Analysis of one year of use

of Agroecological Logbooks

in FIDA Projects in Brazil

Analysis of one year of use

of Agroecological Logbooks

in FIDA Projects in Brazil

Analysis of one year of use

of Agroecological Logbooks

in FIDA Projects in Brazil

IFAD
Investing in rural people

IICA

SEMEAR
INTERNACIONAL

cta
centro de tecnologias alternativas

PROJETO PAULO FREIRE
DESENVOLVIMENTO PRODUTIVO E DE CAPACIDADES

PROJETO DOM HELDER CAMARA

PROJETO viva o SEMIÁRIDO

PROCASE
PROJETO DE DESENVOLVIMENTO SUSTENTÁVEL DO CARIRI, SERIDÓ E CURIMATAÚ

PROJETO DOM TÁVORA
DESENVOLVIMENTO DE NEGÓCIOS RURAIS PARA PEQUENOS PRODUTORES

PRÓ-SEMIÁRIDO

PUBLISHING TEAM

Preparation of Texts
Liliam Telles
Laeticia Jalil
Rodica Weitzman
Elisabeth Maria Cardoso
Camila Alvarenga
Cícero Augusto
Aline Martins da Silva

Revision and Organization
Aline Martins da Silva

Cover and illustrations
Paloma Rolim

Graphic Design and Layout
Edileno Santana Capistrano Filho
https://linktr.ee/edilenocapistrano

PSI TEAM

Coordinator
Fabiana Dumont Viterbo

Knowledge Management
Aline Martins da Silva

South-South Cooperation Manager and Administrative and Financial Management
Ruth Elisabeth Pucheta

Monitoring & Evaluation Manager
Adalto Rafael Nascimento Silva

Communication Advisor
Gabriel Monteiro Duarte Cerqueira

Administrative and Financial Assistant
Ana Luiza Pinto Palma Santos

Cataloguing In Publication (CIP)

F981a International Fund For Agricultural Development (IFAD)

Analysis of one year of use of Agroecological Logbooks in FIDA Projects in Brazil. – [Salvador] : International Fund For Agricultural Development (IFAD), 2021.
88 p : gráfs. color., tabs. color.

This book brings the updated information with the analysis of the use of the agroecological Logbooks referring to the period from september 2019 to september 2020.

ISBN 978-92-9266-103-8

1.Family farming. 2. Agriculture. 3. Rural and economic development. I. Título.

CDU 338.43

The sun lights up

By Daniela Bento

Chronicler, Writer of Short Stories and Poetry Chapbooks, and Gender Advisor of the Project Dom Távora in Sergipe.
From the book O Feminino que Carrego – Cotidiano em Prosa e Verso ("The Feminine I Carry – The everyday in Prose and Verse"), Ganesha Produções, 2021.

The drought arising from the
belly of the Sertão.
The old stick fence scratches the
Wind and the "gals" of my
sertão…

The road, the curve, the
dust, the fence, the cloud...
they are all Women

Enlacing days, sharings, destinies,
Challenges... follow them, like this.

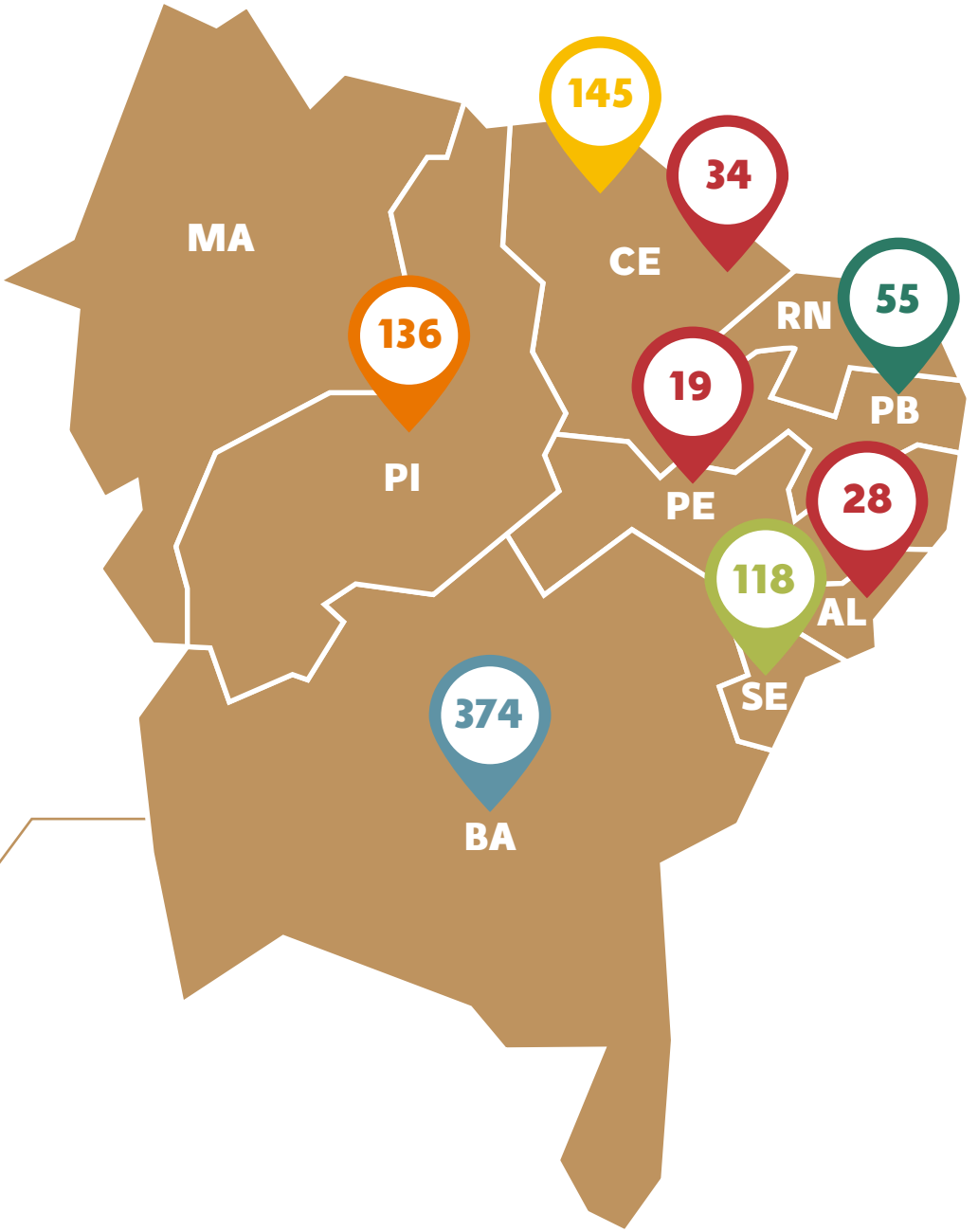
And only if those who see the various
forms of "Being so*" female shares.

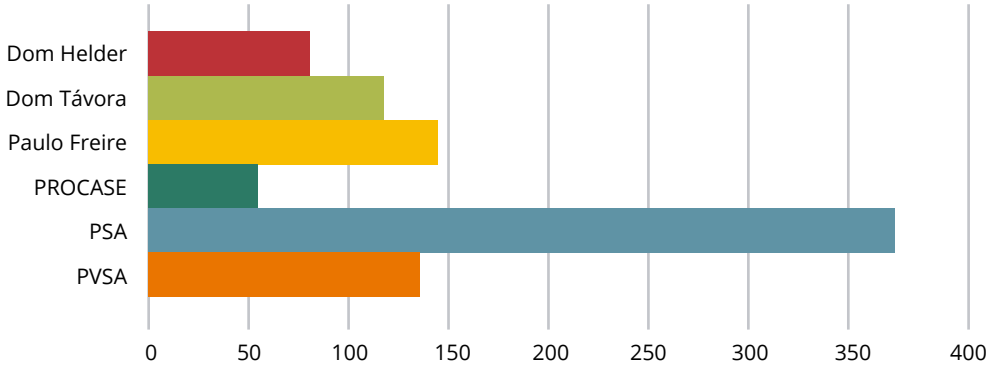
*Translator's note: In this case, "Ser tão" is a play on words, because in portuguese, "ser" means "to be" and "tão" is the adverb "so", and together this words form "Sertão", which is the name of the region the poem talks about.

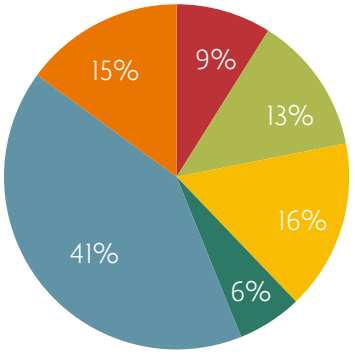
The number of female farmers who take notes in the Agroecological Logbook per project and state

909

female farmers (total) in seven states in the Brazilian northeastern region







PROJETO DOM HELDER CAMARA — 81

PROCASE — 55

PROJETO DOMTÁVORA — 118

PRÓ-SEMIÁRIDO — 374

PROJETO PAULO FREIRE — 145

PROJETO VIVA O SEMIÁRIDO — 136

81 — **DOM HELDER**
Pernambuco (19)
Alagoas (28)
Ceará (34)

118 — **DOM TÁVORA**
Sergipe

145 — **PAULO FREIRE**
Ceará

55 — **PROCASE**
Paraíba

374 — **PSA**
Bahia

136 — **PVSA**
Piauí

Contents

Activities of the International Fund for Agricultural Development (FIDA) in Brazil with the support of the *Semear* International Program

The International Fund for Agricultural Development (FIDA - *Fundo Internacional de Desenvolvimento Agrícola*) is a United Nations (UN) investment agency that, in partnership with state and federal governments, makes agreements for loans and grants to support rural development. In Brazil, the focus of FIDA's investments is the semi-arid region, where it supports actions aimed at promoting productive projects for generating agricultural and livestock income, cooperativism, associativism and access to markets. With the promotion of nutritional food security and the reduction of poverty in rural areas among its pillars, FIDA encourages the strengthening of activities that have women, young people and traditional communities as priority groups.

FIDA has already made possible an amount of more than US$ 450 million, for the implementation of 13 projects in Brazil, including governmental counterparts. Currently, in 2021, six projects are being executed, reaching 250 thousand families directly benefited. Five of them are in partnership with state governments, under bilateral agreements: Paraíba - Sustainable Development Project of Cariri, Seridó and Curimataú (Procase - *Projeto de Desenvolvimento Sustentável do Cariri, Seridó e Curimata*); Bahia - Pro-Semi-Arid Project (*Projeto Pró-Semiárido*); Sergipe - Dom Távora Project (*Projeto Dom Távora*); Piauí – Hooray Semi-arid Project (*Projeto Viva o Semiárido*); and Ceará - Paulo Freire Project (*Projeto Paulo Freire*). The Dom Hélder Câmara Project (PDHC – *Projeto Dom Hélder Câmara*), with the federal government, covers eleven states – Pernambuco, Ceará, Rio Grande do Norte, Alagoas, Bahia, Piauí, Paraíba, Sergipe, Maranhão, Minas Gerais, and Espírito Santo.

In parallel to the projects, FIDA also seeks to carry out actions that go beyond productive development in the communities it serves, stimulating access to information through donation programs, such as the International Sowing Program (PSI - *Programa Semear Internacional*). Acting in Brazil, PSI has the following axes: Knowledge Management, Monitoring & Evaluation, Communication, Policy Dialogues, and South-South and Triangular Cooperation, and its operationalization is supported by the Inter-American Institute for Cooperation on Agriculture (IICA - *Instituto Interamericano de Cooperação para a Agricultura*). The Program works with the six projects supported by FIDA in Brazil, strengthening their capacities by carrying out activities that stimulate knowledge. The goal is to facilitate access to contextualized knowledge and innovations for living with the semi-arid region.

Among PSI's activities are exchanges, training, workshops and seminars with technicians and project beneficiaries, technical training for public managers, institutional articulations, promotion of work for gender equality, support for the collection of socioeconomic data and methodization of results, publication of books, and production of journalistic and communicational content in print and digital formats. In this way, the program has contributed significantly to the systematization and dissemination of the good rural practices of FIDA projects, both nationally and internationally.

Understanding how each PSI component works

Knowledge Management

Training, exchanges, thematic meetings and seminars are the main activities developed to strengthen knowledge and the exchange of knowledge among the projects, involving technicians and beneficiaries. The most worked themes are: market access, agroecology, gender, gastronomy, and goat raising. Many of these events result in publications that, in printed and/or digital format, contribute to the enhancement and visibility of these good practices and successful experiences.

Monitoring & Evaluation

Regular training sessions are held for technicians in these areas, with the promotion of working group meetings and the participation of professionals from other institutions. An integrated management system common to all FIDA projects in Brazil, the Data.FIDA, is the major product developed by *Semear* International in this component, which contributes to increasing the quality and accuracy of the information collected and processed by the projects.

Communication

A component that permeates all the others, Semear International's Communication uses several channels, such as the portal and social networks, to make sure that knowledge and information reach the most diverse groups. On the website are available, for example, the publications (books, primers, manuals and studies), the collection of videos and photos, and the bank of good practices already catalogued, in addition to texts created weekly and disseminated among the FIDA projects. A recent product of this area is the Semear International Journalism Award, which honors the best reports from Brazil on good rural practices, and is in its first edition.

South-South and Triangular Cooperation and Policy Dialogues

Fostering new knowledge and networks through internationalization of its actions: this is the goal of South-South and Triangular Cooperation. Through exchanges, training and seminars involving Latin American and African countries, common issues of interest to family farming are addressed, identifying techniques and practices that can help rural workers in their daily lives. In addition, PSI seeks to facilitate dialogue on public policies, in order to support spaces for debate between civil society, governments, academia, and partners.

SEMEAR INTERNACIONAL

Learn more about PSI's actions, visit the virtual library and access the events held to join the network for the dissemination of good rural practices in the semi-arid region, by accessing ***www.portalsemear.org.br****.*


Caderneta Agroecológica

01 Agroecological Logbooks

Because of the gender relations established in society, women's work is culturally less valuable than the work performed by men. The sexual division of labor, which assigns men's work to the productive sphere and women's work to the reproductive sphere, also hierarchizes men's work over women's, with men's work being more valued than women's work (HIRATA; KERGOAT, 2008). Not by chance, there is an invisibility of the work done by women, especially in family farming, in which productive and reproductive work are often mixed up, as is the case of farmyards, which are considered to be spaces of reproduction and of cultivation for self-consumption, but which also generate products for commercialization. Contributing to this invisibility, according to Michelle Perrot (2005), there is a social, political, and cultural project to silence the history of women, a resource to hide and make their actions and speeches invisible, concealing and/or excluding these subjects from the historical text, believing the historical text to be the absolute and unquestionable truth of the facts. Therefore, to have a more complete view of the production and income of family farming and agroecology, it is necessary to question the way of looking at women's work and production, based on the traditional economy, which makes women's work invisible and excludes the production of self-consumption (which sustains and ensures the food and nutritional security of families) of the income elements that measure the value of production. In order to shed light on women's production and income, we sought the foundations of feminist economics which, in addition to income, emphasizes the economic contribution of work that does not produce commodities, such as domestic and care work, and the references to well-being and autonomy, which, according to Miriam Nobre (2012), tend to combine production for self-consumption and the market, as well as an integrated vision of territory under the management and control of the populations who live there. They conceive markets based on proximity relations and short cycles that have considerably less impact on the ecological and social structure, with positive consequences for food security and the quality of life of the entire local community, thus giving visibility to women's work and production.

The intense economic movement in the farmyards of women family farmers in the Zona da Mata, region of Minas Gerais, especially from the access of families to policies such as the Food Acquisition Program (PAA - *Programa de Aquisição de Alimentos*) and the National School Meals Program (PNAE - *Programa Nacional de Alimentação Escolar*), highlighted the urgent need to take a closer look at the production of women in their farmyards. In addition, emphasized the production carried out by women on the property as a whole, which until now has been little discussed in studies on income and production in family farming, in order to advise families, especially women, to access these policies. Even the data on the marketing of women's products and their access to public policies for the marketing of family farming do not bring the real dimension of women's contribution to the production and income of family farming, as Emma Siliprandi and Rosangela Cintrão (2011) alerted us, based on a study conducted on women's access to the PAA: "Although women are participating directly in production, the

commercialization of family farming products is still done, in most cases, with the man's Individual Taxpayer Registry (CPF – *Cadastro de Pessoa Física*). Rural women producers have, in general, difficulties to participate in commercialization, due to their gender attributions." Based on these demands, the Center for Alternative Technologies of Zona da Mata (CTA-ZM - *Centro de Tecnologias Alternativas da Zona da Mata*)[1] , in partnership with the Women's Movement of Zona da Mata and Minas' East, with the objective of measuring and giving visibility to the work of agroecological women farmers, created, in 2011, the Agroecological Logbook. Considering that the act of writing down the production is not very common in family farming, even less so in the production of women, and, for the women farmers to start recording their production, it would have to be a simple tool in which the annotation could be done quickly.

Introduction to the Agroecological Logbook

Presented in Logbook format, the Agroecological Logbook has four columns to organize the information about the women's production. In it, it is recorded everyday what has been sold, donated, exchanged, and consumed, from everything that is cultivated in the spaces of women's domain in the productive units of family farming and peasant agriculture, from agricultural production to handicrafts and processing. The Agroecological Logbook was created as a political-pedagogical instrument for the formation of women, at first, with the objective of "empowering" women from the visibility generated and the awareness of the importance of their own work, having as a starting point their perception of the importance of their participation in the production and in the family income, contributing, in this way, to the promotion of women's autonomy. As the first returns from the notes appeared, with surprising partial results for the women and for the project team, the Logbook proved to be an efficient tool for monitoring the women's production, valuing their almost invisible production for self-consumption, exchange, donation, and sale.

[1] The Center for Alternative Technologies of Zona da Mata is an organization with more than 30 years of experience in promoting agroecology for family agriculture in the Zona da Mata region of Minas Gerais.

From the interaction with the Women's Working Group of the National Agroecology Articulation (ANA - *Articulação Nacional de Agroecologia*)[2] , in 2013, the Logbook was implemented in other regions of Brazil in a partnership with the Amazon Network of Rural Women Entrepreneurs; the Northeast Network of Women Producers and the Northeast Network of Feminism and Agroecology; the Gender and Agroecology GT of the Southeast Region; and the Peasant Women's Movement of the South Region of Brazil, through the Feminism and Agroecology Training Program. In this initiative, only the data from two micro-regions were systematized: the Zona da Mata in Minas Gerais and the Sertão do Pajeú in Pernambuco, revealing a consistency of data not found in previous studies. With the need to analyze national data, between 2016 and 2018, a research was conducted in a partnership between the mentioned regional networks, the ANA Women's GT, the Federal University of Viçosa (UFV - *Universidade Federal de Viçosa*) and the Federal Rural University of Pernambuco (UFRPE - *Universidade Federal Rural de Pernambuco*), bringing together other partners. Three hundred Agroecological Logbooks from sixteen states in Brazil were systematized. Inspired by the results of this national process, the Semear International Program, in partnership with CTA-ZM and the Women's Working Group of the National Agroecology Articulation (GT Mulheres da ANA), proposes in 2018 the "Training and Dissemination Project for the Conscious Use of Agroecological Logbooks in Projects Supported by FIDA in Brazil". The objective of the Project is to systematize the production of women farmers accompanied by the projects located in the Brazilian Semi-arid regions. The project was developed from June 2019 in partnership with the Dom Távora Project, in Sergipe; Paulo Freire, in Ceará; Dom Hélder Câmara II, in Alagoas, Ceará and Pernambuco; Procase, in Paraíba; *Viva o Semiárido* Project, in Piauí; and Pro-Semi-Arid Project, in Bahia, in 111 municipalities, where the Logbooks of 879 women in 415 rural communities directly involved in the process were systematized, in addition to involving their families, technical staff, and project managers. The systematization process of the Agroecological Logbooks, promoted by the *Semear* International Program, followed the same methodology created and tested from the experience of the Women's GT of ANA. The differential was to consider the counterpart of the projects for the realization of seminars and/or state and municipal meetings, in addition to the support of the GT on gender equity of FIDA projects in Brazi[3] and for all the field work of application of the Socioeconomic Questionnaires and the Maps of Sociobiodiversity, of advising, training of women and data collection, all these actions being the responsibility of the project teams. The research has constituted another way of looking at agroecology and women's work, based on the Agroecological Logbook, highlighting women's production that is usually not perceived or valued by the family. However, such production is fundamental for the agroecosystem's economy, and the Logbooks shed light on the role of women as food producers and income generators, bringing reflection to these women about the importance of their work in family and peasant agriculture. In addition, the Logbooks provide elements for a better gender relationship in the family unit and in the technical assistance and rural extension (ATER - *Assistência Técnica e Extensão Rural*) processes carried out by the advisory organizations.

Starting the process, an initial seminar was held at UFRPE in Recife, in June 2019, with the participation of approximately eighty people, including technicians, farmers and managers of the projects involved, with the objectives of presenting and sensitizing the partner organizations of the *Semear* International Program about the "Project for Training and Dissemination of the Conscious Use of Agroecological Logbooks in Projects supported by FIDA in Brazil". The objectives were to present the methodology of using Agroecological Logbooks for the projects and partner organizations;

[2] Working Group (GT – *Grupo de Trabalho*) created in 2004.
[3] The GT of gender equity of FIDA projects in Brazil is composed by the gender, race and ethnicity advisors of the six projects (Sena, Elizabeth, Sarah, Gleiciane, Amarize and Maria do Carmo), by the coordinator and manager of knowledge management of the Semear International Program (Fabiana and Aline), and by the gender consultant for FIDA (Rodica).

discuss the experience of the national systematization of Agroecological Logbooks and its impacts on the lives of the women participants, as well as the technical teams; present and discuss the proposal for the systematization of Agroecological Logbooks in the Northeast region of Brazil; strengthen a training process on Gender, Feminism and Agroecology for technicians of FIDA's partner organizations in the Northeast of Brazil; deepen the discussion on feminist methodology in the performance and implementation of projects developed in partnership with the *Semear* International Program; strengthen the Gender GT of the projects supported by FIDA so that it could play the role of general monitoring of the process. From this moment on, all six of FIDA's supported projects in Brazil started the process of multiplication, training, and use of the Logbooks with the women farmers and the technical team.

A feminist tool to give visibility to the production and work of women farmers

From an action-research process with the six projects supported by FIDA in Brazil, results related to the production and economic, environmental and socio-political contribution of women and their self-recognition regarding the value of their production were collected and analyzed. The research started by questioning the bases of the hegemonic economy, which only considers as part of the economy those activities that generate monetary resources, that is, only those related to the market. Many of the activities that are under the responsibility of women are made invisible or disregarded by this perspective of the economy, centered on the mercantile logic. For a counter-hegemonic look at the economy, which allows giving visibility to the set of activities carried out by women in society, we dialogue with the reflections proposed by feminist economists. They state that the notion of economy should incorporate all the activities necessary for the sustainability of human life. The data revealed the important production of women for sale and self-consumption, as well as for exchange with neighbors and donations to schools, community festivals, religious activities, among others. The practice of donation and exchange is essential to strengthen the social structure of the territories and, as Cristina Carrasco (2013) points out, promotes a displacement of the axis and the social and economic objective and causes changes in paradigms and, consequently, creates a new economic logic in challenge to the capitalist economy that now, more than ever, needs to understand that such practice emerges from the forms of relationships that we build, and not the opposite, as the financial capital that appropriates everything tries to make us believe. Even with some limitations and difficulties in continuing the annotation on the Logbooks, the women were impressed with the results and motivated with the exercise of annotation, from a new vision acquired about their production. From the research, we conclude that the Agroecological Logbooks shed light on the non-monetary activities carried out by women (such as consumption, donation, and exchange), considering them in the economic analyses, while bringing reflection to the women farmers about their production and the value and importance of it, allowing changes in production planning and bringing visibility, empowerment, and autonomy to the women who used the tool. From this, we can affirm that the activities performed for self-consumption and the set of activities performed for the reproduction of life, such as domestic and care work, should be considered as a fundamental part of the economy of farming families. According to the technical teams of the projects, the systematization of the Agroecological Logbooks has helped to reflect on the production and work of women in family farming, on the types of products they produce, and on the meaning of this production for ATER. The systematized data from the Logbooks show the challenges of

production; the importance of what is exchanged and donated by women, encouraging solidarity relations in the communities; the importance of production for self-consumption in maintaining the food and nutritional security of families; the diversity of the income composition generated by women; and also brings visibility to the work developed by them. The collective reflection on the data makes it possible to question the subordinate role to which women in family farming are submitted, and demonstrates the importance of an inclusive ATER committed to the reality of women, to generate positive impacts on the income and food security of families.

The Logbooks promote the inclusion of women's daily production in the economic analysis of family production and reveal an income that was invisible before, but which is fundamental for the production of food and for the maintenance of families in the countryside. By incorporating the Agroecological Logbooks, we generate elements for reflection on the work of women and to guide how ATER should serve women to achieve the objectives of improving the income and quality of life of rural families by improving production systems; access mechanisms to markets, credit and financing; services; and income in a sustainable way. The Agroecological Logbooks methodology contributes to reveal that women produce in a resilient, healthy way, with respect for life, being much less dependent on external resources, building systems that are much more sustainable than conventional systems. Bringing light to farmyard production makes it possible to compare the incomes of the various subsystems of the family unit and to incorporate some strategies adopted by women, in the whole family production system. The farmyard production data also makes it possible to create justifications for future projects for the territories, centered on its production, food security, and self-consumption. The results of the Logbooks methodology show, in a practical way, the relevance of the projects to include actions that encourage gender equality relations, strengthening women and their contribution to the family income, as well as their recognition as political and economic subjects. There is a perception that the systematization of the Agroecological Logbooks enables the recognition and visibility of women's work, but it also contributes to bring the debate on gender issues to the organizations, pointing out the need to work in depth on some important issues to qualify the work developed with women farmers, such as the sexual division of labor, gender inequalities in family farming, domestic violence, ATER for women, among others. The methodology of the Agroecological Logbooks is allowing the monitoring of women's production in a simple and easy way, bringing data that can be cross-referenced with the ATER actions. This methodology contributes to the revision of the project monitoring systems, bringing the economic indicators closer to the social indicators, including data on the economic contribution of women beyond the annual production, crop production, animal production, and to conventional markets. The methodology has allowed women farmers to meet in the communities or in workshops to exchange experiences, report what is happening to them, listen to each other, and come up with solutions to problems together, bringing autonomy to them and, sometimes, dispensing the use of techniques to propose solutions to all problems. The training process, indispensable in the proposed methodology, when well executed, continuous and involving both technical teams and farmers, strengthened the systematization of the Agroecological Logbooks and made it possible for the farmers to understand the filling out of the Logbooks as part of their training process.

02 Analysis of one year of use of Agroecological Logbooks in FIDA Projects

This study brings the updated information with the analysis of the use of the Agroecological Logbooks referring to the period from September 2019 to September 2020, totaling 13 months of annotation.

The process of collecting primary data is challenging. In the case of the Logbooks, there are some difficulties associated with this already complex process. This is because the Logbooks are based on self-reported production notes, and, of course, individual perceptions are different regarding the production, economic relationship, and valuation of those items that are not converted into commodities (what we will call non-monetary socioeconomic relationships - exchange, donation and consumption). This point establishes some particularities that must be considered in the systematization process.

Besides, the Logbooks are applied in territories where, despite sharing some characteristics, have specificities and heterogeneities that must be expressed in the analyses, from the methodological point of view, and in the look at the results. Also because of this, the process of digitization, tabulation and systematization of the Logbooks ended up not following a single standard, even though this was presented and defined in agreement with the projects, and renegotiated in moments of reflection held virtually and in person during the consultancy. Therefore, throughout the process, the systematization team was faced with some challenges that were not foreseen at first.

Once these initial considerations was made, with the information pre-systematized by the teams, the first step was to perform a sorting process, which began even before the Logbooks were systematized. Some typical problems were identified and corrected, such as missing information on the economic relationship or the value of the product, leading to their exclusion.

The challenges also extended to the application of the questionnaires. Since the Socioeconomic Profile Characterization Questionnaires (SCQ) were applied at different times and by different people, several filling errors were identified, but with no obvious pattern. Many answers were missing, in different sections of the SCQ of different projects, which made it difficult to deepen the analysis of some parameters for the aggregated data.

Furthermore, it is important to point out that the monthly information from the projects express the diversity of the women farmers that have been engaging in the process of using the AL (Agroecological Logbooks), in a very active dynamic, with some of them having started to participate in the last month of the Logbooks. The entry of new women farmers or their withdrawal, for different reasons, required updating the registration list of all projects every month. In some months, some women farmers did not to take notes for personal reasons, or, given the pandemic, in the last months some of them were uncommunicable. These

reasons are diverse and range from practical constraints for production (such as floods, dry season, or drought) to pluriactivity, when the farmer does another activity (usually non-farming), illness of the farmer or of someone in the family, extended trips, etc.

Finally, even if the diversity of situations reported above has implied the reduction of the base of viable information for analysis, a database with 213,238 (two hundred and thirteen thousand, two hundred and thirty-eight information) was constituted, allowing an approximation or a deepening of the reality of the women farmers, capable of subsidizing very interesting analyses at different levels.

This publication complements the book published by the Semear Internacional Program in 2020 “Cadernetas Agroecológicas e as Mulheres do Semiárido – de Mãos Dadas Fortalecendo a Agroecologia”, which presented the analysis of the first six months of use of the Logbooks from August 2019 to February 2020, when 879 rural women from the semi-arid used the tool. This first publication is divided by themes, where we focused deeply on the economic participation of women in monthly family income; the construction of feminist rural technical assistance; the sexual division of labor; and the relationship of productive yards with food and nutritional security. Please check portalsemear.org.br for this publication.

After the Logbook

By Marcilene Araújo

Female Farmer of the Community São José dos Cocos/Ipiranga do Piauí.
Beneficiary of the Project Viva o Semiárido.

The concern has changed, I admit
I was a producer completely out of it
I knew that I was working, I swear
But how much I was producing, I was not aware

With the Agroecological Logbook, change was brought
to us, honestly
'Cause before, it was just work, actually
I was tired at the end of the day
Thinking I hadn't done anything today
To change, the Logbook came
Updating what remained the same

The great technologies we use
From their resource we abuse
Talk and do
Only after writing, everything gets clear to you

How much was my effort
I added up and put it in my pocket
'Cause the child ate and dressed
Then to the technology smiled

On weekend, I could also relax
Forget about work and finally rest
I called some friends
To talk and remember our memories

We sit in a chatting circle and clear our throats
There's nothing better

03 Socioeconomic characterization of the women farmers monitored in the projects supported by FIDA in Brazil

Table 1 shows the spaces of women farmers involved in the Agroecological Logbooks per Project, and their distribution according to municipalities and states:

Table 1. Number of women farmers by project, State and municipalities involved

Project, State and Municipality	Number of women farmers
Dom Távora Project	
Dom Távora Project	**115**
Aquidabã	21
Aracaju	11
Caraíbas	7
Japoatã	2
Nossa Senhora Aparecida	10
Pacatuba	13
Poço Verde	21
Simão Dias	19
Tobias Barreto	11
Paulo Freire Project	
Ceará	**145**
Aiuaba	2
Antonina do Norte	1
Araripe	6

Project, State and Municipality	Number of women farmers
Paulo Freire Project	
Assaré	8
Campos Sales	2
Coreaú	3
Hidrolândia	2
Ipu	9
Ipueiras	9
Massapê	5
Nova Olinda	2
Olinda	2
Parambu	7
Pires Ferreira	5
Potengi	3
Quiterianópolis	15
Reriutaba	12
Salitre	4
Santana do Cariri	9
Sobral	27
Tauá	12
Dom Hélder Câmara II Project (PDHC II)	
Alagoas	**28**
Água Branca	2
Arapiraca	2
Craíbas	2
Girau do Ponciano	2
Inhapi	4
Jacaré dos Homens	1
Lagoa da Canoa	3

Project, State and Municipality	Number of women farmers
Dom Hélder Câmara II Project (PDHC II)	
Monteirópolis	1
Olho D'Água das Flores	1
Palmeira dos Índios	2
Pariconha	1
Piranhas	1
Poço das Trincheiras	2
Santana do Ipanema	1
Senador Rui Palmeira	1
Tanque D'Arca	1
Traipu	1
Ceará	**34**
Ipu	4
Quixadá	7
Quixeramobim	11
Santa Quitéria	10
Não identificado	2
Pernambuco	**19**
Agrestina	1
Bezerros	2
Cumaru	2
Cupira	2
Gravatá	1
Orobó	4
Riacho das Almas	1
Salgadinho	1
Santa Maria do Cambucá	2
Taquaritinga do Norte	1

Project, State and Municipality	Number of women farmers
Dom Hélder Câmara II Project (PDHC II)	
Vertente do Lério	2
Procase Project	
Paraíba	**55**
Alcantil	1
Barra de Santana	14
Boqueirão	1
Caturité	3
Congo	6
Cubati	8
Nova Palmeira	1
Picuí	5
Remígio	4
Santa Luzia	2
Sumé	10
Pro-Semiarid Project (PSA)	
Bahia	**370**
Andorinha	3
Antônio Gonçalves	4
Caém	8
Caldeirão Grande	11
Campo Alegre de Lourdes	18
Campo Formoso	23
Capim Grosso	14
Casa Nova	6
Curaçá	5
Filadélfia	14
Itiúba	11

Project, State and Municipality	Number of women farmers
Pro-Semiarid Project (PSA)	
Jacobina	16
Jaguarari	7
Juazeiro	24
Miguel Calmon	12
Mirangaba	12
Ourolândia	20
Pilão Arcado	29
Pindobaçu	7
Ponto Novo	7
Queimadas	12
Quixabeira	20
Remanso	19
Saúde	15
Senhor do Bonfim	6
Sento Sé	11
Serrolândia	6
Sobradinho	3
Uauá	9
Umburanas	10
Várzea Nova	8
***Viva o Semiárido* Project (PVSA)**	
Piauí	**138**
Bela Vista do Piauí	10
Betânia do Piauí	8
Campo Grande	16
Francisco Santos	23
Ipiranga do Piauí	19

Project, State and Municipality	Number of women farmers
***Viva o Semiárido* Project (PVSA)**	
Itainópolis	15
Oeiras	9
Picos	20
Queimada Nova	8
São Raimundo Nonato	10
Total Geral	**909**

Source: Own elaboration based on the Logbooks data.

The descriptive statistical analysis of the systematized Agroecological Logbooks and SCQ showed that 60% of 642 women farmers are married and 16% are in a stable union (see Table 2). Less than 4% declared that they live alone. Of those who live with other people, when they do not live with their partner and children (most cases), live with nephews, parents or grandparents. 88% have daughters/ sons, of which 88% have up to 5 daughters/sons. The average age of the women farmers is 45 years old.

Table 2. Marital status of the women farmers

Marital Status	Ratio
Married	60%
Divorced	2%
Separated	2%
Single	11%
Stable Union	16%
Widow	3%
No answer	6%
Overall Total	**100%**

Source: Own elaboration based on the Logbooks data.

REGARDING COLOR OR ETHNIC ORIGIN
53% declared themselves as brown;
22% declared themselves as black;
75% of the women farmers can be considered black women, according to the classification of the Brazilian Institute of Geography and Statistics (IBGE).

REGARDING CATEGORIES
64% identify themselves as family farmers;
9% as settlers;
16% as *quilombolas*.
In smaller proportions, the following sociocultural identities also occur: agroextractivist, grassland community, indigenous, shellfish gatherer, fisherwoman and river dweller.

REGARDING EDUCATION
48% have incomplete primary schooling;
22% completed high school;
8% continued their studies and have technical or higher education (complete or not), and
4% are illiterate.

REGARDING WORK
81% of the women farmers declared that they do not work outside the home;
86% reported being the main person responsible for domestic work, while others share it with other family members.

REGARDING LAND OWNERSHIP
A little more than half (**54%**) have their own land and
12% access the land through lending. Among those who are landowners, only
18% have documentation in their name.

REGARDING ACCESS TO WATER
73% of the women farmers have a cistern for drinking water. In some cases, there are other complementary infrastructures for access to water:
39% have a production cistern;
31% have an artesian well, and
21% receive water by a water truck.

REGARDING TO EXTRACTIVISM
57% of the women farmers extract natural goods from the *caatinga*.

REGARDING THE PUBLIC POLICIES ACCESSED
55% access the Bolsa Família Program (PBF);
40% access the Technical Assistance and Rural Extension Service (ATER).
In this case, as all female farmers are followed up by the projects, there may have been some difficulty in communicating at the time of application of the questionnaire, resulting in a small percentage of female farmers who reported receiving technical advice.

REGARDING ACCESS TO MARKETS
60% sell at home and
36% sell in the community.
55% participate in productive or interest groups, and
33% of these groups are formal,
68% are mixed (composed of men and women),
48% are part of some economic organization, mostly associations

REGARDING OF SOCIO-POLITICAL ORGANIZATION
82% of the women farmers participate in some kind of association, not necessarily through the interest group, and
45% participate in some kind of union. In most cases, they hold leadership positions, both in the associations and in the unions.

In general, this description also represents the specific realities of the projects supported by FIDA and involved with the Agroecological Logbooks.

04 The sexual division of labor from the perspective of the division of household tasks

Feminist economics is a very diverse theoretical field, with distinct currents that produce analyses according to influences from both feminist theory and economics. The analyses carried out here are based on a current called by some authors – such as Amaia Pérez Orozco – as Feminist Economy of Rupture, which proposes the need for epistemological, methodological and political ruptures with the dominant schools of thought, their concepts and explanatory logics (OROZCO, 2005). Among these ruptures is the shift of the focus of the economic debate from the market to the sustainability of life.

An important concept for this theoretical field is the Sexual Division of Labor, proposed by Danièle Kergoat (2003), contributing to understanding how gender biases are responsible for reproducing patterns that feed a cycle of structural inequalities for women. According to Kergoat (2003), the sexual division of labor is historically adaptive and is governed by two principles: separation and hierarchy. The first imposes a supposed separation between men's and women's activities, assigning to women the activities of social reproduction. The second states that productive activities, assigned to men, have greater social value than reproductive activities, creating limits and hierarchizing relations based on gender biases.

These biases are even more reinforced in the rural environment, and their contradictions are easily observed in labor relations, since most of the productive activities of rural women take place around the home and, for this reason, are considered an extension of domestic work. This is what happens with the production in the farmyard, the work in the vegetable garden, the care with the small animals, and the processing when it is done in the home, which are not considered as work and are not recognized for their economic contribution. We will see later that a considerable part of the family's food and, in many cases, also the commercialized products, come from the farmyards – a space led by women – as will be presented in the subsequent sections.

In addition to participating in productive work, women are mostly responsible for reproductive work.

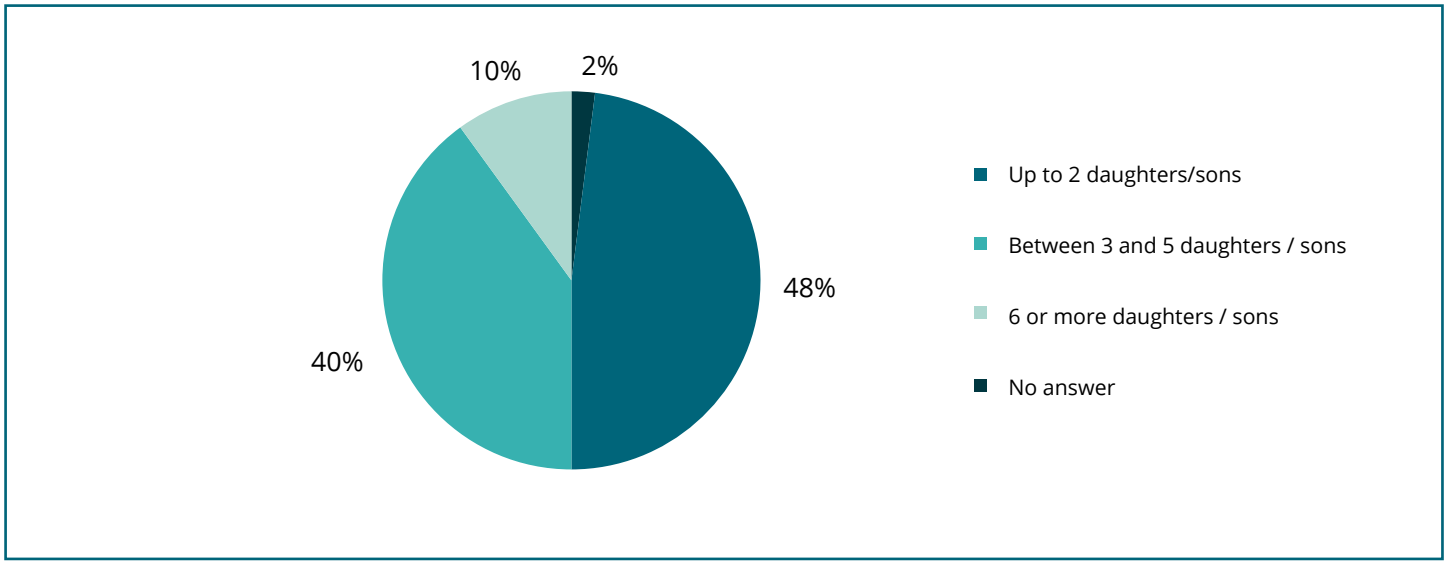
To begin this discussion, this section presents data on family composition and the division of labor within the home. In order to establish some patterns, comparative information will be presented with data from the 2019 National Household Sample Survey (PNAD - Pesquisa Nacional por Amostra de Domicílios) (IBGE, 2019) for the states where the projects are implemented.

As shown in Table 2, most of the women involved in the work with the Agroecological Logbooks are married or in a stable union (76%).

Of these 487 women, only 6 are in a homo-affective relationship, that is, 97% of them have a man as a partner who, almost in total, lives with the woman farmer.

According to the SCQ, 88% of the interviewed women farmers have daughters/sons. Of these, almost half have at most two daughters/sons, as illustrated in Figure 1.

Figure 1. Distribution of the number of children of women farmers who are mothers



Source: Own elaboration based on the Logbooks data.

Among the 566 women farmers with daughters/sons, 67 or 12% no longer live with them – this is the case for the women farmers who have only adult daughters/sons; and 41% of the women live with at most 2 daughters/sons.

This important characteristic could provide clues to analyze the impact that childcare – in the case of women who reside with young children – could have on the economic production of women farmers. However, the "no answer" percentage for this question was 34%, which indicates a relatively high margin of error.

The average age of the children is a piece of information with little descriptive power in this case, because the standard deviation of the number of children is very high. This means that the sample is very heterogeneous: there are women farmers whose children are babies or small children, and others whose youngest son/daughter are 40 years old. One possibility for a description with greater potential for interpretation is to check the proportion of households with sons/daughters over the age of 14, who can contribute to housework and as a labor force for production, and those households with children under the age of 10, which suggests a routine with a greater burden of care work and, therefore, less time for productive work.

It is verified that 33% of the 566 mothers interviewed have children under 10 years old, and 38% of them have only children in this age group. This means that 71 women farmers in the sample are mothers only of children under 10 years old.

It is also observed that, overall, 325 or 57% of the 566 mothers interviewed have sons/daughters aged 14 or older. In 82% of these homes, there is a son or daughter aged 14 or older participating in domestic work.

This pattern differs when a cut-off of color and ethnicity is applied among the women farmers, as presented in Table 3:

Table 3. Proportion of women farmers with children according to color and ethnicity

Color/Ethnicity	Average number of sons/ daughters	Sons/daughters under 10 years old	Sons/daughters over the 14 years old
White	2.9	22%	67%
Brown	2.9	21%	58%
Indigenous Peoples	5.5	0%	100%
Black	2.9	19%	53%
Quilombola Peoples	3.7	18%	58%

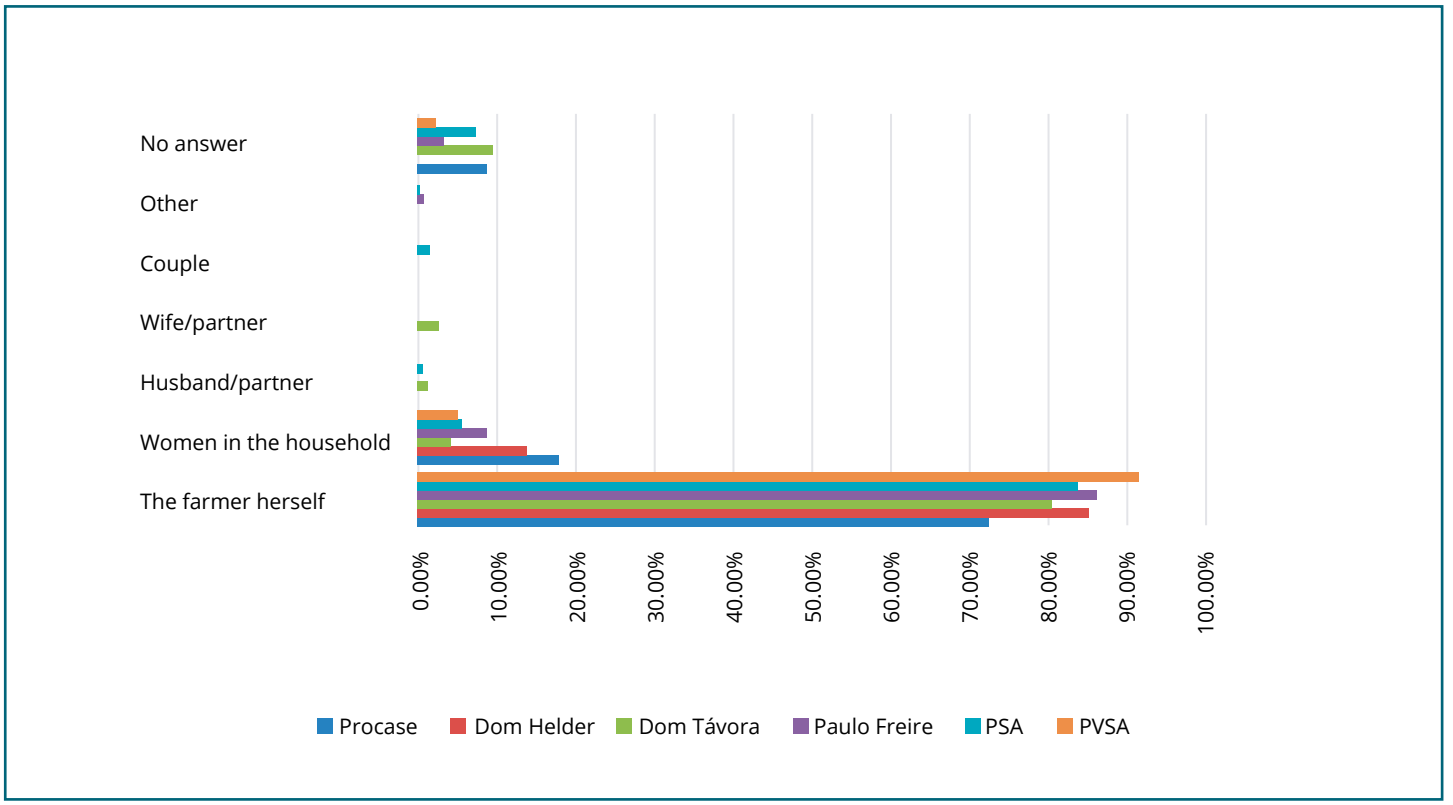
Source: Own elaboration based on the Logbooks data.

White, brown and black women farmers have, on average, 3 sons/daughters, while *quilombola* women have approximately 4. In all these cases, approximately 20% of them have sons/daughters under 10 years old and 60% have sons/daughters older than 14 (67% in the case of white and 53% of black women). The pattern is different in the case of indigenous women farmers' households: the average number of sons/daughters is higher (between 5 and 6 sons/daughters) and all of them are older than 14 years.

Finally, it is important to analyze how the sexual division of labor materializes in the lives of women farmers. In Brazil, FAO data shows that rural women spend an average 27.5 hours per week on unpaid work, including domestic activities, while men spend only 5.2 hours per week (FAO, 2017). In this research, it was found that in cases of homo-affective relationships, 5 out of the six women who are spouses of the farmer in charge declared that they participate in domestic activities, while among the male spouses, 66% participate in these tasks, as reported by the women farmers.

Figure 2 presents this bias considering other household members.

Figure 2. Main responsible for domestic work in the households of women farmers



Source: Own elaboration based on the Logbooks data.

Figure 2 shows that, on average, in 85% of the cases it is the farmer herself who is the main responsible for the domestic tasks. In some cases (7%), the woman farmer shares the work with another woman of the household, or these activities are done by these other women, predominantly mothers and daughters of the woman farmer. In only 2% of the cases, the men of the family do the housework, either sharing the activities with their partners or doing all of them.

In cases where sons/daughters participate in domestic work, there is a relative parity between the genders – 51% of the work is done by girls and women, and 49% by boys and men. It is important to note that the distribution is quite unequal when what is analyzed is the responsibility for domestic activities.

According to data from PNAD (2019), the household tasks performed by women in rural Brazil are diverse, and 93% of them reported doing household tasks for their own household, and on average, they perform 23 hours of this type of activity during the week. Approximately 90% declared to be responsible for food preparation and care related to cooking, cleaning, or clothing maintenance, confirming the importance of domestic work for rural women in Brazil. The specifics of these jobs are presented in Table 4, below:

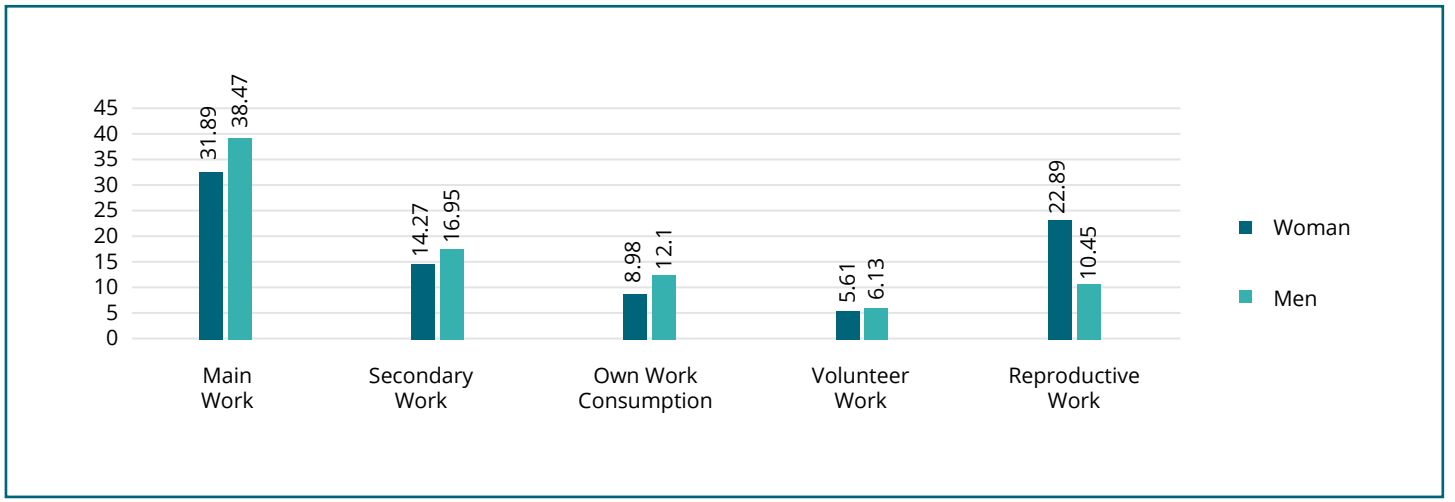
Table 4. Domestic Tasks performed by rural women in Brazil, 2019

Domestic Tasks	Frequency	%
Did domestic tasks at home	41739	92,72%
Preparing or serving food, setting the table, or washing dishes	40416	89,78%
Caring for the cleaning or maintenance of clothes and shoes	38657	85,87%
Cleaning or tidying up the home, garage, yard or garden	34646	76,96%
Shopping or researching prices of goods for the household	28167	62,57%
Taking care of the household organization (paying bills, hiring services, orienting employees, etc.)	26193	58,18%
Taking care of domestic animals	25705	57,10%
Doing small repairs or maintenance on the house, car, electrical appliances or other equipment	11426	25,38%
Did any domestic tasks at a relative's home	2249	5,00%
Other domestic tasks at home	58	0,13%

Source: IBGE – PNAD, 2019.

Considering all the work done by men and women in rural areas, declared in the PNAD in 2019, it is easy to show that both are equally dedicated to labor activities: even if men declare (slightly) more hours dedicated to paid work. However, regarding reproductive work, women do it more than double. These data reinforce the need to observe such activities more closely, in order to effectively value the work done for social reproduction, especially in rural areas where informal work and work for self- consumption are more persistent for women. This relationship is shown in Figure 3:

Figure 3. Average hours of work for rural men and women in Brazil, 2019



Fonte: IBGE – PNAD, 2019.

Despite the notorious accumulation of domestic work on women, unlike what is observed in the country's official statistics, this does not have specificities of color and ethnicity among the interviewed women farmers. As shown in Table 5, the women farmer are responsible for domestic tasks in more than 85% of the households where they are white, brown, black, or *quilombola*. This proportion is a little lower (75%) in the case of indigenous women, but reinforces the pattern. The participation of sons/daughters in domestic activities is also different among these groups. Approximately 45% of the sons/daughters of black women farmers (brown, black, and *quilombola*) participate in domestic activities; a number similar to the proportion of sons/daughters over 14 years old. In the case of white women, the participation of their sons/daughters in these activities is 53%. The greatest participation of sons/daughters in the activities occurs in the households of indigenous women farmers, where in 75% of these households the tasks are distributed.

Table 5. Proportion of cases where the woman farmer herself is the main responsible for the domestic tasks and there is participation of her sons/daughters in the activities

Color/Ethnicity	Woman Farmer Responsible	Son/daughter Participates
White	84%	53%
Brown	85%	46%
Indigenous Peoples	75%	75%
Black	88%	47%
Quilombola Peoples	89%	46%

Source: Own elaboration based on the Logbooks data.

After the Logbook

By Marcilene Araújo

Female Farmer of the Community São José dos Cocos/Ipiranga do Piauí.
Beneficiary of the Project Viva o Semiárido.

I worked night and day
Not knowing how much he produced
But how much I was producing, I was not aware
With production without result

Sometimes I go out to have fun
I was bothered by nothing to produce
I thought I didn't have the money
Because only my partner was working

I worked since my childhood
But what I produced I never took note
Because I had no reason
We lived without stimulus

And then, Sarah Luiza has appeared
And brought a team that blowed our minds
SEMEAR, IICA and IFAD
Great teams without further ado

Each one with their role
Performance shows the Cordel
Well prepared team
Came and made a adjustments

They made it clear with a lecture
They complemented each other
I transcribe my thoughts using the Logbook
With the booklet I have no problem

05 Economic analysis of Agroecological Logbooks: women farmers' contribution to the economy

In this section, we present descriptive information on the data from the Agroecological Logbooks for the 13 months of implementation, with the systematization of the notes taken until September 2020. In addition to highlighting the economic contribution of the women agroecological farmers of the Brazilian semi-arid region, we intend to demonstrate the extent and dynamics of the economic relations that they perform, in the light of Feminist Economics and non-orthodox currents of economics.

As will be seen below, other dimensions of this economic life are materialized in the donations and exchanges made by women farmers. In this sense, as Polanyi (1944) states, the maintenance of social ties is crucial, and individual interests are best served within the social dynamic in the practice of giving and receiving, which is one of the pillars of what this author calls Substantive Economy. The economy, contrary to what the dominant schools claim, is immersed in society, and one cannot be dissociated from the other.

In a complementary way, Feminist Economics converges with the conception of Substantive Economics proposed by Polanyi, in the aspiration for an economy that incorporates all the activities necessary for the maintenance of life in economic analyses (TELLES, 2018). In addition, both currents make it possible, among other things, to recognize women as economic agents by integrating the non-market context of exchanges into the economic model. In this way, production for self-consumption, which is so important for sustaining life, is made visible, in addition to donations and exchanges.

Table 6 summarizes the information regarding the number of women farmers whose Logbooks were systematized, by project:

Table 6. Number and percentage of Logbooks systematized

Project	Number of women farmers	Proportion
Dom Helder	81	9%
Dom Távora	118	13%
Paulo Freire	145	16%
Procase	55	6%
PSA	374	41%
PVSA	136	15%
Total	**909**	**100%**

Source: Own elaboration based on the Logbooks data.

As explained in the table above, 909 different Logbooks were systematized, distributed among the 6 projects. Of these, 41% correspond to PSA Logbooks, the project with the highest number of participating women farmers. The rest is distributed among the other projects, with Procase having the lowest number of Logbooks to date – 6% in relation to the total. The variation in the flow of Logbooks is explained by different individual and situational factors, and the notes from month to month do not necessarily belong to the same women farmers.

Table 7 shows the distribution of the Logbooks by project over the months (Sept/19 - Sept /20):

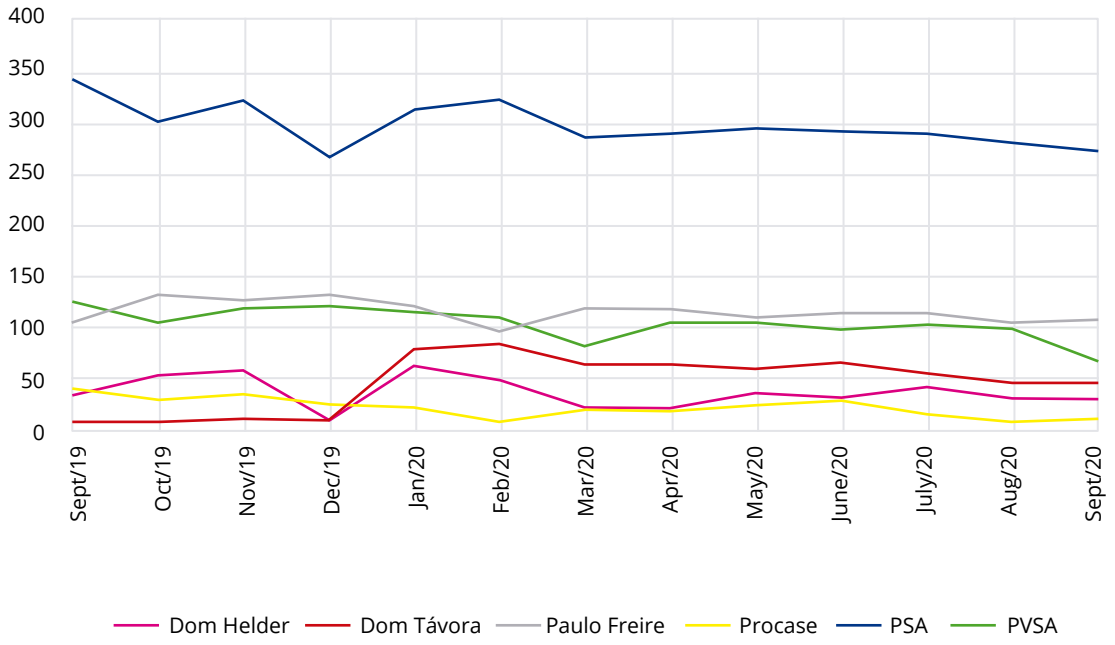
Table 7. Distribution of Logbooks received per project between Sept/19 and Apr/20

Month/Year	Project					
	Dom Helder	Dom Távora	Paulo Freire	Procase	PSA	PVSA
Sept/19	35	8	106	36	342	125
Oct/19	52	10	131	29	301	105
Nov/19	58	10	128	34	320	117
Dec/19	11	10	129	24	269	120
Jan/20	62	78	121	23	310	115
Feb/20	50	84	100	12	322	109
Mar/20	23	61	117	19	286	84
Apr/20	21	64	117	19	291	104
May/20	37	60	112	26	294	104
June/20	34	65	114	30	291	98
July/20	41	56	112	17	289	101
Aug/20	31	47	106	9	282	97
Sept/20	27	44	105	10	273	68

Source: Own elaboration based on the Logbooks data.

Figure 4 illustrates the distribution of the Logbooks by projects during the ten months of notes taken by the women farmers.

Figure 4. Distribution of the number of Logbooks systematized between Sept/19 and Sept/20



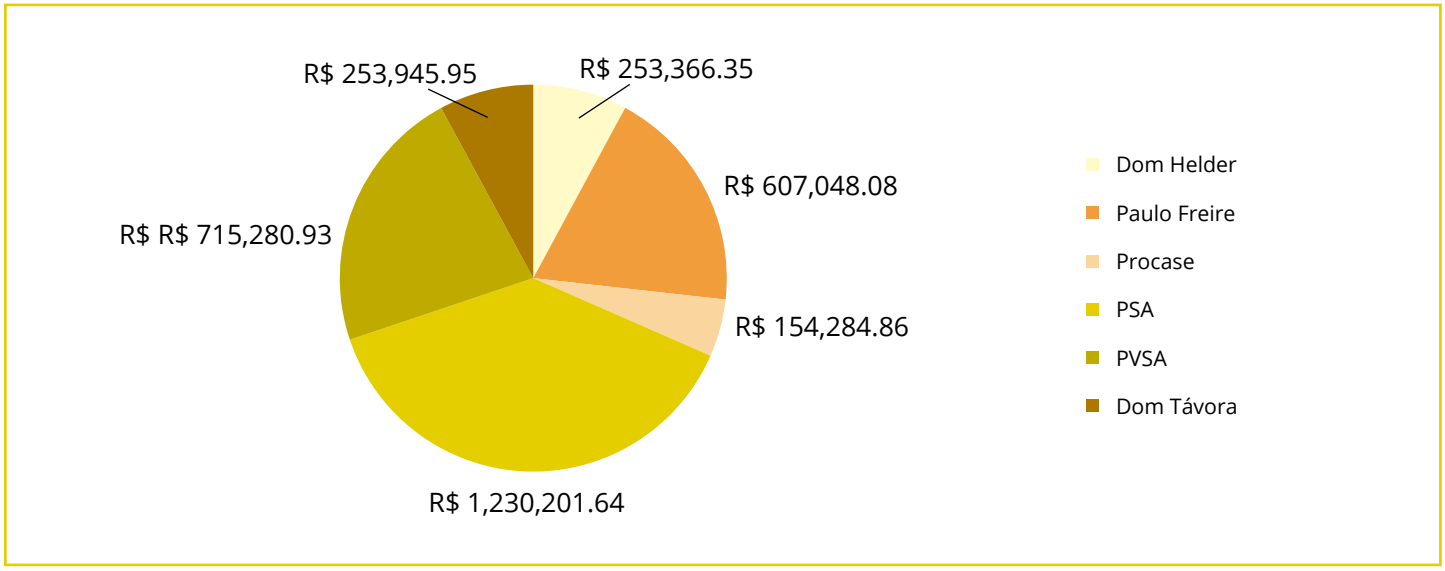
Source: Own elaboration based on the Logbooks data.

Each Project has a distinct flow of monthly information. With the exception of the PVSA and Paulo Freire projects, which delivered a similar number of Logbooks in all months, the other projects had months with more or less annotations. For example, in the case of Dom Hélder Câmara, in December 2019, only 11 Logbooks were sent. In addition, Dom Távora sent a substantially higher number of Logbooks starting in 2020 (January to April), which corresponds to an average increase of 650%. On the other hand, the number of Logbooks delivered by the PSA varied in every month, sometimes higher or lower, always maintaining a high flow. As of March, in general, the projects kept the number of systematized Logbooks stable, and, in September, there is a reduction in this number.

The justifications for these oscillations were, to some extent, reported by the technical advisors that accompany the women farmers. In general, the non-delivery of the Logbooks occurred due to weather issues, which impeded production, or even personal issues such as illness or travel. Specifically in relation to the last months, an aggravation of the difficulty in establishing contact on the part of the advisors, as well as the difficulty in writing down the production by the women farmers, was due to the social isolation measures, because of the covid-19.

Below will be presented the total monetary data of the Agroecological Logbooks, distributed by the projects. Figure 5 presents the distribution of the total production values among the projects:

Figure 5. Total Production Value per Project



Source: Own elaboration based on the Logbooks data.

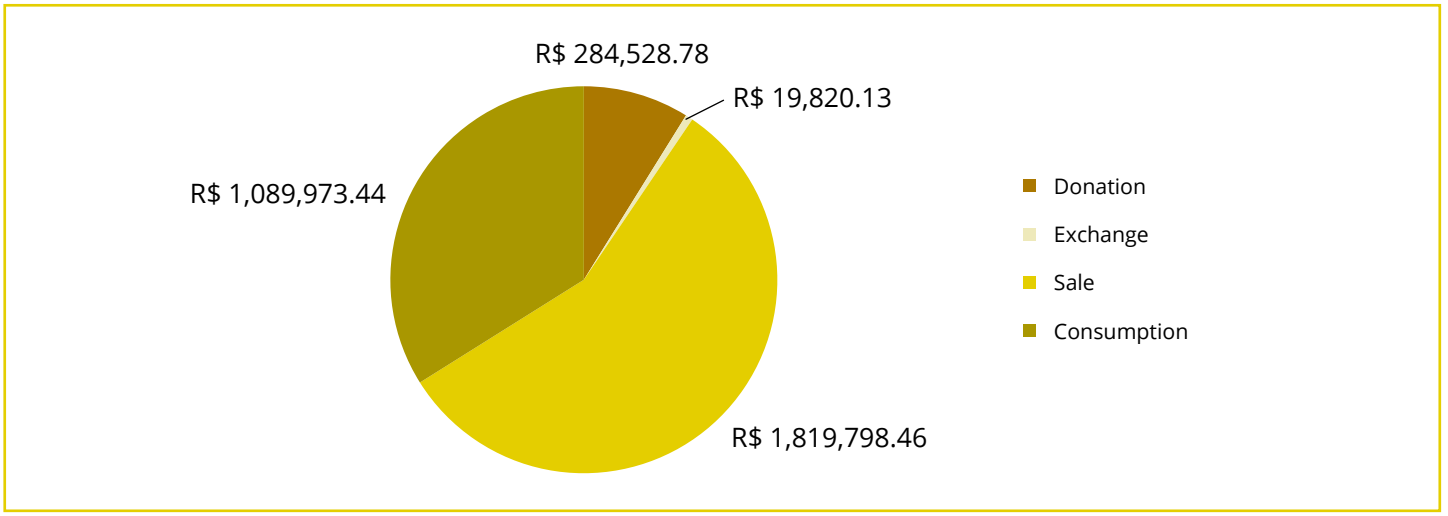
The total produced by all the women farmers involved in the 6 projects, over 13 months, is R$3,214,127.81 (three million, two hundred and fourteen thousand, one hundred and twenty-seven reais and eighty-one cents) or about R$3,200,000.00 (three million, two hundred thousand reais).

The image above shows that not only PSA is the most significant project in terms of number of Logbooks, but also in the total value of economic production, which corresponds to more than one million reais (R$ 1,230,201.64 – one million, two hundred and thirty thousand, two hundred and one reais and sixty-four cents), followed by Viva o Semiárido Project successively. These values correspond to all the production reported by the women farmers, which is divided among four types of socioeconomic relations: consumption, donation, exchange or sale.

213,238 notes were recorded and each note corresponds to a line in a specific column of the Logbooks, considering the four socioeconomic relations. Of these, almost 65% (138,156 notes) correspond to consumed items. This data is interesting, as it reinforces the arguments that the logic of women in organizing their production is guided by the concern with health, food security of the family and the environment, that is, it focuses on the sustainability of life, as assumed by Feminist Economics.

The distribution of the total value of production varies between the different types of socioeconomic relations, as shown in Figure 6 below:

Figure 6. Total Production Value by Socioeconomic Relationship



Source: Own elaboration based on the Logbooks data.

It can be observed that most of the reported values are related to the sale of the products (56.24%), followed by values related to consumption (34.15%), donation (8.94%) and, with a smaller participation, exchanged products (0.67%). This relationship can be explained by the fact that women farmers – and society as a whole – value more the production for commercialization, which is an important source of monetary income for the families. It was observed that the practice of taking notes of the products sold is common in the routine of some women farmers, to keep control of the flows of monetary inflows and outflows in the management of the family economy.

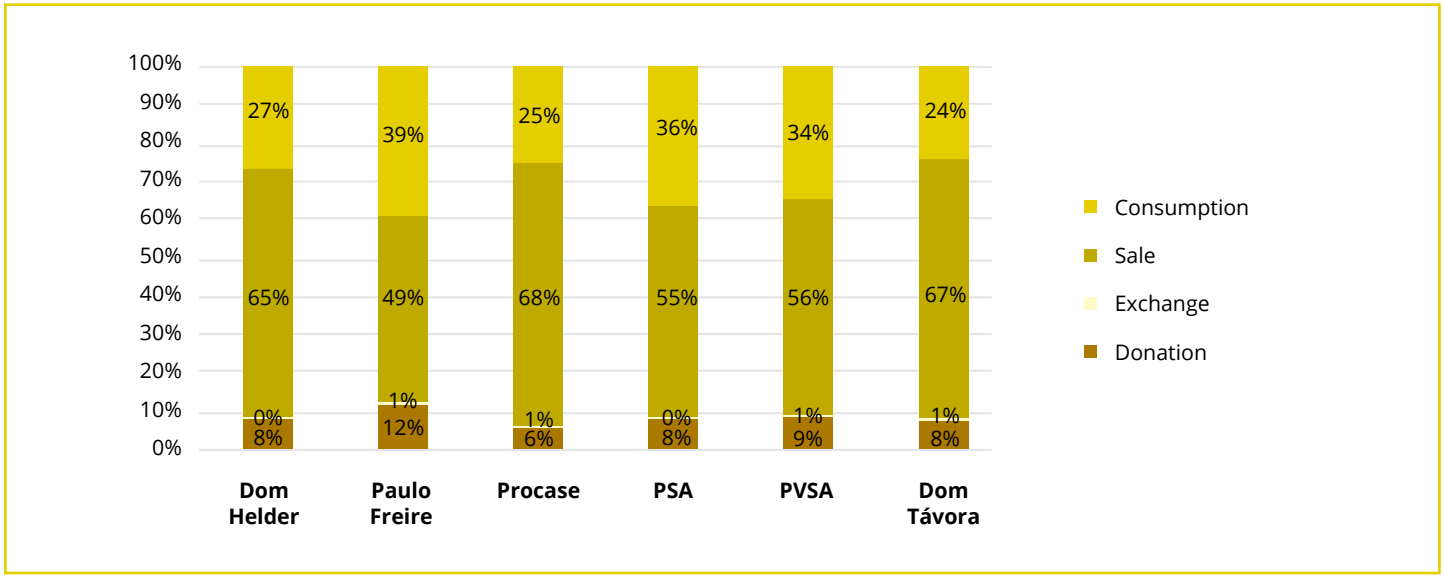
The lower participation of the other socioeconomic relations in the total values recorded in the Logbooks can be explained by at least two factors. First, this is because the women farmers often had difficulties in attributing monetary values to the products consumed, donated, or exchanged. In several cases, they reported that this "is priceless" and kept the blank notes in the Logbooks. These, in turn, did not have their values computed at the end, for systematization purposes.

Second, the invisibility of non-market practices in conventional economic analyses results in the devaluation of socioeconomic relations that are not converted into money. This results in a common sense that disregards and devalues this enormous amount of work and wealth generated, in large measure, by women around the world. It is to the reduction of the economy to the capitalist market that feminist economists react, by questioning this limited logic, which disregards an important part of the activities necessary to sustain life, as part of the economy.

As a result, production for donation and exchange is less often noted in the Agroecological Logbooks when compared to production for sale. The same occurs with consumption, but apparently to a lesser extent. The production in most cases corresponds to small quantities, consumed everyday by the family, and that can be easily forgotten if the farmer does not record them at the time of harvest or when establishing the economic relationship, contributing to the underreporting of data. Thus, it is possible to say that non-monetary relationships are underreported, even though it is not possible to estimate their real size.

Finally, the discrepancy between the destination of the production in relation to the economic activity is not the same for all projects – although in all of them, the sale corresponds to the most powerful portion. This decomposition is illustrated in Figure 7:

Figure 7. Total value of production by socioeconomic relation



Source: Own elaboration based on the Logbooks data.

The commercialization of the products, as already pointed out, is the most expressive monetary representation for all the projects.

The lowest proportion is from the Paulo Freire Project, in which 49% of the notes correspond to the sale of products, followed by PSA (55%), PVSA (56%), Dom Távora (67%), and Dom Hélder (65%). In the case of Procase, 68% of the annotations were on products sold, corresponding to the highest proportion among the projects. Table 8 shows the absolute monetary values, as well as the monthly averages per project.

Table 8. Absolute Monetary Values by Project

Project	State	Donation	Exchange	Sale	Consumption
Dom Helder	AL	6,596.95	455.50	62,236.59	10,728.45
	CE	10,624.10	253.30	70,966.16	37,510.30
	PE	2,557.60	434.00	32,066.00	18,937.40
Paulo Freire	CE	70,568.55	5,964.35	295,931.43	234,583.75
Procase	PB	9,568.42	1,464.25	104,756.41	38,495.78
PSA	BA	101,633.72	4,681.23	681,413.61	442,473.08
PVSA	PI	63,835.84	3,645.00	401,760.11	246,032.98
Dom Távora	SE	19,143.60	2,922.50	170,668.15	61,211.70
Overall Total		**284,528.78**	**19,820.13**	**1,819,798.46**	**1.089.973.44**

Source: Own elaboration based on the Logbooks data.

Overall, the distribution of non-monetary relationships was similar in all projects, and of these, consumption was the most reported, followed by donation and exchange. Specifically in relation to exchange and/or donation, the low number of products registered can be explained by a series of factors that have to do with the dynamics of the lives of the women farmers, with the local context, etc., which cannot be explored in this document.

However, for purposes of institutional reflection, it is important to ask: what has influenced the intensity of exchanges and donations at the community level? These practices of reciprocity, much discussed by Polanyi (2000, 2012) as part of the concept of Substantive Economy, are essential for families to have access to goods and services that they could not acquire in the market, ensuring their food security and sovereignty and strengthening social ties. For this reason, it is important to identify which factors affect these practices and their implications at the community level. This reinforces the transformative potential of the Agroecological Logbooks, which can improve women farmers' perception of different spheres of life.

As a component of the economic analyses, the monthly average is an important summary statistic of the information in the Logbooks, because it allows us to approximate how much, on average, the woman farmer contributes to the household and the community from her work. This calculated contribution is translated into monetary terms, but integrates the non-monetary spheres of consumption, donation and exchange. Thus, the average monthly value of production per farmer adds the money from the marketing of products, donation and exchange, as well as the amount that the family does not spend because of the farmer's production for self-consumption, showing the economic contribution of her to the family and the community

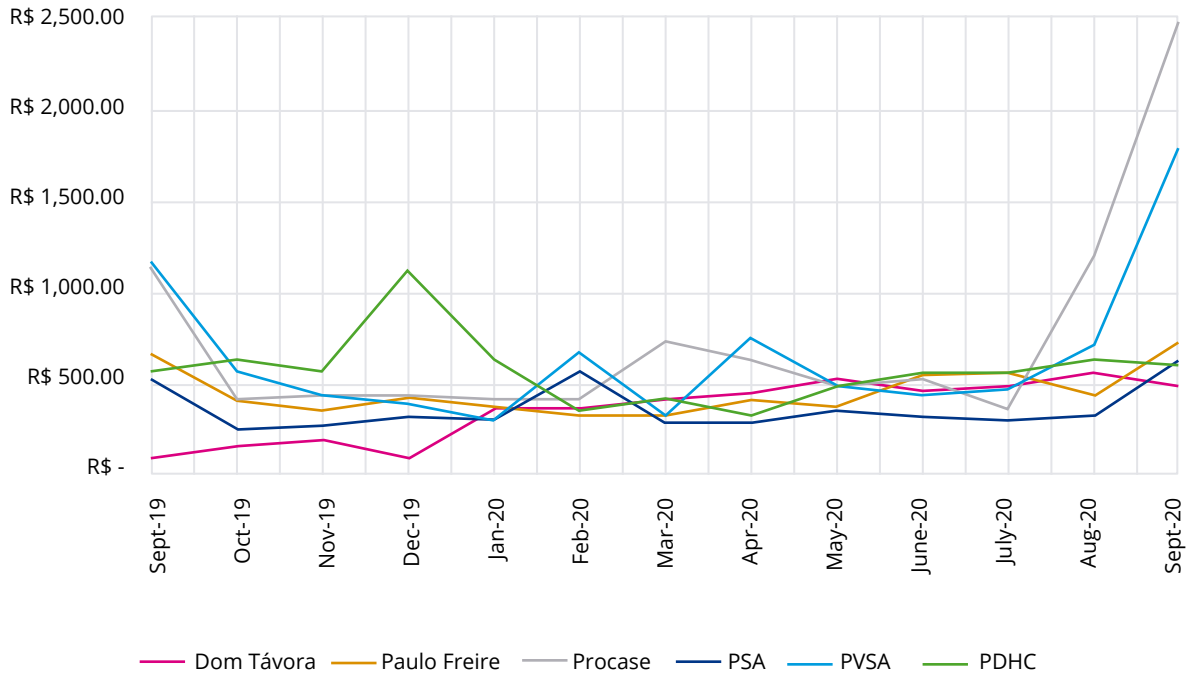
Table 9. Monthly Averages per Project

Month-Year	Dom Távora	Paulo Freire	Procase	PSA	PVSA	PDHC	Overall Total
Sept-19	99.13	621.02	1,067.48	516.87	1,113.17	555.62	675.48
Oct-19	163.60	415.59	410.80	248.34	584.79	608.69	375.47
Nov-19	212.75	354.81	425.07	268.55	442.73	571.72	349.16
Dec-19	116.15	416.31	432.42	308.00	384.84	1,088.45	366.34
Jan-20	370.05	364.15	406.63	290.44	295.59	646.80	347.55
Feb-20	373.78	320.63	395.97	554.79	641.88	342.23	493.25
Mar-20	409.46	330.06	715.04	288.13	329.32	394.39	332.75
Apr-20	459.20	405.06	638.23	286.01	736.46	316.69	414.57
May-20	502.89	379.21	491.72	349.06	470.21	462.86	401.39
June-20	464.98	522.27	505.99	307.23	420.86	550.06	402.36
July-20	484.90	556.91	353.45	292.89	455.37	554.81	404.09
Aug-20	554.95	444.10	1,165.73	319.96	702.15	622.85	456.81
Sept-20	465.92	703.17	2,459.03	600.88	1,764.47	598.47	795.27

Source: Own elaboration based on the Logbooks data.

Figure 8 shows the average production value for each project:

Figure 8. Average monthly value of production per project



Source: Own elaboration based on the Logbooks data.

Figure 8 shows that the average production values among the projects are not homogeneous. This is a reflection not only of the particularities of the women farmers, but also of temporal variation. Dom Távora is the project that presented the lowest average values in all the months of 2019, around R$150.00 (one hundred and fifty reais). This scenario changes after January, when there was an expressive increase in the number of Logbooks received. This can be explained by the type of product they sell (explored later in this section), as well as the frequency of notes.

Another observation to be noted is regarding Procase that, in August and September 2020, registered a significant increase in its average, a similar phenomenon to that observed in the PVSA.

Apparently, this may be related to the reduction in the number of women farmers whose Logbooks were systematized in this period, in both projects. The most plausible hypothesis to explain this atypical movement is that those women farmers who produced more and had higher value associated with their production continued to take notes (and have their Logbooks tabulated). In fact, the monitored women farmers in these last months have produced and sold large volumes of cashew nuts, organic cotton, pigs and cattle (PVSA), and cheese and poultry (Procase).

PDHC II, in turn, had its peak average in December 2019, and since then, in 2020, there has been a significant reduction in the number of women farmers monitored, possibly due to underreporting in the Agroecological Logbooks and seasonal variations in production.

Especially in May and June, there is a convergence in the average values of all projects, which are slightly similar to each other, of approximately R$440.00 (four hundred and forty reais). This value is quite similar with the incomes of women occupied in agricultural activities interviewed in the PNAD in 2019[4].

According to this research, approximately 62% of these women had a gross income from their activities of up to a maximum of one minimum wage; and 36.48% of these women received up to half a minimum wage, or R$ 499.00 (four hundred and ninety-nine reais) (IBGE, 2019).

Moreover, the variation in the values can be explained by several reasons, due to the economic dynamism of the territories, the economic organization characteristics of the farmers involved, or the variability among the notes, when some women farmers can report more faithfully than others can. Also noteworthy here is the large variation in the number of Logbooks received each month, with a downward trend in 2020 due to the covid-19 pandemic.

Some statistical methodological procedures were adopted to correct part of this problem. However, as part of the agreement made with the six projects, there was no exclusion of outliers, because it was collectively understood that these values comprise the diversity of situations observed in the territories. For this reason, it is made a reservation that these average values have greater interpretative value if analyzed in comparison with regional statistical data, by project.

[4] The survey considers all the activities comprised in agriculture, cattle breeding, forestry, forest exploration, fishing or aquaculture, and support activities to agriculture, cattle breeding, forestry, forest exploration, fishing or aquaculture.

Scrutinizing each project closely

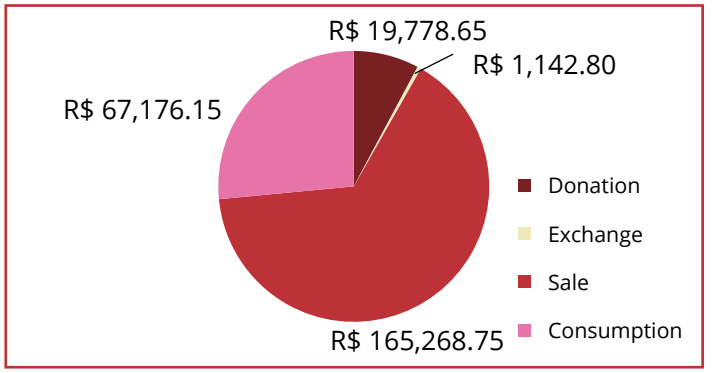
Dom Hélder Câmara II Project (PDHC II)

Table 10. Total Value of Production by Socioeconomic Relationship in Dom Hélder

Socioeconomic Relationship	Total Value
Donation	R$ 19,778.65
Exchange	R$ 1,142.80
Sale	R$ 165,268.75
Consumption	R$ 67,176.15
Overall Total	**R$ 253,366.35**

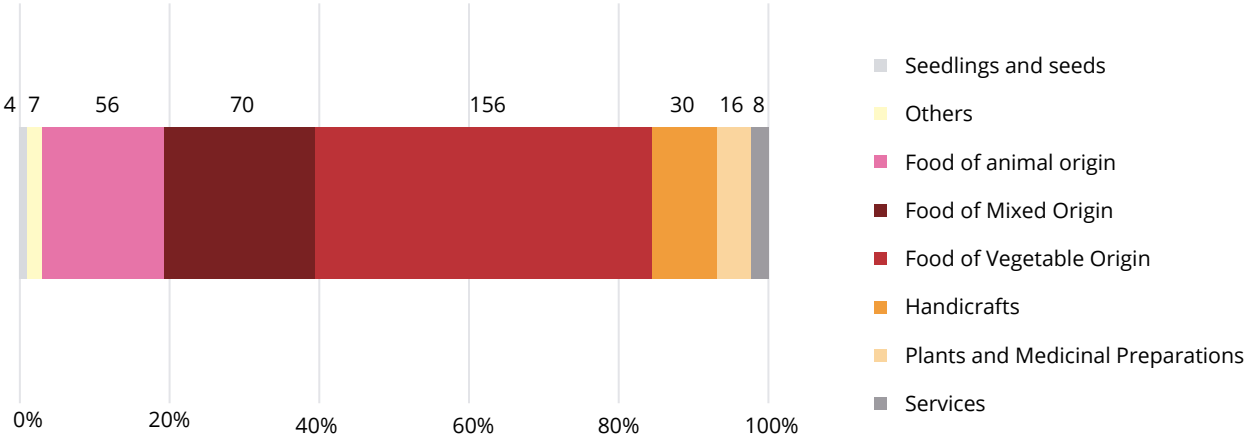
Source: Own elaboration based on the Logbooks data.

Figure 9. Total Value of Production by Socioeconomic Relationship in Dom Hélder



Source: Own elaboration based on the Logbooks data.

Figure 10. Product Diversity: quantity without repetition in Dom Hélder



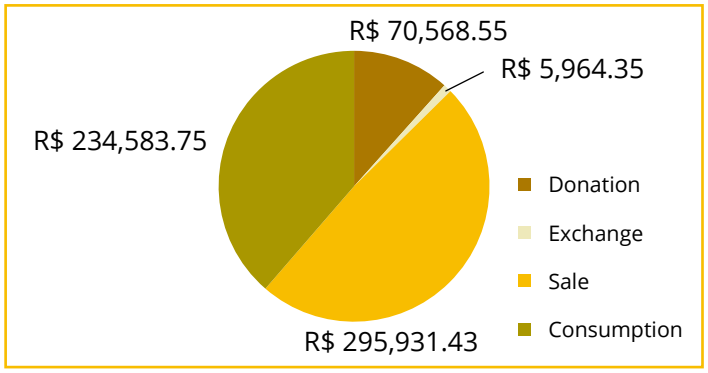
Source: Own elaboration based on the Logbooks data.

Table 11. Total Value of Production by Socioeconomic Relationship in Paulo Freire

Socioeconomic Relationship	Total Value
Donation	R$ 70,568.55
Exchange	R$ 5,964.35
Sale	R$ 295,931.43
Consumption	R$ 234,583.75
Overall Total	**R$ 607,048.08**

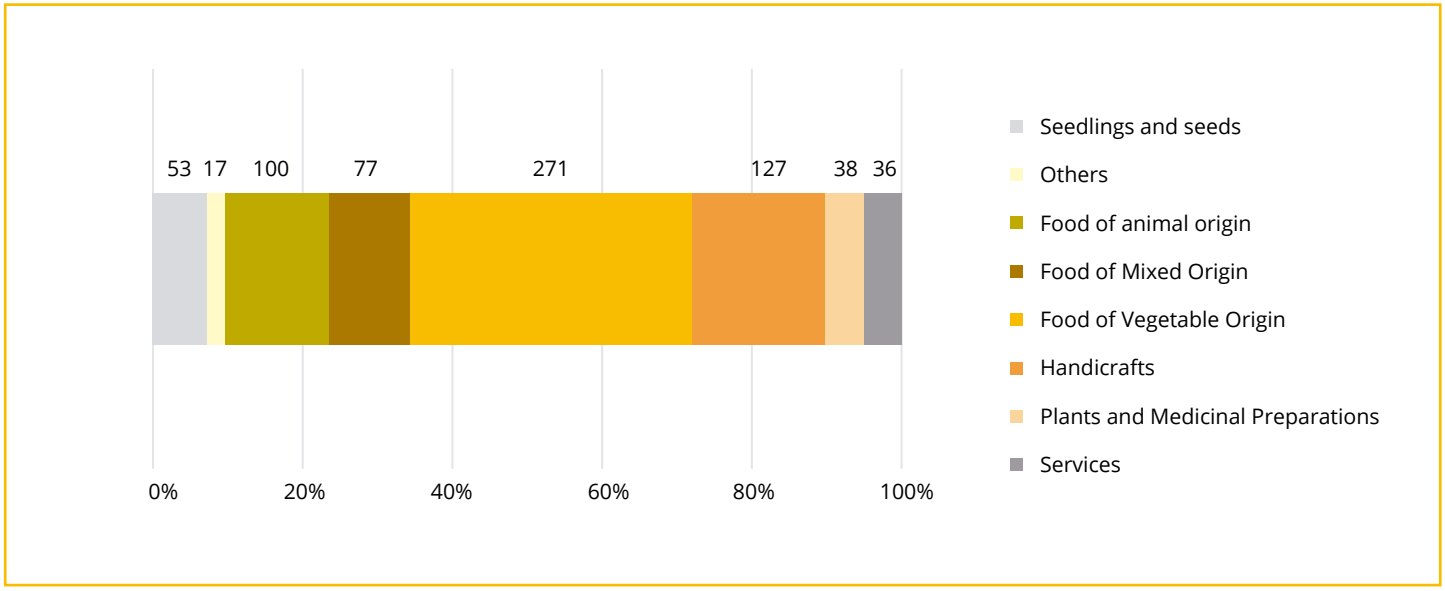
Source: Own elaboration based on the Logbooks data.

Figure 11. Total Value of Production by Socioeconomic Relationship in Paulo Freire



Source: Own elaboration based on the Logbooks data.

Figure 12. Product Diversity: quantity without repetition in Paulo Freire



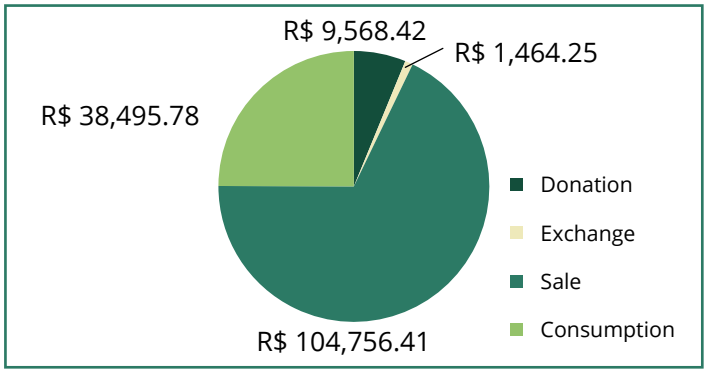
Source: Own elaboration based on the Logbooks data.

Table 12. Total Value of Production by Socioeconomic Relationship in Procase

Socioeconomic Relationship	Total Value
Donation	R$ 9,568.42
Exchange	R$ 1,464.25
Sale	R$ 104,756.41
Consumption	R$ 38,495.78
Overall Total	**R$ 154,284.86**

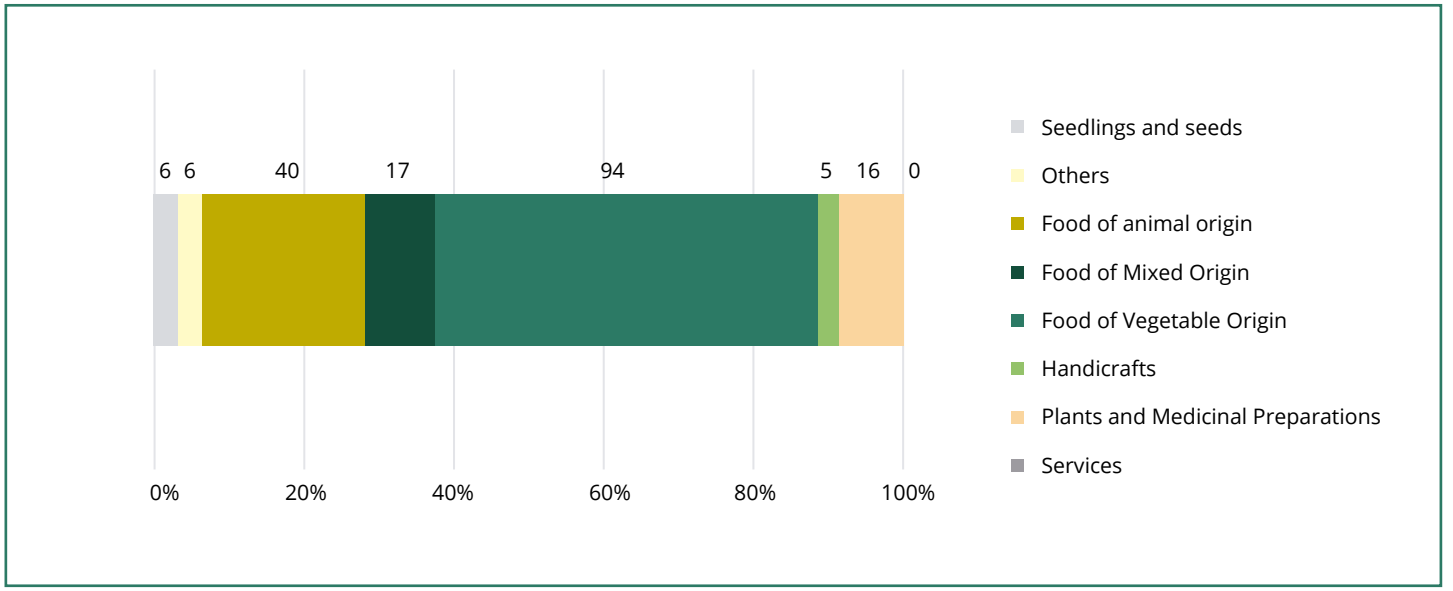
Source: Own elaboration based on the Logbooks data.

Figure 13. Total Value of Production by Socioeconomic Relationship in Procase



Source: Own elaboration based on the Logbooks data.

Figure 14. Product Diversity: quantity without repetition in Procase



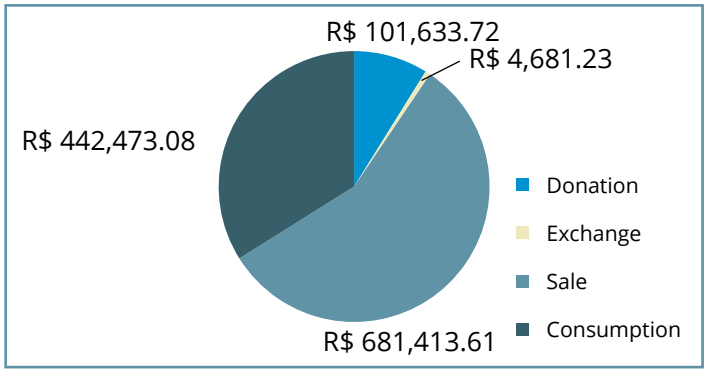
Source: Own elaboration based on the Logbooks data.

Table 13. Total Value of Production by Socioeconomic Relationship in PSA

Socioeconomic Relationship	Total Value
Donation	R$ 101,633.72
Exchange	R$ 4,681.23
Sale	R$ 681,413.61
Consumption	R$ 442,473.08
Overall Total	**R$ 1,230,201.64**

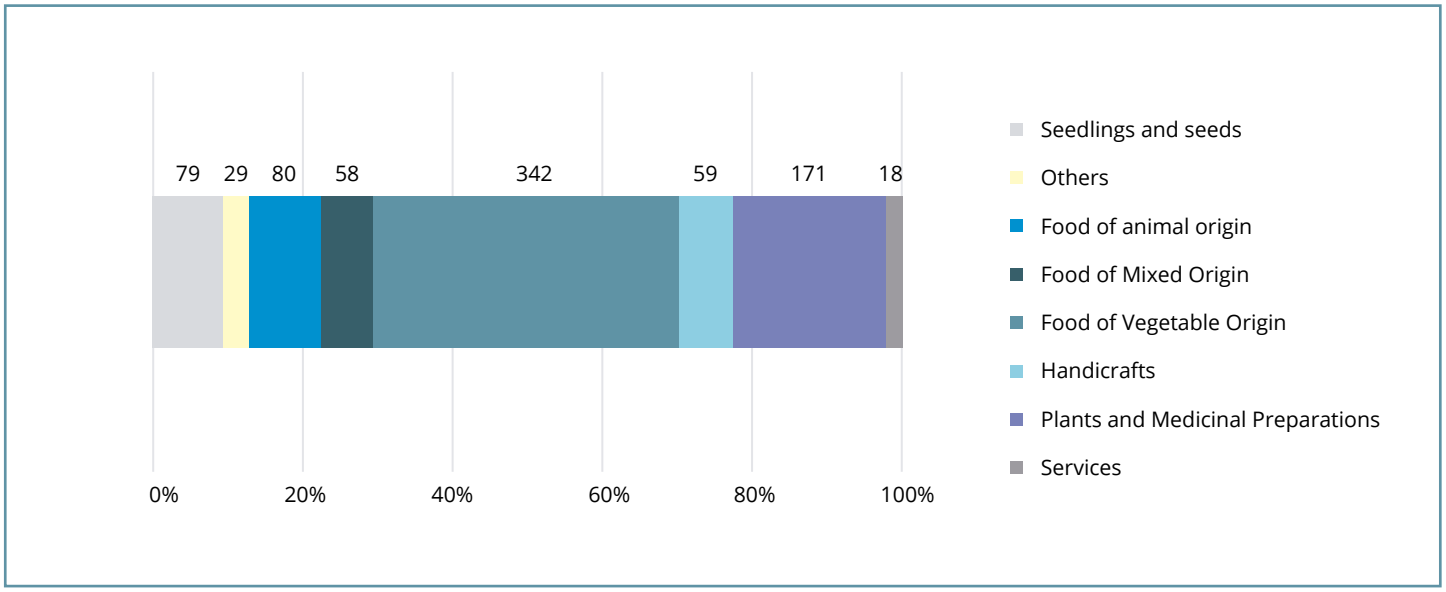
Source: Own elaboration based on the Logbooks data.

Figure 15. Total Value of Production by Socioeconomic Relationship in PSA



Source: Own elaboration based on the Logbooks data.

Figure 16. Product Diversity: quantity without repetition in PSA



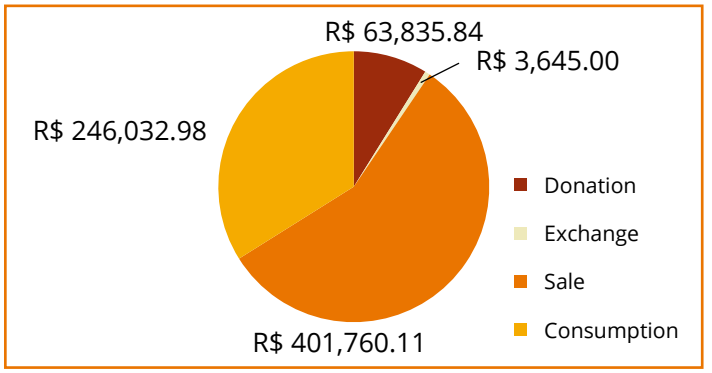
Source: Own elaboration based on the Logbooks data.

Table 14. Total Value of Production by Socioeconomic Relationship in PVSA

Socioeconomic Relationship	Total Value
Donation	R$ 63,835.84
Exchange	R$ 3,645.00
Sale	R$ 401,760.11
Consumption	R$ 246,032.98
Overall Total	**R$ 715,273.92**

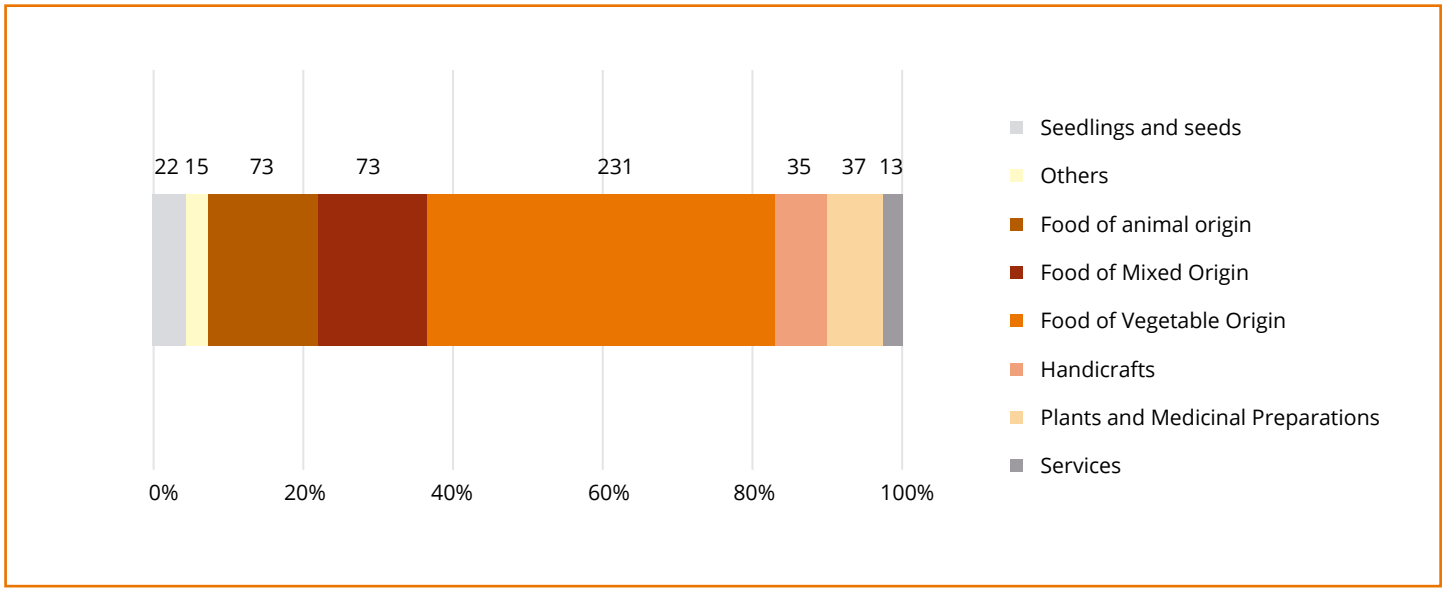
Source: Own elaboration based on the Logbooks data.

Figure 17. Total Value of Production by Socioeconomic Relationship in PVSA



Source: Own elaboration based on the Logbooks data.

Figure 18. Product Diversity: quantity without repetition in PVSA



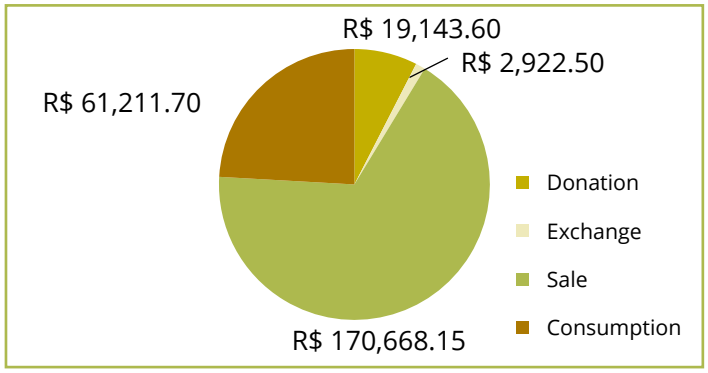
Source: Own elaboration based on the Logbooks data.

Table 15. Total Value of Production by Socioeconomic Relationship in Dom Távora

Socioeconomic Relationship	Total Value
Donation	R$ 19,143.60
Exchange	R$ 2,922.50
Sale	R$ 170,668.15
Consumption	R$ 61,211.70
Overall Total	**R$ 253.945.95**

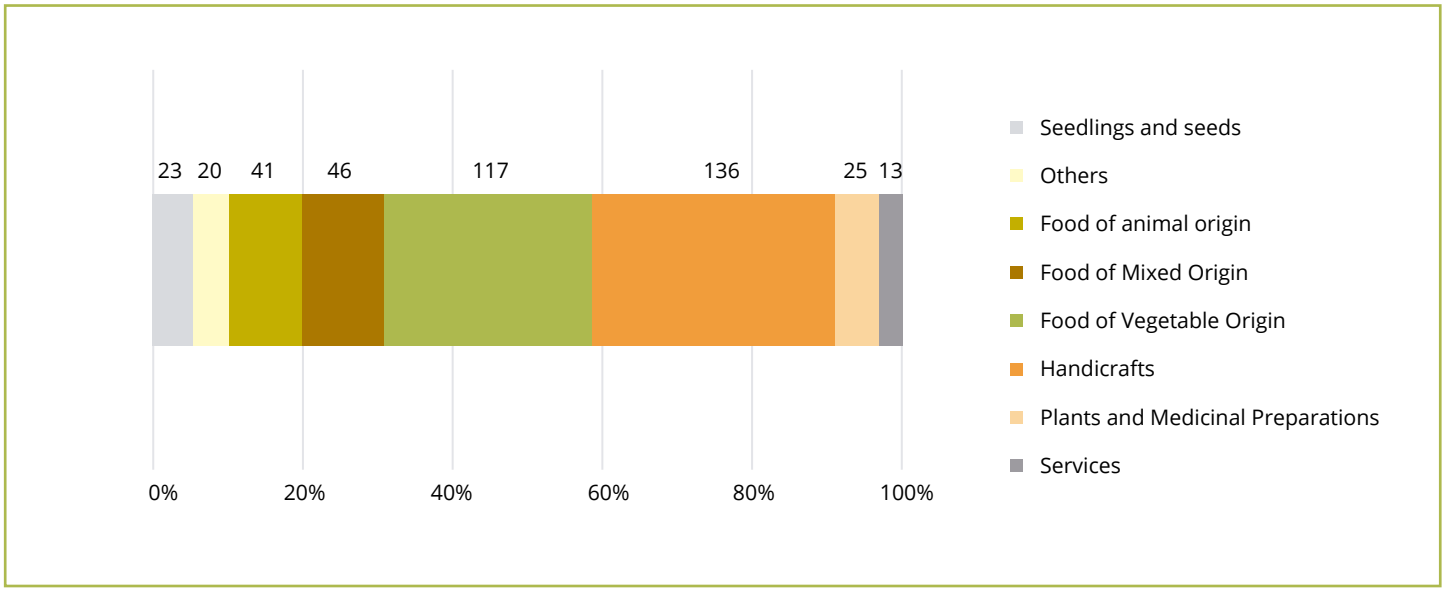
Source: Own elaboration based on the Logbooks data.

Figure 19. Total Value of Production by Socioeconomic Relationship in Dom Távora



Source: Own elaboration based on the Logbooks data.

Figure 20. Product Diversity: quantity without repetition in Dom Távora



Source: Own elaboration based on the Logbooks data.

06 Results of the crossing of data from the agroecolological tables and the socioeconomic questionnaires

This section presents the results of the cross-referencing of the socioeconomic characterization of the women farmers and the production reported in the Logbooks.

- When analyzing how access to public policies can interfere in the economic production of women farmers, Figures illustrate the influence of PAA and PNAE:

Average value of production by access or not to PAA

Do not access: R$ 384.92
Access: R$ 741.38

Average value of production by access or not to PNAE

Do not access: R$ 400.89
Access: R$ 505.73

As can be seen, women farmers who access the PAA make up a group with an average production value almost two times higher than those who do not access it. In the case of PNAE, although the difference is smaller, the women farmers who access this type of policies are still concentrated in a group with higher production values. This shows that such public policies are strategic for the rural environment, and especially for women, because they absorb the diversified production of women farmers and recognize them for their economic role.

- Another aspect that can explain the economic results of the production of women farmers is the access to markets. The more diversified the marketing strategy, the higher the amounts earned from their production, as shown in Figure:

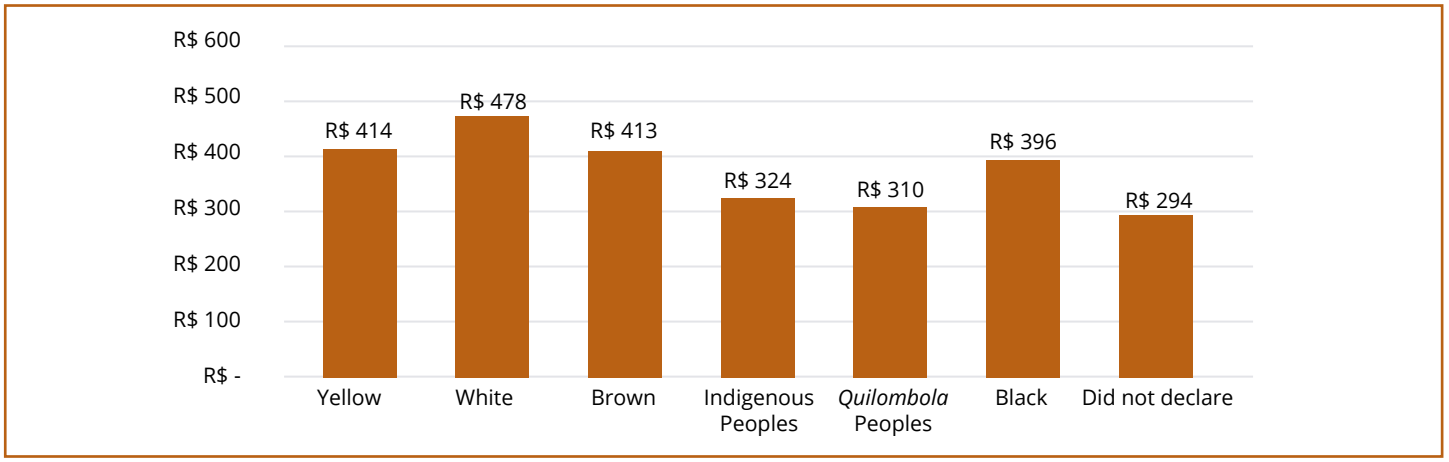
Average value of production by market access

None	Between 1 and 3	4 or more
R$ 428.27	R$ 372.30	R$ 585.18

Figure shows that those farmers who access between 1 and 3 markets have similar average value of production with those who access none. On the other hand, accessing 4 or more markets leads to a substantial increase in the average value of production.

- Social mediators such as color and sociocultural identity of the women farmers also reflect in the distribution of average production values.

Figura 21. Average monthly production value by color or ethnic origin



Source: Own elaboration based on the Logbooks data.

In relation to color and race or ethnicity, white and yellow women farmers have higher average production values than the others (R$413.00 and R$ 401.00, respectively) even though they are not representative of the profile of women farmers involved in the research, who are mostly black. In the brown and black groups, the value is similar, varying between R$ 366.00 and R$ 359.00, respectively, with no significant differences.

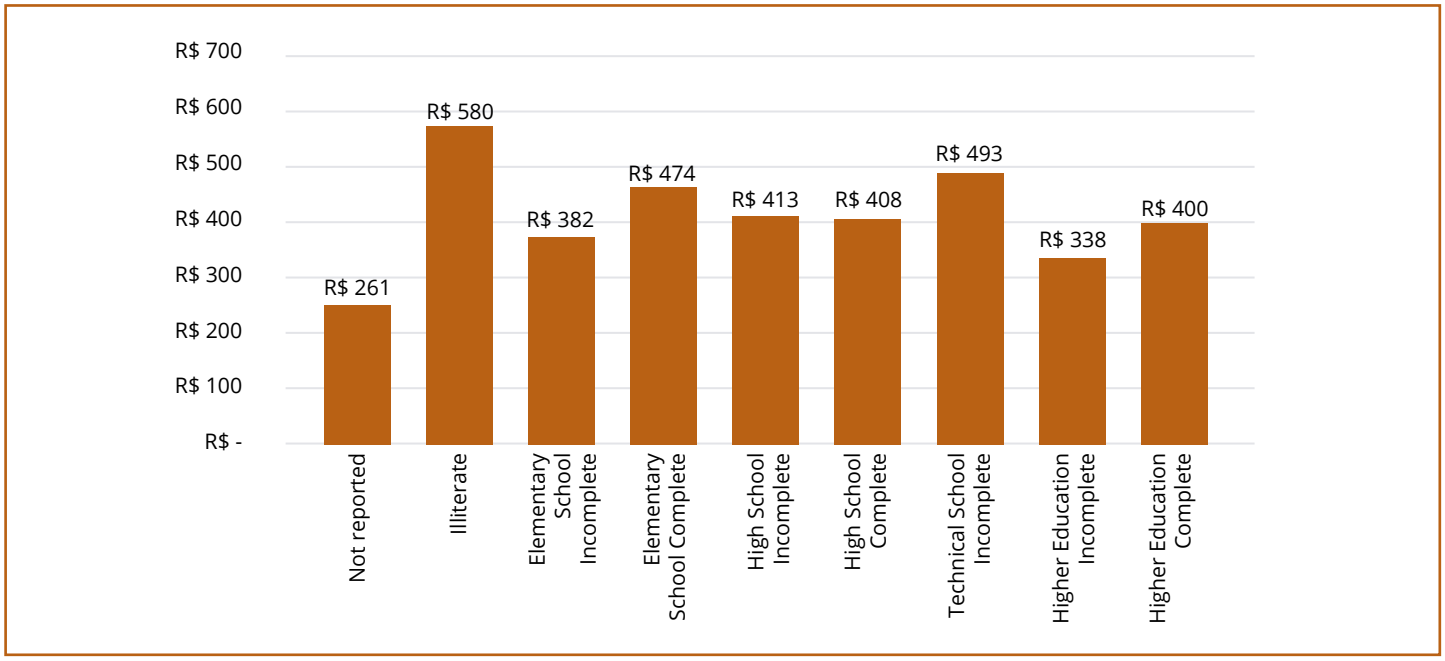
However, the women farmers who identify themselves as *quilombolas* and indigenous have an average production value of R$ 273.00 and R$ 259.00, respectively, lower than the other categories. This shows that specific public policies or affirmative actions for race and ethnicity would be necessary to reduce social inequalities marked by racialization and ensure conditions that are more equitable for income generation by these women.

This kind of data allow public managers to outline actions, programs, and public policies for productive inclusion and access to social and economic rights for the reduction of rural poverty, one of the central objectives of the *Semear* International Program and FIDA in Brazil.

- Some differences can be observed with regard to production in the schooling groups.

In Figure 22, the results are interpreted in terms of schooling:

Figure 22. Average value of monthly production by schooling



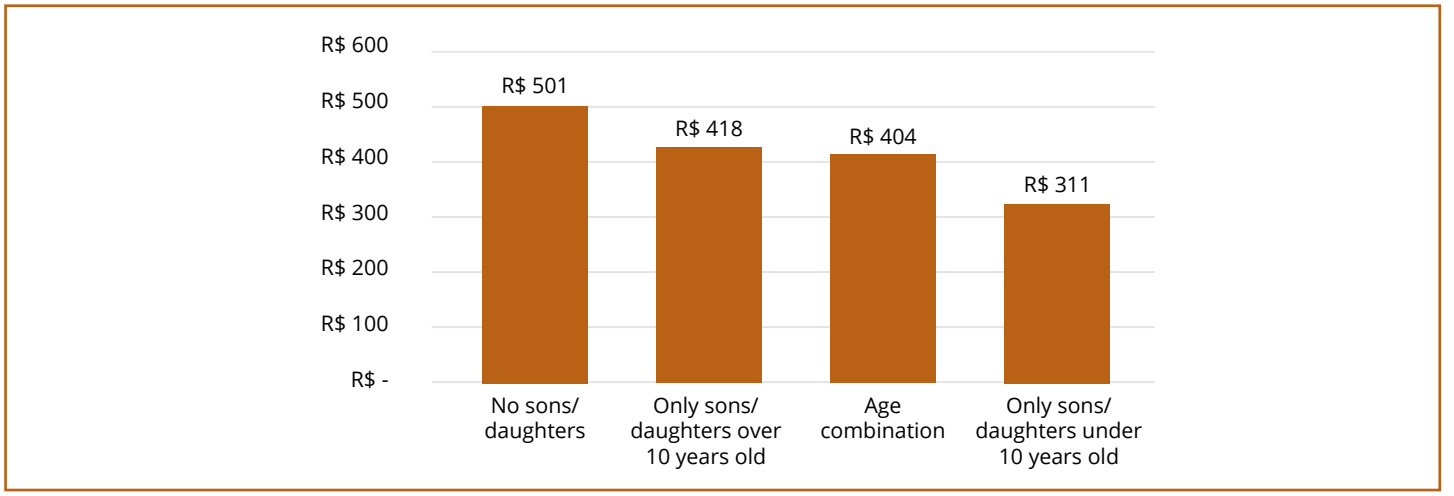
Source: Own elaboration based on the Logbooks data.

Most of the women farmers belong to the group of those with incomplete primary education, with an average production value of R$ 382.00 (three hundred and eighty-two reais). The category that stands out the most is composed of illiterate women (R$ 580.00 - five hundred and eighty reais), followed by women farmers with incomplete technical education (R$ 493.00 - four hundred and ninety-three reais). The women farmers who presented the lowest average value of production are those who did not declare schooling (R$ 261.00 - two hundred and sixteen reais). Thus, it is observed that a higher education level is not related to a higher production value.

- The production of the women farmers can also be analyzed by observing the number and age group of the sons/daughters in the household.

Figure 23 illustrates the average monthly value of the production of women farmers according to the criterion of the existence of sons/daughters, omitting the values of women farmers who did not declare the age of their sons/daughters.

Figura 23. Average monthly value of the production of women farmers according to the existence and age of their sons/daughters

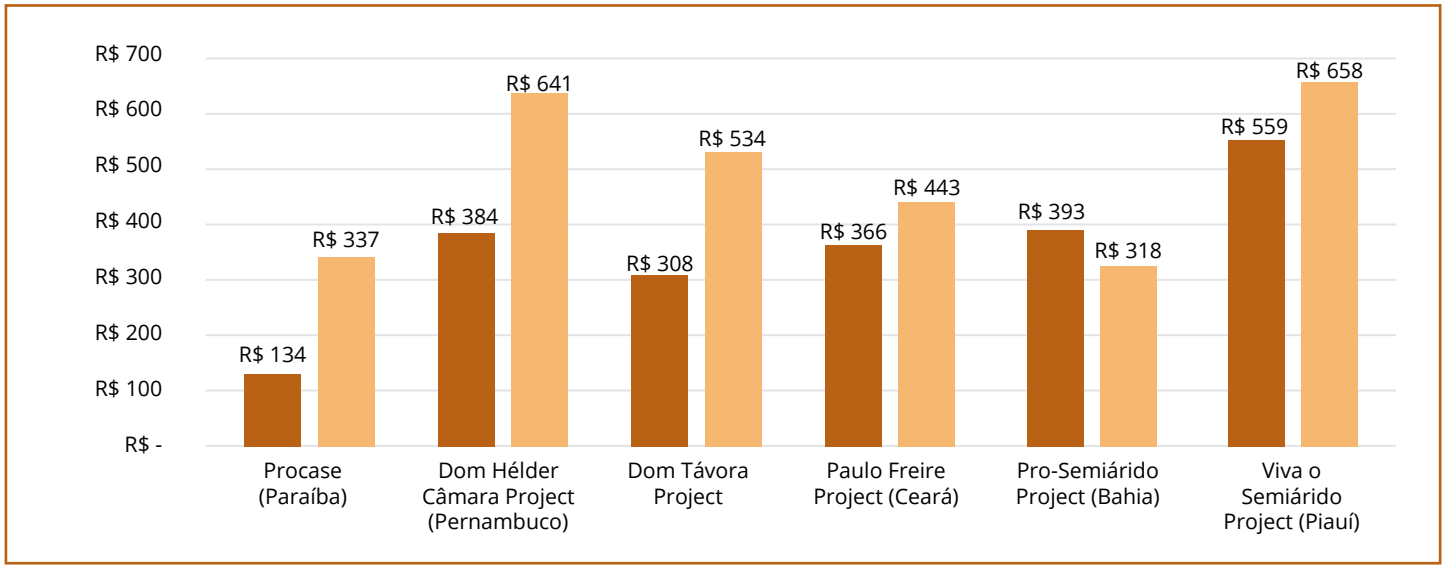


Source: Own elaboration based on the Logbooks data.

Women farmers who have sons/daughters under 10 years old are the ones who have the lowest average monthly economic production values, while those who do not have sons/daughters have the highest average monthly values. The “age combination” criterion implies that there are young children, adolescent, and adult sons/daughters in the household. This is a common scenario in the households interviewed, since in 41% of the households with sons/daughters up to 10 years old there were also adolescents or adults sons/daughters aged 14 or over. There are multiple factors that can contribute to this behavior of the data, but it is known that the more time women dedicate to caring for people, the less capacity they have to insert themselves in productive processes, commercialization, and sociopolitical organization for the generation of income.

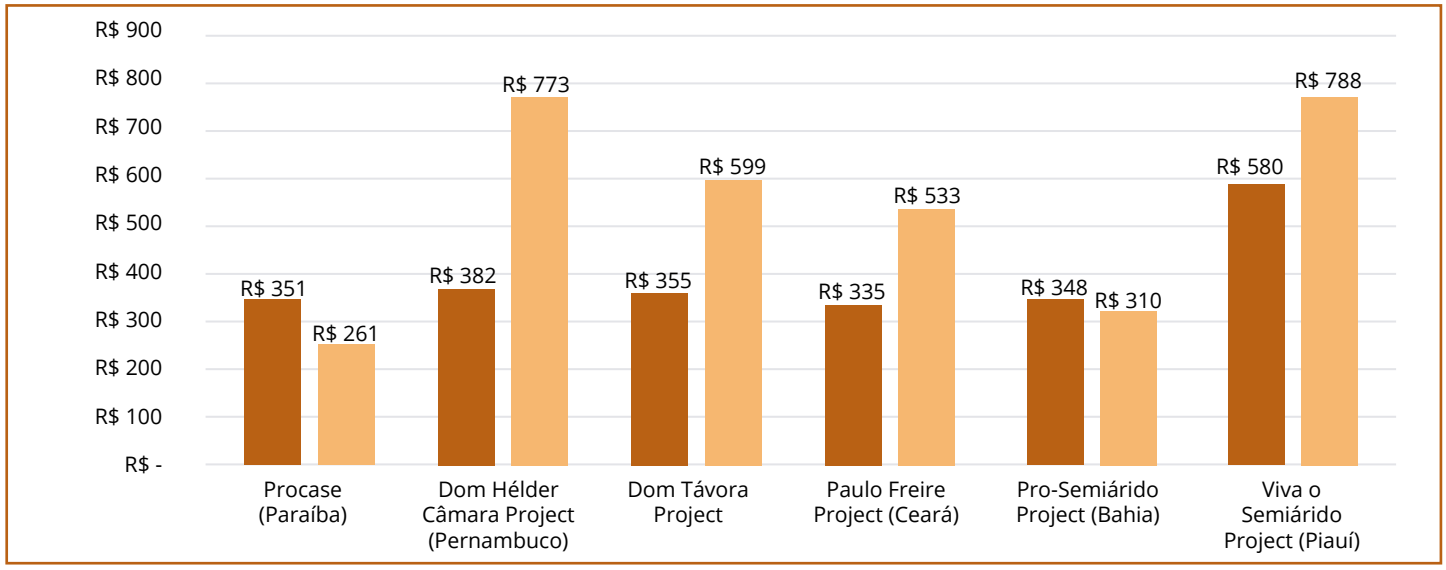
- Women farmers who access water using cisterns, of whatever type, are mostly in a group with higher average production values. Figures 24 and 25 illustrate the average value of monthly production by access to drinking and production cisterns:

Figure 24. Average value of monthly production per access to drinking cistern



Source: Own elaboration based on the Logbooks data.

Figure 25. Average value of monthly production per access to a production cistern

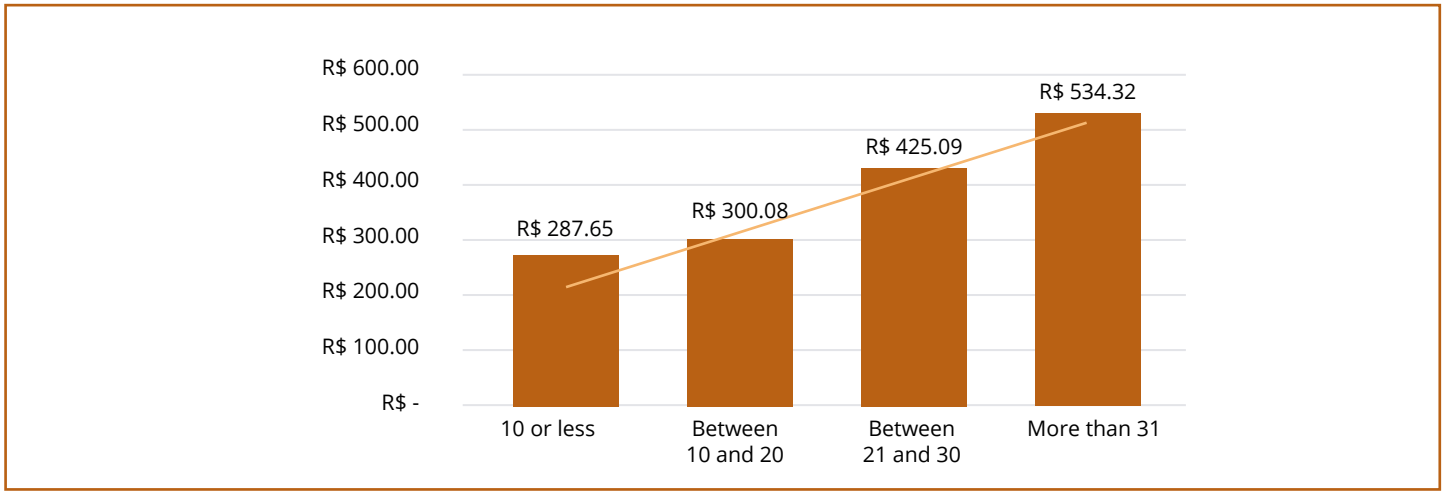


Source: Own elaboration based on the Logbooks data.

The exception is in the PSA, where those who do not access the drinking cistern or the production cistern have a higher average value of production in relation to those who access it. In the case of Procase, women farmers who access the production cistern have a lower average value of production than those who do not access it. This information should be further analyzed in conjunction with the projects, to identify what may have influenced this atypical behavior of the data.

- As production is diversified, the income groups increase proportionally to the quantity of products reported in the Logbooks. Figure 26 shows the division of the average value of production by product diversity, in groups:

Figure 26. Average production value by product diversity



Source: Own elaboration based on the Logbooks data.

Those farmers who produced less than 10 products have an average value of approximately R$ 277.00 (two hundred and seventy-seven reais) while the most diversified ones receive approximately R$ 500.00 (five hundred reais). These results confirm that the production of women who are small farmers opposes the logic of productive specialization and that greater diversification allows a greater economic contribution to the family and the community, whether through commercial exchanges or through non-monetary relations based on reciprocity.

By Marcilene Araújo

Female Farmer of the Community São José dos Cocos/Ipiranga do Piauí.
Beneficiary of the Project Viva o Semiárido.

Conversations and solutions
Thinking about the future of the nations
It is vital to strengthen since childhood
How an alliance is understood

With financial education we start
Always teaching me to be smart
The sweetness of the child grows
And the adult's cruelty is not worth to show

Since childhood, we teach what is beneficial
"Taking notes is essential",
That a women can achieve their dreams
Through many means:

Search, struggle and victory
Ignore the stumbles in your trajectory
It's one more step to climb
Even facing difficulties, smile every time

You need to explore more
To show that everyone is capable of
Do not forget about the Logbook, 'cause
You can improve what can be seen in it

07 The contribution of women farmers to the conservation of sociobiodiversity and to Food and Nutrition Security (FNS)

The way of life and production of rural women cannot – and should not – be simplified from individual contributions. As the data has shown, women farmers have a dynamic of social and economic relations that enable their own and other family groups, through reciprocal relations, to have access to food and sociobiodiversity products. Table 16 shows the main activities performed by rural women in Brazil for their own consumption, data were extracted from the PNAD (2019).

Table 16. Rural women's work for own consumption, 2019

Activities for Own Consumption	Frequency	%	Average Hours
Growing, fishing, hunting or raising animals for food only.	12.169	27.03%	8.98
Coal production, cutting or collecting firewood, collecting water, extracting seeds, herbs, sand, clay, or other material.	1.619	3.60%	5.11
Manufacture of clothing, knitting, crochet, embroidery, ceramics, fishing nets, food or alcoholic beverages, medicinal products, or other products.	1.079	2.40%	6.93
Construction of a house, room, wall, roof, oven or barbecue pit, fence, road, animal shelter, or other work.	116	0.26%	12.9

Source: IBGE – PNAD, 2019.

27%

The data in Table 16 calculate the dedication of rural women to tasks exclusively related to food, production, manufacturing, or construction for the own use of the people living in the household or of relatives. Among these women, most **(27%)** are engaged in food-related activities.

9 hours a week

In a smaller proportion, but relevant, is the production of primary goods such as extractive activities and the manufacture of clothing, handicrafts, among other products. This relationship is confirmed with the data from the AN, since the production of food of vegetal or animal origin correspond to the majority of the products registered by the women farmers. On average, they work approximately **9 hours a week** on such activities.

5 e 7 hours

In smaller proportion – of women and of hours dedicated – are those activities producing charcoal, cutting or collecting firewood, collecting water, extracting seeds, herbs, sand, clay or other material (3.6% of the women) and making clothes, fishing nets, food and alcoholic beverages (2.4% of the women), contributing approximately **5 and 7 hours** respectively.

13 hours

The average number of hours is higher than for the other activities **(13 hours)**, indicating that in some cases women devote themselves vehemently to home maintenance activities.

In a literature review, Braga (2018) shows that, in fact, national and international empirical evidence that makes use of such data and analyzes the situation of women as an object and not a subject, as suggested by Feminist Economics, points out that households headed by women are in a position of greater vulnerability with regard to food and nutrition insecurity. However, this conclusion must be relativized. On the one hand, women, especially black women, from peripheral countries, generally have the most precarious working and income conditions in the world and, for this reason, it is said that gender, class and race relations are structuring inequalities. On the other hand, empirical and theoretical evidence, as pointed out by Duflo (2012), shows that women are the ones who best allocate household resources for household welfare.

The data from the Logbooks presented here – and confirmed in the literature – show that, when the particularities of women farmers and their production are effectively analyzed, the contribution of women is indispensable to guarantee food and nutritional sovereignty and security, in its various configurations. Braga and Costa (2020) use the Gender Gap Index[5] to construct a food and nutrition insecurity index and show that, as important as observing this contribution, women's participation in representative political, social, and economic spaces are imperative, especially for food sovereignty.

[5] Developed by the World Economic Forum for different countries around the world, the Global Gender Index is a gender equality index that analyzes parities between men and women in economic participation and opportunity, education, political empowerment, and health and survival (World Economic Forum, 2017). Source: World Economic Forum (2017) The Global Gender Gap Report. 2017. Available at https://www.weforum.org/reports/gender-gap-2020-report-100-years-pay-equality.

The diversity of the products noted in the Agroecological Logbooks

This section will present the data regarding the diversity of products handled by the agroecological women farmers assisted by the projects and the classification into eight main groups of products: food of vegetable origin, food of animal origin, food of mixed origin (which includes products of both vegetable and animal origin), medicinal plants and preparations, handicrafts, seedlings and seeds (including animal species), services, and others.

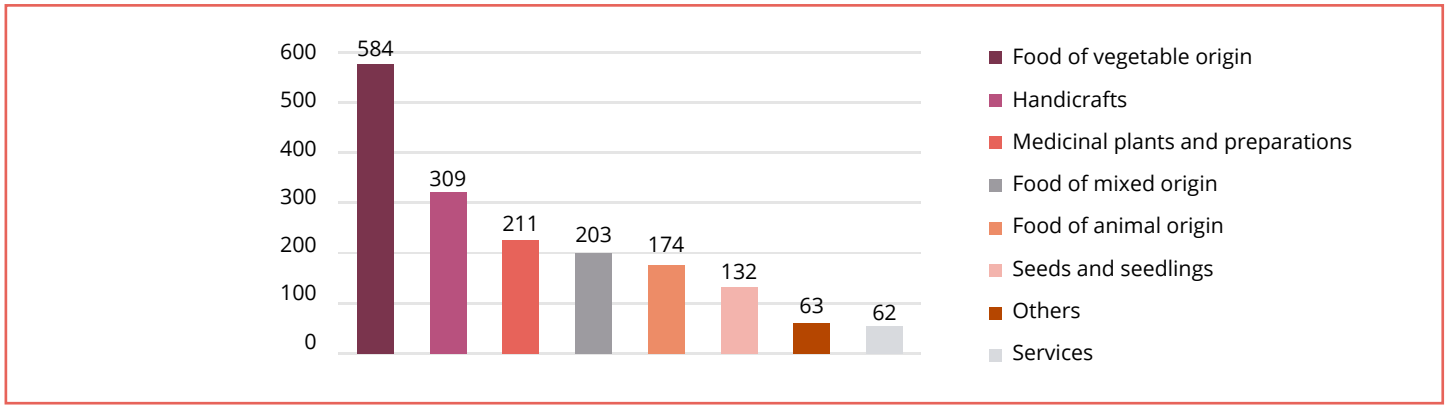
The food classification system, which is under development, is based on the Food Guide for the Brazilian Population (*Guia Alimentar da População Brasileira*) (BRASIL, 2014), and makes it possible to qualify the analysis of the contribution of women farmers to food and nutrition security and to the conservation of sociobiodiversity. In addition, the product groups were also analyzed according to the destination of the production, based on monetary and non-monetary socioeconomic relationships.

A total of 1,738 products and services were registered without repeats.

The exercise used here was, in a first moment, to scan the notes to standardize the names of the products, which varied due to typing errors, regional differences (for example: cassava thats is called *aimpim* or *macaxeira*) or the way the farmers reported the same product. Some women farmers detail the product, specifying how it is prepared, its variety, among other inherent characteristics, while others report only the "raw" product. This is the case for products such as *andú* beans and corn/corncob/creole corn.

After this standardization, in the cases where this is possible, we tried to group the products into categories that represent the food by its origin (animal, vegetable or mixed) and the other types of products, such as handicrafts, seedlings and seeds, medicinal plants, as well as services and others. For analytical purposes, mixed foods are considered to be all those prepared with products of vegetable and animal origin.

Figure 27. Product diversity: quantity without repetition



Source: Own elaboration based on the Logbooks data.

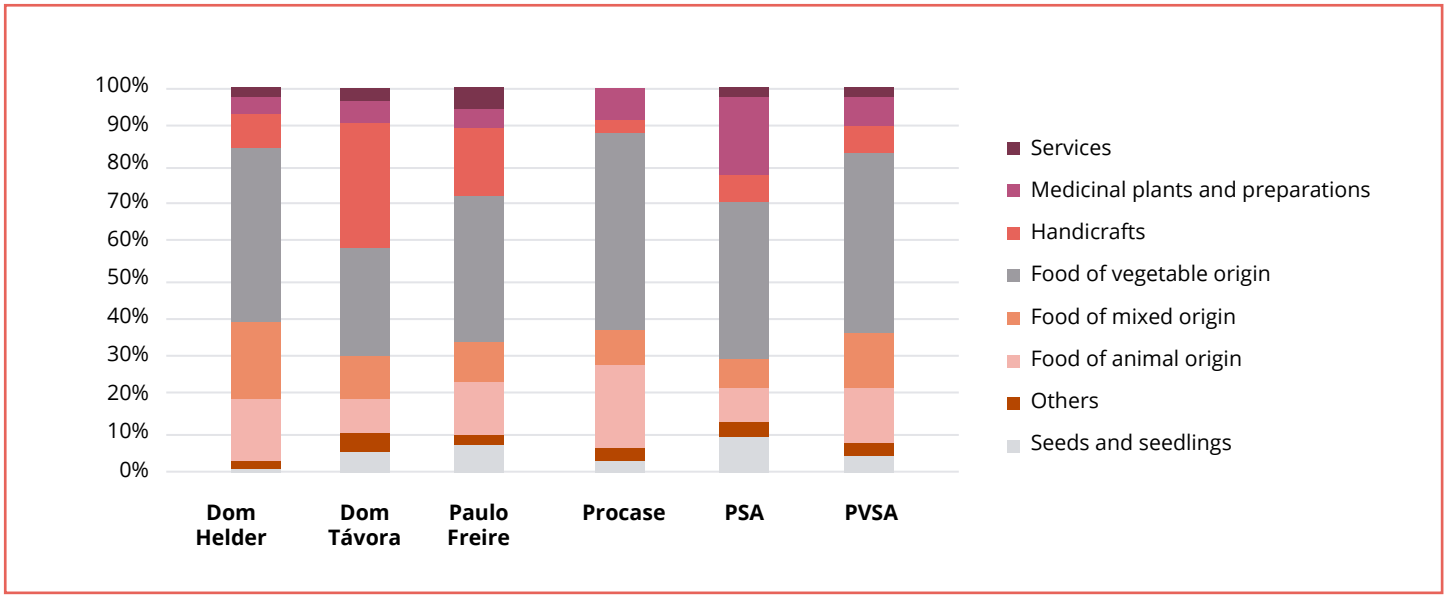
As Figure 27 shows, there is a great diversity of products and services performed by women farmers in the semi-arid region. In total, 1,738 varieties were identified, distributed in the 8 pre-defined groups. Each label in the graph indicates the quantity of products/services identified within the category. Foods of vegetable origin represent approximately 34% of the total, equivalent to 584 different types of products. Then come handicrafts, as well as other types of food (mixed and animal) and medicinal plants.

It is also interesting to note the prevalence of services in income generation (mostly paid domestic work), which relates to a phenomenon observed in rural areas: the diversification of income from non-agricultural activities. Studies conducted by FAO (2017) in Latin America and the Caribbean show that in the last decade, labor insertion in non-agricultural jobs in rural areas has been growing, particularly for young women. The service sector, including domestic work, is the sector that most absorbs rural women's labor. Due to the gender inequalities in society, women often mobilize resources through activities that reinforce their social role, which is linked to caring for the home and family.

This pattern is also observed when disaggregated at the level of the different projects. The absolute numbers should be put into perspective, since the projects with a larger number of Logbooks present a larger number of products (as is the case of PSA, with 749) to the detriment of smaller projects (170 products without repetition observed in Procase).

Figure 28 illustrates the proportion of product participation by Project.

Figure 28. Proportion of product diversity per project

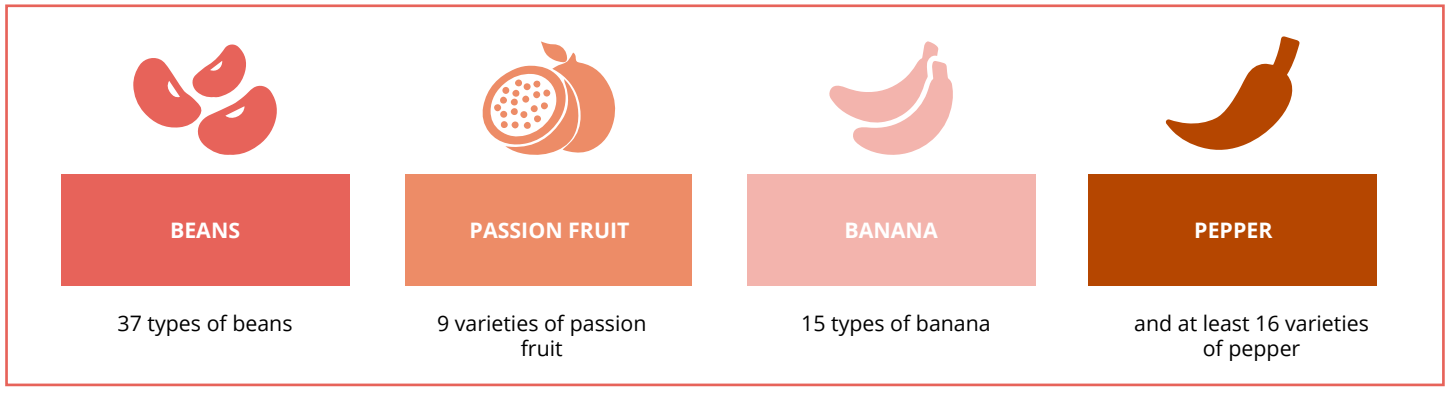


Source: Own elaboration based on the Logbooks data.

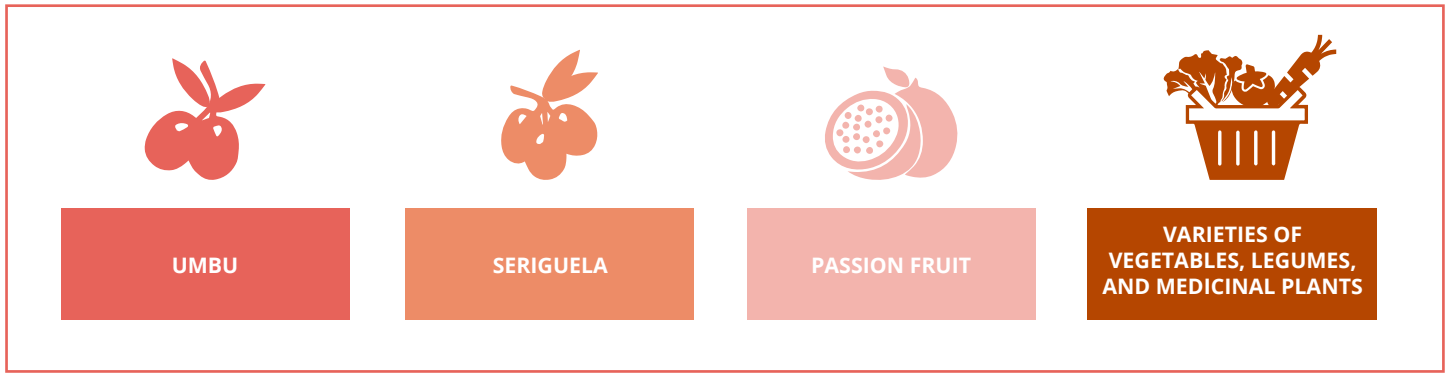
Figure 28 shows that there is a pattern to the contribution of some product groups in the composition of the diversity found. In general, there is a greater diversity of products of vegetable origin in almost all the projects. Only Dom Távora Project presents an atypical pattern of products noted by the women farmers, in which handicrafts are reported in similar proportions to foods of vegetable origin (33%). Animal products (10%) are rarely reported, and this product has a higher prevalence when compared to handicrafts in other projects. In the PSA, the contribution of plants and medicinal preparations, registered in the women farmers' notes, is also relevant for the composition of diversity, in comparison with the others.

The total data suggest the importance of the productive work of women farmers in the conservation of sociobiodiversity, but this becomes more evident when looking at the intraspecific diversity of some vegetable products.

Were identified



In the category of seedlings and seeds, in which 161 types were identified, the presence of fruit trees such as



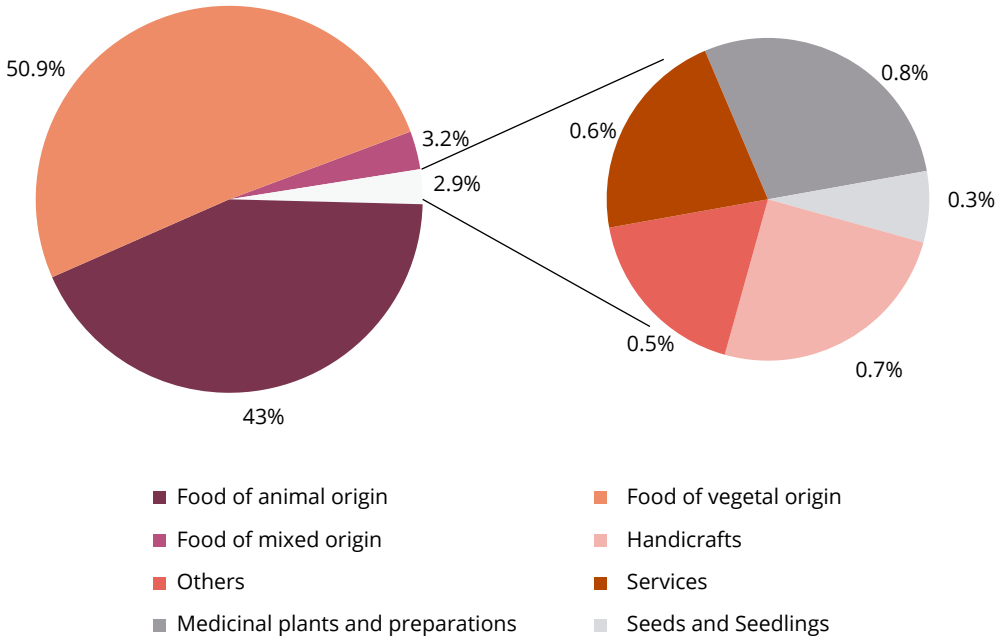
Certainly, this diversity is greater than reported, since most of the farmers' notes presented the products generically, without detailing which variety was being sold, consumed, donated, or exchanged.

By means of this logic, the role of women as guardians of sociobiodiversity is emphasized here, as they promote diversity in their productive spaces and, through the donation and exchange of food, seedlings, and seeds, maintain and increase interspecific and intraspecific diversity over time.

- By adding the dimension of the value of production to the diversity analysis, it becomes possible to see the distribution of the value produced in relation to the product groups.

Figure 29 illustrates this perspective for non-monetary economic relationships:

Figure 29. Percentage of value related to non-monetary socioeconomic relations by product group



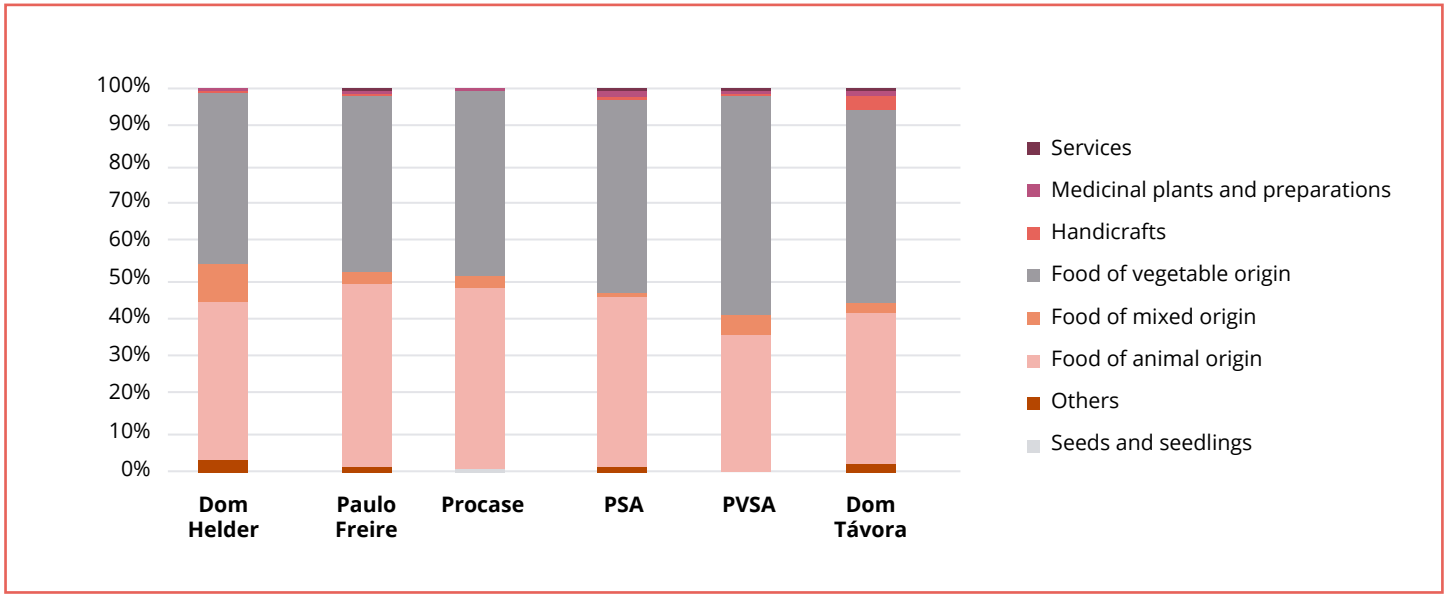
Source: Own elaboration based on the Logbooks data.

According to Figure 29, the value of consumption, donation and exchange is concentrated in the production of food of vegetable origin (50.9%) and animal origin (43%), and only 6.1% of the total value is allocated to the other classifications of products. This shows that, although the variety of other products is significant, and that certain items (such as handicrafts) have a high added value, approximately 94% of the products consumed, donated or exchanged are food. In addition, this fact is an indicator of the significant added value of processed foods. Thus, these data show the protagonism of agroecological women farmers in promoting food sovereignty and security for their families and communities.

The production of food by women farmers symbolizes not only a reduction in the family's expenses, but also the guarantee of an adequate and healthy diet. As recommended by CONSEA (2007, p. 26), food is not restricted to the nutrients necessary for a balanced diet, but "should meet the principles of variety, balance, moderation, pleasure, the dimensions of gender and ethnicity, and forms of production environmentally sustainable, free of physical, chemical, biological contaminants, and genetically modified organisms.

Figure 30 shows a division of this relationship among the projects that, not atypically, have distinct patterns:

Figure 30. Percentage of value related to non-monetary socioeconomic relations by product groups per project



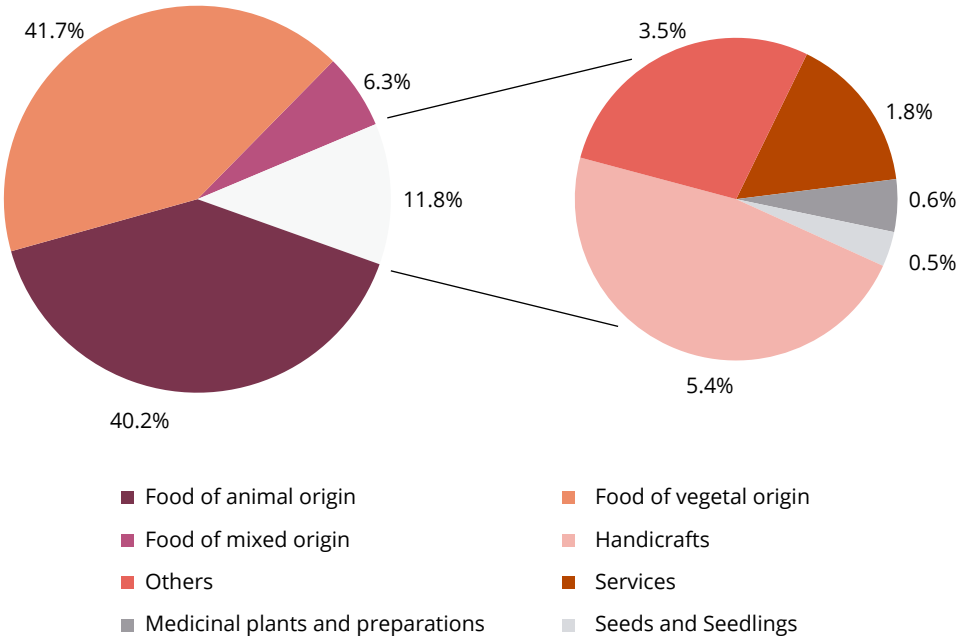
Source: Own elaboration based on the Logbooks data.

For example, the Dom Távora Project, in which groups of women farmers are specialize in handicrafts participate, shows the majority importance of vegetable production in relations of consumption, donation, or exchange, as does the PVSA, which also has a significant share of this food group in the percentage of the value of non-monetary socioeconomic relations. On the other hand, the Paulo Freire and Procase projects show the majority importance of animal food for non-monetary relations (consumption, donation and exchange), while animal and plant products contribute in a similar way to PSA.

Therefore, different patterns of agricultural production exist and, above all, the differentiated contribution of some groups of products in terms of production for self-consumption or for relations of reciprocity and commercialization, depending on the context in which the women farmers are inserted.

- From the perspective of socioeconomic monetary relations, Figure 31 shows the proportions of participation of the food groups specifically destined for marketing.

Figure 31. Percentage of the value related to commercialization by groups of products



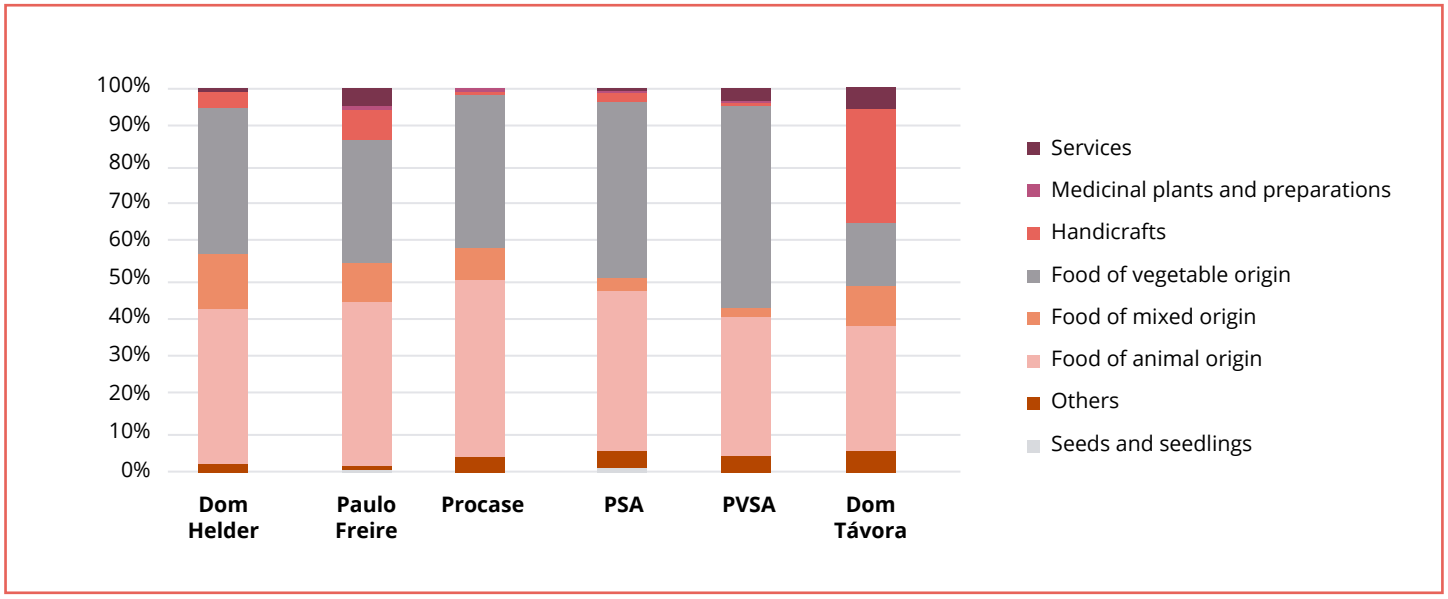
Source: Own elaboration based on the Logbooks data.

The proportion of animal food production for commercialization is similar, compared to the non-monetary economic relations, demonstrating that these are foods commonly destined for family meals, reciprocal relations, and for the market. Other foods become more significant in the marketing dynamics, such as the processed ones: breads, cakes, cheeses, and *beijus*.

More than 88% of the value produced for sale is food. Among the other products, handicrafts stand out, with 5.4% of the total. The handcrafts are almost exclusively destined for commercialization, while the medicinal plants are also consumed, donated and exchanged, in their natural form and in the form of teas, syrups and home remedies.

This relationship is divided among the projects in Figure 32:

Figure 32. Percentage of the value related to commercialization by groups of products per project



Source: Own elaboration based on the Logbooks data.

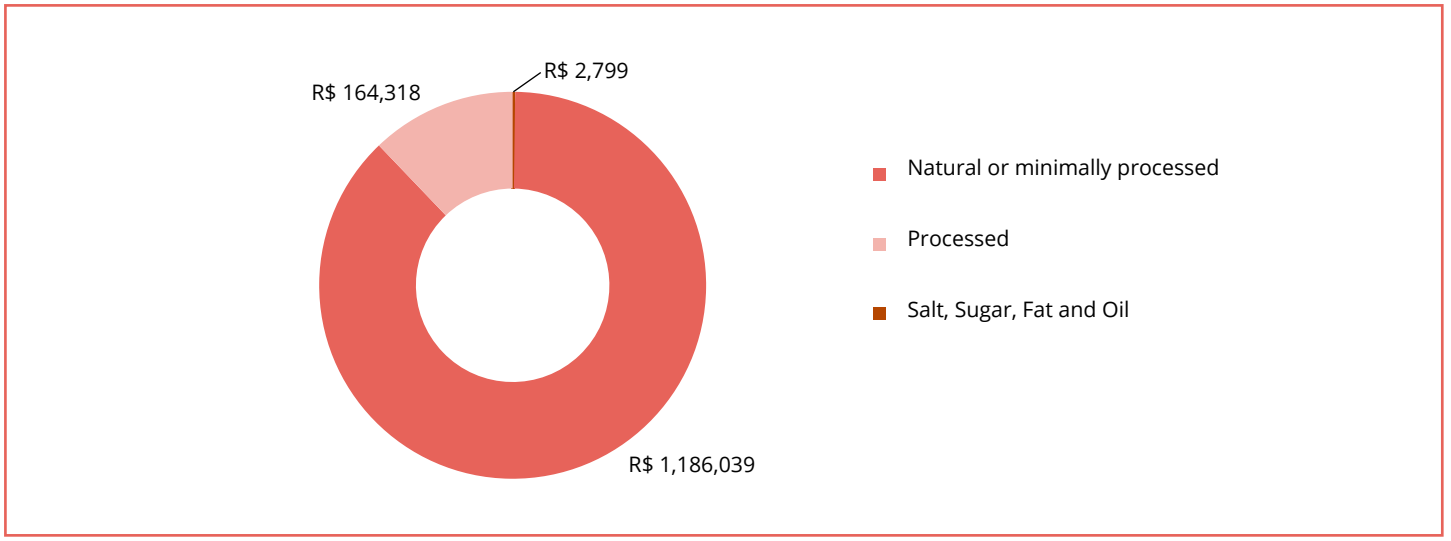
Despite vegetable foods representing a more diversified group, that is, women farmers produce a greater diversity of vegetable foods; the composition of income from commercialization is predominantly based on food of animal origin, due to its higher added value, except for the PVSA and PSA projects.

Dom Távora Project also presents an atypical pattern, with a greater distribution among the different groups of products, with the production of handicrafts having an important contribution to the composition of the economic production of the women farmers. The project presented the highest expression of non-agricultural paid services, such as aesthetic and manicure activities, as a source of income for the women farmers.

- In order to deepen the understanding of the types of food produced, these were classified into 3 categories according to the type of processing: natural (or minimally processed), processed and, salts, sugars, fats and oils.

This subdivision for the aggregated non-monetary socioeconomic relations (exchange, donation and/or consumption) is illustrated in Figure 33, while in Figure 34 the division is presented for each project:

Figure 33. Food: value referring to processed products in the sphere of non-monetary economic relations



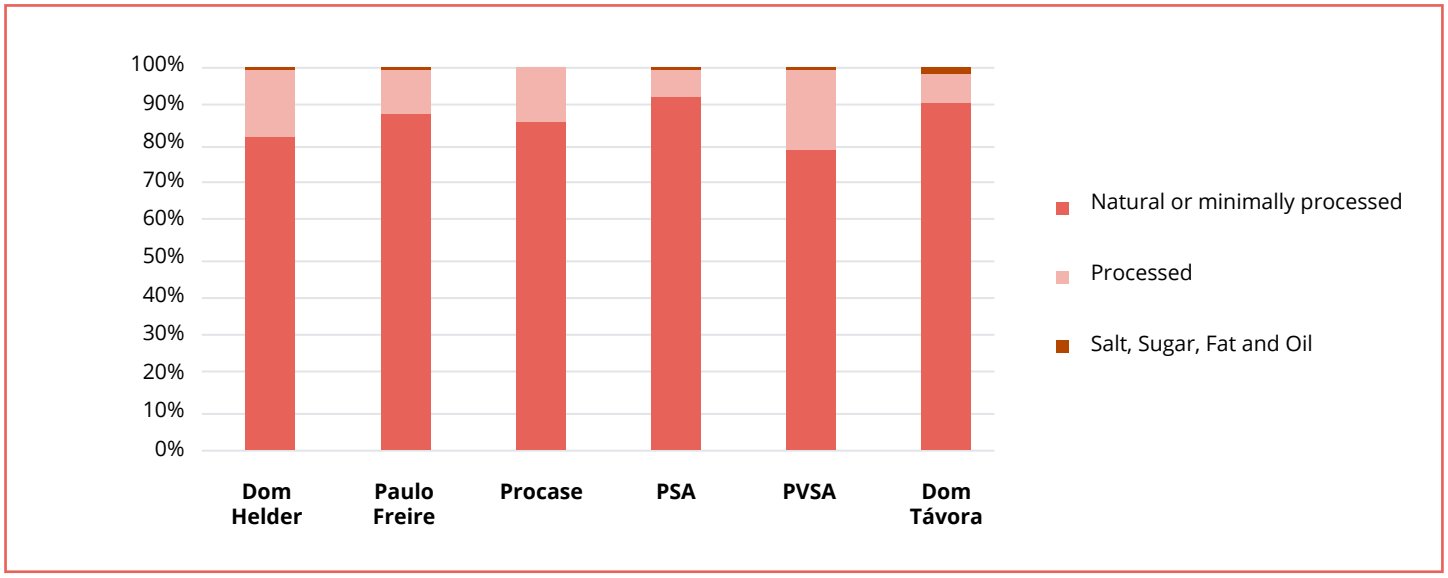
Source: Own elaboration based on the Logbooks data.

Figure 33 shows that, in general, natural foods represent the largest portion of the value of food produced and intended for self-consumption, donation or exchange – about 88% of the total non-monetary relationship – while processed foods represent approximately 12%.

Salts, sugars, fats and oils have an insignificant participation in these cases (less than 1%). The notable prevalence of natural foods in the context of socioeconomic relations is an important indication of the eating patterns of women, their family groups and communities, and reinforces their contribution to food sovereignty and security.

Figure 34 shows these proportions by project, as can be seen below:

Figure 34. Food: value referring to processed products in the sphere of non-monetary economic relations by project



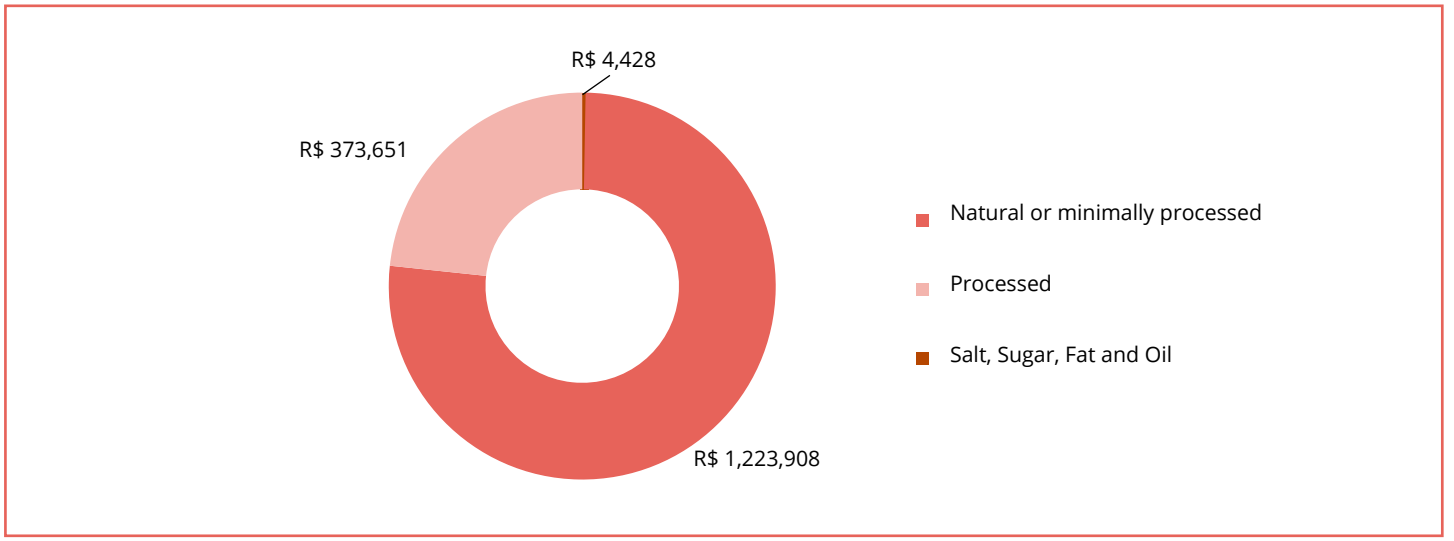
Source: Own elaboration based on the Logbooks data.

Natural or minimally processed foods maintain the general trend of the aggregated data, when analyzed by project, contributing mostly to the composition of the non-monetary economic value generated by women's production.

- Each region has its specificities regarding the diversity of food, but the pattern stays the same.

This pattern, reflecting the type of production reported by women farmers, can also be observed in the commercialization sphere, as illustrated in Figures 35 and 36, with the aggregated values and by projects, respectively.

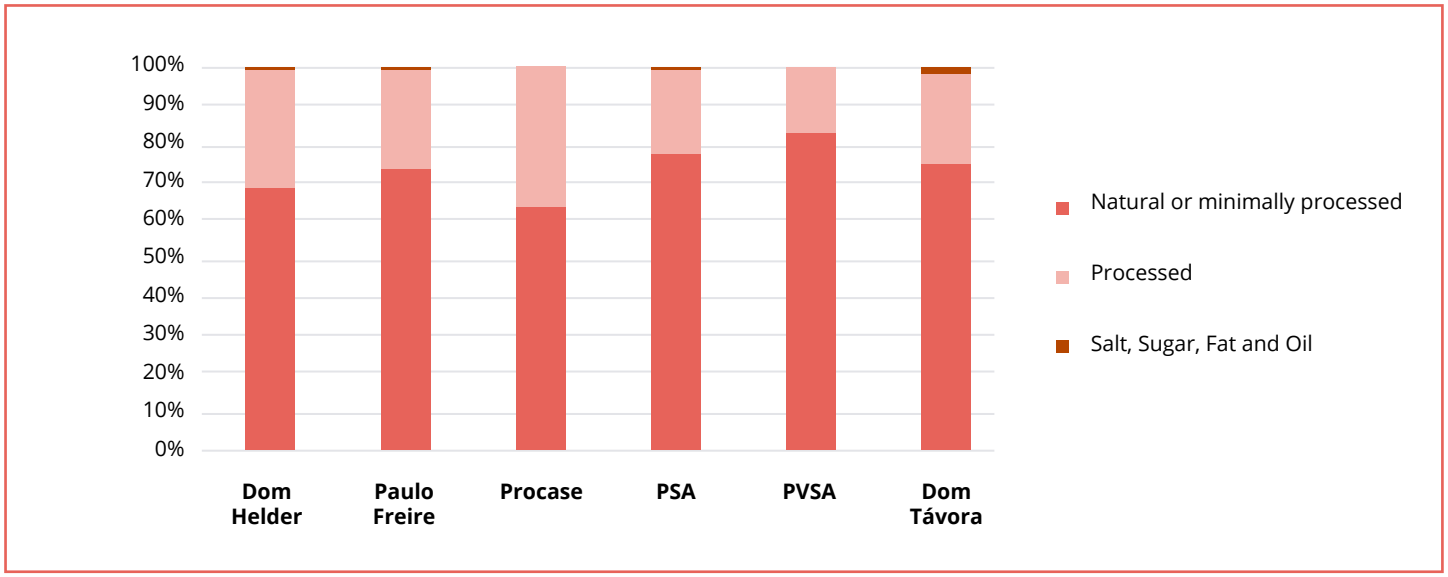
Figure 35. Food: value referring to the processed products in the commercialization sphere



Source: Own elaboration based on the Logbooks data.

Figure 35 illustrates a pattern similar to that observed in the non-monetary socioeconomic relations, with 76% participation of fresh or minimally processed products, but with a greater participation of processed products (23%) in the composition of the total monetary value. This occurs in the same way when we analyze the data by project, as shown in Figure 36:

Figure 36. Food: processing in the sphere of project marketing



Source: Own elaboration based on the Logbooks data.

In addition to the pattern already presented in the graphs referring to non-monetary relationships, some particularities regarding the processed products traded should be highlighted. There is an intersection between the "other foods" previously illustrated (Figures 29, 31, 32), represented in products such as cheeses and cakes. This indicates that the processing of food and the resulting added value generated is a characteristic of the production marketed by women farmers. It reinforces their role in the better use of food, avoiding waste and, consequently, contributing to the access to food and the guarantee of food sovereignty and security for family group and society.

- Let's take look at the production value related to non-monetary socioeconomic relationship (donation, exchange and consumption) and this relationship with what was sold/marketed.

Value of production (in reais) referring to non-monetary socioeconomic relations by group of products, by project

SEEDLINGS AND SEEDS

Dom Helder: 10.00
Paulo Freire: 720.50
Procase: 377.00
PSA: 1,777.50
PVSA: 178.50
Dom Távora: 206.00
Total: 3,269.50

OTHERS

Dom Helder: 2,405.80
Paulo Freire: 920.50
PSA: 2,718.50
PVSA: 226.00
Dom Távora: 1,381.50
Total: 7,652.30

FOOD OF A NIMAL ORIGIN

Dom Helder: 36,630.95
Paulo Freire: 151,123.90
Procase: 23,301.35
PSA: 243,654.18
PVSA: 111,388.88
Dom Távora: 32,810.49
Total: 598,909.75

FOOD OF MIXED ORIGIN

Dom Helder: 8,800.50
Paulo Freire: 9,031.10
Procase: 2,021.00
PSA: 6,285.33
PVSA: 15,848.05
Dom Távora: 2,235.00
Total: 44,220.98

FOOD OF EGETABLE ORIGIN

Dom Helder: 39,221.70
Paulo Freire: 144,924.90
Procase: 23,468.10
PSA: 279,996.81
PVSA: 180,437.89
Dom Távora: 41,975.60
Total: 710,025.01

HANDICRAFTS

Dom Helder: 559.20
Paulo Freire: 1,939.60
Procase: 28.00
PSA: 2,142.00
PVSA: 2,105.00
Dom Távora: 2,914.70
Total: 9,688.50

MEDICINAL PLANTS AND PREPARATIONS

Dom Helder: 340.45
Paulo Freire: 1,143.65
Procase: 320.00
PSA: 7,314.46
PVSA: 1,418.50
Dom Távora: 1,091.50
Total: 11,628.56

SERVICES

Paulo Freire: 1,300.00
PSA: 4,682.20
PVSA: 1,848.50
Dom Távora: 468.00
Total: 8,298.70

Production value (in Reais) referring to the socioeconomic monetary relations (commercialization) per group of products, per project

SEEDLINGS AND SEEDS

Dom Helder: 18.00
Paulo Freire: 1,615.00
Procase: 161.00
PSA: 5,137.00
PVSA: 37.00
Dom Távora: 225.00
Total: 7,193.00

OTHERS

Dom Helder: 3,076.32
Paulo Freire: 1,826.00
Procase: 4,030.00
PSA: 30,963.30
PVSA: 16,030.20
Dom Távora: 8,238.00
Total: 64,163.82

FOOD OF A NIMAL ORIGIN

Dom Helder: 66,829.02
Paulo Freire: 126,448.05
Procase: 48,235.50
PSA: 285,694.45
PVSA: 146,633.13
Dom Távora: 55,926.14
Total: 729,766.29

FOOD OF MIXED ORIGIN

Dom Helder: 23,485.55
Paulo Freire: 31,692.10
Procase: 8,734.50
PSA: 23,831.85
PVSA: 10,017.00
Dom Távora: 17,018.56
Total: 114,779.56

FOOD OF EGETABLE ORIGIN

Dom Helder: 62,408.86
Paulo Freire: 95,863.03
Procase: 42,324.41
PSA: 316,372.71
PVSA: 211,888.58
Dom Távora: 28,583.10
Total: 757,440.68

HANDICRAFTS

Dom Helder: 7,577.00
Paulo Freire: 24,489.75
Procase: 774.00
PSA: 11,782.00
PVSA: 3,060.00
Dom Távora: 50,344.65
Total: 98,027.40

MEDICINAL PLANTS AND PREPARATIONS

Dom Helder: 266.00
Paulo Freire: 768.00
Procase: 461.00
PSA: 5,818.30
PVSA: 3,264.20
Dom Távora: 59.00
Total: 10,636.50

SERVICES

Dom Helder: 238.00
Paulo Freire: 13,149.50
PSA: 1,400.00
PVSA: 10,130.00
Dom Távora: 8,433.70
Total: 33,351.20

- Table 17 shows the value of food production by type of processing and referring to non-monetary socioeconomic relations (donation, exchange and consumption) and, in table 18, this relation with what was sold/traded.

Table 17. Food production value (in Reais) related to non-monetary socioeconomic relationships by type of processing, and by project

Project	Natural or minimally processed	Processed	Salt, Sugar, Fats and Oils	Overall Total
Dom Hélder	70,071.34	14,490.81	91.00	84,653.15
Paulo Freire	270,468.95	33,178.95	1,432.00	305,079.90
Procase	42,140.01	6,650.44		48,790.45
PSA	489,782.04	40,001.78	152.50	529,936.32
PVSA	243,350.82	63,986.00	338.00	307,674.82
Dom Távora	70,225.85	6,010.25	785.00	77,021.10
Overall Total	**1,186,039.01**	**164,318.23**	**2,798.50**	**1,353,155.74**

Source: Own elaboration based on the Logbooks data.

Table 18. Value of food production (in reais) referring to socioeconomic monetary relations (commercialization) per type of processing, per project

Project	Natural or minimally processed	Processed	Salt, Sugar, Fats and Oils	Overall Total
Dom Hélder	104,937.88	47,693.55	92.00	152,723.43
Paulo Freire	187,913.38	64,677.30	1,412.50	254,003,18
Procase	63,280.91	36,013.50		99,294.41
PSA	486,744.76	137,533.25	1,621.00	625,899.01
PVSA	304,887.21	63,651.50		368,538.71
Dom Távora	76,144.24	24,081.56	1,302.00	101,527.80
Overall Total	**1,223,908.38**	**373,650.66**	**4,427.50**	**1,601,986.54**

Source: Own elaboration based on the Logbooks data.

To the farmer

By Marcilene Araújo

Female Farmer of the Community São José dos Cocos/Ipiranga do Piauí.
Beneficiary of the Project Viva o Semiárido.

We are from agriculture
With no degree for our future
Our learning comes from generations
Our day to day is lived with dedication

We saw a great need
To move forward with responsibility, indeed,
To take care of the environment, and
To make no use of pesticides in our land

Nature takes things in hand
There's only one rule to explain
For everything, there's a solution
Say "no" to pollution

Woman enters with kindness
In order to remind us
How she takes care of what she likes: the yard or the farm

Conclusions

The results of the systematization of the economic production of the women farmers of the semi-arid region, in a period of 13 months of notes in the Agroecological Logbooks, show that the wealth produced by them is extremely relevant and it should be considered in the process of formulating and claiming for public policies at the municipal, state, and federal levels. During the whole period, 909 women farmers from 112 municipalities added up more than 3.2 million reais produced by them, in activities that are generally undervalued or disregarded in conventional economic analyses.

It is important to note that 7 of the 13 months of notes were influenced by the economic crisis that deepened with the covid-19 pandemic, which certainly had negative impacts on the value of economic production recorded in the Logbooks. Important markets for income generation for women farmers were closed in the analyzed period from March to September of this year, as in the case of municipal fairs. Others, such as the PNAE, were interrupted in many states and municipalities, with the suspension of classes, which may have interfered with the farmers' ability to sell their production.

In any case, this amount continues to be disregarded in economic analyses, and does not appear in the composition of the GDP of municipalities and states, in public financing projects, or even in other official statistics. The production of wealth by women has impacts on other fields of life, especially on the food and nutritional security of families and communities, and on the conservation of socio-biodiversity. It is a diverse wealth, based especially on food production.

The data showed that women farmers manage at least 1,738 types of products, including intraspecific varieties, most of which are food products. In addition, about 60 types of services performed by them were reported in the Agroecological Logbooks.

The productive diversity of the women farmers and their economic logic based on pluriactivity is quite distinct from the productive specialization proposed by some projects supported by FIDA. The result of the systematization of the Agroecological Logbooks shows that the greater the productive diversification of women, the greater their economic production and, therefore, the public programs of Technical Assistance and Rural Extension should be developed in this direction, avoiding specialization and focusing on productive chains.

It was also shown that the social mediators of color and ethnic origin are limiting for the economic

production of women farmers, reflecting the need to adopt effective actions to overcome gender, race, and ethnic inequalities. Without this, any other policies and actions will have incomplete or ineffective results in overcoming poverty, one of the central objectives of the *Semear* International Program.

Two fields of public policies have shown to be fundamental for the strengthening of the economic autonomy of women farmers and, at the same time, of Food Security and Sovereignty, even though, under the impact of covid-19, they have suffered discontinuity in the period: i) the institutional purchasing policies, such as PAA and PNAE; and ii) the policies of access to water for drinking and production.

Such policies, when accessed, have been shown a positive and direct impact on the economic production of women farmers. Moreover, by recognizing women farmers for their economic role, such policies contribute to bring out of invisibility a part of the population that is still much marginalized in economic policies, overcoming the historical and narrow vision of public management about women, especially rural women.

This article brings important elements for the institutional reflection of the Projects and public managers in the states, something to be done with the women farmers, by the technical advisors. In addition, it provides important pointers for the orientation of FIDA's actions in Brazil, in order to fulfill some of its objectives of reducing poverty, increasing food security and strengthening the resilience of families in rural areas.

The Agroecological Logbooks are a tool and a methodology that has been widely adopted by the women farmers because they are easy to use. The advisory teams can use it in a simple way, just adding up the columns month by month, as a way of supporting the reflections with the women about the volume of resources generated by them. However, it was evident that the gender advisors of the projects and the space created for dialogue with this consulting firm, by means the Gender Workgroup, was fundamental for the successful implementation of the Agroecological Logbooks and to qualify the analytical results presented here.

Having a specific consulting company for the systematization made it possible to generate aggregate data with statistical rigor to subsidize broader analyses, at the project level, or even of public managers at the state and federal scopes. On the other hand, it became evident the need for a greater appropriation of the methodology for systematization and analysis by the projects, in order to generate specific information according to the eventual demands of public managers.

For this reason, it is recommended that new actions that adopt the Agroecological Logbooks as a political and pedagogical instrument provide resources for two levels of systematization: i) centralized systematization, done through specialized consultancy, to perform the aggregate analysis of data, create and update the unified database, as well as create the conditions for decentralized systematization at the level of projects; and ii) decentralized systematization of data per project for the production of specific analyses to the demands of public technicians and managers, through training and monitoring activities to project teams, carried out by specialized consultancy.

Finally, in the framework of the *Semear* International Program, it was possible to generate qualified data in the field of monitoring and evaluation of projects, incorporating the gender approach, especially regarding the changes and economic impacts resulting from their support in different contexts.

In this way, we hope to have contributed to subsidize institutional decision-making at different levels and the reorientation of actions that contribute to the fulfillment of the objectives of overcoming poverty and gender inequalities in rural areas in Brazil.

References

BRAGA, CÍCERO AUGUSTO SILVEIRA. Insegurança alimentar e nutricional em duas perspectivas: índice de insegurança alimentar dos estados brasileiros e a mulher como chefe em diferentes configurações de divisão do tempo. Dissertação (Mestrado em Economia Aplicada). Universidade Federal de Viçosa, 2018.

BRAGA, CÍCERO AUGUSTO SILVEIRA, COSTA, LORENA VIEIRA. Food insecurity and nutrition index: Disaggregation and evidence for Brazilian states , 2020. Pap. Reg. Sci. 99, 1749–1771. https://doi.org/10.1111/pirs.12549

BRASIL. MINISTÉRIO DA SAÚDE. SECRETARIA DE ATENÇÃO À SAÚDE. DEPARTAMENTO DE ATENÇÃO BÁSICA. **Guia alimentar para a população brasileira**. 2. ed. – Brasília, 2014. 156 p. : il.

DUFLO, ESTHER, 2012. Women Empowerment and Economic Development. J. Econ. Lit. 50, 1051–1079. https://doi.org/10.1257/jel.50.4.1051

IBGE. **Microdados da PNAD 2019**. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística. Disponível em <https://www.ibge.gov.br/estatisticas/sociais/educacao/9127-pesquisa-nacional-por-amostra-de-domicilios.html?=&t=o-que-e>. Acessado em: outubro 2020.

KERGOAT, DANIÉLE. A divisão sexual do trabalho e relações sociais de sexo. In: EMÍLIO, MARLI et al. (orgs). **Trabalho e Cidadania Ativa para as Mulheres: desafios para as Políticas Públicas**. 55 – 63p. São Paulo: Coordenadoria Especial da Mulher, 2003, p. 55-64.

OROZCO, AMAIA PÉREZ. Economía del género y economía feminista ¿Conciliación o ruptura? **Revista Venezolana de Estudios de la Mujer**. Caracas, 2005, Vol 10, N° 24.

ORGAIZACIÓN DE LAS NACIONES UNIDAS PARA LA ALIMENTACIÓN Y LA AGRICULTURA – FAO. In: NOBRE, Miriam; HORA, Karla. (Orgs.) **Atlas de las mujeres rurales de América Latina y el Caribe**. Chile, 2017. 68p.

POLANYI, K. **A Grande Transformação: as origens de nossa época** (1944). Trad. Fanny Wrabel. Rio de Janeiro: Campus, 2000.

TELLES, L. **Desvelando a economia invisível das agricultoras agroecológicas:** a experiência das mulheres de Barra do Turvo, SP. Dissertação (Mestrado em Extensão Rural). Universidade Federal de Viçosa, 2018.

This book used the typeface families
Stilu, Open Sans, and Nickainley.

IFAD
Investing in rural people

IICA

SEMEAR
INTERNACIONAL

cta
ZONA DA MATA
centro de tecnologias alternativas

PROJETO
PAULO FREIRE
DESENVOLVIMENTO PRODUTIVO E DE CAPACIDADES

PROJETO
DOM HELDER
CAMARA

PROJETO
viva o
SEMIÁRIDO

PROCASE
PROJETO DE DESENVOLVIMENTO SUSTENTÁVEL
DO CARIRI, SERIDÓ E CURIMATAÚ

PROJETO
DOM TÁVORA
DESENVOLVIMENTO DE NEGÓCIOS RURAIS
PARA PEQUENOS PRODUTORES

PRÓ-
SEMIÁRIDO

ISBN 978-92-9266-103-8