community organizations in 24% of the communities, as well as the regularization of organizations that were pending in 25% of the communities. PPF strengthened the organizations' capacities through training in procurements, which was really important in the implementation of IPs. It also guaranteed the acquisition of computer and sound systems in all community plans, introducing a digital inclusion of these organizations and the community access to information and remote TARE during the pandemic.

260. Brief comparative analysis of the main types of investments. The investments made in the acquisition of beehives and equipment for beekeeping as well as the training and technical assistance boosted the production of honey, which obtained an increase in production and in the value of sales, according to the impact evaluation study. Pig farming stands out due to the increase in the average size of herds as well as the volume of sales, despite the difficulties imposed by the classical swine fever that delayed the implementation of this activity in the field. Sheep, goats and poultry (which comprise the largest number of beneficiaries) had positive results as well. It is worth mentioning that sheep and goat farming had a better sustainability of the activity in relation to poultry farming due to the incentive to produce a strategic forage reserve and control of worms, reducing animal mortality in the dry season. In poultry farming, the dependence on external inputs like feed increased due to the hiking of prices during the pandemic, making the activity more expensive for its maintenance, thus generating discontinuity on the part of the supported households. Despite these difficulties, the impact evaluation study revealed that poultry farming had a positive impact on benefiting households in terms of food security since there was an increase in household income from egg sales and as well as an increase in the herd size (+20 birds per household).

261. The Project supported the search for new markets for production flow, mainly encouraging participation in Family Farming Fairs. During the pandemic period, CTA entities and the Project team helped households in marketing their products via social networks and virtual fairs with delivery service.

262. Project implementation – obstacles and resilience. The project experienced delays in the implementation of IPs. To reverse the situation and achieve the established goals, a new management format was necessary. This change aimed to strengthen the operational capacity of the team, especially in the legal and administrative-financial stages of IPs preparation. In order to achieve the goal agreed with IFAD in the Midterm Mission, it was necessary to: i) assist in the preparation of the SAF-PP spreadsheets with the CTA entities; ii) include technicians in the team; and iii) define strategies aligned with good management practices. The PPF example has shown that it is important to guarantee information and guidelines for entities and associations for an efficient execution of funding transfer instruments.

263. Adjustments during the implementation. Throughout its implementation, the project underwent readjustments: a) In relation to the financial values per benefiting household. Renegotiation took place with

the objective of expanding the scope of the Project in terms of the number of households assisted. b) The discontinuity of public policies on drought and access to water. There was a redesign to strengthen the water capacity of households through the construction cisterns for domestic consumption, school cisterns and the introduction of drinking water supply through mobile ETAs. c) The strategies for Knowledge Management and Social Communication, Gender, Race and Ethnicity and Youth, although not initially foreseen, were elaborated and incorporated into the Project. There was also a readjustment of the organizational chart, with 02 specialists being incorporated (Gender, Race and Ethnicity and Youth) and the technical coordination. d) Remote CTA. With the social isolation imposed by COVID-19, the use of online communication tools has consolidated itself as a form of direct communication with communities and maintenance of the work of CTA teams. e) Conducting remote outcomes surveys. In the period of social isolation, with the need to evaluate LF indicators, PPF—with the support of remote CTA—promoted two outcomes surveys validated by IFAD with reliable results.

264. The gender and youth dimension. PPF implemented a gender strategy and action plan that achieved around 80% of the defined objectives, including surpassing some of the goals from LF indicators, such as women-led associative investments (185%) and women in leadership positions in rural organizations (272%). There have been significant results in promoting economic and political empowerment and equitable balance of domestic workload, meeting the three objectives of IFAD's gender policy.

265. Construction of an intersectoral gender commission with the goal of promoting training, organization and production. The commission contributed to promoting the interface between the various Project actions. The creation of the Gender Focus Group had the participation of the PPF team and the CTA entities, being responsible for planning and monitoring gender actions in the field.

266. In regard to the role and expression of rural youth, actions were developed to strengthen productive capacity, mainly through IPs. The Project developed and strengthened the Semi-Arid Youth Network, as an important instrument for articulating the rural youth. Its communication actions for the semi-arid region strengthened the agendas of this public in the territories.

267. Traditional peoples and communities. The Project sought to provide a reduction in socio-cultural and economic exclusion. The achievement of 651% of the targeting goal for artisanal fishers and 72% for Quilombolas stand out. The spaces for dialogue and interventions built with community participation provided ownership and transformative rural development. The way of life of traditional communities was valued and respected. These communities were not just perceived as productive spaces, but also spaces of ancestry, affections and rurality.

268. For many benefiting households, the experience of preparing IPs was unprecedented, since they had never received continuous technical assistance. This participatory approach allowed the exchange and construction of knowledge and agroecological know-how, building capacities based on the local reality and other strategies of coexistence with the semi-arid region.

The PPF team suggests the following recommendations:

269. The importance of CTA actions for the sustainable rural development of communities, with promotion incentives, enables the autonomy of households. With the PPF experience, many households had the first opportunity to receive services of continuous technical assistance. Thus, the continuity of the partnership model with CTA entities and the State is suggested, in order to provide technical assistance services.

270. Replication of the methodology developed by the Project, where CTA entities carry out training and capacity-building processes, advisory and dialogue/exchanges as practices to strengthen sustainable actions and recognize traditional knowledge.

271. Traditional Peoples and Communities. The need for continuity of initiatives aimed at this group and the development of new ones, with a differentiated and specialized action that enable these peoples to access public policies.

272. Strengthening water supply. Need to strengthen the use of water storage technologies for human consumption, in addition to the reuse of this water for the production and inclusion of community sanitation systems. It is important to reinforce actions and investments to guarantee access to water for small-scale productions.