



Food and Agriculture  
Organization of the  
United Nations



**OVERCOMING  
HUNGER AND  
RURAL POVERTY**  
BRAZILIAN EXPERIENCES



FOOD AND AGRICULTURE  
ORGANIZATION OF THE UNITED  
NATIONS (FAO)

OVERCOMING HUNGER AND  
RURAL POVERTY  
BRAZILIAN EXPERIENCES

INTERNATIONAL FUND FOR  
AGRICULTURAL DEVELOPMENT  
(IFAD)

**First published in Portuguese and Spanish by the Food and Agriculture Organization of the United Nations (FAO)–  
Published in English and French by FAO and the International Fund for Agricultural Development (IFAD)  
Brasília, Brazil – Italy, Rome**

**Coordinator of the original edition in Portuguese:**

Alan Jorge Bojanic

**Coordinator of the English and French editions:**

Paolo Silveri

**Chapter authors:**

Caio Galvão de França, Vicente Penteadó Meirelles de Azevedo Marques, Mauro Eduardo Del Grossi

**Final editing of chapters:**

Caio Galvão de França in collaboration with Mauro Eduardo Del Grossi, Vicente Penteadó Meirelles de Azevedo Marques and Pedro Lucas Boareto

**Final editing of the English and French editions:**

IFAD Language Services, Paolo Silveri

**Spelling and grammatical review of the Portuguese version:** Cecília Fugita

**Spelling and grammatical review of the English and French versions:** IFAD Language Services

**Graphics and electronic editing:** Caco Bisol

**Photo cover page:** Sérgio Amaral, Kalunga, Quilombolas Goiás

Special thanks to Leticia Mendonça, Palova Souza, Ana Luiza Muller and Pedro Lucas Boareto for reading several of the chapters and for their valuable suggestions for improvements.

Thanks to all who collaborated by sending documents, data, and suggestions but are not responsible for the final version of the chapters: Adoniram Peraci Sanches, Ana Sílvia Costa Silvino, Andrea Lorena Butto Zarzar, Ayana Moufflet, Carolina Albuquerque, Carlos Mario Guedes de Guedes, Célia Hissae Watanabe, Cicero Bley Jr., Denise Reif Kroeff, Dione Maria de Freitas, Dulclair Sternadt, Erick Brigante del Porto, Ernesto Galindo, Espedito Rufino de Araújo, Fábio Hazin, Gerd Sparovek, Herlon Goelzer de Almeida, Janine Mello dos Santos, Helmut Schwarzer, João Luiz Guadagnin, José Humberto Oliveira, Karla Hora, Katia Cristina Favilla, Kelma Santos Cruz, Lilian dos Santos Rahaal, Luiz Humberto da Silva, Marcelo Cardona Rocha, Marcia Muchagata, Marco Pavarino, Maria do Socorro Oliveira, Miriam Oliveira, Mariana Schievano Danelon, Najla Veloso, Natascha Ronesbuch Valente, Otavio Valentim Bassaldi, Paulo Petersen, Raimundo Fagner Frota de Vasconcelos, Ricardo Garcia França, Roberto de Andrade, Savio da Silva Costa, Sergio Paganini Martins, Sue Takei, Thomas Patriota and Vicente Galileu F. Guedes.

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) or the International Fund for Agricultural Development (IFAD) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO and IFAD in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO or IFAD.

ISBN 978-92-5-109056-5

© FAO and IFAD, 2017

FAO and IFAD encourage the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO and IFAD as the source and copyright holder is given and that FAO's and IFAD's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via [www.fao.org/contact-us/licence-request](http://www.fao.org/contact-us/licence-request) or addressed to [copyright@fao.org](mailto:copyright@fao.org).

FAO information products are available on the FAO website ([www.fao.org/publications](http://www.fao.org/publications)) and can be purchased through [publications-sales@fao.org](mailto:publications-sales@fao.org).

IFAD publications are available on the IFAD website ([www.ifad.org/publications](http://www.ifad.org/publications)).

# CONTENTS

- v** Foreword
- vii** Preface
- viii** Abbreviations and acronyms
- 1** Breaking the cycle of rural poverty
- 13** Productive inclusion and cash transfers in overcoming rural poverty
- 35** Identification and registration of family farms
- 53** Credit and income guarantees for family farmers
- 79** Research and rural extension for family farming
- 103** Cooperativism in family farming and solidarity economics
- 119** Procurement of food produced by family farms
- 137** The school feeding programme and family farming
- 151** Citizenship and autonomy of rural women
- 171** Adaptation to conditions in the Semiarid region
- 193** Agroecology and family farming
- 211** Cadaster as a tool for environmental monitoring and restoration
- 223** Agriculture and climate change
- 241** Registration and advancement of small-scale fishing and aquaculture



## FOREWORD

Brazil has a long tradition of public policies and efforts to eradicate hunger and poverty. One need only look back to the 1950s and the outstanding contribution of Josué de Castro, a global pioneer in this field, who raised public awareness about the problem of hunger and proposed alternatives to fight it. Other Brazilians, such as Betinho, Hélder Câmara and Mauro Morelli, also contributed to the work in this field.

It is important to underscore that the right to food is enshrined in Amendment No. 64/2010 of Brazil's Constitution as an obligation of the State, and that the country has a very progressive food security law that institutionalizes the policy and lays the foundations for broad-based social participation in priority setting, expressed in the National Council on Food and Nutrition Security (CONSEA).

It was this wealth of experience (reflected in programmes and plans such as Zero Hunger, Bolsa Família and Brazil Without Extreme Poverty, applied nationwide from 2003 to 2013), together with other factors, that took the country off the Hunger Map in 2014.

Thus, the report you are looking at is designed to update the information and describe concrete Brazilian initiatives to facilitate South-South cooperation to a wider audience, including policymakers working to improve food security and



fight poverty. In other words, it is a manual of good practice, if you will, for public authorities, technical personnel, NGOs and the general public in other Latin American, Caribbean and African countries. We believe that this tool will enable us to contribute to the implementation of the CELAC Plan for Food Security, Nutrition, and the Eradication of Hunger and help meet the objective of eradicating hunger in Latin America and the Caribbean.

Selecting the experiences presented here was not easy, given the wealth of valuable federal, state, municipal and civil society initiatives. However, it was necessary to opt for experiences that had aroused high international interest within the framework of the United Nations Sustainable Development Goals, which meant working in the social, political, institutional, economic and environmental realms and fostering interaction among them. We remain open to future publications that include other initiatives or further explore those described here.

Good reading!

Alan Bojanic  
*FAO Representative in Brazil*

The book you have in your hands is the fruit of collaboration between the Food and Agriculture Organization of the United Nations (FAO) and the International Fund for Agricultural Development (IFAD), the United Nations agency specializing in rural development.

Originally published in Portuguese by FAO, the text has been translated by IFAD to make its contents accessible to English- and French-speaking development practitioners, advisers and decision-makers. The book reflects the two institutions' commitment to maximizing the benefits that could derive from the knowledge of the public policies that, in little more than a decade (2003-2013), took Brazil off the hunger map.

Although the country has a long tradition of efforts to reduce hunger and poverty, Brazil's leadership in crafting social and rural development policies became unquestionable at the turn of the century. *Fome Zero* (Zero Hunger) and *Bolsa Família* (Family Allowance) were the pioneers of a wide range of conditional cash transfer programmes that, having spread all over Latin



America, made a massive contribution to lifting more than 70 million people out of poverty in the region.

IFAD, through the FIDA MERCOSUR programme for policy dialogue on rural development, began spreading the word about Brazil's rural policies in Latin America some 15 years ago. Now it is time, however, to move beyond the region, as we are convinced that Brazil's model might very well serve other countries committed to eradicating extreme poverty and hunger in Africa, Asia and the Pacific.

IFAD and FAO are constantly looking for opportunities to join forces in South-South cooperation initiatives. Both agencies are aware that the challenges posed by the modern world are enormous, and no institution or country can overcome them without partnering with others – whether governments, civil society, private sector, NGOs or bilateral and multilateral development agencies.

Both institutions think and hope that Brazil's successful rural development policies shall soon become a common heritage of humanity. This publication is a small contribution in that direction.

We truly hope that this book will serve as an inspiration and heighten your efforts to build a society with no more extreme poverty or hunger – a society in which no one is left behind. This is the promise that world leaders made to their people across the world when they adopted the Sustainable Development Goals in 2015. This is the promise we are striving to fulfil.

Paolo Silveri  
IFAD Country Programme Manager for Brazil



## PREFACE

The eradication of hunger and reduction of poverty and social inequality have garnered widespread international recognition for Brazil. These achievements have aroused great interest in the country's successful public policies in food and nutrition security, notably the Zero Hunger and *Bolsa Família* programmes and the National Programme to Strengthen Family Farming (PRONAF). The interest of many countries often translates into concrete requests for information about the design and implementation of social inclusion programmes and policies in Brazil.

In this context, trilateral South-South cooperation plays a critical role, promoting horizontal exchanges among the developing countries on good practices in food and nutrition security. A good example is the Brazil-FAO programme entitled "Support for National and Subregional Strategies for Food and Nutrition Security and Poverty Alleviation in the Countries of Latin America and the Caribbean", which has made it possible to share Brazil's experiences with Latin America, the Caribbean and Africa. Projects under this programme collaborate in improving the food and nutrition security of the most vulnerable populations in these regions and in the integration of policies for reducing extreme poverty.

This is the perspective from which *Overcoming Hunger and Rural Poverty: Brazilian Experiences* should be viewed. It is a valuable tool for improving the shar-

ing of practices, especially within the framework of South-South cooperation. This first didactic and informative compilation of policies with proven success in the field of food and nutrition security will give new impetus to the dissemination of knowledge. It is hoped that access to this publication with its wealth of good experiences in Brazil can inspire other countries to get off the Hunger Map by embracing policies that promote fairer and more equitable economic and social conditions.

João Almino

*Ambassador*

*Director, Brazilian Cooperation Agency (ABC/MRE)*

## ABBREVIATIONS AND ACRONYMS

|   |  |
|---|--|
| <b>ABC</b> Brazilian Cooperation Agency   | <b>Caisan</b> Interministerial Chamber on Food and Nutrition Security        |
| <b>ANA</b> National Agroecology Coalition   | <b>CAR</b> Rural Environmental Register                                      |
| <b>ANA</b> National Water Agency  | <b>CARICOM</b> Caribbean Community   |
| <b>ANATER</b> National Agency for Technical Assistance and Rural Extension  | <b>CDAF</b> Direct Procurement from Family Farms                             |
| <b>APIMC</b> One Million Cisterns Programme Association   | <b>CDS</b> Procurement with Simultaneous Donation                            |
| <b>ASA</b> Semiarid Coalition   | <b>CELAC</b> Community of Latin American and Caribbean States                |
| <b>ATER</b> Technical Assistance and Rural Extension  | <b>CF</b> Federal Constitution   |
| <b>Bacen</b> Central Bank of Brazil   | <b>CIAPO</b> Interministerial Chamber for Agroecology and Organic Production |
| <b>BNDES</b> Brazilian Development Bank   | <b>CI</b> Conservation International Brazil                                  |
| <b>BOKU</b> Universität für Bodenkultur Wien [University of Natural Resources and Applied Life Sciences, Vienna, Austria] | <b>CIF</b> Climate Investment Fund   |
| <b>BPC</b> Continued Service Benefit Plan   | <b>CLUA</b> Climate and Land Use Alliance                                    |
| <b>BSM</b> Brazil without Extreme Poverty Plan  | <b>CMN</b> National Monetary Board   |
| <b>CadÚnico</b> Unified Social Programme Register   | <b>CNA</b> National Agriculture and Livestock Confederation                  |

- Conab** National Crop Agency
- Conape** National Aquaculture and Fisheries Board
- Concrab** Confederation of Land Reform Cooperatives in Brazil
- Condraf** National Board for Sustainable and Cooperative Rural Development
- Confesol** Confederation of Central Rural Credit Cooperatives with Solidarity-based Interaction
- Consea** National Council on Food and Nutrition Security
- Contag** National Confederation of Farmworkers
- Cooperaf** National Programme for the Advancement and Strengthening of Solidarity Cooperativism and Associativism in Family Farming and Land Reform
- CPG** Standing Management Committee(s)
- CPLP** Community of Portuguese-speaking countries
- CPRStock** Formation Support modality
- DAP** Declaration of Eligibility for PRONAF
- DPMRQ** Bureau of Programmes for Rural and Quilombola Women
- Embrapa** Brazilian Agricultural Research Corporation
- Embrater** Brazilian Enterprise for Technical Assistance and Rural Extension
- FAO** Food and Agriculture Organization of the United Nations
- FAO RLCFAO** Regional Office for Latin America and the Caribbean
- FASE** Federation of Social Assistance and Educational Agencies
- FAT** Workers' Support Fund
- FBMC** Brazilian Forum on Climate Change
- Fetraf** Federation of Family Farmworkers
- FIDA** International Fund for Agricultural Development
- FIDAMERCOSUR** IFAD's Programme for the Southern Common Market
- FIP** Forest Investment Programme
- FNDE** National Education Development Fund
- FNE** Constitutional Fund for Financing the Northeast
- FNE Verde** Programme to Finance Environmental Preservation and Monitoring
- Funai** National Indian Foundation
- GEF** Global Environment Fund
- HFLACI** Hunger Free Latin America and the Caribbean Initiative
- Ibama** Brazilian Institute of Environment and Renewable Natural Resources
- IBGE** Brazilian Geographical and Statistical Institute
- IFAD** International fund for Agricultural Development
- INCRA** National Colonization and Land Reform Institute
- INDC** Intended Nationally Determined Contributions
- INDE** National Spatial Data Infrastructure
- Inovacar** Observation, Verification and Learning Initiative of the Rural Environmental and Environmental Regularization Register

|   |  |
|---|--|
| <b>INSA</b> National Institute for the Semiarid Region  | <b>PAS</b> Sustainable Amazon Plan   |
| <b>IYFF</b> International Year of Family Farming  | <b>PBF</b> Bolsa Família Programme   |
| <b>MAPA</b> Ministry of Agriculture, Fisheries and Food Supply  | <b>PGPAF</b> Family Farm Price Guarantee Programme   |
| <b>MCR</b> Rural Credit Manual  | <b>PISCO</b> Public Interest Civil Society Organization  |
| <b>MCTI</b> Ministry of Science, Technology and Innovation  | <b>Planapo</b> National Agroecology and Organic Production Plan  |
| <b>MDA</b> Ministry of Agrarian Development   | <b>PNAE</b> National School Feeding Programme  |
| <b>MDS</b> Ministry of Social Development and the Fight against Hunger  | <b>PNATER</b> National Technical Assistance and Rural Extension Policy                                       |
| <b>MERCOSUR</b> Southern Common Market  | <b>PNC</b> National Policy on Cooperativism  |
| <b>MMA</b> Ministry of Environment  | <b>PNGATI</b> National Policy for Territorial and Environmental Management of Indigenous Lands               |
| <b>MPA</b> Ministry of Fisheries and Aquaculture  | <b>PNMC</b> National Policy on Climate Change  |
| <b>MPOG</b> Ministry of Planning, Budget and Administration   | <b>PPA</b> Pluriannual Plan  |
| <b>MRE</b> Ministry of Foreign Affairs  | <b>PPCDAM</b> Plan of Action for the Prevention and Control of Deforestation in the Legal Amazon             |
| <b>MST</b> Landless Workers Movement  | <b>PPCerrado</b> Action Plan for the Prevention and Control of Deforestation and Forest Fires in the Cerrado |
| <b>MTE</b> Ministry of Labour and Employment  | <b>Programa ABC</b> Programme for the Reduction of Greenhouse Gas Emissions in Agriculture                   |
| <b>MTPS</b> Ministry of Labour and Social Security  | <b>Pronaf</b> National Programme to Strengthen Family Farming  |
| <b>NFI</b> National Forest Inventory  | <b>Pronamp</b> National Programme to Support Medium-sized Rural Producers                                    |
| <b>OCB</b> Organization of Brazilian Cooperatives   | <b>Pronater</b> National Technical Assistance and Rural Extension Programme                                  |
| <b>OEPA</b> State Agricultural Research Organizations   | <b>PSPA</b> Fisheries and Aquaculture Harvest Plan   |
| <b>OGU</b> Federal Budget   |  |
| <b>P1+2</b> One Land, Two Waters Programme  |  |
| <b>P1MC</b> Training and Mobilization Programme for Living in the Semiarid Region: One Million Rural Cisterns |  |
| <b>PAA</b> Food Acquisition Programme   |  |
| <b>PAA Leite</b> PAA Incentives for Milk Production and Consumption   |  |



**RAIS** Annual Social Information  
Report

**REAF** Specialized Commission on  
Family Farming

**REDD** Reducing Emissions from  
Deforestation and Forest  
Degradation

**RGP** General Fisheries Register

**RL** Legal Reserve

**SAF** Secretariat for Family Farming  
of the Ministry of Agrarian  
Development

**SAFs** Agroforestry systems

**SEAF** Family Farm Insurance

**Senar** Social Security and the Rural  
Training Service

**SEPPIR** Secretariat for the  
Advancement of Racial Equality

**Sescoop** National Cooperative  
Education Service

**SICAR** Rural Environmental  
Register System

**SIPAF** Family Farming Label

**SIPRA** Land Reform Project  
Information System

**SPM** Secretariat of Policies for  
Women

**UN** United Nations

**UNDP** United Nations Development  
Programme

**Unicafes** National Union of  
Cooperatives for Family Farming  
and Solidarity Economics

**UNICEF** United Nations Children's  
Fund

**Unicopas** National Union of  
Solidarity Cooperativist  
Organizations

**UNIDO** United Nations Industrial  
Development Organization

**Unisol** Center for Solidarity  
Cooperatives and Enterprises

**USAID** United States Agency for  
International Development

# BREAKING THE CYCLE OF RURAL POVERTY

The Food and Agriculture Organization of the United Nations (FAO) has declared Brazil a hunger-free country (FAO, 2014a). This feat is the result of its political decision to promote economic growth with income distribution and a range public policies that significantly impacted families in situations of social vulnerability. The country's impressive results in reducing inequality and alleviating poverty have garnered widespread international recognition.

It has long been known that economic growth does not naturally result in the reduction of poverty and inequality, and that robust State intervention is required to reset priorities, introduce innovations in public administration, and synchronize economic policy with social policy.

In this understanding, President Luiz Inácio Lula da Silva made it his government's priority to fight hunger and poverty, implementing the Zero Hunger strategy<sup>1</sup>, which combined emergency and structural action with the advancement of social participation and mobilization as part of a grand strategy to create a vast domestic market and democratize Brazilian society

The *Bolsa Família* (Family Allowance) programme, increase in the minimum wage and the universalization of social security created an extensive social protection network that, supplemented with a package of economic development policies,

---

<sup>1</sup> For information about the Zero Hunger strategy, see Graziano da Silva, Del Grossi and França (2010).

even in rural areas, yielded results that were astonishing for their breadth and the speed with which they had been achieved. Nonetheless, all of this was still not enough to overcome extreme poverty.

Based on this finding and the successes achieved, President Dilma Rousseff embraced the commitment to eradicate extreme poverty and drafted and implemented the Brazil without Extreme Poverty plan<sup>2</sup>. Through a multi-dimensional approach and “interconnected strategies tailored to each context [...] and each group”, with special emphasis on children and adolescents, the plan “addressed multiple dimensions and aspects of poverty” (Rousseff, 2014, pp. 17 and 18). In addition to income support, the plan created opportunities for inclusion and the exercise of rights, especially the right to health and education, with major innovations, such as active searches<sup>3</sup>, which also yielded impressive results.

Fundamental to this recent trajectory is the democratic way in which public policies were formulated and implemented – that is, through intense dialogue and social engagement, expressed through participation in boards and management committees and through information transparency, enabling beneficiaries, social movements and civil society organizations to take part in all stages of the political cycle.

The success of the Brazil without Extreme Poverty plan heightened the already substantial international impact of the Zero Hunger strategy, turning the Brazil experience into a global model. This experience showed that it is possible to eradicate hunger and extreme poverty and overcome poverty, making efforts to this end the core of a national democratic development project.

## THE SOUTH-SOUTH COOPERATION AGENDA

The Brazilian government simultaneously reoriented its foreign policy and, in collaboration with FAO, intensified its agenda for South-South exchange and cooperation with countries in Latin America, the Caribbean and Africa

<sup>2</sup> For information about the development and implementation of the Brazil without Extreme Poverty plan, see Campello, Falcão and Costa (2014).

<sup>3</sup> For information about active searches, see the section “Productive inclusion and cash transfers in overcoming rural poverty” in this publication.

to contribute to the discussions and the formulation of public policies for the eradication of hunger and poverty and to serve as a feedback mechanism for its own policies.

Based on the countries' progress and the common challenges identified, new possibilities for cooperation are being explored, evaluating regional, subregional, bilateral, trilateral or multilateral strategies.

In this context, Brazil's stature in the international community with respect to South-South cooperation has been growing, and it has forged important partnerships with FAO at the global, regional, and national level.

FAO is working constantly and in different ways to support the implementation and replication of Brazilian experiences, combining its knowledge and institutional expertise with the country's development priorities, since in FAO's view, Brazil's policies represent a "sound and productive mechanism for social inclusion and protection" (FAO, 2014b).

## THE TWO-WAY APPROACH

Through its Reviewed Strategic Framework (FAO, 2013), FAO has collaborated with governments and civil society to tackle the modern dilemmas that affect the socio-economic dynamic, especially the issues of poverty, hunger, the effects of climate change, the preservation of biodiversity and fair and inclusive trade. FAO's contribution is grounded in the "two-way" approach, which combines and integrates urgent and necessary assistance to the most vulnerable families in emergencies with lengthier processes and structural measures that will enable families to enjoy the basic rights enshrined in the commitments assumed by the countries of the region in diverse international and global forums.

This approach applied to the rural context permits the integration of emergency action to guarantee food and nutrition security with specific appropriate measures to facilitate rural communities' enjoyment of basic rights and access to public services by strengthening them economically and promoting sustainable, inclusive development.

There should be an emphasis on the Regional Hunger-free Latin America and the Caribbean Initiative 2025, which supports national, regional and subregional initiatives to fight hunger, promote food and nutrition security and guarantee the right to food in the region. At the national level, the initiative furthers adoption of the intersectoral approach and the strengthening of institutional capacity in policy design and implementation.

At the regional level, through the Hunger-free Latin America and the Caribbean Initiative 2025, FAO international cooperation programmes were set up with several countries in the region, among them Brazil, Mexico, Venezuela and Argentina.

## FRAMEWORK COOPERATION AGREEMENT

Since 2008, the Government of Brazil and the FAO Regional Office for Latin America and the Caribbean (FAO RLC) have had a framework agreement on an international cooperation programme to promote the sustainable development of family farming and food and nutrition security. The Brazilian Cooperation Agency (*Agência de Cooperação Brasileira*) under the Ministry of Foreign Affairs is the institution responsible for coordinating and monitoring the programmed activities (FAO, 2015).

The programme's activities are designed to strengthen the institutional capacity of countries to formulate and implement public policies in priority areas at both the national and regional level. The activities include short-term national policies to restore agricultural production chains and systems and guarantee access to food in natural disasters (distribution of seeds, access to water and rehabilitation of infrastructure). They also include medium-term structural measures at the national level to turn family farms into food suppliers, promote public food markets and modernize the public institutions that oversee food security and other measures to guarantee people's access to food in every country.

The Brazil-FAO international cooperation programme is a triangular cooperation initiative, one of the modalities of international development cooperation, that guides the development and execution of regional projects overseen and financed by Brazilian government ministries and sectoral institutions.

The following technical cooperation projects, with their respective Brazilian implementing institutions, are worth mentioning: “Strengthening Opportunities for Dialogue between FAO, the Government and Civil Society: new mechanisms for developing public policies, support for family farming and food and nutrition security,” with the Ministry of Agrarian Development (MDA); “Support for National and Subregional Food and Nutrition Security Strategies and Overcoming Poverty in Latin America and the Caribbean,” with the Ministry of Social Development and the Fight against Hunger (MDS); “Strengthening of School Feeding Programmes through the Hunger-free Latin America and the Caribbean Initiative 2025,” with the National Education Development Fund under the Ministry of Education (FNDE); “Deployment of Services and Consolidation of the Fisheries and Aquaculture Network of the Americas,” (MPA), with the former Ministry of Fisheries and Aquaculture (currently MAPA); “Strengthening Agro environmental Policies in Latin American and Caribbean Countries,” with the Ministry of Environment (MMA); “Strengthening the Cotton Sector through South-South Cooperation,” with the Brazilian Cooperation Agency (ABC) of the Ministry of Foreign Affairs and the Brazilian Cotton Institute (FAO, 2015).

FAO also has projects under the “Emergency Humanitarian Assistance Programme,” which operates in countries affected by social and natural disasters and conflicts. The projects are funded by the Ministry of Foreign Relations’ Coordination Office for International Action to Fight Hunger (CGFOME) (FAO, 2015).

The projects are administered by FAO RLC, which is responsible for their technical and financial execution. They have a steering committee charged with general operations, made up of the government institutions that oversee the projects, sector agencies, the ABC, and the FAO Regional Office.

The projects ensure that the governments of the countries in which they operate take ownership of the activities from the outset and that the results preserve the desired replicability and sustainability in each country. To accomplish this, they are supported by the FAO country representatives, who are responsible for encouraging, promoting, and supervising all activities in order to guarantee close collaboration with the respective national institutions (FAO, 2015).

## FAO ACTIVITIES IN BRAZIL

FAO assistance in Brazil is currently based on the Country Programming Framework 2013-2017” (MPP), aligned with the United Nations Development Assistance Framework (UNDAF) for Brazil 2012-2015, in four priority areas: food security, including the right to an adequate and healthy diet; South-South cooperation; the eradication of extreme poverty, with a focus on family farming and aquaculture; and the sustainable management of natural resources (FAO, 2014b).

National technical cooperation projects are implemented by the FAO Representation in Brazil and coordinated by ABC with the participation of the respective sector ministries.

Eight projects are currently under way in Brazil<sup>4</sup>, among them: “Support for the Improvement and Consolidation of the National Food and Nutrition Security Policy,” implemented in partnership with the MDS; “The New Productive and Social Structure of Family Farming in Brazil,” jointly with the MDA; “Rehabilitation of Degraded Areas in the Amazon Region – PRADAM,” with MAPA; and “Consolidation of the National Forest Programme,” run by the MMA. Also important are the international cooperation projects with the Brazilian government supported by the Global Environment Fund (GEF), whose activities include work on the development of a national forest inventory.

## ABOUT THIS PUBLICATION

In this context, there is growing interest in Brazil’s experience in eradicating hunger and overcoming poverty, especially in rural areas, which is based on an extensive social protection network, food and nutrition security and land reform policies tailored to family farmers and traditional rural communities and the advancement of rural women’s autonomy.

These elements constitute a democratic rural development agenda implemented since the revival of the State’s role as the agent of development and the entity responsible for providing public services and guaranteeing that the most

<sup>4</sup> For additional information on FAO projects and programmes in Brazil, visit <http://www.fao.org/brasil>.



vulnerable sectors can exercise their rights, with new strategies and appropriate instruments.

This interest has been aroused by the results obtained and new demands for sharing experiences and cooperation in institutional innovations and the design and implementation of public policy instruments—interest developed in a dynamic of triangular South-South cooperation that reflects the will of the countries to search for solutions based on their own experiences in the region and their recognition of the value of forums for political dialogue and regional integration.

This publication provides a systematic review of some of Brazil's successful experiences with respect to the agenda for overcoming rural poverty and promoting sustainable development through the Zero Hunger programme and the Brazil without Extreme Poverty plan and the internal dynamics of those experiences.

The experiences selected are those that at this time are becoming more relevant to FAO and the developing countries, given the growing interest in South-South cooperation and exchanges with Brazil, which now include Brazil-FAO RLC technical cooperation projects.

The purpose of this publication is not to prescribe the models to follow but to share aspects of the Brazilian experience that reveal the usefulness and sustainability of the public policies. It describes aspects of the context and policy formulation and implementation processes; the legal and institutional framework; the management and operation of the instruments, with emphasis on coordination and integration among sectors and governments and with the subnational areas of government, chains of participating stakeholders and the dynamic of social participation, as well as the outcomes obtained and lessons learned.

The chapters drew from the legal frameworks of the policies, programmes and institutional submission and evaluation documents, and, given their purpose, are more descriptive in nature. When possible, they refer the reader to publications that explore the topics in greater depth<sup>5</sup>.

<sup>5</sup> For easier reading of the chapters in this publication, it was decided in some cases to use the authors' ideas and concepts without specifically marking them, ensuring, however, the clear identification of authorship and of the bibliographic reference.

The first chapter deals with recent trends in overcoming rural poverty, focusing especially on the supplementary cash transfer instrument and the productive inclusion strategy of the Brazil without Extreme Poverty plan, supplemented by other programmes that are part of the country's social protection network.

Next comes the chapter on the identification and registration of family farms, the Declaration of Eligibility for PRONAF (National Programme to Strengthen Family Farming), which is a prerequisite for taking advantage of a range of public policies, some of which are the subject of other chapters in this publication. One of the chapters is on PRONAF, which provides differentiated credit lines for the sector, as well as insurance instruments to cover risks related to climate (Crop Guarantee Programme for Family Farms) and prices. Another chapter deals with research and extension programmes to promote sustainable production among family farms and rural communities. Yet another explores the strengthening of policies for the economic structuring of family farming.

The sequence includes chapters that describe experiences with public purchasing of family farm products and expand the discussion to the human right to adequate nutrition: one on the Food Acquisition Programme and another on the National School Feeding Programme.

The importance of women's participation and public policy instruments for remedying the inequality and subordination to which women are subject is dealt with in the chapter "Citizenship and Autonomy of Rural Women".

The important experience in developing and implementing policies for adaptation to conditions in the semiarid region, which involved active civil society engagement, justified the inclusion of a specific chapter on this topic.

8 The challenges and instruments for promoting sustainable development are addressed in the next three chapters: one on the advancement of agroecology in family farming; another on the use of the cadastre as an instrument for environmental monitoring and restoration; and the other on action to mitigate and adapt to climate change in agriculture.

Finally, there is a chapter devoted to policies for the registration and advancement of small-scale fishing and aquaculture.

## CONTRIBUTION TO REGIONAL INTEGRATION

This publication contains chapters on areas that are already being addressed in the international cooperation between Brazil and FAO, with a consistent and expanding agenda linked to the regional political processes of the participating countries, among them the Community of Latin American and Caribbean States (CELAC), the Southern Common Market (MERCOSUR), and the Caribbean Community (CARICOM).

The recent experience with the Brazil-FAO International Cooperation Programme reveals the full potential of technical cooperation linked with forums and initiatives for subregional and regional dialogue and the action of multilateral organizations in keeping with national and regional priorities. This is expressed in the synergy between national implementation processes, the consolidation of integrated food security, family farming strengthening and sustainable development policies and the construction of regional agendas for cooperation and the sharing of experiences—a real step forward in the development of regional public policy instruments, jointly and cooperatively furthering integration among nations and peoples.

This cooperation model is not confined to relations between governments, and has proven capable of increasing opportunities to bring social movements and civil society organizations together and foster exchanges in forums for dialogue between governments and civil society.

An illustrative case is gender activities to remedy the inequality experienced by rural women. The programme has contributed at the national level (with support for the development of policies to promote the autonomy and equality of rural women in Brazil), the subregional level (with initiatives to support the REAF regional gender programme and Central American and Caribbean activities) and the hemispheric level (with the Meeting of Rural Women of Latin America and the Caribbean and its contributions to the CELAC gender agenda)—initiatives that at the same time bolster the capacity of national governments, strengthen women's organizations and movements and contribute to the construction of a common regional agenda.

This experience with dialogue, cooperation, and the sharing of ideas and experiences has much to contribute, especially to the implementation of the CELAC Plan for Food and Nutrition Security, approved at the III Summit of Heads of State and Government, held in Costa Rica in January 2015—a contribution that is even more important because of the call issued by the region’s heads of government for FAO to participate in the implementation of this plan.

Thus, there is a favourable climate in the region for tackling new challenges to further South-South cooperation. An important condition has been met, since, as José Graziano da Silva, Director General of FAO, has pointed out, “the governments’ political commitment is turning into effective action and tangible results in the fight against hunger”. (FAO, 2014b).

This is why, for the celebrations of World Food Day 2015, FAO adopted the theme of “Social Protection and Agriculture: Breaking the Cycle of Rural Poverty.”

By shining a spotlight on some of the successful experiences in Brazil’s recent efforts to overcome hunger and extreme poverty under a new national development model, a product of the virtuous combination of political will and social participation on the path to Zero Hunger and Brazil without Extreme Poverty, we can share a new commitment proposed by President Dilma Rousseff: “the end of extreme poverty is just the beginning.”

Good reading!

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**CAMPELLO, T.; FALCÃO, T. and COSTA, P. V. (Orgs.).** 2014. *O Brasil Sem Miséria*. Brasília: MDS. (Available from <http://www.brasilsemmiseria.gov.br>. Accessed 7/1/2016).

**CELAC.** 2015. *Plan de Seguridad Alimentaria y Nutrición e Erradicación del Hambre*. Santiago: FAO, CEPAL, ALADI. (Available from [http://www.fao.org/fileadmin/user\\_upload/rlc/docs/celac/ESP\\_lan\\_CELAC\\_2025.pdf](http://www.fao.org/fileadmin/user_upload/rlc/docs/celac/ESP_lan_CELAC_2025.pdf). Accessed 7/1/2016).

**FAO.** 2013. *38.º Conferência – Marco estratégico revisado*. Rome. (Available from <http://www.fao.org/docrep/meeting/027/mg015s.pdf>. Accessed 7/1/2016).

**FAO.** 2014a. *O estado da segurança alimentar e nutricional no Brasil: um retrato multidimensional. Relatório 2014*. Brasília: FAO.

**FAO.** 2014b. *O Brasil e a FAO: construindo resiliência e segurança alimentar e nutricional sustentável*. Brasília: FAO.

**FAO.** 2015. *Programa de Cooperación Internacional Brasil FAO*. (Available from <http://www.fao.org/in-action/programa-brasil-fao/resumen/es/>. Accessed 8/1/2016).

**FAO.** Undated. *Portal FAO Brasil*. (Available from <http://www.fao.org/brasil>. Accessed 8/1/2016).

**FAO, IFAD and WFP.** 2014. *The State of Food Insecurity in the World 2014 – SOFI 2014. Strengthening the enabling environment for food security and nutrition*. Rome, FAO.

**GRAZIANO DA SILVA, J.; DEL GROSSI, M. E.; and FRANÇA, C. C.** 2010. *The Fome Zero (Zero Hunger) Program: The Brazilian experience*. Brasília: MDA. (NEAD Special Series, 13).

**ROUSSEFF, D.** 2014. Prefácio. In: **CAMPELLO, T.; FALCÃO, T. and COSTA, P. V. (Orgs.).** *O Brasil Sem Miséria*. Brasília: MDS.



## PRODUCTIVE INCLUSION AND CASH TRANSFERS IN OVERCOMING RURAL POVERTY

Since 2003, Brazil has lifted 36 million people out of extreme poverty, 22 million of them since 2011. In 2014, the country was taken off the FAO Hunger Map (Brazil, 2015, pp. 12, 35 and 139) and, what is more, exceeded the Millennium Development Goal (MDG) of reducing child mortality (CAISAN, 2013).

The national extreme poverty rate was lowered from 7.6% in 2004 to 2.8% in 2014, primarily benefitting children under 5. In that same period, the poverty rate plummeted from 22.3% to 7.3%. The Gini coefficient, which measures inequality in income distribution, fell from 0.535 to 0.494 for household income between 2004 and 2014, with the 10% poorest households being the main beneficiaries of the improvement in income distribution (MDS, 2015a).

Populations living in rural areas have made even greater progress: extreme poverty fell from 21.8% in 2002 to 7.6%, in 2014, a 65.2% reduction; and poverty fell from 49% in 2002 to 20.2% in 2014, a 58.7% reduction (MDS, 2015c).

Recent years have seen a substantial improvement in the living conditions of the general population. In 2014, almost 99% of households had a stove;



98% had a refrigerator; 94% had some type of telephone; 99% had electricity; 90.9% had refuse collection; 86.4% had drinking water connections and 64.5% had indoor plumbing (MDS, 2015b, p. 14). The Human Development Index (HDI) captured this improvement, jumping from 0.683 in 2000 to 0.755 in 2014, registering the highest HDI growth in Latin America and the reduction of multidimensional poverty from 4% in 2006 to 2.9% in 2013 (UNDP, 2015)

The following data illustrate the progress made in education: in 2014, the school enrolment rate was 98.5% for children aged 6-14; 84.3% for youth aged 15-17; 82.7% for children aged 4-5; and 30% for young adults aged 18-24 (MDS, 2015b, p. 13). There is strong evidence that the Bolsa Família programme (PBF) has helped reduce grade retention (Oliveira and Soares, 2013, p. 23).

## POLITICAL WILL AND NEW POLICIES

These data are the result of political decisions in 2003 to make fighting hunger and poverty a government priority and to focus economic and social policy on promoting a new economic growth cycle based on strengthening the domestic market through the distribution of income and the reduction of inequalities. Through the Zero Hunger strategy, an integrated structural and emergency action agenda was established in which conditional cash transfers were an important instrument for income distribution and the exercise of basic social rights.

The challenge was daunting, because in 2003, the only feature common to cash transfer programmes was their target group (individuals from poor households), and the situation could be described as “a tangle of isolated initiatives: Objectives and target groups were different but overlapping; no programme was universal or pretended to be so; none was national in scope; each had its own executor and information systems that did not communicate with each other; coordination was minimal and the value of the benefits and inclusion criteria varied.” (Soares and Sátyro, 2010, p. 31).

The *Bolsa Família* programme started out with 3.6 million beneficiary households in 2003 and by August 2010 had 12.7 million (Modesto and Castro, 2010, p. 15). This, together with the policy to increase the minimum

wage, helped expand the social protection network, the formal labour market, and rural development policies, lifting 28 million Brazilians out of poverty.

The examination of these recent developments in this chapter prioritizes certain junctures and some of the main actions taken by the federal government, stressing activities that benefit poor populations in rural areas. Using the data on the recent trend in the reduction of poverty and inequalities, we take a look at the Brazil without Extreme Poverty plan, pointing to its innovations and prioritizing its cadastre feature, cash transfer instrument and inclusive rural production strategy. These elements are supplemented with some of the policies that make up the social protection network, which includes the rural population. Finally, we offer some thoughts on the outcomes obtained and lessons learned in the execution of the plan.

## THE BRAZIL WITHOUT EXTREME POVERTY PLAN

The results of the Demographic Census 2010, conducted after the country took up the challenge of ending hunger, showed that 16.2 million people were still living in extreme poverty, especially in rural areas (Brazil, 2011a).

Thus, the strategic decision was made to eradicate extreme poverty, building on current achievements. To this end, the Brazil without Extreme Poverty plan (BSM) was introduced in 2011. As President Dilma Rousseff has noted, this plan “was created by revamping, expanding and integrating several social programmes, linking the activities of the federal government with those of state and municipal governments” (Rousseff, 2014, p. 17). In order to address “a phenomenon that goes beyond income, the Brazil without Extreme Poverty plan has been designed and implemented from a multidimensional perspective, with interconnected, differentiated strategies for each context—city and country—and each public,” creating “opportunities for inclusion” for different vulnerable groups (Rousseff, 2014, p. 17).

Brazil without Extreme Poverty<sup>1</sup> was born of the cumulative experience with the social policies in place since 2003. Providing continuity for them and improving on successful experiences produced “five significant changes in direction that altered and accelerated the course of social policies in Brazil”: (i)

<sup>1</sup> For information on the development of the Brazil without Extreme Poverty plan, see Campello and Mello (2014).

“definition of an extreme poverty line to set government priorities for including and providing support for the extremely poor population”; (ii) “adoption of the goal of universalizing policies to fight poverty so as to include all persons who had the profile and the right”; (iii) development of the active search strategy, in which “the State embraced the responsibility of locating, registering and including” poor people “in the actions offered”; (iv) the federal government’s “creation of a new design for *Bolsa Família* and supplementation of household incomes to guarantee that no Brazilian would receive less than R\$ 70.00 in household income and *Bolsa Família* benefits”; (v) development of a “strategy to expand the economic inclusion of adults living in poverty, based on the creation of employment opportunities and entrepreneurship” (Campello and Mello, 2014, pp. 34, 35).

The pre-eminence of the Brazil without Extreme Poverty plan in the government’s agenda was accompanied by the setting of budgetary priorities to guarantee the financial resources necessary for its execution.

Note should also be taken of the definition of “targets and results that would permit follow-up and monitoring, ensuring not only physical and financial execution but course corrections and due publication of outcomes, with an accounting to society”, which was one of the “aspects that served as a major guidepost in formulating and executing the plan” (Campello and Mello, 2014, pp. 63, 64).

## UNIFIED SOCIAL PROGRAMME REGISTER

A key element in the success of the Brazil without Extreme Poverty plan was the Unified Social Programme Register (CadÚnico), which was already an important instrument for social policy planning that, as President Dilma Rousseff indicated, had revolutionized the way public authorities tend to the needs of the poor and enforce their rights, giving poverty “a face, a name, an address, and features recognized by the State” (Rousseff, 2014, pp. 16, 17).

This instrument was essential to the viability of another important element of the Brazil without Extreme Poverty plan: the commitment to ensuring that “the universalization of access to public goods and services be grounded in real

determination that its policies and actions must reach the poorest population”, and that “specific policies targeting the most vulnerable groups be part of the consolidation of universal policies”. (Campello and Mello, 2014, pp. 47, 48).

CadÚnico led to an innovation in State administration, “a change in the thinking” behind its activities (that could be defined as “hypertargeting”) and implied “gearing the action to a particular group” and the use of “lists of names taken from the Register”, as well as the definition of “the unit of action as not only the municipality or territory, but the individual and family as well”. (Campello and Mello, 2014, pp. 48, 49).

CadÚnico was also supplemented with other initiatives and became the poor population’s principal gateway to benefitting from the more than 20 policies that use its register as a reference. Registration in CadÚnico is compulsory for enrolment in *Bolsa Família* and other federal programmes, including: the Subsidized Electricity Rate, the *Minha Casa Minha Vida* (My Home, My Life) programme (MCMV), the Retirement Pension for Low-income People, the People’s Telephone, Water for All, the Cistern Programme, the *Bolsa Verde* (Green Allowance) Programme, *Bolsa Estiagem* (Drought Allowance), the Programme for the Advancement of Rural Activities, the National Land Reform Programme, the Programme for the Eradication of Child Labour and the Brazil Literacy Programme.

In November 2015, 27.1 million households were listed in the Unified Register, 1.9 million of which were from traditional populations or in particular situations, such as the households of family farmers, settlers, squatters, extraction workers, small-scale fishers, river dwellers, *quilombola* communities, indigenous peoples, Gypsies, people from *terreiro* communities (sites where African religious rituals are practiced), street people, rag pickers, prison inmates and people adversely affected by infrastructure projects (MDS, 2015d).

## STRATEGIC AREAS OF BRAZIL WITHOUT EXTREME POVERTY

The Brazil without Extreme Poverty plan, whose purpose was to overcome extreme poverty, was divided into three strategic areas, in the understanding that poverty is a multidimensional phenomenon. They are: (a) income security

through cash transfers to supplement household income; (b) access to public services, giving priority to increasing the supply of health, education and social welfare services and improving their quality <sup>2</sup>; and (c) productive inclusion, with employment and income opportunities.

For the purposes of this publication, priority was given to the strategic areas of income security and productive inclusion and to some of the programmes that include rural populations or specifically target rural areas. These are briefly presented, with basic information on their design and operations.

## INNOVATIONS IN BOLSA FAMÍLIA

The main “income guarantee” instrument of the Brazil without Extreme Poverty (BSM) plan is *Bolsa Família* (PBF), a direct cash transfer programme to fight poverty and reduce inequality in income distribution for beneficiaries who meet certain criteria.

Brazil without Extreme Poverty promoted a series of changes in *Bolsa Família* to adjust it to its priorities. The first was the inclusion of members of the population that were eligible for *Bolsa Família* but were not beneficiaries, either because they were not registered in CadÚnico or because their information had not been reviewed.

The finding that half the population living in extreme poverty was between 0 and 19 years of age demanded that “the federal government take concrete action targeting children and youth”, which led to changes “to raise the income of households with children and adolescents”. This resulted in “more effective use of the resources transferred to these households and greater equity among programme beneficiaries”, for example: “a 45% increase in the variable benefit, granted only to households with children aged 0 to 5”; the inclusion of more than 1.3 million benefits, raising the limit from 3 to 5 variable benefits per household; “the actions of Brasil Carinhoso, where families with children aged 0 to 5 years were granted an additional benefit, lifting more than 8.1 million children and adolescents out of income poverty” (Campello and Mello, 2014 pp. 52. 53).

<sup>2</sup> For more information, see Costa, Mafra and Bachtold (2014)

This new supplemental payment, called the Benefit for Overcoming Extreme Poverty, was extended in 2013 to all households that, even with the *Bolsa Família* benefit, were still living in extreme poverty. With this measure, all *Bolsa Família* beneficiary households were lifted out of poverty, from the standpoint of income.

By defining a national extreme poverty line (R\$ 77,00 per capita), the programme equalized regions and states with different income levels in a single reference, requiring the states to adopt a supplementary income policy. This action was effective, since 11 of them had been supplementing the *Bolsa Família* payments since 2011 (Campello and Mello, 2014, pp. 53, 54).

The success of the *Bolsa Família* programme rests on four pillars: (a) direct cash transfers to beneficiaries (without the intermediation of other agents, either public or private); (b) payment through the financial system, which was structured to serve millions of households formerly excluded from the banking system; (c) payments made preferentially to women, promoting their leadership and empowerment in decisions about the use of household resources; and (d) enforcement of the education and health conditionalities among beneficiary households to ensure their continuity in the programme and their exercise of basic social rights.

On receiving a monthly income supplement directly from the federal government, households automatically have access to the social protection, health, and education network through the enforcement of programme conditionalities: pregnant women must receive antenatal care, children must receive nutrition and health check-ups, and attend at least 85% of the classes for students aged 6 to 15 and 75% for youth aged 16 to 17 in regular schools.

In November 2015, the 13.8 million households that benefitted from the programme included 12.4 million beneficiaries aged 6 to 15 and 2.4 million young people aged 16 to 17 under educational supervision, as well as 8.9 million households with health monitoring (MDS, 2015d). Some 1.2 million of these households, including family farmers and settlers, belonged to traditional population groups or were in specific situations (MDS, 2015d). The average amount of the cash transfer was R\$ 163.05 per household per month.

The total federal expenditure through the *Bolsa Família* programme in 2014 was R\$ 26.6 billion (MDS, 2015d), or just under 0.5% of the GDP for that year, and in 2015, R\$ 27.4 billion was committed. The source of financing for the programme is national, and the budgetary resources used for the benefits come from the National Treasury.

## OPERATIONALIZATION AND MONITORING

Four types of benefits are provided to tailor cash transfers to the needs of each household, namely: (i) a basic benefit (R\$ 77.00) for families in extreme poverty (that is, with a monthly per capita income of up to R\$ 77.00); (ii) a variable benefit for poor households (those with a monthly per capita income of up to R\$ 154.00) and extremely poor households whose members include pregnant women, nursing mothers, children and adolescents up to the age of 15 (R\$ 35.00 per beneficiary up to a limit of R\$ 175.00 per household); (iii) a variable benefit for poor and extremely poor households with adolescents aged 16 to 17 (R\$ 42.00 per adolescent, up to a limit of R\$ 84.00 per family); (iv) a benefit over and above the aforementioned benefits, to lift extremely poor families out of poverty in cases where household income continues to be less than or equal to R\$ 77.00 per capita (the amount of this benefit is the amount needed to reach this threshold).

The benefit is deposited into an account with the *Caixa Econômica Federal*, the federal financial institution that runs the programme. Beneficiaries withdraw the funds from its various branches and ATMs, or from correspondent banks throughout the country (*Caixa Aqui*) using a debit card with a PIN number.

Compliance with the conditionalities of the *Bolsa Família* programme is electronically monitored by the municipal government, using the lists that the federal government provides to the municipal health and education systems. Municipalities collect health surveillance and school attendance information (twice per year and five times per year, respectively) and enter it into the federal systems.

Non-compliance with any conditionality may indicate that the household is in a situation of social vulnerability and has difficulty accessing education and health services. Once the availability of the public service and continued non-compliance are verified, households with a growing incidence of non-compliance are subject to cancellation of the benefit. Cancellation is provisional, however, and occurs only in the event of further non-compliance after the municipal social welfare service has intervened.

Since *Bolsa Família* is a decentralized programme, its supervision is also decentralized. The MDS coordinates surveillance of the undue receipt of benefits, but the states and municipalities also have the mandate to act in this area. The programme is subject to audits by firms contracted through public tenders issued by the Comptroller-General's Office, the federal oversight agency that handles all matters related to protecting public property and increasing administrative transparency<sup>3</sup>. External control is exercised by the Federal Audit Court (TCU) and the federal and state Public Ministries.

Social oversight of the programme is exercised by the Municipal and State Social Welfare Boards, which are familiar with the local context of *Bolsa Família* beneficiaries. Any citizen can lodge a complaint with the MDS Ombudsman or the social welfare network. The names of beneficiaries and the sums received are public information and available on the Federal Government's Transparency Portal.

*Bolsa Família* has had a real impact in terms of lowering poverty and income inequality indicators, and its integration with health and education policies has helped reduce child malnutrition and promote child development.

Today, the programme's positive results have led to its expansion to meet the needs of 13.8 million households throughout the country (MDS, 2015d), or approximately 47 million people (23% of the population), resulting in a substantial reduction in poverty and inequality in income distribution.

<sup>3</sup> For more details, see: *Controladoria-Geral da União* - CGU. Federal Government Transparency Portal. (Available from <http://www.portaltransparencia.gov.br/>. Accessed 8/12/2015).



## RURAL PRODUCTIVE INCLUSION <sup>4</sup>

Data from the Demographic Census 2010 revealed the relatively heavier weight of rural poverty and inequality in access to goods and services versus urban areas: “25.5% of the rural population lives in extreme poverty, a figure that drops to 5.4% in the urban population”; “illiteracy is around 20% in the countryside versus 7.7% in urban areas”; “52.9% of the rural population has no more than four years of schooling, while in the cities, the figure is 25.9%” (Mello and Oliveira, 2015, p. 7).

As a result, the productive inclusion line of the Brazil without Extreme Poverty plan was implemented through different strategies for urban and rural areas and specific activities tailored to the economic and social diversity of the rural population.

Despite progress in the development of differentiated family farming and social policies, the policies failed to reach a significant number of rural dwellers, the hard-core rural poor—that is, “family farmers living in a situation of food insecurity with no access to technical assistance or title to the land, living in remote locations or areas isolated from government intervention and little opportunity to generate surpluses”; “lacking water and energy infrastructure, with enormous difficulty accessing credit and marketing channels”. (Mendonça et al., 2015, pp. 50, 51). To address these problems, “the productive inclusion strategy of Brazil without Extreme Poverty offered a roadmap for inclusion in public policies” in which technical assistance and rural extension were used to identify and keep track of families “in their journey towards overcoming poverty” (Mendonça et al., 2015, pp. 50, 51).

To develop more-focused models for action, the rural productive inclusion strategy promoted a revamping of the technical assistance and rural extension

<sup>4</sup> Some of the programmes and topics included in the rural productive inclusion strategy of Brazil without Extreme Poverty are discussed in other chapters of this publication. See: “Research and rural extension for family farming;” “Adaptation to conditions in the Semi-arid region;” “Identification and registration of family farms;” “Registration and advancement of small-scale fishing and aquaculture;” “Procurement of food produced by family farms” and “The school feeding programme and family farming.”

policy (ATER), as well as the policies on marketing, access to water for human consumption and the generation of electricity (Mello et al., 2015, p. 17).

An important first step was identifying the target population. This was initially done by linking the information from different databases<sup>5</sup>—in particular by linking CadÚnico, DAP and the Land Reform Project Information System (SIPRA), after active searches—that is, direct action by the State to reach the beneficiaries where they live.

To increase employment and income opportunities and increase food and nutrition security and the productive capacity of these households, it was essential to create the Programme for the Advancement of Rural Production Activities. This programme combines “ongoing individualized service” from ATER with non-reimbursable funding for families who invest in productive projects based on “the will and productive experience of families.” (Mello et al., 2015, pp. 17, 18). Technical assistance is provided from the preparation of a diagnostic study of production conditions, to the formulation of the project to which development resources will be allocated and continuing with assistance during its implementation, publicizing, and local coordination with the other programmes that families can take advantage of (Mello et al., 2015, p. 18).

Cash transfers are a mechanism for mobilizing family members and a concrete opportunity to boost the productive capacity of a highly decapitalized population; that is, these resources provide an initial and essential impetus for improving the living conditions of this population (Mendonça et al., 2015, p. 56).

Given the variety of situations, public tenders for these services were issued for each region (Semiarid, North, Central-West) and target group (women, *quilombola* communities and indigenous groups), resulting in contracts with public and private institutions<sup>6</sup>.

To support the project’s implementation, households received a non-reimbursable production development benefit of R\$ 2,400, in addition to seeds and other supplies. The MDS issued the cash transfer directly to the

<sup>5</sup> For information about the opportunities opened up by linking CadÚnico with other databases containing information on the rural environment, see Mendonça and Galindo (2015).

<sup>6</sup> For information on the hiring procedures and guidelines of the national ATER services policy, see the chapter “Research and rural extension for family farming.”

farmers, preferably women, through the *Bolsa Família* or *Cartão do Cidadão* debit card <sup>7</sup>. A contract of a sort was entered into, since households signed an enrolment agreement to receive the first payment, and receipt of the rest (up to two payments) was subject to a technical report on the implementation status of each productive project.

In 2013, during a prolonged drought, another non-reimbursable grant of R\$ 3,000 was created under the Development Programme for the Semiarid Region for families that already had access to water for production.

The funds were used in different types of projects, including non-farming activities: small livestock production; corn and bean cultivation; horticulture; handicraft production; small markets, etc. (Mendonça et al., 2015, p. 57).

Households in the semiarid region also received assistance for implementing social technologies to capture water for food and small livestock production. In some cases, after meeting the beneficiaries' food security needs, surpluses were sold to the Food Acquisition and School Feeding Programme (Mendonça et al., 2015, p. 64).

## LAND REFORM ACTIVITIES

In formulating Brazil without Extreme Poverty, the role of the National Colonization and Land Reform Institute (INCRA) and the Land Reform Programme was revamped, given the understanding that settlers should have direct access to a series of public programmes that had been created and expanded since 2003. This meant recognizing settlers' rights, including the right of access to services such as water, health, education and housing and increasing their economic independence through policies that are not directly the responsibility of INCRA.

For this it was essential to combine social inclusion activities that enabled “families that were already beneficiaries who fit the profile of the land reform

<sup>7</sup> The Cartão do Cidadão is for the receipt of social and employment benefits, such as those of the Fundo de Garantia do Tempo de Serviço, benefits of the Social Integration Programme (PIS), the salary allowance and unemployment insurance. For more details, see: <http://www.caixa.gov.br/cadastrados/cartao-cidadao/Paginas/default.aspx>.

programme to be registered in CadÚnico”, providing them with a social protection network that included *Bolsa Família*, *Brasil Sorridente* (Smiling Brazil), *Brasil Carinhoso*, *Água para Todos* (Water for All), *Minha Casa Minha Vida*, with productive inclusion initiatives, taking advantage of INCRA’s experience in combining credit with technical assistance (Guedes et al., 2015, pp. 70, 71).

Rural productive inclusion in Brazil without Extreme Poverty is also supported by the Environmental Preservation Programme (*Bolsa Verde*), created by Law No. 12,512, of 2011, targeting extremely poor families living in environmental preservation units and different settlements, as well as the territories occupied by indigenous groups, river dwellers, extraction workers, quilombola and other traditional communities.

The programme, coordinated by the Ministry of the Environment (MMA), provides quarterly federal transfers of R\$ 300.00 for a renewable 2-year period. It also provides transfers through the *Bolsa Família* or *Cartão Cidadão* card, as well as technical assistance to enable families to work in conservation activities and sustainable production.

The *Bolsa Verde* benefit helps reduce the vulnerability of households while encouraging the conservation of natural resources through sustainable production. To access the *Bolsa Verde* programme, the household signs an enrolment agreement indicating the conservation activities it will perform. In November 2015, the programme was benefitting some 75,000 families in the country’s various ecoregions.

In addition to these programmes, rural residents have other rights under social security, such as the right to a rural pension, the Continued Service Benefit and the *Seguro-Defeso* (unemployment insurance) for small-scale fishers.

## RURAL SOCIAL SECURITY

Social welfare, which includes health, social assistance, and social security, is financed with funds from the federal government, states, municipalities, a percentage of the lottery income and the social contributions of businesses and workers.

One of the principal gains of rural populations under the Federal Constitution of 1988 was access to social security, which granted special treatment for rural workers of either sex who plied their trade, without permanent employees, under the “family farming regime,” regardless of their legal status with respect to land tenure (CF, Arts. 195 and 201).

The Federal Constitution establishes new parameters for the rural population: it raised the eligibility age for the benefit to 60 for men and 55 for women (setting it five years lower than for urban workers), and established a benefit floor equal to one minimum wage (R\$ 788.00 in 2015, and R\$ 880.00 in 2016), in addition to universalizing the benefit in practice for the entire rural population, with equal access for men and women (Beltrão et al., 2004, p. 325).

The number of rural social security benefits issued increased from approximately 5.3 million in December 1995 to 9.3 million in September 2015. The majority were old-age pensions, which rose from 3.5 million beneficiaries in 1995 to 6.2 million in 2015. This was followed by survivor’s pensions, which rose from 1.3 million beneficiaries in 1995 to 2.3 million in 2015 (Ministry of Social Security, 2015).

The effects of universalizing social security to eradicate rural poverty have been heightened by the fact that the benefits are generally equal to the minimum wage, which has risen year after year as a result of a specific wage increase policy.

## CONTINUED SERVICE BENEFIT

In 1993, the Federal Government created the Continued Service Benefit (BPC) for households with older members seeking social security benefits who could not prove how many years they had worked. The benefit is individual, is not lifelong and is non-transferable; it guarantees the monthly transfer of one minimum wage for older persons aged 65 and over and people of any age with a disability who show that they lack the means to support themselves or that their family is unable to do so (MDS 2015e).

To be eligible for the benefit, the applicant must show that his monthly household income is less than one quarter of the minimum wage. Benefits are

reviewed every two years to verify whether the conditions for granting them still apply. The BPC is part of the Basic Social Protection of the Unified Social Welfare System (SUAS), and in October 2015 served 4.2 million beneficiaries (MDS, 2015a), disbursing some R\$ 41.7 billion in resources entirely from the National Treasury.

## UNEMPLOYMENT INSURANCE FOR SMALL-SCALE FISHERS

The unemployment insurance benefit is equal to one monthly minimum wage for professional small-scale fishers who exclusively and uninterruptedly ply this trade, either individually or as part of the family economy; the benefit is provided during the fishing off-season established for the preservation of species. During the off-season, fishing activities are suspended to protect species during the breeding season, guaranteeing the sustainable maintenance of fish stocks and thus, supporting the activities and income of fishers.

Fishers must be enrolled in the General Fisheries Register (RGP), have a fishing license, be enrolled as a subscriber in the special social security register as a professional small-scale boat operator, proving payment in the past 12 months, must not be in an employment relationship or have any other source of income from fishing, and not be receiving benefits from social security (except for workers' compensation and a survivor's pension), *Bolsa Família* or the Continued Service Benefit (BPC). If a member of the household is a *Bolsa Família* or BPC beneficiary, the benefit is temporarily suspended during payment of the off-season unemployment insurance benefit, automatically resuming when it ends.

The programme's resources come from the Workers' Support Fund (FAT), run by the National Social Security Institute (INSS) and currently administered by the Ministry of Agriculture, Livestock, and Food Supply (MAPA), which took over the functions of the Ministry of Fisheries and Aquaculture. In 2014, 612,200 small-scale fishers received this unemployment insurance benefit (Brazil, 2015, p. 83).

## A PATH TOWARDS OVERCOMING POVERTY

Universal rural social security and *Bolsa Família* were critical to raising the income of the Brazilian population in the last two decades and accounted for an average of 33.45% of household income in 2009 (Neri et al., 2011, p. 9). A series of programmes and the inclusive growth model have clearly combined to achieve these results. In rural areas, “the combination of technical assistance, inputs, development resources, credit, marketing support and access to water and electricity were especially important for enabling families in the Semiarid region to survive one of the longest drought in history with greater security”, without reverting to their former state of extreme poverty (Mello et al., 2015, p. 29).

The action in rural areas also showed that their extreme poverty was linked to the lack of opportunities, since once families had benefitted from programme activities, they invested in productive projects that boosted their income (Mendonça et al., 2015, p. 63).

The success of Brazil without Extreme Poverty is visible in the results achieved in poverty reduction. Moreover, in the specific case of rural areas, the programme turned out to be an important link between rural development policies and social development policies and had even served as an inspiration for other countries (FAO, 2015).

The objective of productive inclusion in Brazil without Extreme Poverty was to assist 253,000 households of farmers and land reform settlers, and as of December 2014, services had been contracted for 354,000 households; 3,300 agents had been trained to work with extremely poor families (Mendonça et al, 2015, p. 51); payments had been made to 147,000 family farmers for production development (Mello et al, 2015, p. 20); 1.1 million targeted productive microcredit operations had been carried out (Mendonça and Galindo, 2015, p. 43); and 72,000 households had benefitted from the *Bolsa Verde* programme. Between 2011 and 2013, roughly 50% of the products for the Food Acquisition Programme were purchased from family farmers registered in CadÚnico; from 2011 to October 2014, 781,800 cisterns had been constructed to store water for human consumption, along with 104,500

irrigation devices for production purposes; ; 350,000 households of land reform settlers had received technical assistance; and 12,600 households received the production development benefit (Mello et al, 2015, pp. 22, 23, 27 and 29; MDS, 2015d).

In addition to its direct benefits for the rural population, Brazil without Extreme Poverty yielded another type of result that had a positive impact on public administration. The programme challenged public policies to reach the poorest population groups and to operate in a more integrated fashion. It also fostered the creation of new institutional arrangements involving changes in the legal framework, federative coordination initiatives and new ways of evaluating the activities of family farmers.

The progress made shows that scale can be increased, programme coverage can be expanded and “integration and coordination between the timing and rationale of the various activities” can be improved (Mello et al., 2015, p. 30) by intensifying the combination of social and rural development policies.

An important lesson was related to the timing and development of household autonomy and the overcoming of poverty. Studies on the *Bolsa Família* programme showed that the poorest people live with a high degree of income uncertainty, which translates into high volatility (Smith, 2010, p. 306); and also, that income from the formal market does not ensure a stable flow of income that will guarantee the definitive elimination of poverty (Leichsenring, 2010, p. 299).

It can therefore be inferred that, in the case of Brazil without Extreme Poverty’s social and productive inclusion strategy, the performance gains from the activities financed by development activities and access to other programmes are no immediate guarantee of a stable flow of income. Thus, a necessary improvement would be to consider more intensive technical assistance and rural extension for a much longer period, even to allow for gradual expansion of access to programmes to support production and other rural development policies.



## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BELTRÃO, K. I.; PINHEIRO, S. S.; PEYNEAU, F. P. L. and MENDONÇA, J. L. O. 2004.** A Constituição de 1988 e o acesso da população rural brasileira à seguridade social. In: **CAMARANO, A. A.** *Os novos idosos brasileiros: muito além dos 60?* Brasília, DF: IPEA. (Chapter 10, p. 321-351)

**BRAZIL.** 1988. Constitución de la República Federativa de Brasil de 1988. (Available from [http://www.planalto.gov.br/ccivil\\_03/Constituicao/Constituicao.htm](http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm). Accessed 8/12/2015)

**BRAZIL.** 1993. *Law No.8 742, of 7 December 1993.* On the organization of Social Assistance. (Available from [http://www.planalto.gov.br/ccivil\\_03/Leis/L8742.htm](http://www.planalto.gov.br/ccivil_03/Leis/L8742.htm). Accessed 8/12/2015).

**BRAZIL.** 2003. *Law No.10 779, of 25 November 2003.* On granting the unemployment benefit to professional small-scale fishers during the off season. (Available from [http://www.planalto.gov.br/ccivil\\_03/Leis/2003/L10.779.htm](http://www.planalto.gov.br/ccivil_03/Leis/2003/L10.779.htm). Accessed 8/12/2015).

**BRASIL.** 2004. *Law nº 10 836, of 9 January 2004.* Creating the Bolsa Família. Programme (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2004-2006/2004/lei/l10.836.htm](http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2004/lei/l10.836.htm). Accessed 8/12/2015).

**BRAZIL.** 2007. *Decree No.6 135, of 26 June 2007.* On the Unified Federal Social Programme Register. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2007/Decree/d6135.htm](http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2007/Decree/d6135.htm). Accessed 8/12/2015).

**BRASIL.**Presidencia da Republica. 2011a. Brasil Sem Miséria: governo vai localizar e incluir em seus programas 16,2 milhões de pessoas em situação de extrema pobreza. *Blog do Planalto*, 2/6/2011. (Available from <http://blog.planalto.gov.br/brasil-sem-miseria-governo-vai-localizar-e-incluir-em-seus-programas-162-milhoes-pessoas-em-situacao-de-extrema-pobreza/>. Accessed 8/12/2015).

**BRASIL.** 2011b. *Decree No. 7 492, of 2 June 2011.* Creates the Brazil without Extreme Poverty Plan. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2011/Decree/D7492.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2011/Decree/D7492.htm). Accessed 8/12/2015).

**BRASIL.** 2014a. *Bolsa Família: 75,4% dos beneficiários estão trabalhando*. (Available from <http://www.brasil.gov.br/cidadania-e-justica/2014/05/bolsa-familia-75-4-dos-beneficiarios-estao-trabalhando>. Accessed 21/11/2015).

**BRAZIL.** 2014b. *Decree No. 8 232, of 30 April 2014*. Amends the regulations of the *Bolsa Família* Programme and the Brazil without Extreme Poverty Plan. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2014/Decreto/D8232.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2014/Decreto/D8232.htm). Accessed 21/11/2015).

**BRAZIL.** 2015. *Mensagem ao Congresso Nacional*. Brasília (Available from <http://www2.planalto.gov.br/acompanhe-o-planalto/mensagem-ao-congresso>. Accessed 21/11/2015).

**CABRAL, P. F. G.; ONCALA, A. A.; GAIVIZZO, L. H. B. e APOLONI, R. C.** 2014. Programa Bolsa Verde: erradicação da extrema pobreza e conservação ambiental. In: **CAMPELLO, T.; FALCÃO, T. e COSTA, P. V.** *O Brasil Sem Miséria*. Brasília, DF: MDS. (p. 493-512)

**CAISAN.** 2013. *Balanco das ações do plano nacional de segurança alimentar e nutricional – PLANASAN 2012-2015*. Brasília: MDS; Secretaria Executiva da CAISAN. (Available from [http://www.mds.gov.br/webarquivos/publicacao/seguranca\\_alimentar/balanco-caisan\\_2012\\_2015.pdf](http://www.mds.gov.br/webarquivos/publicacao/seguranca_alimentar/balanco-caisan_2012_2015.pdf). Accessed 21/11/2015).

**CAMPELLO, T. and MELLO, J.** 2014. O processo de formulação e os desafios do Plano Brasil Sem Miséria: por um país rico e com oportunidades para todos. In: **CAMPELLO, T.; FALCÃO, T. and COSTA, P. V.** *O Brasil Sem Miséria*. Brasília: MDS. (pp. 33-65)

**COSTA, P. V.; MAFRA, R. A. and BACHTOLD, I. V.** 2014. O eixo de acesso a serviços e a ação Brasil Carinhoso no Plano Brasil Sem Miséria. In: **CAMPELLO, T.; FALCÃO, T. and COSTA, P. V.** *O Brasil Sem Miséria*. Brasília, DF: MDS. (pp. 261-287)

**FAO.** Food and Agriculture Organization of the United Nations. 2015. *The state of food and agriculture: social protection and agriculture – breaking the cycle of rural poverty*. Rome: FAO. (Available from <http://www.fao.org/publications/sofa/2015/en/>. Accessed 21/11/2015).

**GUEDES, C. M. G; STURM, C. E.; PETRARCA, L. and GUERESI, S.** 2015. Brasil Sem Miséria na reforma agrária: avanços na inclusão social e produtiva. In: MELLO, J. *A inclusão produtiva rural no Brasil Sem Miséria: o desafio da superação da pobreza no campo*. Brasília: MDS. (pp. 70-86)

**LEICHSENRING, A. R.** 2010. Precariedade laboral e o Programa Bolsa Família. In: **CASTRO, J. A. and MODESTO, L.** (Orgs.) *Bolsa Família 2003-2010: avanços e desafios*. Brasília, DF: IPEA. (Vol. 1, pp. 271-300)

**MDS.2015a.** *Um país menos desigual: pobreza extrema cai a 2,8% da população*. Brasília. (Available from <http://mds.gov.br/area-de-imprensa/noticias/2015/novembro/um-pais-menos-desigual-pobreza-extrema-cai-a-2-8-da-populacao>. Accessed 5/12/2015).

**MDS, 2015b.** *Principais resultados da PNAD 2014 potencialmente relacionados às ações e programas do MDS*. Brasília: Secretaria de Avaliação e Gestão da Informação. Estudo Técnico No. 11. (Available from <http://aplicacoes.mds.gov.br/sagi/portal/artigo.php?link=1318>. Accessed 5/12/2015).

**MDS. 2015c.** Extrema pobreza reduz 65,2% no meio rural. Brasília. (Available from <http://mds.gov.br/area-de-imprensa/noticias/2015/dezembro/extrema-pobreza-reduz-65-2-no-meio-rural>. Accessed 5/12/2015).

**MDS. 2015d.** *Relatório de Informações Sociais. Secretaria de Avaliação e Gestão da Informação – SAGI. Relatório de Programas e Ações do MDS, e RI Bolsa Família e Cadastro Único*. Brasília. (Available from <http://aplicacoes.mds.gov.br/sagi/RIv3/geral/index.php>. Accessed 30/11/2015)

32 | **MDS. 2015e.** Benefício de Prestação Continuada. (Available from <http://mds.gov.br/assuntos/assistencia-social/beneficios-assistenciais/bpc>. Accessed 21/11/2015).

**MELLO, J.; ANDRADE, B. T.; MELCHIORI, C. E. e OLIVEIRA, Y. R.** 2015. A inclusão produtiva rural do Brasil Sem Miséria: estratégias e primeiros resultados. In: MELLO, J. *A inclusão produtiva rural no Brasil Sem Miséria: o desafio da superação da pobreza no campo*. Brasília: MDS. (pp. 17-31) (Cadernos de Estudos Desenvolvimento Social em Debate No. 23). (Available from <http://>

aplicacoes.mds.gov.br/sagirmpps/ferramentas/docs/Caderno%2023\_%20FINAL\_910.pdf. Accessed 1/12/2015).

**MELLO, J. e OLIVEIRA, Y. R.** 2015. Apresentação. In: **MELLO, J.** *A inclusão produtiva rural no Brasil Sem Miséria: o desafio da superação da pobreza no campo*. Brasília: MDS. (p. 7-12). (Cadernos de Estudos Desenvolvimento Social em Debate, nº 23).

**MENDONÇA, L. K. e GALINDO, E.** 2015. Integração de políticas de desenvolvimento social e rural para inclusão produtiva e superação da extrema pobreza no Plano Brasil Sem Miséria. In: **MELLO, J.** *A inclusão produtiva rural no Brasil Sem Miséria: o desafio da superação da pobreza no campo*. Brasília: MDS. (p. 32-48). (Cadernos de Estudos Desenvolvimento Social em Debate, nº 23).

**MENDONÇA, L. K.; TAVIRA, G.; FERREIRA, E.; LANGE, R.; OLIVEIRA, L. P.; MOLINA, C. e HORA, K.** 2015. A construção de uma política de assistência técnica e extensão rural para superação da extrema pobreza. In: **MELLO, J.** *A inclusão produtiva rural no Brasil Sem Miséria: o desafio da superação da pobreza no campo*. Brasília: MDS. (p. 50-69). (Cadernos de Estudos Desenvolvimento Social em Debate, nº 23).

**MODESTO, L. e CASTRO, J. A. de.** 2010. Introdução. In: CASTRO, J. A. de e MODESTO, L. (Orgs.). *Bolsa Família 2003-2010: avanços e desafios*. Brasília: Ipea. (v. 2, p. 15-24)

**NERI, M. C.; MELO, L. C. C. e SACRAMENTO, S. R.** 2011. *Superação da pobreza e a nova classe média no campo*. Rio de Janeiro: Fundação Getúlio Vargas (FGV), Centro de Políticas Sociais. (Disponível em [http://www.cps.fgv.br/cps/bd/campo/Rural\\_Livro\\_fim\\_sumario.pdf](http://www.cps.fgv.br/cps/bd/campo/Rural_Livro_fim_sumario.pdf). Accessed 1.º/12/2015).

**OLIVEIRA, L. F. B. e SOARES, S. S. D.** 2013. *O impacto do Programa Bolsa Família sobre a repetência: resultados a partir do cadastro único, projeto frequência e censo escolar*. Brasília, DF: IPEA. (Discussion paper, 1814).

**PNUD.** 2015. *Human Development Report 2015: work for human development*. New York: United Nations Development Programme. (Available from <http://report.hdr.undp.org/>. Acessado em 16/12/2015).

**MINISTÉRIO DA PREVIDÊNCIA SOCIAL.** 2015. *Boletim Estatístico da Previdência Social*. Brasília, DF. v. 20, nº 10. (Available from [http://www.previdencia.gov.br/wp-content/uploads/2015/11/Beps102015\\_Final.pdf](http://www.previdencia.gov.br/wp-content/uploads/2015/11/Beps102015_Final.pdf). Accessed 30/11/2015).

**ROUSSEFF, D.** 2014. Prefácio. In: **CAMPELLO, T.; FALCÃO, T. and COSTA, P. V.** (Orgs.). *O Brasil Sem Miséria*. Brasília: MDS.

**SOARES, S.** 2010. Volatilidade de renda e a cobertura do Programa Bolsa Família. In: **CASTRO, J. A. e MODESTO, L.** (Org.). *Bolsa Família 2003-2010: avanços e desafios*. Brasília, DF: IPEA. (v. 1, p. 301-314)

**SOARES, S. e SÁTYRO, N.** 2010. O Programa Bolsa Família: desenho institucional e possibilidades futuras. In: **CASTRO, J. A. e MODESTO, L.** (Org.). *Bolsa Família 2003-2010: avanços e desafios*. Brasília, DF: IPEA. (v. 1, p. 25-55)

**UNDP.** 2015. Human Development Report 2015: work for human development. New York: United Nations Development Programme. (Available from <http://report.hdr.undp.org/>. Accessed 16/12/2015).

## IDENTIFICATION AND REGISTRATION OF FAMILY FARMS

The United Nations (UN) declared 2014 the International Year of Family Farming (IYFF), a decision that reflects the growing recognition of the importance of this sector in guaranteeing food and nutrition security, overcoming hunger and poverty and contributing to the sustainable development of nations.

This recognition has led to political and social acknowledgment of the identity and demands of diverse segments of society that have different experiences with access to natural resources and their use but who nevertheless share a common identity as producers who toil independently, expressing the unity between life and work. Family farming is therefore a political and social category that is not superimposed on the affirmation of particular identities and expresses solidarity and partnership based on common objectives (França and Sanches, 2015).

FAO recognizes that family farming is the predominant type of agriculture in the food production sector and plays an important socio-economic, environmental and cultural role.

In some countries, as a result of the pressure brought to bear by social movements and the ensuing dialogue with them, responses to some

demands of the population groups that engage in family farming have been institutionalized in specific and differentiated public policies, permitting the exercise of economic and social rights. This marks the beginning of efforts to treat people who have received unequal treatment differently, creating better conditions for integrating family farming into government systems to support the rural sector.

## THE ROAD TO DIFFERENTIATION

Accomplishing this required definition of the universe of beneficiaries of these policies. Family farms needed to be identified and described.

In Brazil, the road to arriving at the current legal framework was a long one. In 1964, the Land Statute, intended to regulate agriculture with the implementation of land reform and the advancement of agricultural policy, prioritized the creation of family farms, which were defined as: rural property that is worked directly and personally by the farmer and his family, absorbing their entire work force, providing them with the means of subsistence and social and economic progress, with a maximum size established for each region and type of crop, with occasional work with third parties” (Art. 4, II Paragraph 4 of Law 504/1964) (Del Grossi and Marques, 2015).

The Federal Constitution (CF) of 1988, ratified after the redemocratization of the country, adopted some of the provisions of the Land Statute and established differentiated treatment for family farms. It protects small farms that are worked by families, prohibits the seizure of property for the payment of debts stemming from productive activities and requires the State to provide the means to finance the development of these family farming units (CF, Art. 5, XXVI); it also prohibits these and medium-sized landholdings from being expropriated for the purposes of land reform (CF, Art. 185, I).

The Constitution furthermore guarantees differentiated treatment in the social security system for rural workers of either sex who labour in the “family economy” without permanent employees, regardless of their legal status with respect to land tenure (CF, Arts. 195, § 8 and 201, § 7, II).

This right only became effective with the regulations issued in 1991, and special status was given in the General Social Security System, (RGPS) to producers, partners, sharecroppers and tenant farmers, gold prospectors, small-scale fishers and the like who plied their trade individually or under the family economy regime, even with the help of third parties, as well as their spouses or life partners and children over 14. The family economy regime is considered an activity in which the work of family members is essential to the household's subsistence and is performed under conditions of mutual dependence and collaboration, without the use of employees (Del Grossi and Marques, 2015).

During this period, the demand for differentiated agricultural policies for small producers grew, spurred by the organizing efforts of rural social movements, known collectively as the “Shout of the Socially Marginalized for Land.”

## THE CREATION OF PRONAF

Significant differentiation in agricultural policy occurred with the creation of the National Programme to Strengthen Family Farming (PRONAF) to promote the sustainable development of small famers through credit lines for financing and investment. Family farmers found it very hard to access the existing lines of financing due to the requirements for obtaining credit, which made no distinction between them and large borrowers. Until the creation of PRONAF in 1996, family farmers were treated as “mini or small producers”—that is, the difference between medium-sized and large producers was simply the scale of production, closely linked with the size of the property worked (Del Grossi and Marques, 2015).

Family farmers are recognized as such by PRONAF under the following conditions: (i) the person who works the parcel of land must be an owner, tenant farmer, usufructuary, borrower, partner, Land Reform Programme concessionaire or individual licensed to use public areas; (ii) the land is worked predominantly by family members, with third-party labour depending on seasonal farming demands; permanent employees may be used but their number may not exceed that of the family members working in the family enterprise; (iii) the size of the parcel worked may not for any reason exceed four fiscal modules; (iv) at least 50% of the gross annual income must be from



farming or extraction work; (v) the individual who works the land must live on the property or in the nearby urban or rural settlement<sup>1</sup>.

The definition of PRONAF beneficiaries retained the breadth of the Social Security definition of “special insured party,” applying to property owners and non-property owners (tenant farmers and partners) alike, and setting new limits on the size of the operation and the connection between income and agricultural or extraction activities (Del Grossi and Marques, 2010).

Registration and inclusion in PRONAF groups have been successively modified to make the programme criteria more inclusive and flexible—for example by raising the gross income limit, reducing the percentage of income necessary for farming and extraction activities, including other groups that are not landowners<sup>2</sup> and granting permission to use permanent labour (Galindo, 2014).

Thus, PRONAF and Social Security each adopted differentiated policies for family farming, gaining national scale and dimension without taking advantage of the potential for their integration. In addition to these policies, there are other rules that consider the output of family farming—for example the law creating the Food Acquisition Program<sup>3</sup>.

## THE FAMILY FARMING LAW

Developing the family farming concept was a cumulative process informed by intellectual and academic debate<sup>4</sup>, self-organization, the affirmation of multiple social sectors in rural areas and changes in the legal and institutional framework. These references are the basis for the drafting and enactment of the Family Farming Law (Law N ° 11 326/2006), which establishes the guidelines for developing the National Family Farming and Rural Family Enterprise policy. Under the current definition, a family farmer or entrepreneur is considered

<sup>1</sup> Art. 2.º, I, of BACEN Resolution No. 2 191, of 1995.

<sup>2</sup> Galindo (2014) reports that between the original text (BACEN Resolution No. 2 191, of 1995), which defined the terms “landowner,” “occupant,” “tenant farmer” and “sharecropper” and the current legislation (BACEN Resolution No. 4 228, of 2013), the definition of “borrower,” “concessionaire of the National Land Reform Programme,” and “individual licensed to use public lands” had been added.

<sup>3</sup> See the chapter: “Procurement of food produced by family farms” in this publication.

<sup>4</sup> See, inter alia, Medeiros (2001) and Wanderley (2009).

someone who engages in activities in rural areas and at the same time: (i) does not own, under any title, an area larger than four fiscal modules; (ii) largely uses family labour in the economic activities of the farm or enterprise; (iii) receives no less than a certain percentage of household income from the economic activities of the farm or enterprise; (iv) manages the enterprise with his family.

Recognizing the wide range of rural activities and the socio-economic diversity of family farming, the law allows for other types of activities associated with social groups that have their own identity, such as small-scale fishers, extraction workers, forestry workers, river dwellers, indigenous groups, the remnants of rural *quilombola* and other traditional peoples and communities<sup>5</sup>.

An important application of this law occurred during the production of the official agricultural statistics. With the Agricultural Census 2006, farms that met the criteria established under the law could be identified and described, making it possible to paint a detailed picture of how many there were, where they were located, and how and what family farmers in Brazil produced<sup>6</sup>.

The contribution of family farming to food production, income generation, and participation in the various occupations was made visible through official statistics that quantified it in detail. The Census revealed that there were 4.3 million family farms (84% of the total farms), covering 80 million hectares and employing over 74% of the labour. Occupying just 24% of the land, family farming accounted for 33% of the gross value of production, with average income per hectare of farmland one and a half times that of non-family farms. Family farming also accounted for the bulk of the food consumed by the Brazilian population, 58% of the milk, 77% of the black beans, 87% of the cassava, 63% of the vegetables, 59% of the pork and 51% of the chicken, in addition to a major share of a variety of regional products (França, Del Grossi and Marques, 2009).

<sup>5</sup> Art. 3, Law No. 11 326/2006.

<sup>6</sup> See [http://www.ibge.gov.br/home/estatistica/economia/agropecuaria/censoagro/agri\\_familiar\\_2006/](http://www.ibge.gov.br/home/estatistica/economia/agropecuaria/censoagro/agri_familiar_2006/). For information about the methodology, see Del Grossi and Marques (2010).

## CREATION OF THE DAP

Despite the importance of the Agricultural Census, the main instrument for identifying and describing rural family production units and their associations established as Legal Persons for the purpose of public policy administration is the Declaration of Eligibility for PRONAF (DAP), coordinated by the Ministry of Agrarian Development (MDA).

The DAP was introduced in 1995 to enable family production units to be identified and classified under various PRONAF categories and is a prerequisite for access to credit. However, it does not have its origins in the decree creating PRONAF, since the decree did not indicate the profile of the programme's beneficiaries. The term "family farmer" was used as if it were a category commonly recognized and understood by the different agents working in rural areas. This vacuum was filled by the National Monetary Board, which, to issue the rules for access to rural credit operations under PRONAF, established the profile for the programme's beneficiaries, since rural credit operations under PRONAF entailed economic subsidies (MDA/SAF, 2014).

At first, the DAP was completed by hand and issued to farmers and technical personnel recognized by the financial agents. It was only in 2001 that the first control mechanisms were introduced, along with a database exclusively for receipt of the Declarations of Eligibility issued by authorized agencies and entities (MDA/SAF, 2014). The MDA distributed a paper form that the issuing entities had to fill out and return; these forms were then entered in the database. Nevertheless, only a small portion of the paper declarations reached the Ministry.

40 In 2002, official technical assistance and rural extension entities in each federative unit began decentralized electronic distribution of the forms, consolidating the data in dedicated applications approved or made available by the Ministry (MDA/SAF, 2014). IT infrastructure issues, however, led to continued use of the paper forms.

However, many forms distributed to the issuing organizations were not returned, and not all DAPs issued as a result of applications were remitted to

the state units, creating a gap between officially issued DAPs and their entry in the MDA database (MDA/SAF, 2014).

To remedy this problem, in 2007 the application developed by the MDA Secretariat of Family Farming was made available to the entire network of partners, consisting of the DAP issuing bodies and entities, enabling the DAP to be issued through the website without preventing the issuing entities from using their own applications.

Since 2014, the DAP for households has only been issued electronically, using the applications approved by the MDA's DAPWEB System, and the DAP for legal persons, using only the MDA application. Once transmitted to DAPWEB, the data are validated, and the DAPs become part of the database<sup>7</sup>.

The security of the system and the credibility of the DAP currently lie in the fact that only the DAPs in the MDA database can be used to identify family farmers.

Issuance of the DAP has been modernized by the Family Farming Law and is subject to adjustments and updates governed by the resolutions of the National Monetary Board and the decisions of the Ministry of Agrarian Development, which address institutional and operational aspects (MDA/SAF, 2014).

The DAP describes the entire rural production unit and not simply the individuals that comprise it. A production unit is “a unit consisting of the family and any additional person, including individuals with no family and temporary workers considered to be family farmers in their community and who exploit a combination of production factors to meet their subsistence needs and/or society's demand for food and other goods and services, and who also: (a) live in the same household; (b) work for the same enterprise, managed strictly by the family; (c) depend on the income generated by the rural family production unit in the installations or outside of them” (Art. 2, Ordinance/MDA/N° 21/2014).

<sup>7</sup> For information on the conditions and procedures for issuing the DAP, see MDA Decision No. 26, of 9 May 2014, and MDA/SAF(2014).

Obtaining the DAP is voluntary, and the data required for it to be issued are unilaterally provided by the interested party, which does not prevent the State, at any time, from comparing the data and information provided and taking the necessary action and measures to ascertain their veracity and, when necessary, rescinding eligibility.

The DAP is issued at no charge and embraces the principle of “oneness”—that is, each family production unit must have a single active primary DAP. Similarly, each association of family farmers or family farmer enterprises must have a single active DAP for legal persons.

In the case of marriage or a stable union, the DAP must identify the couple as owners co-responsible for the family unit with no hierarchy in this co-ownership. A new wife and a family farmers’ child between the ages of 15 to 29 can obtain complementary DAPs linked to the principal DAP of the production unit with which they are linked.

Despite the compulsory indication of joint ownership in the DAP, some credit operations and certain public policies only consider the registration of the man as the owner, making it hard to see the participation of women.

The DAP Registration System permits access to the register of entities authorized to issue DAPs, with their respective operational units, issuing agencies and areas of action, and enables beneficiaries to check their registration status through the website<sup>8</sup> (MDA/SAF, 2014).

The network of issuing agencies and entities has close to 20,000 active registered DAP issuing agents, who must be legal representatives of family farmers or provide technical assistance and/or extension services and meet certain criteria, such as having legal personality and at least one year of duly verified experience in the exercise of their function or in meeting their social objective in sectors covered by the Family Farming Law (MDA/SAF, 2014).

The family farming organizations include the National Confederation of Farmworkers (CONTAG) and the Federation of Family Farmworkers

<sup>8</sup> See <http://www.mda.gov.br/sitemda/dap>.

(FETRAF) and its affiliates; the National Confederation of Fishermen, their state federations and fishers' colonies; and associations that are part of the Interstate Babaçu Coconut Workers Movement (MIQCB). The federal entities include the National Institute for Colonization and Land Reform (INCRA), the former Ministry of Fisheries and Aquaculture (MPA) (today part of the Ministry of Agriculture, Livestock, and Food Supply – MAPA), the National Indian Foundation (FUNAI), the Palmares Cultural Foundation (FCP) and the Chico Mendes Institute for the Preservation of Biodiversity (ICMBio). There are also 27 state technical assistance and rural extension institutions, some with responsibilities for certain groups – responsibilities that include issuing the DAP for legal persons. This type of category is used to identify and confirm the eligibility of legal persons, such as associations, cooperatives and enterprises in which at least 60% of the members are farmers with the DAP.

The DAP has transparency and social oversight instruments. The system permits verification of whether someone has obtained the DAP: if the DAP register exists, when the identification number from the Register of Physical Persons (CPF) is entered, the system generates a report containing basic information (name of the representatives, city of the enterprise, enrolment in PRONAF, conditions of ownership and land use, issuer, etc.). A DAP report by municipality can also be obtained, with a list of all family farming households that have been issued the DAP, with the CPF, name and registration category and a DAP report by CNPJ (tax identification number for legal personality) in the case of associations.

The Municipal Sustainable Rural Development Boards are responsible for annually reviewing the list of owners with the DAP in their municipalities and, when necessary, requesting the cancellation of DAPs identified as irregular.

The DAP database is also subject to monitoring and audits by the Inspector General's Office, the Federal Government's internal oversight agency, and the Federal Audit Court, the Union's external monitoring entity.

## THE DAP AS GATEWAY

There are currently around 5 million DAPs for active family production units and 5,100 DAPs for legal persons, representing some 600,000 associated farmers, both men and women<sup>9</sup>.

As verification of the status as a family farm, the DAP has acquired a major dimension as the gateway to rural development programmes. It is the reference for determining the beneficiaries of 16 public programmes, including: PRONAF; climate and income insurance (Family Farm Insurance – SEAF, Crop Guarantee Programme, Family Farm Price Guarantee Programme – PGPAF); technical assistance and rural extension services; public purchasing of food produced by family farms (the Food Acquisition Programme – PAA and the National School Feeding Programme – PNAE); the rural housing programme (Minha Casa Minha Vida – MCMV); the biodiesel production and use programme (Social Fuel Label); Social Security.

Therefore, the DAP is also a prerequisite for accessing a range of public programmes, including those of other ministries that provide benefits to family farmers.

Its status as the gateway makes the “DAP a policy monitoring and control instrument” and a tool for characterizing the beneficiary population, since it “permits comparison of programme coverage data, mapping access and use trends” among family farmers to “identify implementation gaps and steer action towards priority groups” (Galindo, 2014, p. 11).

The Brazil without Extreme Poverty plan (BSM) sped up the coordination of rural development and social policies, as well as the linking of databases – in particular, the Unified Social Programme Register (CadÚnico), the DAP, and the Land Reform Project Information System (SIPRA). This linkage facilitated broader identification of poor and extremely poor households that would benefit from BSM rural productive inclusion activities. It also discovered a substantial number of family farmers who had not been identified by the specific markers of CadÚnico and generated a profile of these households with

<sup>9</sup> Source: Ministry of Family Farming /MDA, information available as of 30 November 2015.

respect to matters not considered in the DAP and SIPRA, such as access to education, health care, housing, water and electricity (Mendonça and Galindo, 2015).

New initiatives have sought to forge closer links between social policies and rural development policies. In the land reform, one of the criteria for land acquisition activities is the density of the populations living in poverty and extreme poverty, in addition to their prioritization for selecting the beneficiaries in CadÚnico. Another example is the use of the National Programme for Documenting Rural Women Workers as an active search instrument for including women in CadÚnico (Mendonça and Galindo, 2015).

## FAMILY FARMING LABEL

The DAP made it possible to launch new mechanisms to bring family farming to the public's attention and promote the sale of its products and services. The primary mechanism is the label indicating participation in family farming, known as the Family Farming Label (SIPAF), created in 2009 by the MDA to strengthen the social identity of this sector among consumers, indicating its connection with foods, beverages and handicrafts<sup>10</sup>.

The SIPAF may be used by farmers who have been issued the DAP; cooperatives and associations of family farmers, whether or not they possess the DAP; companies whose wares include a strong component of products produced by family farming.

The permit authorizes use of the label on previously reported products and enterprises, as long as the farmers state that they have met the legal requirements for production, transformation and marketing. The permit is automatically issued to persons, both natural and legal, who have been issued the DAP. Legal persons who have not been issued the DAP must show that more than 50% of the price of the end product that will display the label represents family farming inputs when there is only one raw material, with the same requirement for the composition of the principal raw material.

<sup>10</sup> Ministerial Decision MDA No. 45, of 28 July 2009, amended by MDA Decision No. 7 of 13 January 2012.



The SIPAF is therefore simply a mechanism for identifying the social origin of the products and should not be confused with sanitary, organic, or any other type of certification. It adds value to products because it verifies attributes for which there is growing consumer demand, such as healthy foods and food security, and capitalizes on the appreciation of local culture and regional production.

Its logo emphasizes the social nature of family farming and contains the slogan “Product of Family Farming.” To date, 1,079 labelling permits have been issued – 629 of them to family farmers, 70 to enterprises and 380 to cooperatives, benefitting more than 118,000 farmers and some 10,100 products<sup>11</sup>.

The label can now be found on the shelves of grocery stores and superstores in Brazil, but only on a small number of products. It is gradually becoming a differential factor in the ability to participate in MDA commercial advancement activities – for example, as one of the criteria for selecting farms that intend to participate in national fairs or wish to sell their products at MDA stands during international events such as Biofach (Germany) and Expoalimentaria (Peru).

Brazil has other mechanisms created by different organizations to identify family farm products. Increasing use of the SIPAF has fostered joint efforts to create a single brand and improve it. One example is the government of the state of Bahia, which has substituted the state label with the SIPAF and moved to exempt associations and cooperatives that have been issued the DAP for legal persons and use the SIPAF from the ICMS (state tax).

## VISIBILITY OF IDENTITIES

46

In certain situations, recognizing the diversity of the different segments of the family farming universe justifies the creation of labels of origin linked to the SIPAF that indicate ethnic, cultural and territorial identities, as in the case of *quilombola* communities and indigenous groups.

In 2010, the Secretariat for the Advancement of Racial Equality (SEPPIR / PR) created the social identification label for the products of *quilombola* communities, the “*Quilombos do Brasil*” (Quilombos of Brazil) label, as one of

<sup>11</sup> Source: Ministry of Family Farming/MDA, data consolidated in October 2015.

the activities of the Quilombola Brazil Programme.<sup>12</sup> Since 2012, the MDA has been issuing the label, in conjunction with the SIPAF and DAP, to *quilombola* communities, especially through their associations, and to companies that use products of this origin.

The “*Indígenas do Brasil*” (Indigenous Peoples of Brazil) label was created in 2014. A product of collaboration between the National Indian Foundation (FUNAI) and the MDA and dialogue with indigenous organizations, it is a mechanism for identifying the ethnic and territorial origin of the products of indigenous groups<sup>13</sup>, adding symbolic and cultural value to agricultural and extractive production, as promoted in the National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI)<sup>14</sup>.

## REGIONAL IDENTITY

The need to identify family farming to justify differentiated policies and highlight their economic and social importance is gaining ground in international circles, regional integration processes and multistate forums (i.e., the Community of Portuguese speaking Countries – CPLP), as well as multilateral forums and agencies.

The principal regional experience in developing common criteria for the identification of family farming can be seen in MERCOSUR, prompted by the Specialized Commission on Family Farming (REAF).

The origins of REAF expressed the recognition of the Member States, spurred by social organizations and movements, that family farming is an important social and economic sector that makes significant contributions to the integration effort and should be governed by differentiated public policies.

<sup>12</sup> For more information about the Quilombola Brazil Programme, visit: <http://www.portaldaigualdade.gov.br/comunidades-tradicionais/programa-brasil-quilombola>.

<sup>13</sup> According to the Demographic Census 2010 of the Brazilian Geographical and Statistical Institute (Instituto Brasileiro de Geografia e Estatística - IBGE), the total indigenous population in Brazil numbers 817,963, with 305 different ethnic groups and 274 languages

<sup>14</sup> The PNGATI was established by Decree No. 7,747/2012 (available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2012/decreto/d7747.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/decreto/d7747.htm)), and information on its activities can be found at <http://www.funai.gov.br/pngati/>.

The dialogue between representatives of the governments and family farming organizations led to the adoption of comprehensive common criteria for the recognition, identification, and definition of the groups that would benefit from differentiated policies for this sector – a definition that would become a MERCOSUR regulation. The criteria are: the predominance of family labour; direct management of production by the family, who must live on the property or in its environs; and the use of productive resources consistent with the family's work capabilities. Family farmers in MERCOSUR include landless rural producers, the beneficiaries of land reform programmes and communities of producers that work the land jointly<sup>15</sup>.

These criteria guided the development and implementation of national registration systems tailored to the different situations, which involved an intense agenda of engagement and cooperation. The registers are used by different countries in different ways as a condition for access to agricultural and social programmes.

In 2012, MERCOSUR issued a new decision establishing mutual recognition of national registers, which expanded the regional framework for the identification of family farms<sup>16</sup>.

In 2014, an agreement was reached on a recommendation that countries adopt instruments for the identification of the products and services of family farmers. This has already yielded results, such as the adoption of the *Manos Campesinas* (Produced by Campesino Hands) label in Chile and the *Producto de la Agricultura Familiar* (Family Farm Product) label in Argentina.

From what we can see in the Brazilian trajectory and the REAF, there is a basic set of common characteristics in the databases for the identification and description of family farms. These characteristics are to a certain extent the subject of current discussions in multilateral forums, as seen in the IYFF 2014, where FAO formulated and published a definition in which family farming is “a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly

<sup>15</sup> MERCOSUR Resolution /GMC/25/07 on parallel guidelines for the recognition and identification of family farms

<sup>16</sup> MERCOSUR Decision CMC/20/14 on voluntary national family farm registers of the States Parties, amending MERCOSUR Decision CMC/59/12.

reliant on family labour, both women's and men's." Another important FAO initiative was the preparation of studies leading to recommendations for the use of common criteria in the local, national and regional definition of family farming; these studies brought statistical visibility to this sector and included policy guidelines and instruments. (Ramos, 2014).

Thus, identifying and registering family farms became important and are now part of the countries' sustainable rural development agenda.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BRAZIL.** 2006. Law No. 11,326, of 24 July 2006. Establishes the guidelines for the formulation of the National Policy on Family Farming and Rural Family Enterprises. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2004-2006/2006/Lei/L11326.htm](http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2006/Lei/L11326.htm). Accessed 18/11/2015).

**BACEN.** 1995. National Monetary Board Resolution No. 2,191, of 24 August 1995. Created the DAP. (Available from <http://www.bcb.gov.br/pre/normativos/busca/normativo.asp?tipo=res&ano=1995&numero=2191>.)

**BACEN.** 2012. National Monetary Board Resolution No. 4,107, of 28 June 2012. Gives the MDA responsibility for issuing the DAP. (Available from <http://www.bcb.gov.br/pre/normativos/busca/normativo.asp?tipo=res&ano=2012&numero=4107&r=1>.)

**DEL GROSSI, M. E. and MARQUES, V. P. M. A.** 2010. A agricultura familiar no Censo Agropecuario 2006: o marco legal e as opções para sua identificação. *Estudos Sociedade e Agricultura*, Rio de Janeiro, Vol. 18, No. 1, pp. 127-157.

**DEL GROSSI, M. E. and MARQUES, V. P. M. A.** 2015. An in-depth review of the evolution of integrated policies to strengthen family farms in Brazil. Background paper for *The State of Food and Agriculture 2015*. Rome: FAO.

**FAO.** Undated. Family Farming Knowledge Platform. (Available from <http://www.fao.org/family-farming/en/>.)

**FRANÇA, C. G.; DEL GROSSI, M. E. and MARQUES, V. P. M. A.** 2009. O Censo 2006 e a agricultura familiar no Brasil. Brasília: MDA. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_64/O%20Censo%20Agro-pecu%C3%A1rio%202006.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_64/O%20Censo%20Agro-pecu%C3%A1rio%202006.pdf).)

**FRANÇA, C. G. and SANCHES, A. P.** 2015. Family Farming in the new Latin America integration and development agenda. In: Institutional Policy Center for Inclusive Growth (IPC-IG/UNDP. Policy in Focus – Special Issue on Family Farming). Brasília: IPC-iG/PNUD.

**GALINDO, E.** 2014. Agricultura familiar e seu registro no Brasil. Brasília (mimeo).

**MDA.** 2010. Instrucción Normativa MDA No. 1, of 14 May 2010. Deals with the procedures for detecting and correcting mistakes in filling out the DAP (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_64/IN\\_001.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_64/IN_001.pdf).)

**MDA.** Undated. Portal do MDA, Secretaria de Agricultura Familiar, DAP. (Available from <http://www.mda.gov.br/sitemda/secretaria/saf/declara%C3%A7%C3%A3o-de-aptid%C3%A3o-ao-PRONAF-dap>.)

**MDA.** 2014. Decision MDA No. 26, of 9 May 2014. Deals with operational aspects in issuing the DAP. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_64/Portaria\\_26\\_09\\_de\\_maio\\_2014.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_64/Portaria_26_09_de_maio_2014.pdf).)

**MDA/MJ.** 2014. Interministerial Decision (MDA/MJ) No. 2, of 3 December 2014. Establishes the Indígenas de Brasil label. (Available from <http://www.funai.gov.br/arquivos/conteudo/cgetno/Portaria%20Selo%20Indigenas%20do%20Brasil.pdf>.)

**MDA/SAF.** 2014. Manual do agente emissor de DAP. Brasília: SAF/MDA. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_64/MANUAL\\_DO\\_AGENTE\\_EMITSOR\\_CORRE%C3%87%C3%95ES\\_16.01.2014\\_%281%29.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_64/MANUAL_DO_AGENTE_EMITSOR_CORRE%C3%87%C3%95ES_16.01.2014_%281%29.pdf).)

**MDA/SEPPIR.** 2012. Interministerial Decision (MDA/SEPPIR) No. 5, of 21 November 2012. Associates and promotes linkage between the Quilombos do Brasil label, established by SEPPIR/PR Decision No. 22, of 14 April 2010, and the identification of participation in family farming label (SIPAF), established by MDA Decision No. 7, of 13 January 2010, and other provisions. (Available from <http://www.seppir.gov.br/portal-antigo/arquivos-pdf/portaria-interministerial-no-5-de-21-de-novembro-de-2012>.)

**MEDEIROS, L.** 2001. Agricultura familiar no Brasil: aspectos da formação de uma categoria política. In: GIARRACA, N. Una nueva ruralidad en América Latina? 1.<sup>a</sup> ed. Buenos Aires: CLACSO.

**MENDONÇA, L.** and **GALINDO, E.** 2015. Integração de políticas de desenvolvimento rural e social para inclusão produtiva e superação da extrema pobreza no Plano Brasil Sem Miséria e o Cadastro Único para programas sociais do governo federal. Cadernos de Estudos Desenvolvimento Social em Debate, Brasília: MDS, No. 23.

**MERCOSUL.** 2012. CMC Decision No. 59, of 6 December 2012. Voluntary national family farm registers in MERCOSUR. (Available from [http://gd.mercosur.int/SAM/GestDoc/PubWeb.nsf/OpenFile?OpenAgent&base=SAM/GestDoc/DocOfic0Arch.nsf&id=76905C72ACFDAE1783257A-D40045B24D&archivo=DEC\\_059-2012\\_PT\\_Agricultura%20Familiar.pdf](http://gd.mercosur.int/SAM/GestDoc/PubWeb.nsf/OpenFile?OpenAgent&base=SAM/GestDoc/DocOfic0Arch.nsf&id=76905C72ACFDAE1783257A-D40045B24D&archivo=DEC_059-2012_PT_Agricultura%20Familiar.pdf).)

**MERCOSUR.** 2014. CMC Decision No. 20, of 16 December 2014. Voluntary national family farm registers of the States Parties. (Available from [http://gd.mercosur.int/SAM%5CGestDoc%5CPubWeb.nsf/E6363C8E-6FDD619783257F130044A2DF/\\$File/DEC\\_020-2014\\_PT\\_Reg%20Nac%20Agricultura%20Familiar.pdf](http://gd.mercosur.int/SAM%5CGestDoc%5CPubWeb.nsf/E6363C8E-6FDD619783257F130044A2DF/$File/DEC_020-2014_PT_Reg%20Nac%20Agricultura%20Familiar.pdf).)

**MERCOSUR.** 2007. GMC Resolution No. 25, of 27 September 2007. (Available from [http://gd.mercosur.int/SAM/GestDoc/PubWeb.nsf/OpenFile?OpenAgent&base=SAM/GestDoc/DocOfic0Arch.nsf&id=832579C700726F0D032575980072E-C75&archivo=RES\\_025-2007\\_PT\\_AgriculturaFamiliar.pdf](http://gd.mercosur.int/SAM/GestDoc/PubWeb.nsf/OpenFile?OpenAgent&base=SAM/GestDoc/DocOfic0Arch.nsf&id=832579C700726F0D032575980072E-C75&archivo=RES_025-2007_PT_AgriculturaFamiliar.pdf).)

**RAMOS, A.** 2014. Comprehensive recommendations for the application of common criteria for Family Farming definitions. Final Report – Compilation of the definitions and methodologies commonly used and accepted at a national, regional and international level to define and describe family farming based on its diversity. Rome: FAO.

**SEPPIR/PR.** 2010. SEPPIR/PR Decision No. 22, of 14 April 2010. Establishes the social identification label, Selo Quilombos do Brasil, for products from quilombola communities.

**SEPPIR/PR.** Undated. Manual do Selo Quilombos do Brasil. (Available en <http://www.seppir.gov.br/portal-antigo/publicacoes/manual-do-selo-quilombos-do-brasil>.)

**WANDERLEY, M. de N. B.** 2009. O mundo rural como um espaço de vida. Re- flexões sobre a propriedade da terra, agricultura familiar e ruralidade. Porto Alegre: Editora da UFRG.

## CREDIT AND INCOME GUARANTEES FOR FAMILY FARMERS

One of the main challenges for strengthening family farming and economic organizations in the sector is increasing and stabilizing income, given the ever-present climate and market instabilities in agricultural activities.

Key to the Brazilian experience have been the reformulation, creation and combination of land reform instruments and differentiated agricultural policies. The instruments that directly affect the guarantee of income from family farming include rural credit and insurance, which are the subject of this chapter.

### DIFFERENTIATED CREDIT FOR FAMILY FARMING

The National Programme for Strengthening Family Farming (PRONAF), created in 1995, was the first differentiated national policy instrument designed to meet the needs of this sector in Brazil.

Prior to PRONAF, family farmers found it very hard to access existing credit lines because of the requirements and procedures for obtaining credit. The documentation, security requirements and interest rates for loans were the same for small and large producers alike and their unsuitability to the needs



of family farmers often led to situations in which access to credit resulted in unmanageable debt and the loss of farms.

During the redemocratization process, rural social organizations increasingly began to mobilize, resulting in government recognition of certain rights, such as access to social security, shining a spotlight on their issues and demands. In the early 1990s, certain sectors of the rural union movement in Brazil's South Region promoted broad-based discussions of a new credit model for the productive restructuring of family farming (Bianchini, 2015, p. 23), and the Ministry of Agriculture drafted proposals for a differentiated agricultural policy for "small rural producers"<sup>1</sup>.

In May 1995, in a sweeping act of solidarity, known as the "Shout of the Socially Marginalized for Land," rural movements pressed for the creation of differentiated rural credit for farmers in the "family economy regime", in the assumption that this might trigger gains with respect to other policies (CONTAG, 1995).

This social pressure, associated with criticism of the exclusionary effects of the conservative modernization of agriculture and the resulting concentration of land and income and with academic studies that revealed the diversity of the rural environment and proposed new guidelines for rural development<sup>2</sup>, culminated in the creation of PRONAF and its regulations<sup>3</sup>.

By institutionalizing the response to the demand from rural movements as public policy, the Brazilian State recognized the legitimacy of their demands and opened up new opportunities for designating family farmers as a social category and political identity and for new paths towards rural development.

In 1995, PRONAF became a credit line for financing family farm production, providing financing for operating and investment expenses and improvements in community infrastructure, with compulsory enrolment in the existing

<sup>1</sup> "Proposta e recomendação de política agrícola diferenciada para o pequeno produtor rural," MAARA Ministerial Decision No. 692, of 30 November 1993, and No. 42, of 24 January 1994.

<sup>2</sup> See, inter alia, the following: Veiga, 1994; Guanzirolli et al., 1999; Guanzirolli et al., 2001.

<sup>3</sup> National Monetary Board of Brazil, Resolution No. 2,191 of 24 August 1995 and Decree No. 1 946/1996.

insurance plan, PROAGRO<sup>4</sup>. The next year, PRONAF became a programme, engaging in integrated activities with states and municipalities to promote rural development; encourage relevant research and the use of appropriate technologies and promote professional development, prioritizing participatory processes and the local demands of farmers. The programme's initial objective, whose key features included credit, infrastructure and training (Bianchini, 2015, p. 38), was modified when the new public policies on family farming were issued, resulting in the centralization of credit.

Today, PRONAF has an active portfolio of 3.2 million loan agreements totalling R\$ 32 billion; 2.2 million family farmers have current loan agreements<sup>5</sup> with PRONAF, which operates in 4,963 municipalities. A total of R\$ 28.9 billion was available for the 2015/2016 harvest year.

## PRONAF MANAGEMENT

PRONAF operations are coordinated by the Ministry of Agrarian Development (MDA), in collaboration with the Ministry of the Treasury (MF) and the official banks (public-private enterprises controlled by the Federal Government of Brazil), the Bank of Brazil (BB), Banco do Nordeste (BNB) and Banco da Amazônia (BASA).

The importance of the MDA's role lies in the fact that every year, it establishes all the conditions for PRONAF operations and proposes them to the National Monetary Board (CMN)<sup>6</sup>; that is, as the financial system, it must promote credit for family farming, which includes the definition of sources, interest rates, credit limits, etc. Once approved, the CMN resolution containing the rules authorizing and regulating the credit operations of financial agents is published by the Central Bank of Brazil (BACEN) (Muller and Sanches, 2014, p. 426).

The road towards compliance with the constitutional requirement of differentiated treatment for family farming and attaining the dimension and

<sup>4</sup> Farming Guarantee Programme, created by Law No. 5,969 of 11 December 1973, to provide full or partial coverage of producers' costing debt with the financial agent in the case of verified losses from natural phenomena, pests or diseases for which there is no technically recommended control.

<sup>5</sup> "Current" loan agreements are those with more than a zero balance to liquidate.

<sup>6</sup> The National Monetary Board, made up of the Minister of the Treasury, the Minister of Planning, Budget and Administration and the President of the Central Bank of Brazil (BACEN), periodically publishes resolutions on economic policy matters, including rural credit.

importance that PRONAF enjoys today has been a long one.<sup>7</sup> The general direction of the changes in PRONAF, which intensified in 2003, was to simplify, improve and expand differentiated credit for family farming, increasing access, the number of financial agents and the amount of resources available; lower interest rates; and tailor credit lines to the internal differentiation of family farming.

This involved embracing the lessons learned from social movements and institutions, especially from financial agents, under social pressure and with a great deal of negotiation with social movements and the areas of the federal government responsible for economic policy.

Notwithstanding, PRONAF's expansion was possible only because the incremental changes and improvements in the quality of its design and operations promoted were accompanied by the creation of new agricultural policy and rural development tools, among them: the revamped National Technical Assistance and Rural Extension Policy; the Food Acquisition Programme (which purchases the output of family farmers), the Programme for the Productive Organization of Rural Women; and the Programme for the Sustainable Development of Rural Territories<sup>8</sup>.

## IDENTIFICATION AND STRATIFICATION

The first major challenge was to develop a tool that would enable financial agents to easily identify which family farmers were PRONAF beneficiaries. This tool is the Declaration of PRONAF Eligibility (DAP)<sup>9</sup>.

56

The information from the DAP permitted the stratification of farmers, which served as a parameter for tailoring credit lines to the different situations of production units, differentiating credit conditionalities, such as limits, interest rates, rebates and evaluation and monitoring criteria.

<sup>7</sup> The data on the trajectory of PRONAF, by year, are available from several sources, including Bianchini (2015, pp. 23-33).

<sup>8</sup> Some of these policies are dealt with in other chapters of this publication.

<sup>9</sup> See the chapter "Identification and registration of family farms".

PRONAF is geared to family farming and family farmers and their economic organizations instead of a particular type of crop or objective. The activities to be financed are indicated in a simplified proposal or technical project that is reviewed by the financial agent for the concession of credit. These features give the programme the flexibility to operate in every region in the country, adapting to local needs and demands.

Stratification of the beneficiaries into household income groups began with the creation of the PRONAF Especial (Special PRONAF, known as PRONAFinho) in 1997, which targeted low-income family farmers. In 1999, a four-tier stratification was established<sup>10</sup>: “A”, consisting of land reform settlers (former beneficiaries of the now defunct Special Land Reform Credit Programme – PROCERA); “B”, consisting of farmers with a gross household income under the poverty line established by the Federal Government of Brazil; “C”, family farmers in transition, with a low level of capitalization and gross household income of R\$ 1,500.00 - R\$ 8,000.00<sup>11</sup>; “D”, family farmers that were more capitalized or beginning to be capitalized, with a gross household income of R\$ 8,000.00 - R\$ 27,500.00<sup>12</sup>.

New changes were introduced in the framework with the creation of Group E for the 2004/2005 harvest year; they included farmers with higher levels of income and the merging of Groups C, D and E into a single Variable Group (V) for the 2008/2009 harvest year.

PRONAF’s current beneficiaries meet the criteria of the Family Farming Law (Law No. 11 326 of 2006), as well as those of the special groups: Group “A” for land reform or land credit programme settlers; Group “B” for beneficiaries with an annual gross household income of up to R\$ 20,000 who do not hire permanent workers; and Group A/C for those in Group A—that is, land reform or land credit programme settlers who have already signed their first loan agreement; and Group V, consisting of farmers with an annual gross household income of R\$ 20,000 - R\$ 360,000, who may employ permanent workers

<sup>10</sup> According to Bianchini (2015, p. 40), these criteria involve the concept of agrarian systems and distinguish between the poverty of simple social reproduction and expanded social reproduction.

<sup>11</sup> The monetary values indicated in this chapter are in current Brazilian reals.

<sup>12</sup> BACEN Resolution No. 2 629, of 10 August 1999.

but fewer in number than the household members working in the enterprise. At least 50% of the gross income of Groups B and V must be derived from agriculture (BACEN, Manual do Crédito Rural).

## FINANCIAL ENGINEERING

PRONAF was modelled after the National Rural Credit System (SNCR) and the innovations introduced in the way funding for credit operations is raised, as well as the structure of the Brazilian financial system, with input from public institutions operating in this sector.

The credit and other institutions that make up the SNCR are legally bound to apply at least 34% of their average daily income from cash deposits to rural operations and 74% of the average daily deposits made to rural savings accounts. These percentages were established by the National Monetary Board (CMN) and are compulsory sources of funding for rural credit, known as “banking demandables”<sup>13</sup>, 10% of which must be used in PRONAF.

Operational risks depend on the objectives of the financing and may be assumed entirely by the bank or the government or shared between them. Private and public banks can invest these resources directly or pass them to another financial institution on the condition that they be used for the predetermined purpose.

The principal financial agent of PRONAF is the Bank of Brazil, which has an extensive network of branches throughout the country and a long tradition of working with rural credit. Both Banco do Nordeste<sup>14</sup> and Banco da Amazônia focus on regional development; Brazilian Development Bank (BNDES) focuses on second-tier investments, which are basically larger operations with agroindustry and cooperatives. Caixa Econômica Federal (CEF) recently launched rural credit operations, conducting operations with cooperatives in the case of PRONAF.

During the 2014/2015 harvest year, more than 300 financial institutions were involved in the programme’s operation, which still includes facilitation efforts

<sup>13</sup> Law No. 4,829 of 1965 (Available from [http://planalto.gov.br/ccvil\\_03/Leis/L4829.htm](http://planalto.gov.br/ccvil_03/Leis/L4829.htm)); Law No. 8,171 of 1991 (Available from [http://www.planalto.gov.br/ccvil\\_03/LEIS/L8171.htm](http://www.planalto.gov.br/ccvil_03/LEIS/L8171.htm)).

<sup>14</sup> BNB operates in nine states in Brazil’s Northeast Region and in the northern areas of the states of Minas Gerais and Espírito Santo, whose social indicators are below the parameters of other regions in the country, a fact that is evident in rural areas (Banco do Nordeste, 2015).

by unions, associations, agro-industries, public institutions, cooperatives and companies that provide technical assistance services.

To increase the volume of resources distributed through PRONAF and lower real interest rates, financial engineering of the composition of sources was essential.

The main sources of PRONAF funding are the Workers' Support Fund (*Fundo de Amparo ao Trabalhador*) (FAT)<sup>15</sup>, the Constitutional Financing Funds (*Fundo Nordeste*, FNE, FCO and *Fundo Amazônia*)<sup>16</sup>, rural savings accounts, banking demandables and the National Budget (OGU). The sources have different deposit capture costs (interest rate, administrative fees and taxes) and, when these costs are higher than the interest rates paid by farmers in PRONAF operations, the National Treasury of Brazil equalizes them – that is, it covers the difference (Bianchini, 2015, p. 90). Therefore, an important decision made every year by the Federal Government of Brazil is the limit for this disbursement, with definitions of ceilings for the value of the liabilities financed through the equalization mechanism, by source and financial institution.

The sources with the greatest impact on the primary outcomes of public administration – that is, the national budget and the Constitutional Funds – preferentially allocate funds to the credit lines reserved for low-income family farmers, where the operational risks are fully assumed by the federal government or shared with the financial institutions.

This mixed financing system lowers risk and offers greater flexibility in terms of security, in addition to facilitating the inclusion of low income farmers in the financial system. Important information about them collected in successive

<sup>15</sup> The Fundo de Amparo ao Trabalhador (FAT) provides resources for the financing of various Federal Government programmes in Brazil. The amounts established for each year are sent in the form of special deposits in public banks, which must use them for PRONAF and the other programmes.

<sup>16</sup> The Constitutional Financing Funds were created by the Federal Constitution and regulated by Law nº 7 827 of 1989 (Available from [http://www.planalto.gov.br/ccivil\\_03/LEIS/L7827compilado.htm](http://www.planalto.gov.br/ccivil_03/LEIS/L7827compilado.htm)), with the object of contributing to the economic and social development of the North, Northeast and Center-West regions of Brazil through federal financial institutions in the regions that execute productive sector financing programmes aligned with the respective regional development plans. They are the destination of a portion of the national income tax and taxes on other revenues and manufactured goods. In the disbursement of their resources, the funds are exempt from monetary controls of a circumstantial nature and must provide credit that differs from the types usually offered by financial institutions, based on the real needs of the beneficiary regions.

operations can be used by banks and cooperatives for future risk management when these farmers wish to secure larger loans (Muller and Sanches, 2014).

The difference between the 2001/2002 and 2014/2015 harvest years illustrates the changes in the share of the different sources of financing and underscores the importance of rural savings accounts and the reduction in resources from the national budget. The main sources' share evolved in the following manner: FAT, from 53% to 9.75%; national budget, from 11.5% to 1%; Constitutional Funds, from 26.5% to 16.64%; and banking demandables, from 6% to 8.3%.

## INNOVATIONS IN PRONAF

Every year, changes and innovations are integrated into PRONAF through guidelines based on the demands, efforts, and pressures brought to bear by social movements and intense negotiations with the government and between areas of the government. The result of this process is the Family Farming and Land Reform Harvest Plan, which announces the volume of resources and conditions of PRONAF, together with innovations in the insurance programmes, marketing, technical assistance and other rural development policies.

The launch of the Harvest Plan is the time when social movements capitalize on their victories and renew their expectations, and government institutions and financial agents assume commitments.

The changes in PRONAF resulted in an increase in the available credit, its nationalization, lower interest rates, a higher volume of resources and an increase in the number of beneficiaries. Income ceilings were raised, new segments of the population were included (e.g., small-scale fishers), new credit lines were created for different groups (women<sup>17</sup>, youth, etc.) and activities (forestry, rural tourism, handicrafts, agroecology, agroindustry, etc.), tailoring them to the different ecosystems, income levels and economic reproduction patterns of family farming.

One of the main innovations was the simplification and streamlining of access, with the adoption of a standard contract (which substantially lowered operating

<sup>17</sup> PRONAF Mulher is discussed in the chapter "Citizenship and autonomy of rural women" in this publication.

expenses), the PRONAF Card, which makes it easier to obtain credit and renew costing and even has automatic renewal mechanisms when payments are made on time and the applications are correct (Bianchini, 2015, p. 49).

When PRONAF was first launched, it was not very different from other rural credit lines, with a nominal rate ranging from 16% to 12% per annum and a good compliance (timely payment) bonus. As time went by, interest rates were gradually lowered, and in 2015, costing and investment lines started at a rate of 2.5% - 5.5% per annum, with 0.5% for microcredit. Interest rates are therefore much more attractive and have become a strong stimulus for family farming.

In the early years, PRONAF's activities were concentrated in Brazil's South region, with R\$ 2.3 billion in financing. However, in 2003 the programme gained new impetus with policies to fight hunger and adoption of the guideline on banking inclusion, expanding its coverage to the entire country and providing R\$ 23.9 billion in financing in the 2014/2015 harvest year<sup>18</sup> (BACEN, 2015).

PRONAF issues around 2 million loan agreements annually, especially in the regions where rural poverty is concentrated. It currently has 3.5 million active loan agreements with more than 2.6 million family farmers, considering that family farmers can have one loan agreement for harvest costing together with other agreements for investment in different crops (Bianchini, 2015, p. 97).

The volume of resources available to PRONAF grew substantially over the years, and the programme went national, reaching 95% of Brazilian municipalities. During the 2002/2003 harvest year, a total of R\$ 2.4 billion was executed through some 900,000 loan agreements. By the 2014/2015 harvest year, the executed resources were R\$ 24 billion, a 10-fold increase.

During the 2000/2001 harvest year, more than 775,000 farmers participated in PRONAF, receiving average financing of R\$ 2,400.00. Ten years later, the figure was 1.3 million that had access to credit, with average financing of just over R\$ 8,650.00<sup>19</sup> per farmer.

<sup>18</sup> The term "harvest year" refers to the period from July of one year to June of the next.

<sup>19</sup> Dollar to Brazilian real conversion on 8/8/2012: U\$ 1.00 (one dollar) equivalent to R\$ 2.00 (two reals).



Credit limits were also raised. In the first harvest year after the creation of PRONAF, a family farmer could borrow a maximum of R\$ 10,000. By the 2015/2016 harvest year, the maximum for an individual loan agreement was R\$ 300,000. The limit depends on the source of financing. When the risk is partially or fully assumed by the financial institution, the limit is R\$ 200,000 for cost financing and R\$ 300,000 for investments. When the risk is assumed by the State or the Constitutional Funds, the limit is R\$ 10,000 for costing and R\$ 35,000 for investments.

In recent years, the participation of rural credit cooperatives in the execution of PRONAF has increased, especially through Banco Cooperativo do Brasil (BANCOOB), Banco Cooperativo Sincredi (BANSICRED) and Associação Nacional do Cooperativismo de Crédito da Economia Familiar e Solidária (ANCOSOL). A new legal operational framework facilitated the creation, expansion and consolidation of cooperatives, which began benefitting from federal support and development activities (Bianchini, 2015, p. 50).

Cooperativas de Crédito Rural com Interação Solidária (CRESOL) is currently the second largest disburser of PRONAF resources after the Bank of Brazil, with resources from sources in the National Treasury passed through the Banks through sale of portfolios or the sharing of transaction costs.

To give the reader a general idea of the composition of the PRONAF portfolio, in 2013, a total of 2,098,021 loan agreements were signed, for a total of R\$ 20,316,668,267.00, with investments representing 69.3% of the agreements and 55.4% of the value. The main activities supported with the investments were the purchase of cattle (13.8% of the PRONAF resources), tractors (4.7%) and other machinery (2.9%) and pasture improvement (2.0%). The main activities supported with costing were cattle fattening and breeding (11.3%) and the cultivation of soybeans (8.7%), corn (8.3%) and wheat (2.2%)<sup>20</sup>.

## RURAL MICROCREDIT

The first PRONAF experience with a credit line for low-income family farmers was PRONAF Especial. This programme, created in 1997, covered costing and investment operations, offering low interest rates and a rebate on the principal.

<sup>20</sup> BACEN, Matriz de Dados do Crédito Rural (Available from <http://www.bcb.gov.br/pt-br/sfn/credrural/sicor/matrizinformacoes/Paginas/default.aspx>)

Since the rebate was fixed, the smaller the loan, the higher the percentage subsidy rate incorporated into the operation.

In 1999, this model gave rise to PRONAF B, which underwent a series of changes until the 2005/2006 harvest year, when it became PRONAF Microcrédito Rural (PRONAF Rural Microcredit) under the National Programme for Productive and Assisted Microcredit<sup>21</sup>.

The decision to create a microfinance programme grew out of recognition of the effectiveness of these programmes in creating jobs and generating income for poor segments of the population and from an evaluation of PRONAF's earlier experience in this sector.

In 2004, the BNB executed 834,000 PRONAF B operations, disbursing R\$ 652 million. This rapid growth was accompanied by the realization of how little diversity there was among the activities financed and a high rate of default, both associated with insufficient technical assistance for projects and inadequate monitoring of the use of the credit (Banco do Nordeste, 2015, p. 12).

The potential of PRONAF B to bring the poorest farmers into the credit system and, at the same time, the urgent need for improvements were clear.

The Ministry of the Treasury's establishment of a very reasonable amount for the remuneration of microcredit operations, coupled with MDA support, enabled BNB to capitalize on its experience in urban microcredit through Crediamigo and create Agroamigo, characterized by a specific methodology associated with technical assistance and rural extension services (Bianchini, 2015, p. 52).

The methodology includes monitoring and guidance of the family enterprise by a technical expert from the farmer's own community, who advises the farmer during the preparation of income-generating projects involving farm and non-farm activities and monitors their implementation (Banco do Nordeste, 2015, p.13).

Programme operations involve collaboration with Instituto Nordeste de Cidadania, a public-interest civil society organization (PISCO) with experience

<sup>21</sup> Law No. 11,110/2005 created the National Programme for Oriented Productive Microcredit.

in microfinance that carries out the pre-loan activities and later monitors the use of the funds.

With MDA support, motorcycles were procured to guarantee the necessary mobility, and credit agents received training not only in aspects of accounting but about the nature of their work in promoting the economic independence of these farmers, which requires an assessment of their knowledge, their experiences and their choices.

Access to this line of credit is accompanied by banking inclusion, giving farmers access to financial products and services, such as a simplified bank account with a debit card, enabling them to make withdrawals, deposits, and payments.

The proximity and personal relationship between microcredit agent and farmer resulted in the expansion, review, and streamlining of access to credit; improvement in the social and economic conditions of households and lower costs for both farmer and bank, resulting in better execution indicators and a low default rate.

The programme illustrates the potential of a generation of social policies that, without renouncing the State's role in decentralization, adopts smart systems of governance, puts its faith in the rational use of public resources and relies on collective learning as a development method (Abramovay et al., 2012, pp. 19, 20).

## MAIS ALIMENTOS

In the context of the international crisis, rising food prices and their inflationary impact, the *Mais Alimentos* programme was launched in 2008 with the objective of boosting the productivity of family farms and thus increasing the food supply.

This sector is considered to have enormous untapped productive potential that, with the proper stimulus, could rapidly yield results. With this objective and understanding, PRONAF put its faith in a combination of long-term productive infrastructure investments, access to knowledge and technology and a revamping of the food supply policy that yielded results in the three areas of the programme: more investment, more technology, and more markets.

A new and improved PRONAF investment line was created to finance the purchase of machinery and equipment tailored to the characteristics of the sector; soil recovery; milk cooling systems; genetic improvement and irrigation, orchard, greenhouse and warehouse systems<sup>22</sup>. This credit line finances individual projects of up to R\$ 150,000 and joint projects of up to R\$ 750,000, with interest of 2% per annum, up to a 3-year grace period and up to 10 years to pay. For financing warehouse structures, the term may be as long as 15 years. The loan agreements are governed by the Family Farming Price Guarantee Programme (PGPAF), and investments are therefore indexed to the minimum price of the product selected by the farmer (Muller and Sanches, 2014).

A major innovation was the agreement with the associations of the machinery and equipment industries to lower prices, which were negotiated by the farmer and the manufacturer on a case-by-case basis, with discounts of 10%-15%.

The programme has recently added the procurement of wind and solar energy equipment, which will enable farmers to generate their own renewable energy.

Since the launch of the programme, more than 60,000 tractors of up to 75 hp and small trucks have been purchased, and 90,000 loan agreements have been signed for the procurement of farm machinery, as well as milk coolers and other equipment, comprising a portfolio of more than R\$ 8.2 billion, helping reduce heavy labour and boost household income.

Another *Mais Alimentos* priority was to link technical and rural extension services with agricultural research to guarantee the availability of appropriate family farming technologies. This involved over 1,600 actions by the Brazilian Agricultural Research Corporation (EMBRAPA) aimed at boosting productivity of the principal family farm products (Muller and Sanches, 2014, p. 439).

In the “more markets” area, priority was given to restructuring the National Crop Agency (CONAB), improving its ability to store and maintain regular inventories and revamping the Minimum Price Guarantee Policy (PGPM), tailoring it to family farming (Muller and Sanches, 2014, p. 439).

<sup>22</sup> To view the list of financeable machinery and equipment and any other information about the *Mais Alimentos* programme, visit <http://www.mda.gov.br>

The creation of the *Mais Alimentos* programme marked a major shift in the composition of PRONAF, with growth of investment's share in total operations.

In addition to reducing heavy labour and boosting productivity, the programme adds value through the processing and transformation of farm products and the guarantee of their compliance with food safety standards—for example, through the distribution of milk coolers for family farms.

*Mais Alimentos* showed that family farmers play a dual role in the growth of the domestic market, serving the growing demand for food as producers and contributing to the industrial sector as consumers of machinery and equipment. This is particularly important in the context of the crisis in which the programme was launched. Realization of the importance of this market led manufacturers to increase their supply of the types of machinery and implements needed to meet the needs of family farming, boosting activity in this industrial sector and helping to further expand the production chain nationwide.

The success of the programme resulted in the creation of *Mais Alimentos Internacional*, a South-South technical cooperation programme for strengthening family farming that combines activities for sharing information on differentiated public policies with support for technical assistance and rural extension for the procurement of machinery and equipment for its national programmes<sup>23</sup>.

## FAMILY FARMING INSURANCE

Rural credit is an excellent tool for boosting the production and productivity of family farms. However, it can leave producers with unpayable debt when they lose their crops and lack the resources to meet their commitments to financial agents. In the past, this caused many people to lose their farms.

To guarantee and increase the income from family farming, facilitate the expansion of PRONAF and minimize risks, permitting more flexible security for credit, in 2004 important climate and price insurance tools were created,

<sup>23</sup> For more information on *Mais Alimentos Internacional*, visit <http://www.mda.gov.br>.

linked with marketing and price guarantee mechanisms (Muller and Sanches, 2014, p. 427).

Agricultural activities are subject to a myriad of risks, such as the production and market risks common to other economic activities. However, two aspects in particular differentiate risks in agriculture. Agriculture is highly vulnerable to adverse climate events and “the volume of resources invested is generally relatively high in comparison with the farmer’s financial capacity” (Zukowski, 2015, p. 84). Insurance is there precisely to “replace lost capital” and enable farmers to “keep farming” (Zukowski, 2015, p. 84).

Insurance is an important tool for managing risk, leveraging credit and stabilizing income in family farming. With prior preparation, when a disaster strikes or an unanticipated adverse event occurs, immediate action can be taken to verify the extent of the damage and adjust the payment to the farmer’s losses. In very critical situations, this can be supplemented with emergency assistance, which, however, is generally “late in arriving and inadequate to the reality of the losses”, and with the renegotiation of the debt, “with heavy interest rate equalization costs and amortization rebates” (Zukowski, 2015, pp. 84, 95).

In the past, insurance mechanisms in Brazil did not work well. Their supply was limited or inadequate in terms of coverage, insurable crops, regions covered and premium costs. Payment delays were common, leading to their loss of credibility and causing banks to opt for collateral instead to manage the risk to their credit portfolios. Private insurance with premium subsidies was not a viable solution, since family farmers were not an attractive market for insurance companies (low unit value coupled with high operating expenses); access to private insurance would be restricted to only the few among them whose enterprise was considered viable by the companies (Zukowski, 2015, p. 88).

The experience of the Harvest Guarantee Programme<sup>24</sup>, “consisting of indexed insurance mechanisms and emergency assistance”, proved appropriate for the poorest farmers with very small parcels of land. However, it did not meet the needs of other family farming sectors (Zukowski, 2015, pp. 85, 97).

<sup>24</sup> The Harvest Guarantee Programme is discussed in the chapter “Adaptation to conditions in the Semiarid region” in this publication.

With this understanding and to overcome these limitations in the context of credit expansion, Family Farming Insurance (SEAF) was introduced in 2004 as a multi-risk insurance instrument. SEAF includes coverage for high-risk events, such as droughts and excessive rainfall, for which premiums tend to be high and require subsidies. This insurance also provides ample coverage for lost income due to droughts, excessive rainfall, hail, frost, high winds, excessive variations in temperature, pests and diseases for which common control methods are lacking.

Thus, SEAF offers “guaranteed income and coverage conditions tailored to family farming” and encourages farmers to take advantage of the instrument’s potential, inducing them to embrace “appropriate technologies and good farming practices” as part of rural development policies (Zukowski, 2015, pp. 90 and 104).

## MANAGEMENT AND OPERATION

The creation of SEAF was accompanied by a major revamping of the institutional framework of PRONAF and PROAGRO.<sup>25</sup> Operations commenced that same year, demanding speed and flexibility on the part of the institutions involved. SEAF is governed by its own rules, and it is managed in coordinated manner, with the Ministry of Agrarian Development responsible for policy-making, monitoring, training farmers and programme personnel and overseeing the verification of losses.

The Ministry of Agriculture, Livestock, and Food Supply (MAPA) coordinates agricultural zoning and the commission that reviews the resources of farmers in relation to insurance claims that have been denied or the values indicated. The Central Bank of Brazil administers financial and procedural flows, publishes the regulations and oversees the financial agents that operate under PRONAF.

Since this is insurance and not an assistance programme, risk management mechanisms are needed. Thus, coverage is conditional to observance of the agricultural zoning of climate risks developed by the Brazilian Agricultural

<sup>25</sup> In 1975, the Farming Guarantee Programme (PROAGRO) commenced operations temporarily “linked to rural credit” in order to generate information “to assist insurers with risk analysis,” so that they could develop insurance products (Zukowski, 2015, p. 86).

Research Corporation (EMBRAPA)<sup>26</sup> and its recommendations concerning which crops to plant.

To tend to the needs of family farming, it was necessary to expand the zoning, which was restricted to seven crops (agricultural commodities) and geared to the Center-South Region of the country. With MDA support, new crops were included (there are now 40), along with new regions (for example, more than 1,000 municipalities in the Northeast Region) (Zukowski, 2015, p. 100).

At first, SEAF only covered costs. However, in the 2009/2010 harvest year, it began providing additional coverage for the amortization of loans to finance the PRONAF investments that were to be paid for with the income from insured crops<sup>27</sup>.

SEAF is a voluntary insurance programme, but access to PRONAF credit to cover farming costs “requires that the farming activity be covered by some type of insurance” (Zukowski, 2015, p. 98).

With SEAF, for losses related to protected crops, 100% of farmers’ loan payments for that year will be covered, absolving them of the responsibility for making them; farmers will even receive a payment of up to R\$ 7,000, corresponding to a portion of the anticipated income that was not received. In the case of loan agreements with activities not covered by the insurance, the Federal Government periodically publishes regulations on the term and refinancing of loan agreements.

In its first year of operations, the 2004/2005 harvest year, SEAF covered over R\$ 2.5 billion in insured value, with more than 500,000 subscribers. Furthermore, as a result of the severe drought that hit Brazil’s South Region, 245,000 farmers received compensation totalling R\$ 802 million.

Cumulatively to 2014, SEAF covered more than 673,000 claims totalling R\$ 2.9 billion. The insured value has steadily risen, reaching R\$ 7.5 billion in the 2012/2013 harvest year.

<sup>26</sup> For information on EMBRAPA activities to promote family farming, see the chapter “Research and rural extension for family farming” in this publication.

<sup>27</sup> Law No. 12,508 added an article to Law No.8,171/1991 on the institutionalization of SEAF, income guarantees and coverage for investment loans.



Without Family Farm Insurance, the farmers who currently benefit would not be in a position to obtain new loan extensions or have the resources to plant for the next season, making them unable to continue farming.

Although the regulations governing claims include complex procedures for the verification of losses that involve “inspection of the damage to each of the affected crops”, SEAF has “low operating expenses”, having no marketing or loan expenses because it takes advantage of the credit structure<sup>28</sup> (Zukowski, 2015, pp. 98, 102).

SEAF has expanded and improved in its nine years of operation. An example of this was its adaptation so that it could contribute to the agroecological transition by evaluating the use of inputs produced by the farmers themselves and native seeds<sup>29</sup>. A continuing constraint is its lack of coverage for livestock activities due to lack of a recognized methodology for calculating losses.

Other challenges remain that require new solutions, improvements in its operations, “regulatory changes and resources from the federal government”. Its priorities are: to steadily increase the number of insurable crops and their cultivation in the North region; improve monitoring and supervision; improve the linkage with technical assistance; increase and integrate meteorological information; ensure quality technical assistance; adapt the model to permanent and oleaginous crops (Zukowski, 2015, pp. 103, 104 and 105).

Family Farming Insurance has demonstrated that public insurance tailored to family farming can work well as broader income insurance and yield good technical and financial indicators. This is what qualifies it as an alternative model with greater potential to strengthen family farming and sustainable rural development.

<sup>28</sup> In the 2012/2013 harvest year, the costs associated with claims adjustment accounted for just over 0.1% of the ensured value and around 3.2% of the value of the payouts.

<sup>29</sup> For this, the creation of the National Register of Regional, Traditional or Native Crops by Brazil’s Ministry of Agrarian Development was essential (Ministerial Decision No. 51/2007).

## PRICE INSURANCE

Another innovation to guarantee the income of family farmers was the creation of a price insurance instrument under PRONAF in the 2006/2007 harvest year, the Family Farming Price Guarantee Programme (PGPAF). This insurance is part of the agenda for integrating credit and marketing policies, promotes the diversification of productive activities and contributes to income stabilization and reproduction of the family economy (Muller and Sanches, 2014, pp. 429 and 430).

PGPAF operates by granting a discount for credit operations contracted under PRONAF, as long as the market price of the product is below the value of the current guaranteed price. At the beginning of the harvest year, the guaranteed prices are set, using specific family farming production costs as a reference, and if the prices farmers receive when they market their products are lower than the guaranteed prices, the payment to PRONAF is automatically discounted proportionally to the drop in prices.

During the programme's operation, the MDA publishes a monthly ministerial notice with the discount values by activity. For example, if at the time of sale, the prices paid to rice growers in the state of Sergipe are 5.99% lower than the guaranteed price, all family farmers that grow rice receive a 5.99% discount on the payment stipulated in their agreement with PRONAF for that month. Since this price guarantee was designed to benefit poorer farmers, the benefit is limited to R\$ 5,000 for costing loan agreements and R\$ 2,000 in investment loan agreements.

With the programme's support, farmers do not need to sell their goods to obtain credit when market prices fall below production costs, guaranteeing credit flows and income generation, thus contributing to the dynamic of the local economy.

The programme started out with the cultivation of rice, beans, cassava, corn and soybeans and milk production. It gradually expanded to include 47 activities in crop production and 3 in livestock production.

PGPAF is managed by a committee made up of the Ministry of the Treasury, the Ministry of Planning, Budget and Administration, MAPA and MDA, the

latter being responsible for its execution. A major innovation that distinguishes PGPAF from other, similar programmes is that it is not necessary to physically acquire the product financed, which substantially reduces operating costs and increases efficiency (Muller and Sanches, 2014, p. 430).

## SUCSESSES AND CHALLENGES

The creation of PRONAF marked the first step in a series of differentiated family farming policies and was one of the most important measures for revamping the public agenda for rural areas in Brazil.

In addition to credit lines, the Brazilian experience includes other financing mechanisms that operate through the transfer of non-reimbursable resources. Other important development initiatives include the Terra Forte programme<sup>30</sup> for investment in the creation and expansion of collective agro-industrial enterprises in land reform settlements, and the Programme for the Advancement of Rural Production Activities, which includes the Brazil without Extreme Poverty plan<sup>31</sup>, geared to production projects that guarantee food security and the generation of surpluses by the poorest family farmers.

The existence of a rural credit programme specifically for family farmers, PRONAF, brought this group to a new level of banking inclusion, promoting widespread access to people generally marginalized from rural credit. The climate and income insurance were fundamental to the sustainability of the loan agreements, reducing default rates.

Studies of PRONAF conducted at different points in time by different institutions reveal a series of positive effects resulting from family farmers' access to credit, in terms of production units and the local and regional economy.

PRONAF has been key to the stabilization and retention of rural jobs, as well as the generation of new employment at a reduced cost (Ibase, 1999); substantially higher productivity and greater technology use (Fecamp, 2002);

<sup>30</sup> For more information on the Terra Forte programme, visit <http://www.incra.gov.br>.

<sup>31</sup> For information on productive inclusion activities in the Brazil without Extreme Poverty Plan, see the chapter "Productive inclusion and cash transfers in overcoming rural poverty" in this publication.

the stimulation of local and regional development through higher agricultural production, wealth generation (agricultural GDP) and municipal tax revenues (Mattei, 2005); and continued upward mobility (Neri, 2008). It has even had significant sectoral effects, such as the recovery of milk production by family farmers and higher milk prices.

These results must be understood in the context of differentiated policies for family farming, which today comprise a democratic rural development agenda, that are part of land reform, marketing policies, the advancement of women's equality, etc. Between 2002 and 2012, these measures led to a 64% increase in family farming revenues, while the national average grew by only 24% in the same period (Del Grossi and Marques, 2015, p. 72).

Therefore, any evaluation of the positive effects of access to credit must be accompanied by recognition of its complementarity with other policies for promoting a sustainable standard of production. Recognizing the limitations of credit's role in the current agricultural model reemphasizes the importance of linking it with policies that more incisively address structural aspects such as research and development, productive and social infrastructure, economic and environmental regulation of unsustainable forms of production, the food supply and the regulation of the food system.

## **PRONAF CREDIT LINES IN THE 2015/2016 HARVEST YEAR<sup>32</sup>**

### **COSTING CREDIT (FINANCING OF COSTS)**

This credit line is for financing farm and non-farm activities and the processing or industrialization of production (the farmer's own or that of others) for a term of 1 to 3 years. Interest rates depend on the value financed: 2.5% per annum for loans of up to R\$ 10,000; 4.5% per annum for loan operations of more than R\$ 10,000 up to R\$ 30,000; and 5.5% per annum for loans of over R\$ 30,000 up to a maximum of R\$ 100,000 per harvest.

### **PRONAF MAIS ALIMENTOS (INVESTMENT)**

This credit line finances the construction, expansion or modernization of the production, processing, industrialization and services structure, including computer hardware and software, with a term of up to 10 years, including

<sup>32</sup> Source: BACEN, Manual de Crédito Rural. All monetary values are in Brazilian reais.

a 3-year grace period. The financing limits are up to R\$ 150,000 but can be as high as R\$ 300,000 for pig and poultry farming and fruit growing. Interest rates depend on the value financed: 2.5% per annum for operations of up to R\$ 10,000; 4.5% per annum for operations of more than R\$ 10,000 up to R\$ 30,000; and 5.5% per annum for operations of more than R\$ 30,000.

#### **MICROCRÉDITO PRODUTIVO RURAL (GROUP B)**

This credit line finances the investments of family farmers with an annual gross household income of up to R\$ 20,000 who do not hire permanent salaried workers. The limit is R\$ 2,500 per beneficiary, but can reach R\$ 4,000 with the National Programme for Targeted Productive Microcredit, with a 2-year term. Interest rates are 2.5% per annum, and the farmer is still eligible for a good compliance bonus of 25% or 40% for payments made up to the maturity date (when the enterprise is located in the jurisdiction of the Northeast Development Authority - SUDENE).

#### **PRONAF PRODUTIVO ORIENTADO**

(INVESTMENT-ORIENTED PRODUCTIVE CREDIT)

Exclusively for the regions in which the Constitutional Funds operate (Northeast, North and Center-West), access to rural credit is available, along with financial technical assistance that facilitates planning and advises and supervises family enterprises. This credit ranges from R\$ 18,000 to R\$ 40,000 per harvest year and is preferentially allocated to infrastructure for living in the particular ecosystem. Terms are for 10 years, including a 3-year grace period, with interest rates of 4.5% per annum, but with a good compliance bonus of R\$ 3,300 or R\$ 4,500 (North Region).

#### **PRONAF AGROINDÚSTRIA**

(VALUE ADDED)

This credit line finances enterprises or cooperatives that process, store, transform and sell agricultural, forestry, extraction or handicraft products or provide rural tourism services. The enterprises must be owned exclusively by one or more PRONAF beneficiaries, and at least 70% of the production to be processed, transformed, or marketed must be produced by its members. Cooperatives must prove that at least 60% of their active participants are PRONAF beneficiaries and at least 55% of the production to be processed, transformed, or marketed is from cooperatives enrolled in PRONAF. The financing limits are up to R\$ 150,000 for individual projects, up to R\$ 300,00 for rural family farms and up to R\$ 35 million for cooperatives (with a limit of R\$ 45,000 per member), with a term of up to 10 years and a grace period of up to 3 years. Interest rates are 2.5% per annum for loans of up to R\$ 10,000 (or multiples for members of cooperatives), and 5.5%

per annum for other cases. Up to 15% of the resources financed can be used to pay for accounting services, product development, quality control and technical assistance in management and financing.

**PRONAF CUSTEIO AGROINDÚSTRIA FAMILIAR**  
(COSTING CREDIT FOR AGROINDUSTRY)

The credit line finances the costing of processing, inventory building, industrialization and the preservation of production, including the procurement of containers, labels, condiments, preservatives, sweeteners and other supplies. The resources can also be used for down payments and the procurement of inputs for the cooperative to supply to its members. The limits are R\$ 12,000 for individuals, R\$ 210,000 for family enterprises, R\$ 10 million for individual cooperatives (maintaining the limit of R\$ 12,000 for each member) and R\$ 30 million for federated cooperatives (two or more cooperatives).

**PRONAF COTAS-PARTES**

This credit line finances integration of the quotas of PRONAF beneficiaries who are members of cooperatives for the purpose of working capital formation, costing, new investments or restoration of the enterprise's financial position. In the case of cooperatives, at least 60% of their members must be classified by PRONAF, with at least 55% of the production processed coming from these members; the cooperative must have at least R\$ 25,000 in capital and have been in operation for at least one year. The credit limit is R\$ 30 million, with a limit of R\$ 20,000 per member, an interest rate of 4.5% per annum and a term of up to 6 years.

**PRONAF FLORESTA (AGROFORESTRY SYSTEMS)**

This credit line is for implementing agroforestry systems, ecologically sustainable extraction activities, the recomposition and maintenance of permanent preservation areas and official reserves, the restoration of degraded areas pursuant to environmental legislation and the enrichment of areas that already have diversified forest cover with the planting of one or more species native to the ecological system. Projects can be for as long as 20 years. Loans are for up to R\$ 35,000, with a 12-year grace period and an interest rate of 2.5% per annum.

**PRONAF SEMIÁRIDO**  
(ADAPTATION TO CONDITIONS IN THE SEMIARID REGION)

This credit line is devoted to projects for adaptation to conditions in the semiarid region, focusing on the sustainability of agroecosystems. The resources are to be used for the deployment, expansion, rehabilitation or modernization of productive infrastructure, with terms of up to 10 years and a 3-year grace period. The credit limit is R\$ 18,000, at least 50% of which must be used for the deployment, construction, or modernization of water infrastructure. Interest rates are 2.5% per annum.

### **PRONAF MULHER (INVESTMENT FOR WOMEN)**

This programme provides credit for women farmers under the same conditions as the *Microcrédito Productivo Orientado* programme for Groups A, B and A/C or the minimum conditions of PRONAF's *Mais Alimentos* programme for the other beneficiaries.

### **PRONAF JOVEN (INVESTMENT FOR YOUTH)**

Loans of up to R\$ 15,000 for young adults aged 16 to 29 working in family enterprises, with an interest rate of 2.5% per annum and a term of 10 years. The grace period for commencing payment is 3 years but may be as long as 5 years, depending on the technical project.

### **PRONAF AGROECOLOGÍA (INVESTMENT IN AGROECOLOGY)**

Support for grassroots agroecological or organic farming systems, which includes the cost of setting up and maintaining the system. The credit limit is R\$ 150,000 but may be as high as R\$ 300,000 for pig- and poultry farming and fruit growing. The interest rate is 2.5% per annum.

### **PRONAF ECO (INVESTMENT IN RENEWABLE ENERGY AND ENVIRONMENTAL SUSTAINABILITY)**

This credit line finances renewable energy technologies such as solar, biomass and wind power equipment, mini-biofuel power plants and the substitution of fossil fuel-based technologies in farm equipment and machinery with renewable technologies; environmental technologies such as water treatment, solid waste, and effluent treatment plants; composting and recycling; water storage, such as the use of cisterns, dams, underground dams, water reservoirs and small hydropower plants; forestry, dendê (palm oil) and rubber plantations; conservation practices, correction of soil acidity, and improvements in soil fertility to restore and boost productive capacity. The limits and fees are the same as for *Mais Alimentos*, but the term depends on the project and may be for up to 12 years, with a 5-year grace period.

### **CREDIT FOR BENEFICIARIES OF THE LAND REFORM AND LAND CREDIT PROGRAMME (GROUP A)**

Investment credit of up to R\$ 25,000 for resettling families in a new area, with an interest rate of 0.5% per annum and a good compliance bonus of 40%, with a term of 10 years (which includes a 3-year grace period). The credit may be used to pay for technical assistance. The costing loans for Group A/C now allow three operations of up to R\$ 7,500, with interest rates of 1.5% per annum and terms of up to 2 years.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**ABRAMOVAY, R. et al.** 2012. Cinco anos do Agroamigo: retrato do público e efeitos do Programa. 2. ed. rev. atual. ampl. Fortaleza: Banco do Nordeste do Brasil.

**BACEN.** 2015. Página del Banco Central de Brasil. FAQ – Programa Nacional de Fortalecimento da Agricultura Familiar – Pronaf. (Available from <http://www.bcb.gov.br/?PRONAFFAQ>. Accessed 18/11/2015).

**BACEN.** Undated. Manual do Crédito Rural – MCR. Chapter 10: Programa Nacional de Fortalecimento da Agricultura Familiar (Pronaf). (Available from <http://www3.bcb.gov.br/mcr>. Accessed 18/11/2015).

**BACEN.** Undated. Matriz de Dados do Crédito Rural. (Available from: <http://www.bcb.gov.br/pt-br/sfn/credrural/sicor/matrizinformacoes/Paginas/default.aspx>. Accessed 18/11/2015).

**BANCO DO NORDESTE.** 2015. Revista Econômica do Nordeste, Vol. 46 (special supplement): Caderno Especial Agroamigo 10 anos. Fortaleza: BNB. (Available from <http://www.bnb.gov.br/ren-edicao-especial-2015-10-anos-do-agroamigo>. Accessed 18/11/2015).

**BIANCHINI, V.** 2015. Vinte anos do PRONAF 1995-2015: avanços e desafios. Brasília: MDA. 113 pp.

**BRAZIL.** 1996. Decree No. 1,946, of 28 June 1996. Creates the National Programme for Strengthening Family Farming – PRONAF. (Available from [http://www.planalto.gov.br/ccivil\\_03/Decree/D1946.htm](http://www.planalto.gov.br/ccivil_03/Decree/D1946.htm). Accessed 18/11/2015).

**BRAZIL.** 2003. Decree No. 4,854, of 8 October 2003. Regulates the composition, structure, authority, and operations of the National Sustainable Rural Development Board – CONDRAF. (Available from [http://www.planalto.gov.br/ccivil\\_03/Decree/2003/D4854.htm](http://www.planalto.gov.br/ccivil_03/Decree/2003/D4854.htm). Accessed 18/11/2015).



**BRAZIL.** 2005. Law No. 11,110, of 25 April 2005. Institutes the Programa Nacional de Microcrédito Productivo Orientado – PNMPO. (Available from [http://www.planalto.gov.br/Ccivil\\_03/\\_Ato2004-2006/2005/Lei/111110.htm](http://www.planalto.gov.br/Ccivil_03/_Ato2004-2006/2005/Lei/111110.htm). Accessed 18/11/2015).

**BRAZIL.** 2006. Law No. 11,326, of 24 July 2006. Establishes the guidelines for the formulation of the National Family Farming and Family Enterprise Policy (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2004-2006/2006/Lei/L11326.htm](http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2006/Lei/L11326.htm). Accessed 18/11/2015).

**CONTAG.** 1995. Grito da Terra Brasil: pauta nacional de reivindicações 1995 – CUT, CONTAG, MST, MAB, CNS, MONAPE, CAPOIB e Mulheres Trabalhadoras Rurais. Brasília, CONTAG. (Available from <https://www.contag.org.br/>. Accessed 17/9/2015).

**DEL GROSSI, M. E and MARQUES, V. P. M. A.** 2015. An in-depth review of the evolution of integrated public policies to strengthen family farms in Brazil. ESA Working Paper No. 15-01. Rome, FAO. (Available from <http://www.fao.org/publications/card/en/c/081e4416-dcdf-4981-a488-47f6a659c81b>. Accessed 21/12/2015).

**FECAMP.** 2002. Estudo de caso em campo para avaliação dos impactos do PRONAF. Campinas: Fecamp.

**GUANZIROLI, C. E.; DI SABBATO, A.; BITTENCOURT, G. A.; BAMPI, G.; CARDIN, S.; DUARTE, M.; REZENDE, G. C.; PRESCOTH, E.; LOGUERCIO, P. and ROMEIRO, A. R.** 1999. Novo Retrato da Agricultura Familiar: O caso do Brasil. 9. ed. Brasília: Ministry of Agrarian Development. Vol. 1. 65 pp.

**GUANZIROLI, C. E.; ROMEIRO, A. R.; DI SABBATO, A.; BUAINAIM, A. M. and BITTENCOURT, G. A.** 2001. Agricultura Familiar e Reforma Agrária no Século XXI. 1. ed. Rio de Janeiro: Editora Garamond. Vol. 1. 288 pp.

**IBASE.** 1999. Avaliação dos programas de geração de emprego e renda. Democracia Viva, São Paulo: Editora Segmento, Nov. 1999. (Edição Especial).

**MATTEI, L.** 2005. Impactos do PRONAF: análise de indicadores. Brasília: MDA. (NEAD Estudos, 11).

**MDA.** 2014. Acompanhe as ações do MDA e do Inbra. Version 27/6/2014. (Available from <http://www.mda.gov.br>. Accessed 30/9/2015).

**MULLER, L.; SANCHES, A.** 2014. El desarrollo de políticas públicas para fortalecer la agricultura familiar: la experiencia de Brasil. In: SALCEDO, S. and GUZMÁN, L. (Ed.). Agricultura Familiar en América Latina y Caribe. Recomendaciones de Política. Santiago, Chile: FAO. pp. 414-434. (Available from <http://www.fao.org/docrep/019/i3788s/i3788s.pdf>. Accessed 30/9/2015).

**NERI, M. (Org.).** 2008. Microcrédito, o mistério nordestino e o Grameen bra- si- leiro: perfil e performance dos clientes do CrediAmigo. Rio de Janeiro: Ed. FGV/ IBRE. 376 pp.

**PERACI, A. S. and BITTENCOURT, G. A.** 2010. Agricultura familiar e os programas de garantia de preços no Brasil: o Programa de Aquisição de Alimentos. In: GRAZIANO, J.; DEL GROSSI, M. and FRANÇA, C. G. The Fome Zero (Zero Hunger) Program: the Brazilian experience. Brasília: MDA.

**VEIGA, J. E.** 1994. A opção pela agricultura familiar. Brasília: FAO/IN- CRA. (Report).

**ZUKOWSKI, J. C.** 2015. Seguro agrícola e desenvolvimento rural – contribuições e desafios do SEAF. In: GRISA, C. and SCHNEIDER, S. Políticas públicas de desenvolvimento rural no Brasil. Porto Alegre: Editora da UFGRS.



## RESEARCH AND RURAL EXTENSION FOR FAMILY FARMING

The decision to discuss agricultural research and technical assistance and rural extension in the same chapter underscores the importance of integrating these areas of rural policy development and the potential revealed by the initial linkage of their actions in recent Brazilian initiatives.

These policies have their own institutional trajectories and structures. However, their points of contact and joint initiatives have been expanded with the Zero Hunger and Brazil without Extreme Poverty Plan and have contributed to overcoming extreme poverty, galvanizing the regions, and creating new opportunities for sustainable development.

The integration of food security policies with differentiated agricultural policies, together with recognition of the diversity in agriculture and the economic contributions of family farmers and traditional rural communities, is generating new demands and pressure to review and update the procedures for introducing new types of action and cooperation.

Moreover, the Federal Constitution of 1988 and its supplementary legislation enshrine the advancement of research and technology development, as well as technical assistance and rural extension, as national agricultural policy

instruments that must be integrated with each other and embraced by rural producers and their representative organizations and tailored to the different ecosystems and economic and cultural characteristics of these producers.

## AGRICULTURAL RESEARCH

The pressure to change has been accompanied by problems associated with the institutional trajectory of Brazil's earlier agricultural research, which was designed and conducted using a sectoral approach aimed at strengthening the agricultural sector to boost its productive capacity and the generation of foreign exchange to satisfy "a society in which industrialization and urbanization were just beginning" (Basaldi and Junior Stumpf, 2015, p. 511).

The Brazilian Agricultural Research Corporation (EMBRAPA) was created in 1973 to mitigate the precarious situation at the time, marked by "the lack of a sectoral science and technology policy", the "absence of coordination mechanisms", "inadequate linkage with technical assistance and rural extension services", "insufficient resources and a lack of flexibility in their use" (Rodrigues, 1987, p. 238), and to meet the demands of the modernization of agriculture to increase the capacity of the State to intervene (Rodrigues, 1987, p. 238).

Today, there is an institutional framework expressly for agricultural research in which EMBRAPA plays a key role. Present in 23 states and the Federal District, it has 46 decentralized research and service units, 17 focused on ecoregions (temperate, pantanal, eastern Amazonian, semiarid, and other climates); 15 on products (rice, corn, soybeans, poultry, pigs, etc.); 10 on basics (soils, genetic resources and biotechnology, computer science, etc.); and 4 on services (land management, products and markets, etc.). It also has major operations abroad, through virtual laboratories (LABEX) in the United States, Europe (France, Germany and the United Kingdom), South Korea, China and soon Japan; and technical cooperation programmes in Latin America, Africa and Asia.

Since 2013, EMBRAPA and FAO have been conducting joint cooperation activities in agricultural research, policy development, food security and sustainable natural resource management, as well as others to encourage and facilitate the sharing of knowledge and experiences, especially in the context of South-South cooperation.

EMBRAPA is the coordinator of the National Agricultural Research System, comprised of federal and state institutions, universities, private enterprises and foundations that conduct joint research in different areas. Its main partners include 23 state agricultural research organizations (OEPA)<sup>1</sup>. EMBRAPA also promotes public-private, national and international partnerships in areas such as research and development, business and technology transfer, with a total of 3,185 contracts in 2014.

EMBRAPA is a public enterprise with legal personality governed by private law, has its own capital, and enjoys administrative and financial autonomy. Its corporate capital is owned entirely by the federal government, and it does not distribute earnings or income. EMBRAPA's institutional mission is to “provide research, development and innovation solutions for the sustainability of agriculture and for the benefit of Brazilian society” and its vision, to “be a world reference in the generation and supply of information, knowledge and technologies, and thus contribute to innovation and sustainability in agriculture and to food security”<sup>2</sup>.

EMBRAPA's main financial resources are federal budget allotments; it also receives funds from service agreements or contracts; operating income; royalties and copyright and patent fees and other types of revenues, including income from the sale of technologies, seeds, plants, livestock and other products derived from its research.

EMBRAPA is linked with the Ministry of Agriculture, Livestock and Food Supply (MAPA). Its supreme deliberative body is its board of directors, made up of representatives of its staff, MAPA, the Ministry of Planning, Budget and Administration (MPOG), the Ministry of the Treasury (MF) and the Ministry of Agrarian Development (MDA), as well as two members chosen by MAPA from a list submitted by civil society organizations or government entities.

## STRATEGIC ORIENTATION

EMBRAPA operations are based on medium- and long-term planning. Its current master plan shows a broader vision of rurality that extends beyond

<sup>1</sup> For information on each state agricultural research organization, visit: <https://www.embrapa.br/oeapas>.

<sup>2</sup> For more details, visit: <https://www.embrapa.br/missao-visao-e-valores>.

crop and livestock production to include rural development on its agenda, with emphasis on environmental aspects.

The enterprise's 12 strategic objectives, spelled out in its VI Master Plan 2014-2034, are based on four main lines of action: "(a) to advance in the search for sustainability in all dimensions (technical, economic, social, environmental); (b) to promote research and development to further Brazil's strategic and competitive entry in the emerging bio-economy; (c) to contribute to the national and international public policy framework that affects rural Brazil; and (d) to promote integrated activities for productive inclusion and rural poverty reduction, supporting technology development in family farming, organic farming and agroecology" (EMBRAPA, 2014, p. 13).

For the purposes of this report, the strategic objectives are: (a) to generate knowledge and technologies that promote innovation in management to efficiently and effectively handle the growing complexity and multifunctionality of agriculture; (b) to generate knowledge and technologies and propose strategies tailored to the local situation that contribute to the productive inclusion of family farming; (c) to support the improvement and implementation of public policies and strategies based on research and analysis aligned with the needs of the market and rural development (EMBRAPA, 2015c).

The VI Master Plan is divided into macro-areas, all of them guided by an approach focused on production chains: (a) natural resources and climate change; (b) new sciences: biotechnology, nanotechnology and geotechnics; (c) automation, precision agriculture and information and communication technologies; (d) zoo-phytosanitary safety of production chains; (e) production systems; (f) agro-industrial, biomass and green chemistry technology; (g) food security, nutrition and health; and (h) markets, policies and rural development.

## RESEARCH AND FAMILY FARMING

EMBRAPA ascertains the family farming situation using an approach that cuts across all the macro-areas to ensure that the knowledge and trends captured by its activities are reorganized on the basis of the particularities of family farming, facilitating research and analyses and the development of specific strategies<sup>3</sup>.

<sup>3</sup> For information on the family farming technologies deployed and organic and agroecological production, see EMBRAPA (2015c).

In EMBRAPA's vision, family farming plays a "significant role as the agent of equitable and sustainable development" and is a "strategic sector" in several dimensions. Thus, it must be understood and addressed in the public policy arena. According to this vision, the existence of different types of family farming can also be attributed to the differences in access to public programmes, markets and technologies (EMBRAPA, 2014, p.125).

In EMBRAPA's view, the importance of family farming lies in the fact that: "(a) it is intrinsically linked to food and nutrition security; (b) it preserves traditional foods, while contributing to a more balanced diet and safeguarding agrobiodiversity and the sustainable use of natural resources; (c) it represents an opportunity to create wealth and stimulate local economies, especially when combined with policies to promote the independence of farmers, reaffirming their identity, the social protection and well-being of communities and sustainable rural development; (d) it has the potential for job creation" (EMBRAPA, 2014, p. 124).

EMBRAPA estimates that 65% of its projects result in technologies and information that can benefit family farmers in every region of Brazil, adding value to their activities and promoting sustainable development. Of the 1,151 actions in the public interest noted in its Social Report 2014, 257 are geared to family farmers and 108 to food security and the fight against extreme poverty<sup>4</sup> (EMBRAPA, 2015a; EMBRAPA, 2015b).

## CHANGES IN RESEARCH

Greater attention to "rural development and recognition of the different social categories present in rural Brazil" influenced the generation, advancement and "sharing of knowledge and technologies for the various segments of the population. As a result, they became weightier issues in the agenda" of research institutions (Basaldi and Junior Stumpf, 2015, p. 521).

The policy decision to promote family farming led EMBRAPA to modernize its strategic vision, horizontally integrating family farming across its priority

<sup>4</sup> For a description of EMBRAPA activities in the public interest, see <http://bs.sede.embrapa.br/2014/acoes/html/busca2014.html>.



areas and the search for closer linkage with government activities for social and productive inclusion. The enterprise has sought to give greater weight to environmental and institutional policy dimensions, which indicates that it is moving beyond its traditional sphere of action to focus on issues such as the impact of technology in terms of increasing average national productivity and the food supply and of creating jobs and generating income through lower costs and higher unit value added to products<sup>5</sup>.

However, institutional mechanisms for coordinating EMBRAPA's activities can be improved to ensure that social and environmental aspects really are prioritized in technology development and transfer. This coordination would involve strengthening cooperation among units and with OEPA and partners, including technical assistance and rural extension institutions (ATER), cooperatives and non-governmental organizations.

EMBRAPA's genetic resource preservation system is considered the largest of its type in Brazil and Latin America and one of the largest in the world, with more than 170 germplasm banks containing 765 species of plants, animals and microorganisms of importance to agriculture and the food supply. EMBRAPA is one of the leading public biotechnology institutions, with achievements such as animal cloning and the pioneering development in Brazil of genetically modified plants and genomic sequencing.

Given the importance of the enterprise, the National Council on Food and Nutrition Security (CONSEA) has recommended opening discussions, with extensive public participation, on the development of a public policy for preserving genetic resources and intensifying EMBRAPA's activities to produce a more effective social impact on indigenous and *quilombola* populations and other traditional communities and groups<sup>6</sup>.

Although EMBRAPA's institutional vision has incorporated its contribution to food security and recognized the importance of promoting the engagement

<sup>5</sup> For an impact assessment of technologies created by EMBRAPA see, inter alia, <http://bs.sede.embrapa.br/2014/metodologiareferenciaaavalimpactoembrapa.pdf>.

<sup>6</sup> For information on CONSEA's recommendations in this regard, visit <http://www4.planalto.gov.br/consea/eventos/plenarias/recomendacoes/2005/recomendacao-no-001-2005/view> and <http://www4.planalto.gov.br/consea/eventos/plenarias/recomendacoes/2012/recomendacao-no-009-2012/view>.

of social stakeholders in the design of its programmes and the monitoring of its results, the corporation recognizes that these areas can be more fully integrated into its activities and that greater dialogue can be sought with social organizations and movements (EMBRAPA, 2014; EMBRAPA, 2015c).

It also recognizes the need to improve communication with the institutions linked with public and private technical assistance and rural extension networks and cooperatives (EMBRAPA, 2015c).

## TECHNICAL ASSISTENCE AND RURAL EXTENSION SERVICES (ATER)

ATER also have a long institutional track record, with different phases and government actions to support production, community development and educational services. The framework was the creation of the Brazilian Enterprise for Technical Assistance and Rural Extension (EMBRATER) in 1974 as a useful tool for modernizing agriculture that began coordinating and supporting state entities (EMATER), which had considerable local capillarity (Diesel, Dias and Neuman, 2015, pp. 107 and 108). EMBRATER was a public enterprise linked with the Ministry of Agriculture, with legal personality governed by private law and its own capital; integrated with EMBRAPA, it was authorized to provide financial support to the official state ATER institutions<sup>7</sup>.

The Federal Constitution of 1988, supplemented with legislation on agricultural policy<sup>8</sup>, mandates that the federal government maintain free public ATER services for family farmers. Nevertheless, in 1990, with the dismantling of Brazilian State institutions, EMBRATER was dissolved, together with a number of state entities, with a drastic reduction in federal government support.

## RECONSTRUCTION OF RURAL EXTENSION SERVICES

In 2003, the government transferred the responsibility for coordinating and executing ATER policy from MAPA to the Ministry of Agrarian Development,

<sup>7</sup> Law No. 6,126, of 6 November 1974.

<sup>8</sup> Law No. 8,771, of 17 January 1991.

along with a budget of R\$ 3 million<sup>9</sup>. Creating a package of differentiated policies for family farming, in a dialogue with social movements, the federal government made a commitment “to revamp concepts and institutional formats” in a move to reconstruct the technical assistance and rural extension policy (Diesel, Dias and Neumann, 2015, p. 108). This marked the beginning of the institutionalization process, creating the conditions for political recognition of its relevance and “the laying legal foundations for its application, however without it being a specific ATER programme” (Diesel, Dias and Neumann, 2015, pp. 112-113).

The direct contracting of services was present from the outset, strictly through agreements between the MDA and public institutions (EMATER, universities, etc.) and private entities (businesses, cooperatives, civil society organizations).

The criterion of broad social participation was established and applied in the initial formulation of this public policy, continuing in other phases of the public policy cycle, the Committee on ATER, hiring proposals, training and educational activities, and service delivery.

In 2004, the National Technical Assistance and Rural Extension Policy (PNATER) was launched to guarantee, expand, and certify the delivery of a uniform public service for family farmers<sup>10</sup>, traditional rural communities and land reform beneficiaries, as long as they possessed the Declaration of Eligibility for the National Programme for Strengthening Family Farming (DAP) or could prove their status as approved beneficiaries in the INCRA Land Reform Information System (SIPRA).

Other regulatory and administrative steps necessary for its implementation and the strengthening of institutional partnerships were taken, with significant involvement of the Brazilian Association of State Technical Assistance and Rural Extension Entities (ASBRAER)<sup>11</sup>, created just after EMBRATER was dissolved and comprised of 27 state entities.

<sup>9</sup> Decree No. 4,739, of 13 June 2003.

<sup>10</sup> See the chapter “Identification and registration of family farms” in this publication.

<sup>11</sup> For information on each ASBRAER partner, visit <http://www.asbraer.org.br>.

In 2006, the Decentralized Brazilian Technical Assistance and Rural Extension System was created and the institutional foundations for its implementation were laid, with the definition of its management and executive bodies. The National Committee on ATER was created under the National Board for Sustainable and Cooperative Rural Development (CONDRAF) as the public management body, and an operating agreement was established, reaffirming the delivery of services by public and private entities.

## NEW LEGAL FRAMEWORK

A significant benchmark in this process was the creation, by statutory regulation, of the National Technical Assistance and Rural Extension Policy (PNATER) and the ATER Programme (PRONATER), containing one annex on methodologies and one on technologies<sup>12</sup>. Law. No. 12,188/2010 defined technical assistance and rural extension as “a non-formal educational service that promotes the management, production, processing and marketing of agricultural activities and services, including agro-extractive, forestry, and artisanal activities.”

The strategic objectives of PNATER include the advancement of regional and local potential, the improvement of the beneficiaries’ quality of life and integration with the agricultural research system. Its principles include: (a) sustainable rural development; (b) free access to quality technical assistance and rural extension services; (c) adoption of a participatory methodology with a multidisciplinary, interdisciplinary and intercultural approach to build citizenship and democratize public policy management; (d) adoption of the principles of ecological farming as the preferred approach to the development of sustainable production systems; (e) equity in gender, generational, race and ethnic relations; and (f) contributing to food and nutrition security and sovereignty.

ATER services are closely connected with action to promote the diversification of production and household income through families’ entry into alternative markets, such as the markets for organic products, medicinal plants and phytotherapeutic products; fair trade and family farm products; tourism; and handicrafts.

<sup>12</sup> Law No.12,188 of 11 January 2010, and Decree No. 7,215 of 15 June 2010.

In addition to promoting technical assistance, PRONATER provides education and training for rural extension workers as a way of supporting governmental and non-governmental organizations. It also has ATER networks in some Federative Units – 13 thematic networks that provide scientific and technical information, promote the sharing of experiences and help connect entities with professionals working for the programme.

The new legal framework calls for national conferences of a deliberative and participatory nature, which should yield guidelines and proposals for PRONATER that will be included in the federal government's Pluriannual Plan (PPA).

## MANAGEMENT AND INNOVATION

The MDA is responsible for formulating and monitoring compliance with the policy and for managing the programme, understood as the policy implementation tool for organizing service delivery. It determines who can provide services, and institutes a new type of contracting.

Services can be provided in collaboration with the different levels of public administration, as well as through agreements with public or private institutions or organizations, whether for- or not-for-profit pre-accredited by the sustainable rural development boards in each state. A public tender is not required. Instead, a simplified procedure consisting of a public call for proposals is used, an innovation in the legal framework governing the federal contracting of services.

Through a public call for proposals specifying the priority groups, regions or programmes, the minimum number of beneficiaries per expert, the qualifications of the technical team, the value of the services (determined through parameterized costing systems) and the development of participatory methodologies, the technical proposals of pre-accredited entities are selected. Examples of different types of calls for proposals are those targeting different groups (indigenous and *quilombola* populations, small-scale fishers, family cooperatives, etc.); government programmes (Territories of Citizenship, Adaptation to Conditions in the Semiarid Region, Brazil without Extreme

Poverty); and assorted activities (agroecology, the production of native seeds, diversification of production in tobacco-growing areas, the improvement of milk production) or a combination thereof, such as the productive organization of women and for women in the Semiarid region.

Two other institutional innovations are worth mentioning: payment on confirmation by farmers that each of the activities stipulated in their contract has been completed, and monitoring and follow-up of the services and online tax payments through the ATER information system (SIATER)<sup>13</sup>.

In the case of land reform beneficiaries, PRONATER provides technical, social, and environmental assistance (ATES), contracted by INCRA through public calls for proposals for services such as the preparation of development or settlement rehabilitation plans and projects and the implementation of planning and educational activities.

Another major benchmark in the history of ATER was the first National Conference, held in 2012, on the obstacles to effective implementation of PNATER<sup>14</sup>, which mobilized more than 40,000 people in its various stages. The conference's main topics reveal the challenges to implementing the policies: expanding coverage; increasing financial resources for their implementation; improving the quality of services; increasing assistance tailored to the diversity of family farming; producing healthy foods; coordinating with the other family farming policies; and ensuring sustainable rural development (MDA and CONDRAF, 2015, p. 4).

A substantial increase has recently been observed in the use of resources in ATER. Between 2010 and 2014, the MDA allocated R\$ 1.18 billion, benefitting more than 565,000 households and 556 family farmers' organizations. In 2015, "there were 221 current loan agreements, which implies the execution of R\$ 884 million" (MDA and CONDRAF, 2015, p. 4).

The most recent MDA data show that in April 2015, services contracted through calls for proposals assisted 557,407 farmers, both men and women, and 242,144 BSM beneficiary households<sup>15</sup>.

<sup>13</sup> For information on SIATER, visit <http://siater.mda.gov.br>.

<sup>14</sup> The 2nd National Conference on ATER is scheduled for 2016.

<sup>15</sup> Available from <http://www.mda.gov.br/sitemda/pagina/acompanhe-a%C3%A7%C3%B5es-do-mda-e-incra>.

In the period 2011-2014, INCRA allocated R\$ 1.065 billion to ATER services, benefitting 401,300 land reform settler households (MDA and CONDRAF, 2015, p. 4). The sums allocated are even higher if the resources used by state institutions and civil society organizations are considered.

In addition to the increase in resources, it is important to note the diversity of family farming, acknowledged in the ATER policy for women, which includes calls for proposals specifically for assistance to women and for projects that target women's production groups and organizations,<sup>16</sup> as well as activities to support the agroecological transition.

In addition to providing direct technical assistance, ATER have contributed to other public programmes in a variety of ways, such as issuing the Declaration of Eligibility for PRONAF (DAP); developing projects for access to rural credit; conducting inspections and preparing claims for losses so that beneficiaries can be reimbursed by Family Farming Insurance (SEAF); helping family farmers enter the institutional market and working on the design of projects and monitoring the operations of the Food Acquisition Programme (PAA) and the School Feeding Programme (PNAE) and on linkage with schools and municipal and state governments (MDA and CONDRAF, 2015 pp. 5, 14).

An institutional evaluation of ATER policies was recently conducted at the national level. One aspect considered an advance was the shared delivery by governmental and non-governmental organizations of multiple services to specific populations such as family farmers, including those from traditional population groups and communities. However, the need to expand the coverage of these activities and ensure that they better reflect the objectives and guidelines of the National Policy on ATER was observed. Other needs included better government management and social oversight through the restructuring of state institutions, the strengthening of social participation and improved monitoring and evaluation of services (MDA, 2015).

<sup>16</sup> See the chapter "Citizenship and autonomy of rural women" in this publication.

## A NATIONAL AGENCY

A new step forward in completing the institutional framework was recently taken with the approval of the National Agency for Technical Assistance and Rural Extension (ANATER)<sup>17</sup>, which is currently in the structuring phase.

ANATER was established as an autonomous non-profit social service in the public interest and for the public good, with legal personality governed by private law. Its purpose is “to promote the implementation of public policies on technical assistance and rural extension services, especially those that contribute to an increase in production, productivity and the quality of rural products and services, to improve income, the quality of life, social advancement and sustainable development in rural areas” (Law No. 12,897/2013).

ANATER resumed State coordination of the advancement of these services at the federal level, with the responsibility of universalizing technical assistance and rural extension services. Its priority beneficiaries were family farmers, as defined in Law No. 11,326/2006, and rural producers enrolled in the National Programme to Support Medium-sized Rural Producers (PRONAMP)<sup>18</sup>.

The Agency will be responsible for accrediting and contracting public and private service providers, in addition to monitoring them and evaluating their results. It will also promote ongoing activities to train rural extension professionals, promote integration of agricultural research with the ATER system and foster technology upgrading and the generation of new technologies and their use by producers.

The Agency is responsible for coordinating with public and private entities, including state governments, public institutions that offer technical assistance and rural extension services and municipal consortia, to meet its objectives.

It is funded by transfers from federal budget lines and the income from agreements and contracts with entities, agencies, businesses and other enterprises.

<sup>17</sup> Law No.12,897 of 18 December 2013, and Decree No. 8,252 of 26 May 2014.

<sup>18</sup> According to the Manual de Crédito Rural, PROCAMP beneficiaries are producers who: (a) receive at least 80% of their annual income from farming or plant extraction activities; and (b) have a gross annual income of up to R\$ 1.6 million. This limit includes 100% of the gross production value (GPV), 100% of the income received as an integrating entity and the other income from activities performed inside and outside the enterprise and 100% of non-farming activities (Res/BCB/ Nos. 3,987 and 4,226).



ANATER is an autonomous agency connected with MDA and managed by means of management contracts. Its board of directors is a deliberative body, composed by 11 members. It is composed by its president, the president of EMBRAPA, four representatives of the federal executive branch (MDA, MAPA, MPOG and MPA), one representative of the state governments, one representative each of CONTAG, FETRAF, the National Agriculture and Livestock Confederation (CNA) and the Organization of Brazilian Cooperatives (OCB). ANATER also has a national advisory board, which is consultative in nature, with 36 members, 10 of them from entities representing family farmers.

EMBRAPA's Director of Technology Transfer is also the Executive Director of ANATER, strengthening the connection between research and development flows and promoting greater synergy between public and private initiatives in an effort to offer reliable information to rural producers—an important “initiative for increasing technology transfer and promoting productive inclusion in rural areas” (EMBRAPA, 2014, p. 30).

## INTEGRATION OF RURAL DEVELOPMENT POLICIES

The paths taken by agricultural research and technical assistance and rural extension services have been marked by a commitment to development and prioritization of the various segments of the rural population, posing the challenge of revamping institutional agendas. Embracing the knowledge and technologies generated and educational extension processes, along with their economic, social and environmental impact, depends on the capacity to engage with public rural development programmes – especially those for differentiated family farming, productive inclusion and rural poverty reduction (Basaldi and Junior Stumpf, 2015, pp. 522, 523).

94

The primary interfaces and mechanisms for integration with other programmes implemented by EMBRAPA and PRONATER executing bodies and entities are the Brazil without Extreme Poverty Plan (BSM), the National Agroecology and Organic Production Plan (PLANAPO), the Low-carbon Agriculture Plan (ABC) and the National Land Reform Programme (PNRA).

Since 2013, state forums have been established for consensus-building and the advancement of joint initiatives between agricultural research institutes,

educational institutions, ATER entities and family farming organizations. Their results include the creation of “local and regional innovation networks”, shared knowledge and technology management in the training of agents and the accreditation of ATER services (MDA and CONDRAF, 2015, p. 18).

Emphasis should be placed on participation in the Brazil without Extreme Poverty Plan (BSM)<sup>19</sup>, with the development and implementation of differentiated ATER services capable of supporting and guiding extremely poor rural families “down a path of policies and activities for rural productive inclusion” (Mendonça et al., 2015, p. 50).

Despite the cumulative experience with services for impoverished family farmers, especially technical assistance for households benefitting from PRONAF’s rural microcredit line, the challenge was to develop a new methodology for reaching the population “that had largely been ignored in the credit policy” and other rural development policies (Mendonça et al., p. 53).

It was the responsibility of ATER to reach these households by conducting an active search<sup>20</sup> for this population, which was largely “invisible to government registers”, since it was not enrolled in CadÚnico (Mendonça et al., p. 54). ATER would thus be the link between these households and the various BSM programmes, guiding the use of the non-reimbursable financial resources transferred to each household through the food security and income generation projects of the Programme for the Advancement of Productive Rural Activities<sup>21</sup> and access to government food procurement programmes.

The ATER strategy for overcoming poverty therefore involved the design of a “roadmap for productive inclusion” for each specific situation; “the training of technical teams”; “inclusion of the gender perspective” and recognition of the work of women; and differentiated services tailored to “the diversity of traditional peoples and communities” (Mendonça et al., 2015, p. 53).

<sup>19</sup> For information on the general characteristics of BSM, visit <http://mds.gov.br/assuntos/brasil-sem-miseria/o-que-e>.

<sup>20</sup> For information on the active search strategy, see the chapter “Productive inclusion and cash transfers in overcoming rural poverty” in this publication.

<sup>21</sup> For information on the Programme for the Promotion of Productive Rural Activities, visit <http://mds.gov.br/aceso-a-informacao/perguntas-frequentes/seguranca-alimentar-e-nutricional/fomento-as-atividades-productivas-rurais>.

Two instruments were combined in the implementation of this differentiated ATER: direct contracting through public calls for proposals to “exclusively serve the extremely poor population in the rural municipalities and territories with the highest concentration of poverty in the country”, and pacts with state governments that offered services under the BSM methodology (Mendonça et al., 2015, p. 53).

Between 2011 and 2014, MDA and INCRA guaranteed ATER services to 354,000 households, especially in the North and Northeast regions, and trained more than 3,300 ATER agents, for a total of some R\$ 620 million in investments in these activities (Mendonça et al., 2015, p. 51).

EMBRAPA’s participation consisted primarily of technology transfer, especially for access to water (One Million Cisterns and *Segunda Água* programme), training for technicians and seed production and distribution. In 2014, through an agreement with MDA, 169 tons of seed corn, black-eyed peas, and vegetables were distributed to 500,000 households of BSM beneficiaries (EMBRAPA, 2015b).

## PROGRESS IN LAND REFORM

The land reform programme’s participation in BSM, in combination with the new roadmap for the financing of land reform, yielded major innovations, especially in the areas of social and productive inclusion. These innovations include the individualization of credit for households, the introduction of debit cards, and the linkage of resources to support production with technical assistance<sup>22</sup>.

Squatter families began to be recognized and registered in CadÚnico like settler families, “providing them with the social protection associated with the register, which included the *Bolsa Família*, *Brasil Sorridente*, *Brasil Carinhoso*, *Água para Todos* and *Minha Casa Minha Vida* programmes” (Guedes et al., 2015, p. 70).

The BSM strategy of linking financial and technical support was nothing new for INCRA, since the funds that settler families received through the credit

<sup>22</sup> The new financing roadmap was consolidated in Provisional Measure No.636, of 26 December 2013, becoming Law No.13,001, of 20 June 2014.

for setting up household were intended to create the conditions for them to begin a new life in the settlements. These funds enabled “populations to meet their basic needs (food, clothing, etc.), helped get productive activities up and running and guaranteed housing” (Guedes et al., 2015, p. 72).

The BSM introduced major innovations, such as the Programme for the Advancement of Productive Rural Activities, the differentiated ATER, the advancement of access to government food procurement programmes and the *Bolsa Verde* programme targeting households in environmentally differentiated settlements, which, implemented in partnership with MDS and MMA, provides payment for environmental services.

## ACHIEVEMENTS AND CHALLENGES

The achievements of the differentiated technical assistance included the successful “strategy for targeting” extreme poverty; the implementation of productive farming and non-farming projects to fulfil “the hopes and dreams of families”; farmers’ acquisition of the DAP and enrolment in CadÚnico, enabling them to participate in other differentiated social and agricultural programmes; and women’s participation in productive projects with the transfer of “development resources through the *Bolsa Família* card, issued largely in the name of women” (Mendonça et al., 2015, pp. 63, 64).

The most important achievement, however, was validation of the argument that extremely poor families can have a productive future if the instruments of the social protection network are combined with appropriate measures for social inclusion and offer new opportunities and the necessary support for their economic independence.

The lessons from this recent experience call attention to the issues on the agenda for improving the Brazil without Extreme Poverty Plan. Keeping the focus on those who need it most must be combined with activities to strengthen “the bonds of social cooperation in the communities served” and “the use of development resources for productive projects in the public interest” (Mendonça et al., 2015, p. 65). Further increasing women’s participation will require decreasing their burden of work as caregivers, guaranteeing them

“social mechanisms and care for children, the elderly, and people with special needs” (Mendonça et al., 2015, p. 65).

It is also clear that the road to overcoming poverty is a long one that will require “technical assistance services for three to five years” to enable the poor to access the available programmes and make the productive inclusion conceived by the BSM a reality (Mendonça, et al., 2005, p. 66). This trajectory clearly demonstrated the importance of linking technical assistance and rural extension with the Programme for Access to Technical Education and Employment (PRONATEC), “tailoring its activities to the profile of the population” and the demand for “new knowledge and techniques”, and with *Bolsa Verde*, which combines cash transfers with the sustainable use of natural resources as seen in some settlements (Ibid, p. 66).

Recent MDA and EMBRAPA initiatives have sought to establish and consolidate state forums for consensus building and the integration of activities to promote innovation in family farming, bringing together representatives from academia, research and extension institutions and family farmers.

Guided by a common vision, these different and varied experiences have increased the potential for research and extension services to interact with other programmes, thus contributing to sustainable development.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BASALDI, O.** and **STUMPF JUNIOR, W.** 2015. Políticas públicas e pesquisa para o desenvolvimento rural no Brasil. In: **GRISA, C.** and **SCHNEIDER, S.** (Orgs.). *Políticas públicas de desenvolvimento rural no Brasil*. Porto Alegre, RS: Editora da UFRGS. (pp. 511-529)

**BRAZIL.** 2003. *Decree No. 4,739, of 13 June 2003*. On the structure of the Office of the President of the Republic and ministries. (Available from [http://planalto.gov.br/ccivil\\_3/Decree/2003/d4739](http://planalto.gov.br/ccivil_3/Decree/2003/d4739). Accessed 24/10/2015).

**BRAZIL.** 2010. Decree No. 7,215, of 15 June 2010. Establishes PNATER and the regulations for PRONATER. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2010/Decree/D7215.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2010/Decree/D7215.htm). Accessed 24/10/2015).

**BRAZIL.** 2012. Decree No. 7,766, of 25 June 2012. Approves the EMBRAPA Statute. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2012/Decree/D7766.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2012/Decree/D7766.htm). Accessed 24/10/2015).

**BRAZIL.** 2014. Decree No. 8,252, of 26 May 2014. Establishes the autonomous social service called ANATER. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2014/Decree/D8252.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2014/Decree/D8252.htm). Accessed 24/10/2015)

**BRAZIL.** 1972. Law No. 5,851, of 7 December 1972. Authorizes the Executive Branch to create a public enterprise called Brazilian Agricultural Research Corporation (EMBRAPA). (Available from [http://www.planalto.gov.br/ccivil\\_03/LEIS/1970-1979/L5851.htm](http://www.planalto.gov.br/ccivil_03/LEIS/1970-1979/L5851.htm). Accessed 24/10/2015).

**BRASIL.** 1974. *Law nº 6126, of 6 November 1974.* Autoriza o Poder Executivo a instituir a Empresa Brasileira de Assistência Técnica e Extensão Rural (EMBRATER). (Available from <http://www2.camara.leg.br/legin/fed/lei/1970-1979/lei-6126-6-novembro-1974-357673-publicacaooriginal-1-pl.html>. Accessed 24/10/2015).

**BRAZIL.** 1991. Law No. 8,171, of 17 January 1991. On agricultural policy. (Available from [http://www.planalto.gov.br/CCIVIL\\_03/leis/L8171.htm](http://www.planalto.gov.br/CCIVIL_03/leis/L8171.htm). Accessed 24/10/2015).

**BRAZIL.** 2010. Law No. 12,188, of 11 January 2010. Establishes PNATER and PRONATER. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2010/Lei/L12188.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2010/Lei/L12188.htm). Accessed 24/10/2015).

**BRAZIL.** 2013. Law No. 12,897, of 18 December 2013. Authorizes the federal Executive Branch to create an autonomous social service called the National Technical Assistance and Rural Extension Agency (ANATER). (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2013/Lei/L12897.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2013/Lei/L12897.htm). Accessed 24/10/2015).

**DIESEL, V.; DIAS, M. M. and NEUMANN, P. S.** 2015. PNATER (2004-2014): da concepção à materialização. In: **GRISA, C. and SCHNEIDER, S.** (Orgs.). Políticas públicas de desenvolvimento rural no Brasil. Porto Alegre, RS: Editora da UFRGS. (pp. 107-128) .

**EMBRAPA.** 2015a. Secretaria de Comunicação. EMBRAPA em números. Brasília: EMBRAPA. (Available from <https://www.EMBRAPA.br/EMBRAPA-em-numeros>. Accessed 24/10/2015).

**EMBRAPA.** 2015b. Secretaria de Comunicação. Secretaria de Gestão e Desenvolvimento Institucional. *Balanco Social 2014*. Brasília, DF: Embrapa. (Available from <http://bs.sede.embrapa.br/2014/balancosocialembra2014.pdf>. Accessed 27/10/2015).

**EMBRAPA.** 2015c. Secretaria de Gestão e Desenvolvimento Institucional. *VI Plano Diretor da Embrapa: 2014-2034*. Brasília, DF: Embrapa, 2015. (Available from <https://www.embrapa.br/plano-diretor>. Accessed 24/10/2015).

**EMBRAPA.** 2014. *Visão 2014-2034: o futuro do desenvolvimento tecnológico da agricultura brasileira*. Brasília, DF: Embrapa. (Available from <https://www.embrapa.br/visao-2014-2034>. Accessed 24/10/2015).

**GUEDES, C. M. G.; STURM, C. E.; PETRARCA, L. e GUERESI, S.** 2015. Brasil sem Miséria na reforma agrária: avanços na inclusão social e produtiva. In: **MELLO, J.** (Org.). *A inclusão produtiva rural no Brasil sem Miséria: o desafio da superação da pobreza no campo*. Brasília: MDS. (p. 70-86). (Cadernos de Estudos Desenvolvimento Social em Debate, nº 23). (Available from [http://aplicacoes.mds.gov.br/sagirmsp/ferramentas/docs/Caderno%2023\\_%20FINAL\\_910.pdf](http://aplicacoes.mds.gov.br/sagirmsp/ferramentas/docs/Caderno%2023_%20FINAL_910.pdf). Accessed 24/10/2015).

**MDA.** 2015. Secretaria da Agricultura Familiar. *Matriz de sistematização do Seminário Nacional de Ater*. [Balanço das ações na última década e novos desafios. Brasília, 31 August 2015]. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_img\\_21/Matriz%20%20Sistematiza%C3%A7%C3%A3o%20todos%20eixos%20para%20Anais%20integral%20PDF.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_img_21/Matriz%20%20Sistematiza%C3%A7%C3%A3o%20todos%20eixos%20para%20Anais%20integral%20PDF.pdf). Accessed 27/10/2015).

**MDA e CONDRAF.** 2015. *2.<sup>a</sup> Conferência Nacional de Assistência Técnica e Extensão Rural na Agricultura Familiar e Reforma Agrária: Ater, agroecologia e alimentos saudáveis.* Reference document. Brasília, DF: MDA.

**MENDONÇA, L. K.; TAVIRA, G.; FERREIRA, H.; LANGE, R.; OLIVEIRA, L. P.; MOLINA, C. e HORA, K.** 2015. A construção de uma política de assistência técnica e extensão rural para superação da extrema pobreza. In: **MELLO, J.** (Org.). *A inclusão produtiva rural no Brasil sem Miséria: o desafio da superação da pobreza no campo.* Brasília, DF: MDS. (p. 50-69).

**RODRIGUES, C. M.** 1987. A pesquisa agropecuária no período do pós-guerra. *Cadernos de Difusão de Tecnologia*, Brasília, DF, v. 4, nº 3, p. 205-54.





## COOPERATIVISM IN FAMILY FARMING AND SOLIDARITY ECONOMICS

Associativism, in general, and cooperativism, in particular, are considered important tools for increasing the contribution of family farming to activities for overcoming poverty, fighting hunger and guaranteeing food and nutrition security, economic growth and the sustainable development of nations.

Through their economic organizations, family farmers can better respond to the challenges posed by competition and the globalization of markets and improve their economic participation at different levels and on different scales, especially when it comes to public food procurement programs. Family farmers' cooperatives and associations can also contribute to the creation of new forms of production and consumption and new national development standards.

Accordingly, in Brazil and the regional context of MERCOSUR, there is an understanding between governments and civil society organizations that instruments to support associativism and aimed at building cooperatives and civil society organizations should be part of the differentiated policy package for the social and economic strengthening of family farming (IFAD-MERCOSUR CLAEH Programme, 2014).

## A NEW LEGAL FRAMEWORK

One of the main items on the work agenda of family farming cooperatives is determining whether or not the legal framework is tailored to the characteristics and needs of their members, including its implications for the direction of public policies.

The law creating the National Policy on Cooperativism (PNC) was published in 1971 during the military regime and imposes strict federal control over cooperatives, even over the act of creating them and their deliberative bodies. Under this law, there is only one representative of the national system of cooperatives, and that is the Organization of Brazilian Cooperatives (OCB), a civil society organization made up of analogous state entities, whose function is to serve as a technical advisory body for the government. For permission to operate, all cooperatives must register with the OCB and pay an annual fee.

Created in 1969, the OCB is part of a system of representation that also includes the non-profit National Cooperative Education Service (SESCOOP) and the National Confederation of Cooperatives (CNCOOP), both with legal personality governed by private law. SESCOOP was created in 1998 through a Provisional Measure; national in scope, its purpose was to organize, manage and conduct professional training, foster the development and social advancement of cooperative workers and members and engage in monitoring, supervision, audits, and control in cooperatives<sup>1</sup>.

The service is funded by a compulsory monthly contribution to the Social Security system of 2.5% of the wages paid to all employees of cooperatives, among other income. It is run by a National Board headed by the OCB, in which four ministries, including the Ministry of Agriculture, Livestock, and Food Supply (MAPA), and other entities participate.

CNCOOP has been registered since 2010 as a third-tier employers' organization<sup>2</sup> and is responsible for coordinating cooperatives as an economic category. The

<sup>1</sup> For information on the creation of SESCOOP, visit [http://www.planalto.gov.br/ccivil\\_03/mpv/2168-40.htm](http://www.planalto.gov.br/ccivil_03/mpv/2168-40.htm). For information on its operations, see <http://www.ocb.org.br/site/sescoop/index.asp>.

<sup>2</sup> According to the PNC, cooperatives are legally classified by type and are considered singular when they have 20 people; central cooperatives or federations when they consist of at least three singular cooperatives; and confederations when they consist of at least 3 federations of cooperatives or central cooperatives of the same or different type.

Confederation collects a compulsory annual contribution from cooperatives, whether or not they are members of a union.

In line with some objectives of the National Cooperatives Policy, the Federal Constitution (CF) of 1988 includes support for and encouragement of cooperativism and other forms of association, considering them key elements for the planning and execution of agricultural policy. The Constitution also contains appropriate fiscal provisions for the cooperation acts of cooperatives<sup>3</sup>.

Nonetheless, the Federal Constitution does not embrace some of the principal articles of the national policy and guarantees full freedom of association, prohibiting State interference in the creation and operation of cooperatives. Even so, the National Cooperatives Policy is still in force and has guided comprehensive public policies for cooperatives, regardless of their members' characteristics. These policies have a privileged mediator in the OCB and its entities.

In April 2015, the OCB<sup>4</sup> reported that it represented 6,600 cooperatives and approximately 11 million members; of these, 1,597 cooperatives and 1 million members belonged to the agricultural sector<sup>5</sup>. According to the organization, its members include some 320 cooperatives that have been issued the Declaration of Eligibility for PRONAF (DAP PJ)<sup>6</sup>, representing some 76% of family farmers and campesinos registered with the MDA (Freitas, 2015).

The OCB reports that cooperatives account for 48% of Brazil's agricultural production and 21% of the country's static warehouse capacity, among other important aspects (Freitas, 2015). Moreover, they are major participants in the country's international trade. In 2014, cooperatives were responsible for exports worth approximately US\$ 5.2 billion (FOB) and a positive balance of trade in the amount of US\$ 4.9 billion (FOB). In 2011 and 2012, these figures

<sup>3</sup> Cooperative acts are the actions of cooperatives with their members, of members with the cooperatives, and of cooperatives with each other when they are associated in order to meet social objectives. Cooperative acts do not involve market operations or sales agreements for products or merchandise.

<sup>4</sup> For information on OCB operations, visit <http://www.ocb.org.br/SITE/ocb/index.asp>.

<sup>5</sup> According to the PNC, cooperatives are legally classified according to the purpose or nature of the activities that they or their members perform. Since 1993, the OCB has had 12 branches other than the agricultural branch, devoted to labour, credit, health, transportation, consumption, housing and infrastructure.

<sup>6</sup> In this regard, visit [http://www.ocb.org.br/site/agencia\\_noticias/noticias\\_detalhes.asp?CodNoticia=13069](http://www.ocb.org.br/site/agencia_noticias/noticias_detalhes.asp?CodNoticia=13069).

were around US\$ 6.2 billion (FOB) and US\$ 5.8 billion (FOB), respectively. The main products exported by some 220 agricultural cooperatives to 125 countries include coffee, poultry meat, pork, soybeans, corn and sugar<sup>7</sup>.

OCB strategic objectives for 2015-2020 include: supporting the participation of cooperatives in the market; helping to improve the regulatory framework for cooperatives; promoting the implementation of public policies and strengthening the political and institutional representation of cooperativism<sup>8</sup>.

## NEW ENTITIES

The legitimacy of the OCB as the sole entity representing cooperatives is being called into question by other entities, including those that specifically represent family farmers. Opposition to the OCB is generally based on defence of the principles and values of solidarity economics (or solidarity cooperativism), which include self-management, associative work without subordination, an emphasis on internal democracy and a commitment to sustainable local development through solidarity of the communities in which the enterprises operate (MTE and MDA, 2010)<sup>9</sup>. The legitimacy of the high fees charged by the OCB system has also been challenged.

Challenges to the National Policy on Cooperativism materialized in the founding of organizations such as the Confederation of Land Reform Cooperatives in Brazil (CONCRAB) in 1992, the Center for Solidarity Cooperatives and Enterprises (UNISOL)<sup>10</sup> in 2000, the National Association of Cooperative Credit for Household and Solidarity Economics (ANCOSOL)<sup>11</sup> in 2004, the National Union of Cooperatives for Family Farming and Solidarity Economics (UNICAFES)<sup>12</sup> in 2005 and the Confederation of Central Rural Credit Cooperatives with Solidarity-based Interaction (CONFESOL)<sup>13</sup> in 2008.

<sup>7</sup> For information on the foreign trade of cooperatives, visit [http://www.desenvolvimento.gov.br/sitio/interna/interna.php?a\\_rea=5&menu=3186](http://www.desenvolvimento.gov.br/sitio/interna/interna.php?a_rea=5&menu=3186).

<sup>8</sup> For information on the Strategic Map 2015-2020 of the OCB, visit [http://www.brasilcooperativo.coop.br/Gerenciador/ba/arquivos/Mapa\\_estrategico\\_da\\_OCB.pdf](http://www.brasilcooperativo.coop.br/Gerenciador/ba/arquivos/Mapa_estrategico_da_OCB.pdf).

<sup>9</sup> For information on the Charter of Principles of Solidarity Economics in Brazil, visit [http://www.fbcs.org.br/index.php?option=com\\_content&task=view&id=63&Itemid=60](http://www.fbcs.org.br/index.php?option=com_content&task=view&id=63&Itemid=60).

<sup>10</sup> For information on the operations of UNISOL, visit <http://www.unisolbrasil.org.br/>.

<sup>11</sup> For information on the operations of ANCOSOL, visit <http://www.ancosol.org.br/>.

<sup>12</sup> For information on the operations of UNICAFES, visit <http://unicafes.org.br/>.

<sup>13</sup> For information on the operations of CONFESOL, visit <http://www.confesol.com.br/home.php>.

These organizations represent formal enterprises, such as public credit, housing, energy cooperatives and informal cooperatives that come together over different issues through organizations, networks, and production chains.

In January 2014, UNICAFES, UNISOL and CONCRAB formed the National Union of Solidarity Cooperativist Organizations (UNICOPAS), whose mission was to coordinate, integrate and represent the general organizations to turn solidarity cooperativism into a grassroots instrument for sustainable local development through solidarity.

UNICOPAS reports that it represents over 2,000 cooperatives, with a membership of approximately 550,000 that includes family farmers, land reform settlers, *quilombolas* communities, small-scale fishers and other rural and urban groups. CONFESOL represents 155 cooperatives and some 395,000 members.

## ADVANCEMENT OF COOPERATIVISM AND FAMILY FARMING

Other examples of challenges to the National Policy on Cooperativism are the demands for the advancement and support for the consolidation, structuring, and expansion of solidarity cooperative systems. Most of these demands are expressed in the guidelines of the National Programme for the Advancement and Strengthening of Solidarity Cooperativism and Associativism in Family Farming and Land Reform (COOPERAF), created by MDA in June 2015 as part of the Family Farming Harvest Plan 2015/2016.

The strategic lines of COOPERAF are to increase the number of solidarity cooperatives and associations in rural areas; provide greater access to credit programmes, value added, marketing and agro-industrialization; promote training and education in cooperativism; and coordinate related public policies at the national, state and municipal level.

The instruments used in the implementation of COOPERAF include: (a) technical assistance and rural extension services (ATER) for the management, production, marketing and corporate structuring of cooperatives and associations; (b) broadening of the channels for marketing the products of

cooperatives and associations in public food procurement processes; (c) the revamping of existing credit lines or creation of new ones; and (d) linkage of joint investment initiatives between government entities and cooperatives and associations.

An important component of technical assistance since 2012 has been the *Mais Gestão* (Better Management) service, under the National Technical Assistance and Rural Extension Programme (PRONATER), designed to improve all dimensions of cooperative management systems. The service assists cooperatives with at least 70 member households, providing structure and organization to meet the demands of institutional or private markets, especially for producers of appropriate foods for school feeding programmes and raw material for biodiesel. Services are contracted through public calls for proposals<sup>14</sup>.

*Mais Gestão* is an advisory service that has been operating continuously for 24 months with a multidisciplinary team of accountants, engineers, nutritionists, administrators, psychologists, economists, cooperativists, social workers, attorneys, publicists and other professionals.

This service is based on the methodology of the Industrial Export Extension Project (PEIEx), developed by the Ministry of Development, Industry and Foreign Trade (MDIC), which includes the stages of mobilization and sign-up, preparation of a diagnostic study of the cooperative to organize production; and the construction, implementation and monitoring of the results of a participatory improvement plan.

In February 2015, the *Red Mais Gestão de Universidades* (University Network for Better Management) was created to conduct studies and research on the management of cooperatives and other economic organizations of family farmers that included monitoring, evaluation, and innovation to promote cooperativism. Network members also trained students to work directly in the cooperatives served by *Mais Gestão* through the Young Cooperativist Programme.

<sup>14</sup> For more information on PRONATER and the contracting of these services, see the chapter “Research and rural extension for family farming” in this publication.

## MARKETING AND CREDIT

The main instrument that benefits cooperatives in public procurement from family farms is financial support to enable supplier organizations to build up food stocks, also known as the Stock Formation Support modality (or CPR Stock) of the Food Acquisition Programme (PAA)<sup>15</sup>. The accumulated stocks are marketed, and part of the income obtained is returned to the government. This modality includes fresh and industrialized/processed/transformed food products, including organic and agroecological foods.

The participation of cooperatives, associations and formal groups is provided for in the modalities of Direct Procurement from Family Farms (CDAF), Procurement with Simultaneous Donation (CDS) and Institutional Procurement and Seed Purchases from Family Farms. Informal groups are allowed to participate in CDAF.

Three PRONAF credit lines are devoted exclusively to cooperatives and associations: the value added investment credit (PRONAF *Agroindústria*); the costing credit for family agro-industry (PRONAF *Custeio Agroindústria Familiar*); and credit for payment of the quota contributions for PRONAF beneficiaries who are cooperative members (PRONAF *Cotas-Partes*)<sup>16</sup>.

The purpose of PRONAF *Agroindústria* is to procure equipment and upgrade infrastructure for the transformation, storage, processing and marketing of agricultural, forestry, extraction and handicrafts products and to promote rural tourism. PRONAF *Cotas-Partes* allocates funds for the capitalization of cooperatives and allows them to be used for working capital, costing, investment or the financial restructuring of these organizations.

For investments, there is the Programme for Agro-industrialization in Land Reform Settlements (*Terra Forte*), launched in 2013. The objective of *Terra Forte* is to implement and/or modernize the collective agro-industrial enterprises of production and/or marketing cooperatives and associations of

<sup>15</sup> For information on the Stock Formation Support modality, visit [http://www.conab.gov.br/OlalaCMS/uploads/arquivos/15\\_05\\_15\\_10\\_19\\_49\\_t33\\_15.pdf](http://www.conab.gov.br/OlalaCMS/uploads/arquivos/15_05_15_10_19_49_t33_15.pdf).

<sup>16</sup> See *Manual de Crédito Rural* and the chapter “Credit and income guarantees for family farms” in this publication.



land reform settlement projects created or recognized by INCRA that have proven experience in supplying products to public institutions (through PAA and PNAE) or private institutions. In addition to purchasing infrastructure and equipment, the programme finances activities to promote market entry and boost the demand for products; technical assistance and training in social organization and organizational management in the technical and operational area.

The programme was created through a public call for proposals for projects to reduce inequalities and promote social inclusion and territorial development and has a Studies and Projects Office that assists with the management of the projects selected.

The principles of solidarity economics expressly guide at least two other initiatives targeting family farmers. The first is the Programme for the Productive Organization of Rural Women<sup>17</sup>, created in 2008, whose objectives include support for the creation and consolidation of networks of productive organizations and greater inclusion of rural women workers at different levels and on different scales, including government procurement.

The second initiative is the Support for Infrastructure Projects and Services in Rural Territories (PROINF), including the Territories of Citizenship. This initiative supports the implementation of production and marketing networks for local markets; productive infrastructure for groups of farmers' associations; and production structuring projects for collectively organized youth<sup>18</sup>. Applications for funding can be submitted to the state, municipal and Federal District governments and public consortia through PROINF.

110 Cooperatives, associations and other types of family farming organizations with legal personality also benefit from the use of the Family Farming Label (SIPAF), designed to raise the profile of family farming and its values among consumers<sup>19</sup>.

<sup>17</sup> See the chapter "Citizenship and autonomy of rural women" in this publication.

<sup>18</sup> For information on the 2015 guidelines and priorities of PROINF, visit [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_383/Manual%20Proinf%202015\\_0.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_383/Manual%20Proinf%202015_0.pdf).

<sup>19</sup> See the chapter "Identification and registration of family farms" in this publication.

## PROGRAMME MANAGEMENT

All the programmes and initiatives described cover the entire country, and each has an agency responsible for its management.

COOPERAFA is managed by MDA, and its advisory body for improvement and monitoring is the Standing Committee on Cooperativism of the National Board for Sustainable and Cooperative Rural Development (CONDRAF), created in 2013. The Committee has 24 members, including representatives of UNICAFES, UNISOL, CONCRAB and OCB<sup>20</sup>.

The Ministry of Agrarian Development (MDA) also manages *Mais Gestão*, PRONAF, PROINF and SIPAF. The Ministry of Social Development and the Fight against Hunger shares management of the PAA with MDA and the National Crop Agency (CONAB).

The Programme for the Productive Organization of Rural Women is managed by MDA, MDS, the Ministry of Labour and Social Security (MTPS), the Ministry of Women, Racial Equity, and Human Rights (formerly the Secretariat of Policies for Women), the Ministry of Agriculture, Livestock, and Food Supply (formerly the Ministry of Fisheries and Aquaculture) and the National Crop Agency (CONAB). The *Terra Forte* Programme is coordinated by the current Secretariat of Government of the Office of the President and INCRA/MDA, together with MDS, CONAB, Brazilian Development Bank (BNDES), the Bank of Brazil and the Bank of Brazil Foundation.

The Food Acquisition Programme, the Programme for the Productive Organization of Rural Women and the *Terra Forte* Programme have specific national management groups or committees in which government participates, and some of them have an advisory body made up of government institutions and civil society organizations. PRONAF is regulated by the National Monetary Board (CMN), the supreme body of the National Financial System, under the Ministry of the Treasury.

<sup>20</sup> For Resolução/MDA/CONDRAF No. 96/2013 creating the Committee, visit [http://www.mda.gov.br/sites/sitemda/sites/sitemda/files/user\\_arquivos\\_64/Resolu%C3%A7%C3%A3o\\_96\\_-\\_Comit%C3%AA\\_Cooperativismo\\_CONDRAF.pdf](http://www.mda.gov.br/sites/sitemda/sites/sitemda/files/user_arquivos_64/Resolu%C3%A7%C3%A3o_96_-_Comit%C3%AA_Cooperativismo_CONDRAF.pdf).

In the case of PROINF, the design, selection, and channelling of the projects that will be proposed in each rural territory is the responsibility of the respective collegiate bodies, with government and civil society participation. CONDRAF is responsible for monitoring and evaluating the implementation of these initiatives, through its Standing Committee on Territorial Development, in which government and civil society participate.

## POLICY INTEGRATION

The main interfaces and mechanisms for integrating the policy for the advancement and strengthening of solidarity associativism and cooperativism in family farming are actions to promote economic solidarity, overseen by the Ministry of Labour and Social Security (MTPS), and cooperativism and associativism, overseen by MAPA.

The responsibilities of the MTPS include promoting the creation, maintenance and expansion of job opportunities and access to income through cooperative economic enterprises and linkage with civil society representatives working in the field of solidarity economics.

Support for these enterprises is provided in a number of ways, including agreements with the organizations that support and promote the solidarity economy, selected through public tenders. These entities are public or private non-profit organizations that offer direct support in the form of training, advisory services, encouragement, access to markets and technical and organizational assistance, in conjunction with enterprises in the solidarity economy. They can obtain an identification credential (DCSOL) by signing up with the respective National Registry (CADSOL), created in 2014.

These programmes dialogue directly with the Brazilian Solidarity Economics Forum (FBES), formalized in 2003, whose members consist of some 3,000 economic solidarity enterprises, 500 of them family farms and public administrators from 12 states and 200 municipalities. FBES has over 160 municipal, microregional and state forums<sup>21</sup>.

<sup>21</sup> For information on FBES operations, visit <http://www.fb.es.org.br/>.

Linkage with civil society representatives is organized by the National Solidarity Economic Board (CNES), an advisory body created in 2006 for the purpose of reaching a consensus on policies and activities for strengthening the solidarity economy. The Board is comprised of 56 representatives of government agencies, solidarity enterprises and other civil society and social services organizations, including OCB, UNICAFES, UNISOL, CONCRAB and representatives of the Brazilian Forum<sup>22</sup>.

This linkage has also been accomplished through National Solidarity Economics Conferences (CONAES), held in 2006, 2010 and 2014, which were marked by extensive civil society participation. The most recent conference approved the 1st National Solidarity Economics Plan (2015-2019), containing objectives, strategies, lines of action and operational guidelines for these policies<sup>23</sup>.

MAPA's responsibilities in rural cooperativism and associativism include the professionalization of cooperative management; technical training and professional and technological education; intercooperation; access to markets and the internationalization of associations and cooperatives<sup>24</sup>; corporate responsibility to communities; and the implementation of rural development programmes and projects, promoting equity between men and women, youth participation and environmental sustainability.

The credit lines coordinated by MAPA that use BNDES funds include the Agricultural Cooperative Capitalization Programme (PROCAP-AGRO), aimed at promoting the recovery or restructuring of the assets of agricultural, agro-industrial, aquacultural, and fishing cooperatives; and the Cooperative Development Programme for Adding Value to Agricultural Production (PRODECOOP), created to boost the competitiveness of the agro-industrial complex of Brazilian cooperatives by modernizing production and marketing systems.

<sup>22</sup> For information on CNES operations, visit <http://www.mte.gov.br/index.php/trabalhador-economia-solidaria/quem-sao-os-participantes-7>.

<sup>23</sup> For information on the National Solidarity Economics Conferences, visit <http://www.ipea.gov.br/participacao/conferencias--2/566-i-conferencia-nacional-de-economia-solidaria>.

<sup>24</sup> Export promotion is also the objective of the B-dairy Project, implemented since 2012 by OCB and the Brazilian Trade and Investment Promotion Agency (Apex-Brasil), with support from MDA. In November 2015, the project included 10 enterprises or cooperatives (including family farms) representing more than 20% of total national dairy exports. For information on the activities of the B-dairy Project, visit <http://www.bdairy.com.br/>.

The Agribusiness Board, linked with MAPA, has a Chamber for Agricultural Cooperativism, which serves in an advisory capacity and is chaired by the CBO.

The programmes and initiatives described are financed, inter alia, with miscellaneous income from the Federal Budget (OGU), and in the case of PRONAF, compulsory bank resources, funds from Rural Savings Accounts and Constitutional and BNDES Funds.

In the case of Mais Gestão, there were resources from the Micro and Small Enterprise Support Service (SEBRAE), an autonomous private social service, and the focus was on planning, coordination and guidance for technical programmes, projects and activities to support micro and small enterprises, pursuant to national development policies.

## BENEFICIARY GROUP

COOPERAF's beneficiaries are the MDA-accredited enterprises that possess the DAP PJ—that is, singular or central cooperatives or associations that show that at least 60% of their members and partners are family farmers with a valid DAP for the rural family production unit. There are additional criteria for obtaining the DAP PJ for access to PRONAF *Agroindústria* and PRONAF *Cotas-Partes*, such as the requirement that at least 55% of the production transformed, processed, or marketed come from cooperative members or partners enrolled in PRONAF.

The DAP PJ is not required for participation in the Programme for the Productive Organization of Rural Women or the *Terra Forte* programme or for displaying the Family Farming Label.

According to MDA, as of October 2015, Mais Gestão had assisted 457 cooperatives with 16 contracts in 18 states, mobilizing 131 field technicians and benefitting some 100,000 households. The qualitative results demonstrate the positive aspects of regularizing administration and accounting practices and boosting marketing capacity through greater coordination with the executing entities of the National School Feeding Programme (PNAE), as well as an improvement in relations between the leaders and members of the cooperatives assisted.

According to MDS, in 2012, operations involving the PAA Stock Formation Support modality (CPR Stock) reached their peak, with 20,073 farmers providing 59,200 tons of products, representing 10.5% of the total providers and 11.2% of the total quantity of products under the programme. In 2014, the figures were 4,548 providers and 24,200 tons mobilized, or roughly 4% of all providers and 7.2% of the total executed by PAA<sup>25</sup>.

## LESSONS LEARNED

The experiences described reveal that public policies directed to solidarity cooperatives emerged from the activities of a wide range of organizations across Brazil. These organizations are in the process of legal and institutional transition, coexisting with organizational systems in the country with very different characteristics and, in some cases, opposing interests.

The OCB, UNICOPAS and other solidarity cooperative entities recognize the need to increase the representativeness of cooperativism and its role as a strategic agent for the social and economic development of the country.

These organizations also recognize common challenges, such as improving the management practices of cooperatives, encouraging intercooperation, shifting the fiscal and legislative burden to extend use of the judicial protection instrument to enterprises in financial crisis.

UNICOPAS and other entities stress the need for revamping the overall legal framework to include the principles of solidarity economics and, through an integrated package of public policies, attempting to overcome poverty, fight hunger and guarantee food and nutrition security, economic growth and sustainable development. Although the creation of the National Programme for the Promoting and Strengthening of Solidarity Cooperativism and Associativism in Family Farming and Land Reform (COOPERAF) has played a key role in building sound cooperatives and social organizations, there remains the challenge of furthering the integration of activities, including those that are the responsibility of other ministries such as MTPS and MAPA, insofar as they relate to family farmers.

<sup>25</sup> See PAA Data, Available from [http://aplicacoes.mds.gov.br/sagi/paa/visi\\_paa\\_geral/pg\\_principal.php?url=abertura](http://aplicacoes.mds.gov.br/sagi/paa/visi_paa_geral/pg_principal.php?url=abertura).

The evaluations of *Mais Gestão* up to now show that the methodology used can be adjusted to emphasize aspects related to improving the linkage of cooperatives and their professionals with local stakeholders, thereby improving other activities with a territorial approach. The evaluations also indicate that a strategy to take universalization of the service national will require amending its regulations so that other types of organizations, not just those with legal personality, can benefit.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BRAZIL.** 1971. Law No. 5,764, of 16 December 1971. Defines the National Policy on Cooperativism and establishes the legal regime for cooperatives. (Available from [http://www.planalto.gov.br/ccivil\\_03/LEIS/L5764.htm](http://www.planalto.gov.br/ccivil_03/LEIS/L5764.htm). Accessed 13/11/2015).

**FREITAS, M. L.** 2015. Planos Agrícolas 2015-16. Plano Agrícola e Pecuário e Plano Safra da Agricultura Familiar. Presentation to the Chamber of Deputies. Brasília: OCB. (Available from <http://www2.camara.leg.br/atividade-legislativa/comissoes/comissoes-permanentes/capadr/audiencias-publicas/audiencias-publicas-2015/audiencia-publica-07-de-abril-de-2015-2>. Accessed 12/11/2015).

**IFAD-MERCOSUR CLAEH PROGRAMME.** 2014. El potencial del cooperativismo en la agricultura familiar. Seminario Internacional sobre Cooperativismo en la Agricultura Familiar. Foz de Iguazú, Montevideo: REAF/FAO/MDA/UNILA/ FIDA MERCOSUR. (Available from [http://fidamercosur.org/claeh/images/BIBLIOTECA/2014/Documentos/SICAF\\_El\\_potencial\\_del\\_cooperativismo\\_en\\_la\\_AF.pdf](http://fidamercosur.org/claeh/images/BIBLIOTECA/2014/Documentos/SICAF_El_potencial_del_cooperativismo_en_la_AF.pdf). Accessed 12/11/2015).

**MDA.** Undated. Portal da Secretaria da Agricultura Familiar do Ministério do Desenvolvimento Agrário – SAF/MDA. (Available from <http://www.mda.gov.br/sitemda/secretaria/saf/apresenta%C3%A7%C3%A3o#sthash.1dFovhwu.dpuf>. Accessed 13/11/2015).

**MDA.** 2015. Portaria/MDA/No. 204, of 22 June 2015. Creates COOPERAF. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_img\\_24/Portaria%20Coperativismo-%20Cooperaf.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_img_24/Portaria%20Coperativismo-%20Cooperaf.pdf). Accessed 13/11/2015).

**MTE.** Undated. Economía solidaria. Portal do Ministério do Trabalho e Emprego. (Available from <http://www.mte.gov.br/index.php/trabalhadoreconomia-solidaria>. Accessed 2/1/2016).

**MTE and MDA.** 2010. Conferência Temática de Cooperativismo Solidário. Document with proposals for the II National Conference on the Solidarity Economy. Brasília. (Available from <http://www.ims.org.br/wp-content/uploads/2010/05/Documento-Propostas-Cooperativismo-Solid%C3%A1rio.pdf>. Accessed 12/11/2015).

**OCB.** 2015. Relatório OCB 2014. Brasília: OCB. (Available from [http://www.brasilcooperativo.coop.br/arquivos/publica/relatorio\\_OCB\\_2014\\_web.zip](http://www.brasilcooperativo.coop.br/arquivos/publica/relatorio_OCB_2014_web.zip). Accessed 12/11/2015).





## PROCUREMENT OF FOOD PRODUCED BY FAMILY FARMS

One of the first programmes implemented in 2003 and one that best expresses the objectives of the Zero Hunger strategy to combine structural measures with emergency action is the Food Acquisition Programme (PAA) for the purchase of family farm output.

The PAA is based on the simple idea of channelling the purchasing power of the State to procure food directly from family farmers and channel it directly to the population in a situation of food and nutrition insecurity (Takagi, Sanches and Silva, 2014, p. 28). Greater consumption by the poorest population increases the demand for food, stimulating the expansion of supply and boosting the income of family farmers.

This programme is not an isolated initiative, but from the outset has been based on a package of differentiated public policies (access to land, credit, technical assistance, etc.) specifically targeting family farmers (Campos and Bianchini, 2014, p. 15). Part of an extensive social protection network, it is one of the components of the National Food and Nutrition Security Plan, the

Territories of Citizenship Programme and, more recently, the Brazil without Extreme Poverty Plan<sup>1</sup>.

The PAA represents an innovation in a country where production was once governed by an economic rationale disconnected with the nutritional needs of the population with a dichotomy between agricultural policy and the social advancement and protection policy (Mielitz, 2014, p. 60).

## DUAL OBJECTIVE

The programme put its faith in the notion that this dichotomy can be surmounted while simultaneously meeting two objectives: support for family farm production and the advancement of food and nutrition security. Its guidelines, spelled out in the law that created the programme<sup>2</sup>, point the way to: fostering the economic and social inclusion of family farmers by promoting food production; stimulating the consumption and appreciation of the foods produced by family farmers; promoting access to adequate quantities of healthy food; promoting a supply of food for government procurement, including school feeding programmes; encouraging the building of public food reserves and stocks by family farming organizations; and strengthening local and regional food marketing circuits and networks.

The challenge taken up was to make this programme an instrument for agricultural policy as well as food security policy, procuring products directly and exclusively from family farmers to donate them to families in a situation of food insecurity, the social assistance network (both government and charitable) and public food and nutrition security entities.

Neither government agencies nor the law was prepared for this innovation; thus, changes were needed in the design and implementation of public policies. A new institutional arrangement for coordinating and modifying the existing instruments was needed. Implemented in a fragmented way by different

<sup>1</sup> For information on the Brazil without Extreme Poverty Plan, see the chapter, "Productive inclusion and cash transfers in overcoming rural poverty" in this publication.

<sup>2</sup> Law No. 10,696/2003 and Decree No. 7,775/2012, Available from [http://www.planalto.gov.br/ccivil\\_03/LEIS/2003/L10.696.htm#art19](http://www.planalto.gov.br/ccivil_03/LEIS/2003/L10.696.htm#art19) and [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2012/Decreto/D7775.htm#art1](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2012/Decreto/D7775.htm#art1). Accessed 23/11/2015.

institutions and entities of the federation, these instruments had to be linked to common objectives and procedures and the participation of civil society organizations guaranteed.

## INTERSECTORAL ACTION

In order to deal with the complexity of this undertaking and achieve shared intersectoral management, the intergovernmental Management Group was formed to regulate all operations. Six ministries participated in the Group: (Social Development and the Fight against Hunger (MDS); Agrarian Development (MDA); Education; Finance; Planning, Budget and Administration; and Agriculture, Livestock and Food Supply, represented by the National Crop Agency (CONAB). There was ongoing social dialogue through the National Advisory Committee, comprised of representatives of family farming organizations and movements, institutions of the social assistance network, representatives of the National Council on Food and Nutrition Security (CONSEA), the National Social Assistance Board (CNAS), the National Sustainable Rural Development Board (CONDRAF) and others appointed by the MDS Secretariat for Food and Nutrition Security, following their nomination by the respective government and civil society institutions. The members of the Committee constitute a network capable of providing monitoring and social oversight.

It was also necessary to amend the law on public tenders and public contracts, whose rules had resulted in the purchase of large volumes of food from family farms, favouring large suppliers of industrialized or semi-processed foods.

Law No. 10,696/2003 exempted foods produced exclusively by family farmers or their organizations from participation in public tenders, since prices consistent with the prevailing local or regional market prices, with sales limits per household to include the poorest farmers, were what was most needed to support marketing.

The programme was put together rapidly, commencing operations in late 2003 with resources transferred from other government activities. Several problems arose during its implementation, some anticipated and others not. On the one hand, there was the natural difficulty of public institutions adapting

to innovation (Mielitz, 2014, p. 65) and a certain lack of confidence in the ability of family farmers to actually meet the demand for food in the volumes and timeframes necessary while meeting the requisite standards of quality. It was necessary to emphasize that the priority was to provide marketing opportunities for family farmers. On the other hand, the programme met unexpected resistance from food workers in the beneficiary institutions, as they considered “working with processed foods easier and less onerous” in terms of preparation time and equipment than preparing fresh foods (Mielitz, 2014, p. 68). This resistance was gradually overcome by mobilizing the families served by these entities, fathers and mothers in the schools and public administrators “to motivate the food preparation teams”, based on the rapid demonstration of gains in quality and diversity (Ibid. p. 68).

## INSTITUTIONALITY AND FLEXIBILITY

One of the secrets of the programme’s success was its development of a flexible implementation mechanism, with different operators using different modalities and procurement limits, based on a strategy institutionalized by law. These arrangements were created to allow different types of government intervention, bearing in mind the different situations and markets in order to tailor the programme to the different segments of family farming.

Under Law No. 11,326/2006, suppliers under the programme may be: family farmers, both men and women; land reform settlers; foresters; fish farmers; extraction workers; fishers; indigenous peoples; *quilombola* communities and other traditional groups and communities in possession of the Declaration of Eligibility for PRONAF (DAP)<sup>3</sup> or their cooperatives and associations in possession of the DAP for legal persons. Possession of the DAP was a prerequisite for determining the priority of potential beneficiaries.

The variety of instruments and their flexibility made it possible to tailor the programme to the various regional and local situations and reach different target groups (food suppliers and receivers), operate with small volumes and a wide range of products, reach those who needed more support and address specific aspects of the markets in every region of the country, closing the

<sup>3</sup> For more information on the DAP, see the chapter “Identification and registration of family farms” in this publication.

purchase-consumption circuit, with some preferential recipients, such as local feeding programmes, social assistance institutions (day care centres, hospitals, nursing homes, shelters) and schools, and building up stocks.

## GRADUAL EXPANSION

In the beginning, the programme was characterized by the availability of foods supplied by family farmers, with supply determining the recipients, and by the priority given to the more traditional products of the basic market basket (rice, beans, cassava flour).

Little by little, the diversity of the products increased with the foods grown by family farmers on their land, which had not been valued in local markets (Porto et al., 2014, p. 48), coupled with the food demands of the social assistance network.

The programme gradually expanded as word about it spread, the interest of farmers and their organizations increased, and it gained legitimacy within the government, vanquishing the initial resistance of the authorities.

The road was a long one that involved negotiations to pass the necessary legislation and intense coordination and mobilization to implement the programme. Decisive in all this was the fact that the facilitators took ownership and came on board; these agents included public administrators, public and private technical assistance entities, and above all, social movements, governmental and nongovernmental organizations and family farming cooperatives and associations. These facilitators played a key role in providing information and support to farmers and cooperatives in the activities required to take advantage of this new marketing opportunity, among them project development, the organization of transportation logistics and reporting (Schmitt et al., 2014, p. 167)<sup>4</sup>.

In the past 12 years, the programme has evolved in different ways. The legal framework was amended to make it function better, and specific budgetary action was taken in MDA and MDS to guarantee regularity in its financing.

<sup>4</sup> The role of mediators or facilitators was emphasized by Schmitt et al. (2014) on examining access to the PAA not only by land reform settlers but other segments of family farming as well.

The participation of social organizations, the creation of the PAA as an instrument for ensuring a regular supply of food for the food and nutrition security programmes, its credibility with family farmers, the increase in budget allotments and the value limit made it possible to expand the scope of the programme.

In 2003, 42,077 farmers participated in the programme, with US\$ 144 million in operations and a total volume of 135 tons of food<sup>5</sup>. Today, 200,000 households and 4,000 economic organizations (associations and cooperatives) supply food to more than 3,000 municipalities and the 20 million people served by 23,000 social assistance and educational institutions, providing more than 3,000 different foods (fruits, vegetables, beans, rice, meat, milk, flour, etc.).

## PROGRAMME MODALITIES

New modalities were created, others were modified, and one was abolished. The six modalities currently in place are<sup>6</sup>:

- i) Procurement with Simultaneous Donation (CDS): The products procured are donated to entities of the social assistance network, public facilities (community cafeterias and kitchens, the Food Bank), and in special circumstances, the public and charitable education network. The operators are CONAB and state and local governments, with resources from MDS. The limit on purchases from households is R\$ 6,500/year for an individual operation and R\$ 8,000/year in the case of joint purchases, up to a limit of R\$ 2 million/year for the collective.
- ii) Direct Procurement from Family Farms (CDAF): Procurement of certain products selected by the Management Committee for public use or sale to regulate prices. Run exclusively by CONAB, with MDS and MDA resources. The limit per household is R\$ 8,000/year and for organizations, R\$ 500,000/year, respecting the household limit.

<sup>5</sup> Source: PAA Data, Available from [http://aplicaciones.mds.gov.br/sagi/paa/visi\\_paa\\_geral/documentos/Apresenta%C3%A7%C3%A3o%20Institucional%20do%20PAA%20-%20202.pdf](http://aplicaciones.mds.gov.br/sagi/paa/visi_paa_geral/documentos/Apresenta%C3%A7%C3%A3o%20Institucional%20do%20PAA%20-%20202.pdf). Accessed 23/11/2015.

<sup>6</sup> Includes amendments to Decree No. 8,293, of 12/8/2014.

- iii) Support for Family Farming Stock Formation (CPR *Stock*): Financial support for organizations to build food reserves for subsequent sale and the return of resources to the public authorities run exclusively with MDA resources. The limit for households is R\$ 8,000/year and for organizations, R\$ 1.5 million/year, respecting the household limit.
- iv) Incentives for Milk Production and Consumption (PAA *Leite*): The purchase of goat and cow's milk that, after processing, is donated to the beneficiaries to meet the local demand for food supplementation. Run by state governments that hire milk producers to receive, collect, pasteurize, bottle, and transport the milk to predetermined distribution points set up by the municipal governments for registered households, receiving for it 60% of the amount paid by the government. Run with MDS resources only in states in the Northeast and Minas Gerais. Farmers must produce a maximum of 140 litres/day, and the purchasing limit is R\$ 4,000/six-month period.
- v) Institutional Procurement from Family Farms: Food procurement from family farms by all federal institutions (hospitals, jails, military bases, university cafeterias), as well as state and local institutions, with their own resources under special rules for procurement from family farms (calls for proposals with exemption from participation in public tenders). The limit per household is R\$ 20,000/year and, if the transaction is with a family farming organization, R\$ 6 million/year.
- vi) Procurement of Seeds from Family Farms: Procurement for the donation of seeds, seedlings and other materials from family farms to grow crops for human or animal consumption. The limit per household is R\$ 16,000/year and, if the transaction is through an organization, R\$ 6 million/year. Run exclusively by CONAB with resources from the MDS.

The reference prices for the products purchased by the programme are determined through research methodologies applied to the local or regional market. The limits for annual purchases from households are relatively low, due to the programme's focus on creating a marketing option for poor farmers with surplus production.



## OPERATION OF THE PROGRAMME

There are differences in the execution of the various modalities, with rules that have been amended along the way to ensure simpler and more transparent procedures and more streamlined operations that are part of a common framework for agreement, formalization, and monitoring.

The federal government's partnership with states and municipalities for implementing the procurement with simultaneous donation modality no longer involves the signing of agreements, which were the initial instruments used. The federal government currently signs a membership agreement with the operators (state or municipal government), valid for five years, that spells out the basic requirements, commitments and functions of each participant. The amount of the financial resources to be used and the targets to be met are indicated in the annual operating plans submitted by the implementing institutions and approved by the MDS, based on the budget established by decree for each of the executors.

Through the membership agreement, the federal government deposits the payment to suppliers directly into their account in a financial institution after certification of the invoices by the executing entity. The farmers withdraw the funds using a debit card. Thus, the implementation responsibilities are divided up and shared, which helps connect the programme with local supply activities.

Suppliers need not be members of cooperatives or associations, which enables households with less of a market presence to participate.

Proposals for participation in the programme, both those executed by CONAB and those executed by states and municipalities, are entered in a computer database, analysed, and if approved, result in contracts between the executors and the food suppliers, who may be individual farmers, in the case of execution through a membership agreement, or their organizations, for execution by CONAB. In these CONAB operations, the payment is made to the family farmers' organization that signed the contract to supply the food, once the necessary documentation has been submitted. The organization transfers the funds to the family farmers based on the quantities they deliver individually.

## PROMOTING PARTICIPACION

In practice, the programme can purchase almost any food produced by family farmers, whether fresh or processed, as long as the respective sanitary regulations are complied with. This feature and the programme's consolidation made it possible to take steps to induce specific segments of the population to participate and to include other types of products.

In order to increase women's participation, a minimum quota of 30% was established for the Stock Formation Support modality and 40% for Procurement with Simultaneous Donation. The results were not slow in coming, and in 2013, just one year after the regulation had gone into effect, women already accounted for 47% of all transactions and over 50% of CDS<sup>7</sup>.

Nonetheless, the market is still a major obstacle to boosting the income of women farmers, and to increase their participation in the programme, the volume and regularity of their food deliveries must be guaranteed. This has required them to band together and formalize their relationship through associations and cooperatives.

In order to meet the objectives of the Brazil without Extreme Poverty Plan, at least 40% of the beneficiaries must be registered in CadÚnico<sup>8</sup>. In 2014, 65% of the participants in the Procurement with Simultaneous Donation modality were in this database.

Improving management involves the growing use of computer systems, with applications for project presentation and management and for greater transparency and social oversight, allowing users to view transactions, contracts, prices received, etc.

The procurement of a wider range of foods—more than 3,000 types—resulted simultaneously in a healthier diet that included products with high nutritional value and a new appreciation of regional foods. It also fostered the diversification of family farm production.

<sup>7</sup> For more information on women's participation in the Food Procurement Programme, see Siliprandi and Cintrão, 2014.

<sup>8</sup> For information on CadÚnico, see the chapter "Productive inclusion and cash transfers in overcoming rural poverty" in this publication.

To stimulate increases in the supply of organic and agroecological foods, the programme establishes a minimum of 5% in the limit on purchases per household for organizations that provide only these types of products, and payment of the market value. In the absence of reference prices for organic or agroecological products in the local or regional market, prices up to 30% higher than those of conventional products can be paid<sup>9</sup>.

## SUCCESSSES AND CHALLENGES

A vast body of academic research and evaluations confirms that the programme has had positive effects in terms of fostering recognition of the right to food security; strengthening family farms and their legitimacy as food producers; regulating existing markets and developing new marketing channels; and promoting sustainable production systems. One aspect worth noting is that the programme has procured family farm products in every region of the country and from all segments of the sector. Another is its positive impact on the income of households and their ability to plan.

The PAA encourages the integration of farmers into short marketing circuits, enabling them to acquire skills and knowledge that will subsequently enable them to enter other circuits.

The programme's ability to influence the market dynamic depends on the particular situation, the conditions in each market, the modality, the product, and the degree of interaction between organizations and policy executors. In general, however, it has contributed to diversified entry into the institutional market, which in many situations extends to other markets, thus preventing dependence on government procurement.

It was found that the programme had helped strengthen the economic organizations of family farmers (Campos and Bianchini, 2014, p. 18); create markets where none had previously existed; change family farmers' relationships with intermediaries, increasing the prices paid for their products (Mielitz, 2014, p. 70) and generating structural changes in price setting (Campos

<sup>9</sup> For more information on the procurement of agroecological and organic products, see Galindo et al., 2014.

and Bianchini, 2014, p. 16)<sup>10</sup>; improve product quality with the adoption of classification, health, and packaging procedures; and boost their productive capacity (Mielitz, 2014, p. 70).

Because a short marketing circuit was involved, the programme could be implemented even in places where there was little economic organization, and its experience helped strengthen existing associations and cooperatives or create new ones.

Family farmers and their organizations encountered many problems and constraints in accessing the programme. Lack of knowledge about its regulations and level of operation, crumbling productive and transportation infrastructure, unstable supply, occasional problems obtaining the DAP, distribution logistics, sanitary surveillance requirements and the inexperience of managers were but some of the problems encountered.

The documentation requirements for accreditation and compliance with formal reporting procedures, though necessary, were substantial and something that family farmers and their organizations were unprepared for. Payment delays and disruptions in access to the programme created additional problems for decapitalized farmers and called for new efforts to revamp production and market entry strategies<sup>11</sup>.

## LESSONS AND NEW CHALLENGES

This experience yielded many lessons, many of which have led to changes in regulations, with adjustments in execution and monitoring practices. Based on its cumulative experience, its strong foothold, the results obtained and the legitimacy it gained in the eyes of public administrators, consumers and farmers, the programme can take up new challenges, especially in the present-day scenario in Brazil, in which hunger and extreme poverty are a thing of the past. The potential and “needs of family farmers” and “food insecurity

<sup>10</sup> For information on the PAA's impact on the prices received and family farming income, see Delgado (2005) and Sparoveck et al., 2007.

<sup>11</sup> Schmitt et al. (2014, p. 168) identified these and other problems affecting access to the PAA by land reform beneficiaries.

problems are not what they were” when the programme was launched 12 years ago (Campos and Bianchini, 2014, p. 21).

The Food Acquisition Programme is being reviewed and modernized to enhance its role in building short production and consumption circuits and strengthening diversified, sustainable family farm production, creating the conditions for expanding its scope to include traditional peoples and communities<sup>12</sup>. “Greater linkage and coordination” with the differentiated family farming programmes is being sought, particularly special technical assistance, rural extension and food security programmes whose object is “to certify and organize supply and demand” and strengthen cooperatives and associations, encouraging them to bring in many farmers who are not yet members (Campos and Bianchi, 2014, p. 25).

The programme has growth potential in the institutional food procurement market through expansion to new municipalities and a greater number of family farms. This will require greater linkage and economic organizing capacity in family farming.

New associations have been created to strengthen and certify the economic organizations that supply the PAA and school feeding programmes, supporting activities to develop local and regional production circuits and preparation, processing, storage and marketing operations. Examples include those between *Banco Nacional de Desenvolvimento Economico e Social* (BNDES) and CONAB, MDS and INCRA, as well as specific technical assistance services for marketing, contracted by MDA.

The PAA has much to contribute to the advancement of sustainable development, emphasizing the value of purchasing organic and agroecological products, as well as those rooted in the cultural diversity of the country. To accomplish this, other measures to overcome sanitary and certification challenges are needed.

A recent advance in tailoring public health regulations to the reality of family farming is the implementation of the Unified Agricultural Sanitary System

<sup>12</sup> See contributions of the National Council on Food and Nutrition Security. Available from <http://www4.planalto.gov.br/consea/eventos/plenarias/>.

(SUASA), through which decentralized, integrated inspections are conducted by the states and municipalities that join the system and adopt equivalent procedures to guarantee the safety and quality of foods.

Another illustrative advance in tailoring regulations to the reality of family farming was the decision by the National Sanitary Surveillance Agency (ANVISA) to consider the kitchen a production site and allow rural extension workers to assume responsibility for providing technical training to family farmers. Other amendments to the sanitary laws governing products of animal origin and beverages are needed to increase family farmers' participation in the institutional market with products such as cheese, processed fish and fruit pulp<sup>13</sup>.

Consistent with the new administrative agenda on the certification of public purchases, in which sustainability indicators are increasingly incorporated, are the initiatives under way to encourage public administrators to recognize the procurement of family farm products as part of this agenda, connecting with the population's growing concern about product origin and the social and environmental practices of production systems.

Social oversight and participation continue to be the object of special attention. The flexibility to create or adapt to the different local circumstances has been a positive feature of the programme. However, it requires "an active civil society and greater social oversight" to prevent distortions (Schmitt, 2014, p. 180).

There is still potential to make better use of the PAA as a tool allied with the nutrition education policy and the advancement of healthy eating habits to fight the growing problem of obesity and junk food, which is taking up greater space in the existing public and private markets.

The Food Acquisition Programme can also be an even more important instrument for making a leap to organize the products supplied by family farms, so that family farming can play a greater role in supplying food to public institutions and meet the demand of people living in medium sized and large cities.

<sup>13</sup> On 23 June 2015, MAPA published Regulatory Instruction No. 16, which simplifies the procedure for registering family agroindustries (regulations of Art. 7 of SUASA). Other instructions are pending publication.

Beyond short circuits, it can cease to be the supplier of a small portion of the supply at certain times of the year and become the main supplier for the institutions that promote food and nutrition security (Campos and Bianchini, 2014, p. 22).

An important step in this direction was the federal government's recent decision that 30% of the food procured for federal institutions (hospitals, university cafeterias, etc.) come from family farms<sup>14</sup>.

The Brazilian experience with public procurement of family farm products, expressed chiefly in the Food Acquisition Programme and the National School Feeding Programme, is now part of the South-South cooperation agenda promoted by the partnership between Brazil and FAO in Latin America and the Caribbean, as well as in Africa. It is also part of the Regional Programme for the Procurement of Family Farm Products, coordinated by the MERCOSUR Specialized Meeting on Family Farming, and is now in its second iteration, incorporating other countries from the region<sup>15</sup>.

Finally, it is worth remembering that, in addition to the increase in institutional procurement from family farms, especially by the PAA, there is enormous potential in Brazil and the other countries for expanding the role of family farming in the food supply, which implies more complex circuits and markets, especially in major urban areas. This will require improvements in the economic structure of the sector, including that of agro-industry.

<sup>14</sup> Decree No. 8,473 of 22 June 2015.

<sup>15</sup> See FAO (2015); Sanches, Veloso and Ramírez (2014); PAA Africa portal, available from [paa-africa.org](http://paa-africa.org), Accessed 23/11/2015; and MERCOSUR REAF portal, available from [www.reefmercosul.org](http://www.reefmercosul.org), Accessed 23/11/2015.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BRASIL.** 2010. *Balanço de Avaliação da Execução do Programa de Aquisição de Alimentos PAA*. Brasília, DF: MDS. (Available from <http://www4.planalto.gov.br/consea/eventos/plenarias/documentos/2010/balanco-de-avaliacao-da-execucao-do-programa-de-aquisicao-de-alimentos-paa-08.2010>. Accessed 23/11/2015).

**BRASIL.** 2012. *Decree nº 7 775*, 4 July 2012. Regulations of PAA. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2012/Decreto/D7775.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/Decreto/D7775.htm). Accessed 23/11/2015).

**BRASIL.** 2003. Law No. 10,696, of 2 July 2003, Art. 19. Creates the PAA. (Available from [http://www.planalto.gov.br/ccivil\\_03/leis/2003/L10.696.htm](http://www.planalto.gov.br/ccivil_03/leis/2003/L10.696.htm). Accessed 23/11/2015).

**BRASIL.** 2006. Law No. 11,326, of 24 July 2006. Establishes the guidelines for the formulation of the National Policy on Family Farming and Rural Family Enterprises. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2004-2006/2006/lei/111326.htm](http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/lei/111326.htm). Accessed 23/11/2015).

**BRASIL.** 2011. *Law nº 12.512, of 14 October 2011*. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2011/Lei/L12512.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/Lei/L12512.htm). Accessed 23/11/2015).

**BRASIL.** 2014. Decreto nº 8 293, de 12 de agosto de 2014. [Altera o Decreto no 7.775/2012].

**BRAZIL.** 2015. Decree No. 8,473, of 22 June 2015. Establishes federal regulations on the minimum percentage allocated to the acquisition of food products from family farmers. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2015-2018/2015/Decreto/D8473.htm](http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2015/Decreto/D8473.htm). Accessed 23/11/2015).

**CAMPOS, A. e BIANCHINI, V.** 2014. A agricultura familiar passou a ser uma prioridade de Estado. In: MDS. 2013. *PAA: 10 anos de aquisição de alimentos*. Brasília, DF: MDS.



**CONAB.** Undated. Portal da CONAB. Agricultura Familiar. (Available from <http://www.conab.gov.br/conteudos.php?a=1125&t=2>. Accessed 23/11/2015).

**CONAB.** 2015. Programa de Aquisição de Alimentos – PAA: Legislação básica. Available from [http://www.conab.gov.br/OlalaCMS/uploads/arquivos/15\\_12\\_07\\_17\\_25\\_57\\_livreto\\_paacorreta.pdf](http://www.conab.gov.br/OlalaCMS/uploads/arquivos/15_12_07_17_25_57_livreto_paacorreta.pdf). Accessed 23/11/2015.

**DELGADO, C. C.** et al. 2005. Avaliação do programa de aquisição de alimentos da agricultura familiar. Brasília: IPEA. (Discussion paper 1145).

**FAO.** 2015. Las compras públicas a la agricultura familiar y la seguridad alimentaria y nutricional en América Latina y el Caribe: lecciones aprendidas y experiencias. Santiago: FAO. Available from <http://www.fao.org/3/a-i4902s.pdf>. Accessed 23/11/2015.

**GALINDO, E. P.; SAMBUICHI, R. H. R.** and **OLIVEIRA, M. A. C.** 2014. Compras de produtos agroecológicos e orgânicos da agricultura familiar pelo Programa de Aquisição de Alimentos. In MDS. 2013. PAA: 10 anos de aquisição de alimentos. Brasília: MDS

**MDA.** Undated. Portal do MDA. PAA. Available from <http://www.mda.gov.br/sitemda/secretaria/saf-paa/sobre-o-programa>. Accessed 23/11/2015.

**MDA.** Undated. Tutorial SISPA – Passo a Passo. Available from <http://www.mds.gov.br/segurancaalimentar/aquisicao-e-comercializacao-da-agricultura-familiar/entenda-o-paa>. Accessed 23/11/2015.

**MDS.** 2013. PAA: 10 anos de aquisição de alimentos. Brasília: MDS. Available from [http://www.mds.gov.br/webarquivos/publicacao/seguranca\\_alimentar/livroPAA10Anos.pdf](http://www.mds.gov.br/webarquivos/publicacao/seguranca_alimentar/livroPAA10Anos.pdf). Accessed 23/11/2015.

**MDS.** Undated. Portal do MDS. Compras governamentais. Available from <http://mds.gov.br/assuntos/seguranca-alimentar/compras-governamentais> Accessed 23/11/2015.

**MDS.** Undated. Portal PAA Data. Available from [http://aplicacoes.mds.gov.br/sagi/paa/visi\\_paa\\_geral/pg\\_principal.php?url=abertura](http://aplicacoes.mds.gov.br/sagi/paa/visi_paa_geral/pg_principal.php?url=abertura). Accessed 23/11/2015).

**MDS.** 2014. Programa de Aquisição de Alimentos. Manual Operativo. [s.l.]: MDS/ SESAN. Feb. 2014. Available from [http://www.mds.gov.br/webarquivos/publicacao/seguranca\\_alimentar/manualPAA.pdf](http://www.mds.gov.br/webarquivos/publicacao/seguranca_alimentar/manualPAA.pdf). Accessed 23/11/2015.

**MIELITZ, C.** 2014. Dez anos do Programa de Aquisição de Alimentos e a constituição de uma estratégia nacional de segurança alimentar. In MDS. 2013. PAA: 10 anos de aquisição de alimentos. Brasília: MDS

**PORTO, S. I.** et al. 2014. Programa de Aquisição de Alimentos (PAA): dez anos de uma política múltipla e inovadora. In MDS. 2013. PAA: 10 anos de aquisição de alimentos. Brasília, DF: MDS.

**SANCHES, A.; VELOSO, N.** and **RAMÍREZ, A.** 2014. Agricultura familiar y compras públicas: innovaciones en la agenda de la seguridad alimentaria y nutricional. In: **SALCEDO, S.** and **GUZMÁN, L.** Agricultura familiar en América Latina y Caribe: recomendaciones de políticas. Santiago, Chile: FAO. (pp. 349-368). Available from <http://www.fao.org/3/a-i3788s.pdf>. Accessed 23/11/2015.

**SCHMITT, C. J.** et al. 2014. O Programa de Aquisição de Alimentos e assentamentos de reforma agraria: implantação, impactos e perspectivas. In MDS. 2013. PAA: 10 anos de aquisição de alimentos. Brasília, DF: MDS

**SILIPRANDI, E.** e **CINTRÃO, R.** 2014. As mulheres rurais e a diversidade de produtos do Programa de Aquisição de Alimentos. In: MDS. 2014. *PAA: 10 anos de aquisição de alimentos*. Brasília, DF: MDS (p. 114-151)

**SPAROVEK, G.** et al. 2007. Estudo comparativo das diferentes modalidades do PAA – Região Noreste. In: **PAES-SOUSA, R.** and **VAITSMAN, J.** (Orgs.). Síntese das pesquisas de avaliação de programas sociais do MDS. Brasília: MDS. (pp. 62-64). (Cadernos de estudos desenvolvimento social em debate n. 5).

**TAKAGI, M., SANCHES, A. P.** and **GRAZIANO DA SILVA, J.** 2014. PAA: um embaixador do Brasil na luta contra a fome. In MDS. 2013. PAA: 10 anos de aquisição de alimentos. Brasília, DF: MDS



## THE SCHOOL FEEDING PROGRAMME AND FAMILY FARMING

The National School Feeding Programme (PNAE) was one of the main programmes of the Zero Hunger strategy and the Brazil without Extreme Poverty Plan (BSM), because it integrated activities in food and nutrition security, education, and the productive inclusion of family farming.

Its capillarity guaranteed approximately 42 million children, young people, and adults a daily intake of 800 calories in every municipality in the country, channelling more than R\$ 3.8 billion in resources from the federal government to the PNAE in 2015 (FNDE, 2015a, p. 9).

The programme's versatility gave populations that were experiencing food insecurity access to basic nutrition and encouraged the formation of healthy eating habits, thus helping to fight overweight and obesity in young people.

The legal requirement that states and municipalities allocate at least 30% of the decentralized funds from the federal government to the purchase of food produced by family farmers bolsters the regional economy and connects schools with the production of fresh and healthy foods.

Before arriving at its current status, Brazil's School Feeding Programme went through a lengthy institutionalization process associated with decentralization and major changes in its legal framework.

## BRIEF HISTORY

The School Feeding Programme was officially launched in 1955 under the name "School Meals Campaign". Until 1974, government action consisted of distributing foods to schools in poor municipalities, with financial support from international organizations, such as the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Children's Fund (UNICEF), and the U.S. government, through the Food for Peace programme (USAID).

Early 1970 marked the creation of the National Food and Nutrition Programme (PRONAN), which initially targeted low income "pregnant women, nursing mothers, children up to the age of 7 and students aged 7 to 14". In 1976 "funding for the programme became the responsibility of Brazil's Ministry of Education and Culture" (Avila et al., p. 101).

The switch to the current name, National School Feeding Programme (PNAE), occurred in 1979, maintaining centralized procurement of family farm products via public tenders and nationwide distribution. At this time, efforts were under way to tailor the food to the regional dietary customs, with greater student acceptance.

In 1986, the recently created Student Assistance Foundation (FAE) began promoting decentralization by signing agreements with municipalities to take over the management and procurement of basic *fresh* foods (Avila et al., 2014, p. 102). Although decentralization had its benefits, it was "fraught with problems such as delays in the release of funds and accountability issues" (Ibid, p. 102).

In 1988, the new Federal Constitution enshrined nutritional supplementation for schoolchildren as a State obligation, together with the provision of instructional materials, transportation, and health care.

It was only in 1994, with the enactment of Law No. 8,913, that the Federal Government of Brazil halted the centralized procurement and distribution of foods, channelling resources to states and municipalities – defined as executors – so that they could provide food directly to their students. Decentralization of the funds for programme execution was conditioned on the existence of school nutrition boards (CAE), charged with monitoring and auditing their use. The purchases of executing units continued to have a high proportion of industrialized products, almost always processed or ultra-processed.

Decentralized programme execution was consolidated in 1998, “when the transfer of resources became automatic, without the need for an agreement or similar instrument” (Triches, 2015, p. 188).

In 2001, the National Fund for Educational Development (FNDE), which took over the responsibilities of FAE when it was dissolved, made local procurement from family farms compulsory, requiring that at least 70% of the federal resources be allocated to the purchase of basic (unprocessed) products, respecting local dietary habits and the farming culture of the region (Provisional Measure No. 2,178-36, of 2001).

However, the centralized procurement system did not question the origin of the food, its quality or its health impact and was based on the rationale of self regulating markets with extensive supply chains (Triches, 2015, p. 182).

Moreover, the existing public tender system at the time implied that procurement from large-scale suppliers would result in lower unit prices for the food. Consequently, working with large volumes of products required a distribution network that only well-structured, specialized suppliers that participated in public tenders could manage.

## A NEW LEGAL FRAMEWORK

The year 2003 marked the start of extensive public debate in the National Council on Food and Nutrition Security (CONSEA) and other forums on a public strategy that would simultaneously foster healthy school meals and local family farm production, using the Food Acquisition Programme (PAA)

as an example of an initiative that forged new ties between production and consumption in the supply system.

In this context, a 2006 FNDE resolution laid out the current organizing principles of the programme: universality, respect for local dietary customs, equity, decentralization and social participation for monitoring and control of the activities.

Given the difficulties involved in procuring family farm products through traditional public tenders, some municipalities began using the Food Acquisition Programme (PAA) to supply schools and day carecenters. This built trust between family farmer suppliers and the administrators of school feeding programmes, helping farmers understand the complexity of PNAE requirements and procedures.

The experience of the Food Acquisition Programme, which had now been running for six years, was essential for revamping the National School Feeding Programme (PNAE) to include family farm products. The lessons learned with the PAA served not only to develop a new design for the programme but to enable the wide range of stakeholders involved to understand the magnitude of the new challenge, which was to turn family farming into a supplier of products to feed schoolchildren.

The fact that the social movements of family farmers were already accustomed to dealing with fiscal, transportation and logistics, price research and health legislation issues facilitated well-informed discussions about the changes that would have to be made in the PNAE.

140 CONSEA, now consolidated as a forum for dialogue on public policy making, monitoring and social participation, had learned many lessons through the activities of the Zero Hunger strategy, including the PAA. The government agencies involved in managing the PAA, especially the federal agencies, had had ample experience with the legal constraints and challenges posed by the creation of markets for direct sales by family farmers. These experiences were the foundation for the proposal drafted by CONSEA and shepherded by the National Congress of Brazil to maintain the intensive mobilization of civil

society organizations and government entities working in this area. The result was the enactment of Law No. 11,947, of 2009, which extended the right of access to school feeding programmes to all levels of basic education, which in Brazil includes day carecenters, preschool, primary and secondary school, and youth and adult education.

Social participation continued in the discussions with the FNDE on programme regulations<sup>1</sup> and in a series of publicity and training events for managers in every state in Brazil to ensure implementation of the new regulations. The intersectoral and social participation dimension of the PNAE called for the involvement of other agencies besides FNDE/MEC, including the Ministry of Agrarian Development (MDA), the Ministry of Social Development and the Fight against Hunger (MDS) and the National Crop Agency (CONAB), CONSEA and family farmers' organizations.

This new law established a state regulatory mechanism for simplified direct procurement of family farm products for national school feeding programmes, known as the "public call for proposals." The law also stated that "at least 30% (thirty percent) of all financial resources transferred by FNDE under the PNAE must be used for the direct procurement of food from family farms and rural family entrepreneurs or their organizations, giving priority to land reform settlements and traditional indigenous and *quilombola* communities" (Art. 14, Law No. 11,947/2009).

The public call for proposals is a simplified process that dispenses with the traditional public tender, "as long as the prices are consistent with local market prices and the foods meet the quality control standards established in the respective regulations" (Art. 14, § 1).

The law also provides safeguards for local administrators in the event of difficulties procuring the minimum 30% from family farms in certain circumstances, such as the inability to issue the respective tax document; the inability to ensure a regular and constant supply of food products; unacceptable sanitary conditions (Art. 14, § 2).

<sup>1</sup> FNDE Resolution No. 26, of 17 June 2013.



The results were rapid in coming. One year after the new legal framework had gone into effect, 47.4% of municipalities had purchased family farm products to feed schoolchildren, representing an average of 22.7% of their purchases; three years later, that figure was 67%<sup>2</sup>.

The new legislation expanded food and nutrition education in schools as one of the guidelines for the feeding of schoolchildren. This is important, since obesity in Brazil is on the rise not only in adults but in children as well, due to the consumption of unhealthy foods, which later in life can lead to adults with poor eating habits and elevated health risks (FAO, 2015, p. 8).

## MANAGEMENT OF PNAE

The PNAE is managed by FNDE, an independent entity under Brazil's Ministry of Education. The programme is executed by the state, Federal District, and municipal governments, which are responsible for guaranteeing the supply of food for schools, and even for hiring nutritionists and qualified professionals, as well as providing the necessary infrastructure.

The nature of the intersectoral programme resulted in the creation of a management committee made up of FNDE, MDA, MDS, CONAB and the Ministry of Fisheries and Aquaculture (MPA).

Social participation in management occurs at different levels: locally, through the action of school nutrition boards in controlling the resources transferred and the quality of the food; and nationally, through the programme's Advisory Group, made up of representatives of the federal government, family farmers' organizations, and national councils<sup>3</sup>.

The programme is supervised by internal oversight agencies, such as the Comptroller-General's Office (*Controladoria-Geral da União - CGU*), and external oversight agencies, such as the Federal Audit Court (*Tribunal de Contas da União - TCU*) and the *Public Ministry* (MP).

<sup>2</sup> Triches (2015, p. 193) mentions the studies of Saraiva et al. (2013) and Soares et al. (2013).

<sup>3</sup> For more information on the operations of school nutrition boards, see FNDE, 2015a.

In 2015, the programme served 42.6 million schoolchildren in Brazil's 5,570 municipalities, a universe consisting of students enrolled in basic education in the federal, state, Federal District, and municipal school systems and charitable and community institutions. Government transfers ranged from R\$ 0.30 to R\$ 1.00 per student/day, based on the age of the students and the length of their school day (FNDE Resolution No. 26 of 2013), and the foods procured were primarily milk and dairy products, fruits, vegetables, legumes, grains and meat.

To encourage good programme execution, food and nutrition education and the preparation of food that was tastier, healthier and tailored to the local culture, contests to promote good practices became common. Between 2004 and 2014, for example, FNDE, in collaboration with the NGO *Ação Fome Zero*<sup>4</sup> (Action Zero Hunger), held a contest for the Efficient School Food Service Manager Award. The object of this award was to encourage good school nutrition practices and shine a spotlight on local initiatives and the work of food service personnel, helping ensure that public funds from the PNAE were actually being used to purchase quality foods in the amounts and with the regularity necessary to guarantee the physical and intellectual development of children in Brazil's public schools.

In 2015, in celebration of the 60th anniversary of the School Feeding Programme, FNDE launched the "Better School Recipes" contest to highlight the role of school cooks in promoting healthy eating habits.

## PROCUREMENT FROM FAMILY FARMS

The law contains a series of procedures that regulate food procurement from family farms<sup>5</sup>. The first step that the family farmer must take to sell products to the PNAE is to present the DAP for physical persons (Declaration of Individual Eligibility for PRONAF) or the DAP for physical persons for members of the group to which he belongs or even the DAP for legal persons

<sup>4</sup> Ação Fome Zero is a nongovernmental organization that supports activities to fight hunger. Its collaboration was very important when the Federal Government's Zero Hunger programme was launched.

<sup>5</sup> For more details about the procedures for procuring family farm products for school feeding programmes, see FNDE, 2015b.

in the case of family farmer's associations for organizations such as cooperatives and associations in which at least 60% of the members are family farmers.

The proposals received through public calls are divided into groups: local, rural territory, state, and national suppliers. Local groups are given priority in procurement, followed by territorial, state, and national groups, with the latter given the lowest priority. Once the group is selected, the priorities are as follows: (1) land reform settlements and indigenous and *quilombola* communities (none of which has higher priority than the others); (2) producers of certified organic or agroecological foods; (3) suppliers with the DAP for legal persons; (4) informal groups of farmers in possession of the DAP for physical persons; and (5) individual family farmers in possession of the DAP for physical persons.

Family farmers must receive the current prices in the local market, based on surveys conducted in family farming fairs, plus the cost of transportation, packaging, etc. If a local price survey cannot be conducted, prices in the territory, state or country (in that order) should be obtained. Furthermore, when price surveys for organic or agroecological products are not possible, up to 30% of the value of the price of conventional products can be added. The sales limit for family farmers, or proportionally for their organizations, is R\$ 20,000.00 per DAP for physical persons/year for each PNAE executing unit.

The executing unit should evaluate the quality of the products, using three criteria: (a) they meet the specifications of the public call for proposals; (b) they pass a test in which nutritionists evaluate the sensory characteristics of the product; (c) they have sanitary certification. For products that are generally not consumed locally, a fourth criterion is used: proof of acceptability among students.

Regarding sanitary certification, all products of animal origin must bear the stamp of the sanitary inspection services (municipal, state, and federal) or the Unified Agricultural Sanitary System (SUASA), coordinated by the Ministry of Agriculture, Livestock, and Food Supply (MAPA). Processed plant products must have the authorization or approval of the state, regional or municipal sanitary surveillance network, coordinated by the National Sanitary Surveillance Agency (ANVISA). Only unprocessed fresh plant products are not subject to sanitary inspection.

There is yet another set of detailed recommendations dealing with nutritional matters, social oversight, and shared management with communities<sup>6</sup>.

Another responsibility of the executing unit is collecting the contributions to Social Security and the Rural Training Service (SENAR) when the products are procured from individuals or informal groups.

As of 2015, the resources invested in the direct procurement of family farm products came to R\$ 1.14 billion, or 30% of the total PNAE budget for that year. In 2014, the stipulated amount to be allocated for purchases from family farms was R\$ 1.1 billion. However, only R\$ 711 million (64% of that figure) was actually disbursed. Many municipalities justify their non-compliance by citing problems locating suitable producers to regularly supply the programme.

## AN INTERNATIONAL MODEL

By establishing a minimum threshold for purchases from family farms (30%), the federal government guaranteed an innovation that has been pointed to as a strategy that many other countries can embrace, offering healthy foods while opening up a major institutional market for family farmers and their organizations, promoting income generation and social inclusion in rural areas.

Its successful implementation made the Brazilian experience a model that, through an intense international cooperation agenda coordinated with FAO, has helped Latin American and African countries interested in developing school feeding programmes that promote social and economic development while supplementing the diet of students.

Based on the South-South cooperation agenda promoted by Brazil and FAO, several Latin American and Caribbean countries have enacted specific legislation and created or improved programmes to encourage the participation of family farmers in supplying food for schoolchildren<sup>7</sup>.

<sup>6</sup> For more information on the recommendations incorporated into the PNAE, see FNDE, 2009.

<sup>7</sup> For more information on the South-South cooperation agenda for the procurement of family farm products for the school feeding programme, see FAO, 2013 and 2015.

## CHALLENGES

Even with its years of experience, the National School Feeding Programme is facing real challenges to ensuring a positive impact. Much remains to be done to get the word out about the programme and ensure that beneficiaries understand the health benefits of a healthy diet and the importance of short circuits for developing the regions and economically strengthening family farming and rural communities.

The decision to procure family farm products entails new challenges for municipal public administration in several areas, since the original programme implementation procedures must be modified. Planning and operating procedures must be reviewed, along with logistics in distributing food to schools and public procurement from family farms; menus must be reviewed to make them more flexible; information about local farm production must be gathered; and new standards for relations with farmers and their organizations must be set (Triches, 2015, p. 193).

Several studies identify and analyse the problems encountered by family farmers when they attempt to enter this market<sup>8</sup>, including: not having the DAP; lack of formal associations and cooperatives; the transaction costs of logistics, packaging and administration; low prices; irregular supply; lack of standardization and certification (important in the case of organic products); and non-compliance with sanitary requirements (Triches, 2015, pp. 193, 194).

Other challenges are the programme's to supply food in large cities, which demands far greater capacity among family farmers' organizations, flexibility in terms of the priority given to local production, and the remedying "the inconsistency between what is produced in the regions and the demand" (Triches, 2015, p. 194).

## A POSITIVE BALANCE

Although implementing the School Feeding Programme is a challenge in many regions in Brazil, it has shown that family farmers and their economic

<sup>8</sup> Triches (2015) mentions research by several authors on the structural, operational and political obstacles encountered by family farmers when they attempt to enter or remain in this market.

organizations are in a position to serve large consumer markets, providing a regular supply of quality foods. This achievement and lesson learned will enable family farming to play a greater role in supplying food for the institutional market in Brazil, beyond the School Feeding Programme.

PNAE exceeded its initial objectives and became the basic programme of the food and nutrition security system and a key area, demonstrating the capacity “to act as a force for integrating activities and creating the long desired – and not always achieved – intersectoralism of food and nutritional security” (Maluf, 2009, p. 3).

Given its “long track record”, breadth, innovations, “interfaces and the intersectoral nature of its objectives”, PNAE can be considered “a benchmark in public food policies” (Triches, 2015, p. 181).

In addition to its direct effect on the markets for family farm products, PNAE, which is part of the National Food and Nutrition Plan, has had a significant indirect effect on other programmes and activities, such as the Strategic Plan of Action on Chronic Noncommunicable Diseases in Brazil, the Intersectoral Strategy for Obesity Prevention and Control and the National Agroecology and Organic Production Plan (PLANAPO).

PNAE’s current design grew out of innovations during the evolution of the School Feeding Programme, especially decentralization and the new public procurement procedures, within the framework of strengthening the national food and nutrition security policy and a package of differentiated policies to support family farming to maintain the supply of food.

The National School Feeding Programme is a good example of a new type of government intervention that stresses linkage between sectoral policies, dialogue between government and civil society and coordination between national, state and municipal governments. All this requires changes in the legal framework, administrative procedures, and especially, the understanding of the State’s role and the nature of public policies, if it is to become a reality.

Thus, the programme illustrates the potential of State intervention in reorganizing a major sector of the agricultural food supply system and

certain market relationships based on an integrated intersectoral strategy that simultaneously guarantees the right to proper nutrition and sustainable rural development.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**AVILA, M. L.; CALDAS, E. L. and AVILA, S. R.** 2013. Coordenação e efeitos sinérgicos em políticas públicas no Brasil: o caso do Programa de Aquisição de Alimentos e do Programa Nacional de Alimentação Escolar. In: MDS. PAA: 10 anos de aquisição de alimentos. Brasília: MDS

**BRAZIL.** 1988. Constituição da República Federativa do Brasil de 1988. Artigo 208. (Available from [http://www.planalto.gov.br/ccivil\\_03/Constituicao/Constituicao.htm](http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm). Accessed 20/11/2015).

**BRAZIL.** 1994. Law No. 8,913, of 1994. On the municipalization of school lunches. [Superseded by Law No. 11,947, of 16 June 2009.]

**BRAZIL.** 2009. Law No. 11,947, of 16 June 2009. On the school feeding programme and compulsory procurement from family farms. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2009/Lei/L11947.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Lei/L11947.htm). Accessed 20/11/2015).

**BRAZIL.** 2001. Provisional Measure No. 2,178-36, of 24 August 2001. On the transfer of financial resources from the National School Feeding Programme and other matters. (Available from [http://www.planalto.gov.br/ccivil\\_03/mpv/2178-36.htm](http://www.planalto.gov.br/ccivil_03/mpv/2178-36.htm). Accessed 20/11/2015).

**FAO.** 2013. Alimentación escolar y las posibilidades de compra directa de la agricultura familiar: estudio de caso en ocho países. Programa de Cooperación Brasil-FAO Fortalecimiento de Programas de Alimentación Escolar en el marco de la Iniciativa América Latina y Caribe sin Hambre 2025. (Project GCP/RLA/180/BRA). (Available from: <http://www.fnnde.gov.br/programas/>

alimentacao-escolar/alimentacao-escolar-material-de-divulgacao/alimentacao-manuais/item/5646-manual-de-aquisi%C3%A7%C3%A3o-de-produtos-da-agricultura-familiar-para-a-alimenta%C3%A7%C3%A3o-escolar. Accessed 20/11/2015).

**FAO.** 2015. Fomento del modelo brasileño de alimentación escolar. Cómo utilizar la cooperación Sur Sur para compartir la experiencia del Brasil sobre alimentación escolar en América Latina y el Caribe. Santiago, Chile: FAO. (Available from <http://www.fao.org/3/a-i4287s.pdf>. Accessed 20/11/2015).

**FNDE.** 2009. Referências nutricionais para o Programa Nacional de Alimentação Escolar. Final report of the Working Group, reviewed by the Reference Center. Brasília: FNDE.

**FNDE.** 2013. FNDE Resolution No. 26, of 17 June 2013. On providing food to students in basic education under the National School Feeding Programme – PNAE. (Available from [https://www.fnde.gov.br/fndelegis/action/UrlPublicasAction.php?acao=abrirAtoPublico&sgl\\_tipo=RES&numero\\_ato=00000026&seq\\_ato=000&vlr\\_ano=2013&sgl\\_orgao=FNDE/MEC](https://www.fnde.gov.br/fndelegis/action/UrlPublicasAction.php?acao=abrirAtoPublico&sgl_tipo=RES&numero_ato=00000026&seq_ato=000&vlr_ano=2013&sgl_orgao=FNDE/MEC). Accessed 2/1/2016).

**FNDE.** 2015a. Cartilha Nacional do Programa de Alimentação Escolar. Brasília: FNDE. (Available from <http://www.fnde.gov.br/programas/alimentacao-escolar/alimentacao-escolar-material-de-divulgacao/alimentacao-manuais/item/6820-cartilha-pnae-2015>. Accessed 20/11/2015).

**FNDE.** 2015b. Aquisição de produtos da agricultura familiar para a alimentação escolar. (Available from <http://www.fnde.gov.br/programas/alimentacao-escolar/agricultura-familiar>. Accessed 2/1/2016).

**MALUF, R.** 2009. Compras Governamentais para a alimentação escolar e a promoção da agricultura familiar. Rio de Janeiro: OPPA/CPDA/UFRRJ (Boletim do OPPA – Observatório de Políticas Públicas para a Agricultura OPPA), No. 27, June 2009). (Available from [http://oppa.net.br/artigos/portugues/artigo\\_OPPA\\_br\\_027-06\\_2009-renato\\_maluf.pdf](http://oppa.net.br/artigos/portugues/artigo_OPPA_br_027-06_2009-renato_maluf.pdf). Accessed 21/02/2016).



**TRICHES, R. M.** 2015. Repensando o mercado da alimentação escolar: novas institucionalidades para o desenvolvimento rural. In: **GRISA, C.** and **SCHENEIDER, S.** (Orgs.). Políticas públicas de desenvolvimento rural no Brasil. Porto Alegre, RS: UFRGS Editora. (pp. 181-200).

# Citizenship and autonomy of rural women

Women's struggle for recognition in Brazil intensified during the democratization process of the mid-1980s, when their demands for change in the public and private arena, including rural areas, gained greater visibility in society.

Their search for recognition as workers, farmers, and citizens demanded acknowledgment of their economic and social rights, as well as membership in rural workers' unions and access to social security benefits and land. As this process unfolded, women began questioning the patriarchal ideology, the notion of male supremacy and men's status as the representative of the family, given the growing understanding that "the family is not a monolithic unit, that it is impregnated with gender conflicts and interests and marked by unequal power relations between men and women" (Faria, 2009, p.25).

## OVERCOMING INVISIBILITY

It is clear that women's work in rural areas is generally invisible, that women are unequally represented in production activities, and that they are ignored in public policy. Despite their work in the fields, on farms, in orchards, and

in small livestock husbandry, their activities are viewed merely as “help for the family.” Although they labour in the spheres of production and reproduction, they receive no remuneration for their work, because it is for their own consumption. Thus, their work goes unacknowledged, and they have no power in household decision-making and fewer possibilities of gaining economic independence (Butto, Hora and Dantas, 2014, p. 133).

This invisibility is grounded in the notion that women’s work in production is an extension of their domestic responsibilities and in the low value accorded to work associated with reproduction – a common attitude “exacerbated in rural areas, given the weight of (unremunerated) domestic labour and work performed for personal consumption” (Melo and Sábato, 2009, p. 35).

Women account for almost half the rural population (47%), numbering over 14 million in 2013 (14% of the total female population). In 2010, 34.1% of women had no earnings, and the bulk of their income came from transfers of public funds from social programmes (IBGE, 2010). Even under these conditions, women “contributed an average of 42.4% of the income of rural households”. This, combined with the fact that 24.8% of rural households are headed by women, reveals that women have been taking on progressively heavier family responsibilities and that initiatives for productive inclusion, income generation and the strengthening of women’s organizations are key to fighting hunger and poverty (MDA/DPRMQ, 2015b, pp. 2, 3).

Other relevant data show a decline in the proportion of women employed in rural areas as part of a general reduction in agricultural employment and the fact that “women are generally not paid”, and the few who do receive payment in cash receive less than men do (Melo and Sábato, 2009, pp. 43, 61, 106).

This is what is fuelling the growing migration of young women to urban areas in search of opportunities for economic independence and greater freedom, a phenomenon that is contributing to the masculinization and aging of the rural population.

Significant changes have occurred in recent years with the strengthening of rural women’s movements and organizations and their efforts to ensure that women

are considered individuals in their own right and not simply part of a couple and to a more favourable context in the federal government “for implementing public policies and embracing a feminist agenda in rural development” (Butto, 2011, p. 14).

Some of women’s demands have led to changes, expressing recognition of their rights and the institutionalization of those rights as public policies for promoting economic independence.

These policies have already yielded positive results, such as greater women’s participation in land reform, a reduction in the proportion of women who work without pay, a “substantial increase in the income of rural women” and the slowing of women’s migration (Melo and Sábató, 2009, pp. 43,60).

The recent experience in Brazil has shown that when important aspects of their situation change – for example, access to documentation, land, credit and education – women take advantage of opportunities and quickly attempt to improve their situation.

Despite women’s progress towards economic independence, household chores and caregiving are the areas most resistant to change. Women continue to shoulder the responsibility for household chores, which are considered women’s work. Men do not step up and share this responsibility, and adequate public services and facilities to relieve some of the burden of this work are lacking.

## NEW PUBLIC POLICIES

The phenomenon of public policies linked with the gender perspective is new in Brazil and required recognition of the existence of inequalities and the fact that policies have a different impact on men and women. This understanding led to the decision to develop a new government policy capable of influencing hierarchical power relations through “public policies to promote equality and economic independence” (Soares, 2014, p. 49).

A key step was the creation of federal agencies specifically targeting women at the general level, with the Secretariat of Policies for Women (SPM), and the

sectoral level, with the Programme for the Advancement of Gender, Racial, and Ethnic Equality (PPIGRE) under the Ministry of Agrarian Development (MDA) (a programme that was later to become the Bureau of Programmes for Rural and *Quilombola* Women (DPMRQ)<sup>1</sup>, as well as gender committees in different ministries.

With their own structure, budget, teams, programmes and activities to promote and coordinate public policies, these agencies adopted gender mainstreaming as an intersectoral intergovernmental strategy to ensure that the gender perspective was integrated into the design and execution of the various policies and that “the policies took the particular characteristics and demands of women into account” (Soares, 2014, p. 50). This was combined with the adoption of policies specifically targeting women and support for action to strengthen women’s organizations and movements.

Implementing this strategy has required intense social dialogue with women’s movements and organizations to reach a consensus on specific guidelines and thus share policy administration and coordination with the subnational levels in accordance with the shared responsibilities of the federal, state, and municipal governments. It has also required integration of the activities of the different ministries.

Gradually and incrementally, the conditions have been created for moving beyond a situation in which women were not the specific targets of public programmes and did not participate in decision-making bodies.

The guidelines for new programmes were based on extensive consultations in conferences that brought together government and women’s organizations and on the lines of action and objectives of the National Plan on Programmes for Women (PNPM)<sup>2</sup>, which are overseen by the National Council on Women’s Rights, with support from Brazil’s Observatory on Gender Equality and the gender commissions of federal entities.

<sup>1</sup> For more information on DPMR/MDA, visit <http://www.mda.gov.br>.

<sup>2</sup> For more information on the National Plan on Programmes for Women, visit <http://www.observatoriodegenero.gov.br/eixo/politicas-publicas/pnpm>

The Plan provides for action to individualize rights, breaking with the tradition based on the family unit that characterized State action, fostering women's autonomy in the home, the economy, and social participation, including in rural areas.

## POLICIES FOR RURAL WOMEN

Rural women are a diverse group made up of family farmers, land reform settlers, *quilombolas* communities, women affected by hydroelectric dams, artisanal fisherwomen, extraction workers, and indigenous women, each with their own characteristics but sharing common challenges for developing autonomy. They are represented by an array of women's movements and organizations, such as the Campesina Women's Movement (MMC), the Rural Women Workers Movement of the Northeast (MMTR-NE), the Interstate Babaçu Coconut Breakers Movement (MIQCB) and specific structures within mixed movements, such as the Secretariat for Women of the National Confederation of Farmworkers (CONTAG), the Secretariat for Women Extraction Workers of the National Council on Extraction Worker Populations (CNS), the Women's Coordination Office of the Federation of Family Farm Workers (FETRAF), the Gender Section of the Landless Workers' Movement (MST) and the Gender Section of the Small Farmers' Movement (MPA). These organizations work to eliminate inequalities in their communities and organizations, coordinate seminars for individual and joint action, promote the March of the Margaritas<sup>3</sup> and forge alliances with other sectors of the feminist movement.

Pursuant to the new federal guidelines, the formulation of policies to address the needs of rural women remains a strategy that prioritizes women's full citizenship and economic independence, combining gender mainstreaming in sectoral policies with specific policies and new institutional agreements with new instruments for social participation and oversight (Butto, 2011, p. 17).

Dialogue is part of policy-making, the negotiations resulting from women's advocacy movements and, regularly and institutionally, the Standing

<sup>3</sup> The March of the Margaritas is a national movement organized by CONTAG. Every four years, women farm - and non-farmworkers, extraction workers, fisherwomen, and indigenous and quilombola women take to the streets in the federal capital to express their grievances and dialogue with the federal government. The movement's name honors union leader Margarida Maria Alves, assassinated in 1983 while fighting for workers' rights in Paraíba.

Committee for Promoting Equality of the National Board for Sustainable Rural Development (CONDRAF) and the MDA programme management committees.

Incrementally, the changes in public policy have been integrated into the federal government's Pluriannual Plans (PPA) as specific, cross-cutting actions, under the aegis of the MDA and other ministries and with a budget increase. In the case of MDA, the budget for women's policies in the PPA 2004-2007 was R\$ 8 million, allocated to the Agrarian Development Policy Management Programme under the Executive Secretariat (MDA, 2007). In the PPA 2008-2011, R\$ 180 million were executed. Today, the funds are allocated to two government programmes with three budgeted activities specifically targeting rural women: Specialized Technical Assistance for Rural Women, Productive Organization of Rural Women, and Documentation of Rural Women Workers (Butto, 2011; MDA/DPMRQ, 2007, p. 7).

In the period 2003-2013, the activities implemented directly by the MDA Directorate for Programmes for Rural and *Quilombola* Women had R\$ 250 million in funding (MDA/DPMRQ, 2015a, p. 7). The budget executed by the Directorate in 2015 was R\$ 16 million, supplemented with resources from other areas of the MDA and other ministries (MDA/DPMRQ, Personal communication, January 2016).

A wide range of policies have been implemented to loosen the constraints to achieving economic independence and equality for rural women. These can be grouped into three main areas of activity: guaranteeing the prerequisites for access to public programmes (documents, registration, titles to property); tailoring programmes to the needs and demands of women and creating specific new instruments (land reform, credit, technical assistance, productive organization); and shining a spotlight on inequalities and legitimizing the feminist agenda (statistics, research).

## ACCESS TO DOCUMENTATION

One of the main problems confronting women seeking access to production and Social Security programmes is the lack of documents. Given the difficulties

involved in making the pension rights won in 1988 a reality, access to civil documentation has become a major demand of rural unions and women's movements. Thus, in 1997, a national campaign called "No Rural Woman Worker without Documents" was launched, mobilizing women and putting pressure on state programmes, while taking concrete action in collaborative efforts to secure access to civil documents. In the 2000s, this issue became the first item on the March of the Margaritas' agenda.

The under-documentation of rural women stems from the fact that the documents are issued by different entities, with little capillarity among issuing authorities and different requirements, many of which entail a cost. Furthermore, until recently, women did not view these documents as identification documents that would give them access to public programmes; they believed it was enough that one member of the household have documentation (MDA/Aegre, 2010, p. 7).

Social pressure, combined with MDA advocacy with several federal and state entities charged with issuing the documents resulted in the creation of the National Programme for the Documentation of Rural Women Workers (PNDTR), an integrated initiative to guarantee free access to public documents needed for work and social security purposes (Identity Card, Registration Papers for Physical Persons) and others needed for access to social and production programmes, such as the Declaration of Eligibility for PRONAF (DAP), proof of registration in the Unified Social Programme Register (CadÚnico), the Woman Producer's Notebook (*Bloco de Notas da Produtora*) and the Rural Land Registry (MDA/DPMRQ, 2015a, p. 20).

The programme conducts joint activities, sending teams from community to community in rural areas surrounding towns. In addition to issuing documents, it conducts activities to provide information about, and even access to, programmes of interest to rural women, together with "recreational activities for their children" (MDA/DPMRQ, 2015b, p. 3).

Each state has its own working group and infrastructure, consisting of computers, cameras and vehicles – in particular, specially equipped buses to serve as mobile "Citizenship Express" units, which now number 22 (MDA/DPMRQ, 2015a, p. 20). More recently, to expand the service to communities



along the Amazon River, mobile riverboat units were built in partnership with the Brazilian navy. Mission activities varied, depending on the “capacity for linkage” in each state (Ibid, p. 20)

The programme, which has its own regulations, is coordinated by the Ministry of Agrarian Development (MDA) and the National Colonization and Land Reform Institute (INCRA). It is administered by the National Administration Committee and the State Committees, which serve as the planning and coordinating bodies of the federal entities (in the areas of Justice, Social Security, Treasury/Taxes, Labour, Social Development, Human Rights and Policies for Women), state entities (Treasury, Public Safety, Policies for Women) and municipal entities, together with financial agents (*Banco do Nordeste and Caixa Econômica Federal*), and it guarantees the participation of representatives of women’s movements and organizations<sup>4</sup> (MDA/DPMRQ, 2015a, p.19).

Since 2004, the programme has conducted 6,500 joint activities, benefitting some 1.5 million rural women through the distribution of nearly 3 million documents (MDA/DPMRQ, Personal communication, January 2016).

## WOMEN AS PEOPLE WITH RIGHTS AND PROGRAMME BENEFICIARIES

Notwithstanding, having documents was not enough for women to gain direct access to public programmes. It was necessary to revamp public administration to ensure that women were indeed recognized as people with rights and direct beneficiaries of public programmes, regardless of their marital status – that is, without the mediation of men. This required – and still requires – a great deal of pressure and persistence to overcome the resistance of public administrators and list women in different registers or forms as individuals in their own right and no longer as wives.

Dual title to the land in the land reform and family farm registers (DAP) guaranteed women’s right to participate and benefit directly from a range of public and productive inclusion (credit, technical assistance, marketing), housing and insurance programmes. In 2012, 68% of DAPs were in both names.

<sup>4</sup> MDA/INCRA Joint Resolution Execution Regulation No. 1, of 22 February 2007.

The road towards recognition of rights was made significantly smoother by the adoption of specific strategies and objectives to include rural women in national programmes and plans for food and nutrition security, agroecology and organic production and the National Plan for Cooperative Rural Development, in addition to the National Plan for Women's Programmes. Another advance was greater participation by women and their organizations in decision making, management, and the public programme monitoring bodies, as well as management committees, technical working groups, and sectoral forums.

### PRONAF *MULHER* AND DEVELOPMENT

One of the most important and debated issues in the government and women's movement was access to rural credit to finance production. The obstacles to securing credit stemmed from women's subordinate status and the inadequacy of the available instruments. In addition to the problems stemming from the lack of documentation and their invisibility in registers, women were afraid to take on debt, lacked technical assistance to support them in executing project financing and were limited to local distribution networks.

The main demand for securing access to the National Programme for Strengthening Family Farming (PRONAF)<sup>5</sup> and differentiated credit with subsidized interest rates to cover costs and investments in family farms, was for a special, independent family credit line with facilities for obtaining and repaying loans. Negotiations and pressure from women's movements led to the creation of PRONAF *Mulher*, which started out providing 50% over the total amount of the credit available to the family for use in farming and non-farming activities but was limited to higher income households.

As a result of the discussions in the Working Group on Gender and Credit, PRONAF *Mulher* became a credit line specifically for investment, regardless of any credit obtained by the family unit, and was extended to women of all income levels. Annual interest rates currently range from 2.5% to 5.5%, based on income level. Between 2003 and 2014, more than 42,000 loan agreements were signed, representing an investment of R\$ 359 million.

<sup>5</sup> For information on PRONAF lines of action and operations, see the chapter "Credit and income guarantees for family farms" in this publication.

Women's participation in other PRONAF credit lines also increased. In the Harvest Plan 2013/2014, more than 515,000 loan agreements were with women, representing 27% of the total. Emphasis should be placed on women's participation in productive microcredit (investments of up to R\$ 4,000, annual interest of 0.5% and timely payment bonus of 25%), granted to 47% of the total operations.

A specific strategy was created for women farmers living in extreme poverty. It consisted of ongoing individualized technical assistance and food production and income generation projects under the Brazil without Extreme Poverty Plan (BSM)<sup>6</sup>. To ensure the viability of their production projects, women receive and administer a total of R\$ 3,000 in non-reimbursable funds, paid in instalments, which they withdraw using the *Bolsa Família* debit card. Around 138,000 households headed by women have benefitted from this strategy<sup>7</sup>.

Pursuing this trajectory involved overcoming the resistance and narrow interpretations of financial agents, ensuring a common understanding among employees and training them and securing commitments from the federal government, banks and social movements to encourage, facilitate and thereby expand women's access to credit.

## ATER FOR WOMEN

Another demand was that women and their organizations receive specific technical assistance and rural extension services (ATER)<sup>8</sup>. Having participated in the development of the national ATER policy and contributed to the drafting of its guidelines, women succeeded in securing very low interest rates on loans, and later, parity throughout the service. Added to this was a 30% quota of women in ATER *Agroecologia* technical teams, combined with services exclusively for them. To guarantee this service and its quality, it was essential to develop appropriate approaches and methodologies that would allow technical personnel to recognize women's work and offer them guidance on the proper way to support production projects and marketing activities.

<sup>6</sup> For information on the Brazil without Extreme Poverty Plan, see the chapter "Productive inclusion and cash transfers in overcoming rural poverty" in this publication.

<sup>7</sup> For an analysis of activities targeting rural women in the Brazil without Extreme Poverty Plan, see Mendonça et al. (2015).

<sup>8</sup> For more information on technical assistance services, see the chapter "Research and rural extension for family farming" in this publication.

Federal specifications for public calls for proposals to provide ATER services have led to teams with a more balanced composition and an increase in the number of women served, who in 2014 accounted for 56% of all beneficiaries.

## SUPPORT FOR THE ORGANIZATION OF PRODUCTION

Innovations in the design of differentiated agricultural policies for family farming and consolidation of the federal policy agenda for rural women have made possible more inclusive intersectoral action to improve women's production activities and promote the organization of producers' groups through the Interministerial Programme for the Productive Organization of Rural Women<sup>9</sup>.

Thus, the federal government responded to a demand from women's movements in the March of the Margaritas to create "a programme for recognizing and improving the quality of women's production" and providing visibility and recognition for their work and efforts, giving priority to "production groups and networks". This programme was to play "a transformative role in power relations within the family unit" (Butto, 2011, pp. 23, 24).

Coordinated by DPMRQ/MDA, the programme is managed by an intersectoral committee made up of different women's organizations and movements (MDA/DPMRQ, 2015a, p. 37). It integrates MDA actions with those of other areas of the federal government (social development, fisheries, labour, employment, etc.), covers activities (allocation of non-reimbursable resources) that promote production, value added and training for management and marketing and includes support for participation in local and national fairs. Given the importance of marketing to the income of rural producers, it includes specific action to increase the participation of women's groups and associations in public procurement programmes (Food Acquisition Programme – PAA, and National School Feeding Programme – PNAE). In the period 2008-2013 it allocated R\$ 50 million, benefitting more than 230,000 women (Ibid, 39).

<sup>9</sup> Interministerial Decision MDA No. 2, of 24 September 2008. For more information about the Programme, visit <http://www.mda.gov.br/sitemda/secretaria/dpmr-org/sobre-o-programa>.

## ACCESS TO LAND

An issue central to the economic independence of rural women is access to land, an area also characterized by tremendous inequality between men and women – a phenomenon generally replicated in land reform programmes. Traditionally, the State replicated the traditional pattern of exclusion by using the family group as the reference unit in planning and activities, selecting the man as its representative (Butto and Hora, 2010, p. 22). The man was the head of household or owner by law, with the woman appearing only as his spouse.

To remedy this situation, the II National Land Reform Plan (2003) included specific measures targeting rural women and began effectuating their right to land, regardless of their marital status. This required changes in administrative procedures for the registration, selection and allocation of land provided for in the Federal Constitution of 1998 but was never implemented.<sup>10</sup>

A change in the regulations<sup>11</sup> made joint ownership of the land compulsory for a couple in a stable marriage” and stipulated that in the event of separation, “the land would remain with the wife, as long as she had custody of the children” (Butto and Hora, 2010, p. 28). Furthermore, “the rules for registering candidates for the selection of land reform settlements, concession contracts and the final deed to the land were changed so that joint ownership could be implemented” and priority given to households headed by women, requiring couples to disclose their marital status. Also created was a certificate for women beneficiaries of the land reform to facilitate women’s exercise of their rights when dealing with other federal agencies that made access conditional to proof of land ownership (Butto and Hora, 2010, p. 29)<sup>12</sup>.

162 These changes produced rapid results. In 2003, only 13.6% of all land reform beneficiaries were women; by 2013, that figure had soared to 72%, while the figure for households headed by women had jumped from 13% to 23% (Hora and Butto, 2014, p. 30).

<sup>10</sup> The Federal Constitution of Brazil of 1988 established that the “deed of ownership and the concession of use shall be conferred on a man or a woman, or both, regardless of marital status” (Art. 189). See II National Land Reform Plan (Available from [http://sistemas.mda.gov.br/arquivos/PNRA\\_2004.pdf](http://sistemas.mda.gov.br/arquivos/PNRA_2004.pdf). Accessed 29/11/2015).

<sup>11</sup> INCRA Regulatory Instruction No. 981/2003, of October 2003.

<sup>12</sup> All of these changes are found in INCRA Instruction No. 38/2007, of 13 March 2007.

Priority was given to women's participation in the drafting of settlement development plans, production management and the definition of social infrastructure. To strengthen women's production projects, the settlement installation cycle offered a special credit line for women (*Fomento Mulher*) of up to R\$ 3,000, with annual interest of 0.5%, an 80% subsidy and one year to pay, so that the funds could be invested in farming and non-farming activities, farms or other projects. The funds were accessed using a debit card in the woman's name. This boosted family income and contributed to the food security of households and the settlement, in addition to creating better conditions for rural women's autonomy.

A major struggle still under way is securing free access and use of those territories by babaçu coconut breakers for activities that generate income and contribute to the preservation of biodiversity. Few municipalities have passed laws on free access, and it has been difficult to pass a federal law in Congress guaranteeing this right.

In territorial development policy, the feminist agenda's priority was to stimulate participation through the creation of local women's committees, training and cooperation for the implementation of policies for women.

In matters important for sharing the burden of caregiving and early childhood education, understood as a right of children and women, initiatives are still in their infancy, and the main challenges are selecting criteria capable of expanding the initiatives and tailoring them to order (MDA/DPMRQ, 2015a). The priority has been to influence early childhood education policies in the Ministry of Education and include recreational activities for children in the documentation programme's collective technical assistance activities<sup>13</sup>.

## STATISTICS ON RURAL WOMEN

Another area of activity in women's programmes is action to shine a spotlight on inequalities and legitimize the feminist agenda in rural development. Only recently has the government begun to produce official statistics on rural

<sup>13</sup> For information on the activities of the Interministerial Working Group on Early Childhood Education, see Brazil, 2014.

women by incorporating gender relations in the categories of the data gathering instruments that organize the data and analyse their results, although this is one of Brazil's international commitments.

The production of statistics and studies that include a gender approach has been essential for lending visibility to rural women and the inequality they experience, for revealing the importance of their economic activities and for subsidizing and justifying the creation of new public policies and their monitoring, thereby strengthening the feminist agenda.

Improvements in data collection and research methodologies in the Agricultural Census and National Household Sample Survey (PNAD) revealed, albeit partially, the number of rural women and who they are, how they live and work, their activities in rural enterprises, and how much time they spend on domestic chores and caregiving. It took considerable effort to convince the authorities to include specific topics and disaggregate the data by sex in all the variables used, a factor that was key to revealing the different situations of men and women. A major achievement was getting the authorities to acknowledge work for personal consumption and self-development, and new advances can be expected with the recognition of "domestic chores as an economic factor" (Faria, 2009, p. 20) and consideration of work in the home as "unpaid labour rather than economic inactivity" (Bruschini, 2006, p. 351 apud Faria 2009, p. 20).

The Agricultural Census 2006 asked for the first time which sex ran the farm. This question yielded the discovery that women ran 12.68% of all farms, and in the universe of family farming, women managed approximately 600,000 farms (13.7%). The next Agricultural Census in 2017 is expected to yield data on topics such as the registration of farms run by more than one producer, such as a couple, and an expanded list of activities performed, as well as information on everyone living on the property.

Alongside efforts to produce official statistics are initiatives to stimulate critical thinking about practices for promoting equality and bringing women's struggles to the attention of the public. The Margarida Alves Prize for Rural and Gender Studies, awarded jointly with national academic associations (ANPOCS, ABA, SBS, Rural Studies Network), honours academic articles and research,

in addition to the production of rural women themselves, with stories and memoirs.

## ON THE ROAD TO PARITY

The evolution of public policy design reveals that in some sectors, a transition is under way from a quota for women to their participation with parity. A benchmark in this direction was the II National Conference on Sustainable Rural Development and Solidarity (2013), which was marked by gender parity that was unprecedented in Brazil. That is, the make-up of the delegations was half women and half men.

Several proposals approved at the conference to guarantee women's rights illustrate this new approach (parity in the composition of territorial collegiate bodies and boards; parity between the groups served and in the composition of the ATER teams), and others continue to emphasize the importance of quotas in resource allocation and beneficiary groups.

The gains have been gradual and partial, but cumulative. This priority conference, for example, was preceded by another, in which 30% of the participants were required to be women. In the contracting of ATER services experience working with rural women came to be valued in judging the qualifications of organizations, and specific contracts for women were included; women were given priority in ATER agroecology contracts involving the participation of a mixed public, where half the beneficiaries had to be women and 30% of the resources had to be channelled to women. In the Food Acquisition Programme, the minimum quota of 40% in the procurement with simultaneous donation modality was exceeded in 2014, reaching 41%<sup>14</sup>.

## AN INTERNATIONAL AGENDA

The Brazilian experience spread and led to the women's agenda in MERCOSUR's Specialized Meeting on Family Farming (REAF). Major progress was made "beyond the commitments of the United Nations conferences", "connecting

<sup>14</sup> See the chapter "Procurement of food produced by family farms" in this publication.



with the priorities of international civil society forums and women's movements in defence of food sovereignty" (Butto and Hora, 2012, pp. 29-30).

Political dialogue and cooperation activities associated with a regional gender programme resulted in the creation of specific public agencies and new public policies in the countries, leading to MERCOSUR's approval of the recommendations on guidelines for public policies to promote the equality and autonomy of rural women. Reports on women's access to land and their enrolment in family farm registers will make it possible to monitor the remaining problems and develop joint initiatives to solve them<sup>15</sup> (Brazil, 2006; Butto and Hora, 2012).

Progress in the MERCOSUR gender agenda has contributed to its spread throughout the Hemisphere, illustrated especially by the 2014 Conference on Rural Women in Latin America and the Caribbean in Brasilia and the initiatives of the Community of Latin American and Caribbean States (CELAC)<sup>16</sup>.

The combination of self-organization by rural women and their struggles with the government agencies that oversee policies and programmes for women has been key in the organization, consolidation and expansion of a feminist agenda in rural development. The broader scope and power to connect and implement sectoral programmes that increasingly incorporate gender mainstreaming underscore the effectiveness of quotas in the delivery of services and use of specific resources.

## ACHIEVEMENTS AND CHALLENGES

Some of the major demands of rural women's movements have been recognized and institutionalized in public policy, opening new opportunities for dialogue and participation in government. Recognition of the value of backyard gardens on farms has shed light on and underscored the important work of women, who play a key role in diversifying production, creating an appreciation of regional foods, and ensuring household food security. The relationship between gender and agroecology should also be noted, emphasizing women's work in the preservation of biodiversity.

<sup>15</sup> For more information on the gender agenda and MERCOSUR policies to benefit rural women, see MDA (2006) and Butto and Hora (2012).

<sup>16</sup> Conference on Rural Women in Latin America and the Caribbean in the Year of Family Farming 2014. Available from [http://www.fao.org/fileadmin/user\\_upload/rlc/docs/Declaracion\\_de\\_Brasilia\\_AIAF\\_2014\\_final.pdf](http://www.fao.org/fileadmin/user_upload/rlc/docs/Declaracion_de_Brasilia_AIAF_2014_final.pdf). Accessed 29/11/2015.

The experience of women has helped underscore the importance of extending the concept of economics beyond the marketplace. Women's organizational and production practices, especially those developed in groups and networks, make it possible to discuss the principles of feminist solidarity economics and agroecology.

Despite this progress, challenges to achieving equality and economic independence persist. Much remains to be done to increase the availability of public services (health, education, housing, sanitation, electricity) that particularly impact the lives of women, since they are the people most affected by the low coverage and their almost exclusive responsibility for family caregiving.

A major constraint that must be addressed is the fact that policies to strengthen family farming are designed for the family as a unit, prioritizing the access of that unit to programmes, services and resources. The conditions must be created for women farmers to be considered individuals in their own right with their own projects and aspirations that, while negotiated with the family and the community, deserve to be expressed and realized.

Public programmes to increase the autonomy of women producers are counter-hegemonic and still need to acquire scale and the necessary integration to weather the more structural dynamics of agriculture and rural development, which are replicated and reinforced by newly emerging forms of inequality and women's subordination.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BRAZIL.** 2014. Grupo de Trabalho Interministerial para la Educación Infantil en el Campo. *Educação Infantil do Campo: proposta para a expansão da política.* (mimeo.)

**BRUSCHINI, C.** 2006. Trabalho doméstico: inatividade econômica ou trabalho não remunerado? *Revista Brasileira de Estudos Populacionais*, São Paulo, Vol. 23, No. 2, pp. 331-353, Jul./Dec. 2006.

**BUTTO, A.** 2011. Políticas para as mulheres rurais: autonomia e cidadania. In: **BUTTO, A.** and **DANTAS, I.** (Orgs.). *Autonomia e cidadania: políticas de organização produtiva para as mulheres no meio rural*. Brasília: MDA. (pp. 11-34).

**BUTTO, A.** and **HORA, K.** 2010. Mulheres e reforma agrária no Brasil. In: **LOPES, A. L.** and **BUTTO, A.** (Orgs.). 2010. Mulheres na reforma agrária: a experiência recente no Brasil. Brasília: MDA. (pp. 19-38) (NEAD Debate 14). (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_64/pageflip-4204232-74145-1t\\_Mulheres\\_na\\_Reforma\\_A-1046705.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_64/pageflip-4204232-74145-1t_Mulheres_na_Reforma_A-1046705.pdf). Accessed 25/11/2015).

**BUTTO, A.** and **HORA, K.** 2012. Políticas para as mulheres rurais no Mercosul. Revista do Observatório Brasil da Igualdade de Gênero, Brasília: SPM. (pp. 29-43). (Special edition: “Desenvolvimento sustentável e igualdade de gênero”) (Available from <http://www.observatoriodegenero.gov.br/menu/publicacoes>. Accessed 25/11/2015).

**BUTTO, A.; HORA, K.** and **DANTAS, I.** 2014. Políticas para as mulheres rurais: uma história de 10 anos. Revista do Observatório Brasil da Igualdade de Gênero, Brasília: SPM, Year 4, No. 5. (pp. 130-140). (Special edition: “10 anos da SPM”). (Available from <http://www.observatoriodegenero.gov.br/menu/publicacoes>. Accessed 25/11/2015).

**FARIA, N.** 2009. Economia feminista e agenda de luta das mulheres no meio rural. In: **BUTTO, A.** (Org.). Estatísticas rurais e a economia feminista: um olhar sobre o trabalho das mulheres. Brasília: MDA. (pp. 11-28). (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/anexos/Livro\\_Estatisticas\\_Rurais\\_e\\_Economia\\_Feminista\\_0.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/anexos/Livro_Estatisticas_Rurais_e_Economia_Feminista_0.pdf)).

**HORA, K.** e **BUTTO, A.** 2014. Políticas públicas para mulheres rurais no contexto dos Territórios da Cidadania. In: **BUTTO, A.** et al. (Orgs.). *Mulheres rurais e autonomia: formação e articulação para efetivar políticas públicas nos Territórios da Cidadania*. Brasília, DF: MDA.

**IBGE.** 2010. *Censo Demográfico: 2010: características da população e dos domicílios: resultados do universo*. Rio de Janeiro, RJ: IBGE.

**INCRA.** 2007. INCRA Regulatory Instruction 38, of 13 March 2007. On INCRA regulations to enforce the right of women workers in rural areas to participate in the National Land Reform Programme. (Available from: [http://www.incra.gov.br/sites/default/files/uploads/institucionall/legislacao--/atos-internos/instrucoes/in38\\_130307.pdf](http://www.incra.gov.br/sites/default/files/uploads/institucionall/legislacao--/atos-internos/instrucoes/in38_130307.pdf).) Accessed 29/11/2015.

**INCRA.** 2003. INCRA Act No. 981, of 2 October 2003. Amends SDA Execution Regulation No. 29, of 2002. (Available from: <https://www.legisweb.com.br/legislacao/?id=185200>.) Accessed 29/11/2015.

**MDA.** Assessoria Especial de Gênero, Raça e Etnia. 2010. Documentação da Trabalhadora Rural. *Cadernos de Formação*. Brasília, DF: MDA.

**MDA.** Diretoria de Políticas para as Mulheres Rurais. 2015a. *Relatório Balanço 2011-2014*. Brasília, DF: MDA.

**MDA.** Diretoria de Políticas para as Mulheres Rurais. 2015b. *Políticas para as mulheres rurais*. Brasília, DF: MDA.

**MDA.** 2006. Ministério do Desenvolvimento Agrário. *Gênero, agricultura familiar e reforma agrária no Mercosul*. Brasília, DF: MDA. (NEAD Debate 9).

**MDA.** 2007. *Políticas para as trabalhadoras rurais: relatório de gestão do Programa de Promoção da Igualdade de Gênero, Raça e Etnia do MDA/INCRA*. Brasília, DF: MDA.

**MDA.** 2007. MDA/INCRA Joint Execution Regulation No.1, of 22 February 2007. Establishes the operating standards of the National Programme for the Documentation of Rural Women Workers. *Diário Oficial da União*, No. 39, Section 1, 27 February 2007, pp. 211-213.

**MDA.** 2008. MDA Interministerial Act No. 2, of 24 September 2008. Institutes the Programme for the Productive Organization of Rural Women. *Diário Oficial da União*, No. 186, Section 1, 25 September 2008, pp. 74-75.

**MDA.** Undated. Portal MDA/Diretoria de Políticas para as Mulheres Rurais (DPMR). Available from <http://www.mda.gov.br/sitemda/secretaria/dpmr/apresenta%C3%A7%C3%A3o>. Accessed 29/11/2015.

**MELO, H. P. e SABATO, A. D.** 2009. Gênero e trabalho rural. In: **BUTTO, A.** (Org.). *Estatísticas rurais e a economia feminista: um olhar sobre o trabalho das mulheres*. Brasília, DF: MDA. (p. 31-122). (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/anexos/Livro\\_Estatisticas\\_Rurais\\_e\\_Economia\\_Feminista\\_0.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/anexos/Livro_Estatisticas_Rurais_e_Economia_Feminista_0.pdf). Accessed 29/11/2015)

**MENDONÇA, L. et al.** 2015. A construção de uma política de assistência técnica e extensão rural para superação da extrema pobreza. In: **MELO, J.** *A inclusão produtiva rural no Brasil Sem Miséria: o desafio da superação da pobreza no campo*. Brasília, DF: MDS. (p. 50-69). (Cadernos de Estudos Desenvolvimento Social em Debate, nº 23).

**MERCOSUR.** 2014. GMC Decision No. 08, of 13 May 2014. Guidelines for the MERCOSUR Gender Policy. (Available from: [http://www.mercosur.int/innovaportal/file/5941/1/p.\\_dec\\_08-14\\_pt\\_diretrizes\\_politica\\_igual\\_genero\\_rmaam.pdf](http://www.mercosur.int/innovaportal/file/5941/1/p._dec_08-14_pt_diretrizes_politica_igual_genero_rmaam.pdf). Accessed 29/11/2015).

**MERCOSUR.** 2008. GMC Recommendation No. 06, of 15 December 2008. Guidelines for Gender Equality in Public Programmes for Family Farming. (Available from: <http://www.mercosur.int/innovaportal/v/1466/2/innova.front/recomendaciones-2008>.) Accessed 29/11/2015.

**SOARES, V.** 2014. Organismos governamentais de políticas para as mulheres – avanços e desafios. *Revista do Observatório Brasil da Igualdade de Gênero*, Brasília, ano 4, nº 5, p. 46-59. (Edição Especial “10 anos da SPM”). (Available from <http://www.observatoriodegenero.gov.br/menu/publicacoes>. Accessed 25/11/2015)

**SPM.** *Portal da Secretaria Especial de Políticas para as Mulheres*. (Available from <http://www.spm.gov.br>. Accessed 29/11/2015).

## ADAPTATION TO CONDITIONS IN THE SEMIARID REGION

The Brazilian experience with adaptation to conditions in the Semiarid Region is a good example of direct citizen participation in public administration. An appreciation of popular wisdom, combined with scientific knowledge, revived the principle of adaptation to conditions in the region, implemented through concrete activities that have become a model for the government and have been institutionalized in public programmes that today include the participation of civil society organizations in implementation and management.

Brazil's Semiarid Region is marked by a heavy concentration of land ownership and access to water, coupled with high levels of poverty and environmental degradation that pose serious challenges to its development.

The region's climate is characterized by average rainfall of 800 mm or less, with irregular precipitation (60% risk of drought) and average annual temperatures of 23°C to 27°C. Thus, it is marked not only by lack of precipitation, but also by its irregularity.

The region is home to 1,135 municipalities in 10 states, covering a territory of 980,133 km<sup>2</sup> with a population of some 23 million, or 11.9% of Brazil's

population and 42.6% of the population in the country's northeast macro-region<sup>1</sup>. The Semiarid Region has 32% percent of the country's farms, three-quarters of which occupy 20 hectares at the most and are predominantly family farms.

The predominant ecosystem is Caatinga, rich in biodiversity, with shallow soils covered by drought-resistant shrubs – an area degraded both by intensive and improper use of its natural resources and desertification.

## FEASIBILITY OF ADAPTATION

The recent policies adopted for the region are related to the mobilization and strengthening of civil society in the 1980s, which increased in the 1990s in line with the 1994 United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, contrasting with the government's policy of combating the effects of climate change through improvised emergency action and "drought mitigation" projects<sup>2</sup>. These latter activities were confined basically to the "construction of dams", mostly large ones for rainwater collection, and interventions at critical points in the prolonged drought, with "government contracting of temporary services" (Duke, 2015, p. 204).

Campefino organizations and movements criticizing this intervention model began to grow, "demanding effective measures to improve people's situation" and ongoing structural action to promote development to deal with the drought, while ensuring environmental sustainability and social inclusion (Duke 2015, p. 205).

172 The discussion forums and other opportunities for dialogue created by civil society initiatives led to the sharing of experiences and increased the number of organizations committed to this new programme. This environment gave rise to the first activities to build "round, semi-underground plate cisterns",

<sup>1</sup> Source: IBGE Demographic Census 2010.

<sup>2</sup> Significantly, the creation of the *Fórum Pernambucano de Enfrentamento à Problemática da Seca* (Pernambuco Forum to Fight Drought) (*Fórum Seca*) and the holding in 1999 of the parallel forum of the Summit of the Parties to the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought (COP 3), organized by rural union movements and civil society organizations.

financed by various sources, expanding the scope of the activities through the “system of revolving solidarity funds”, which has strengthened community organization (Duke, 2015, p. 206).

The Declaration of the Semiarid Region, approved in 1999 by civil society organizations, was a major milestone that affirmed the feasibility of coping with conditions in the region and the importance of collecting rainwater as a source of water sufficient to meet the region’s production and social needs. The Declaration contains proposals for sustainable development grounded in the principles of strengthened family farming and food security; guaranteed access to credit and marketing channels; linkage between production, extension, research and scientific and technological development; the use of adapted technologies and methodologies; and universal water supply.

## SEMIARID COALITION

These initiatives gave rise to the Semiarid Coalition (*Articulação Semiárido*) (ASA), a network of more than 3,000 assorted civil society organizations (unions, associations, cooperatives, nongovernmental organizations, churches, women’s movements, universities, etc.).

ASA operations are based on a set of common principles, including: the mobilization and empowerment of rural families and communities; their participation in each step of the process; and the development of solutions based on local knowledge and needs, with the decentralization of responsibilities.

The ASA’s priority was the design and creation of a “cistern construction and distribution programme” to guarantee water for human consumption, called “Training and Mobilization Programme for Living in the Semiarid Region: One Million Rural Cisterns” (P1MC). This was supplemented by the “One Land, Two Waters” Programme (P1+2), designed “to store and manage water” for production purposes (Duke, 2015, p. 207).

The design of the P1MC was initially financed by the federal government, with the Ministry of Environment (MMA) and the National Water Agency providing support for its implementation. In 2003, it became part of the Zero Hunger Programme.



The P1MC was administered through management units (a central unit and a series of microregional units), with support from the One Million Cisterns Programme Association (AP1MC)<sup>3</sup>, which has committees to review and judge the procedures for procurement processes and the contracting of construction projects and services, including the selection of organizations to serve as ASA programme management units.

The P1+2 programme was created by ASA in 2007 to expand water supply to households, rural communities and traditional groups to irrigate crops and tend to livestock. The programme promotes the use of different P1MC technologies, such as underground and trench dams, stone tanks, community pumps, etc.

In 2003, within the framework of the Zero Hunger Programme and with a focus on food and nutrition security, the main public activities for the Semiarid region were established to guarantee access to water for human consumption and the inclusion of relevant aspects of the previous experience, such as social participation and the strengthening of self organization by rural communities.

## BRAZIL WITHOUT EXTREME POVERTY PLAN AND THE SEMIARID REGION

However, it was necessary to go farther, and in 2011, the Brazil without Extreme Poverty Plan (BSM) was formulated. Work began by reviewing the social programmes implemented since 2003, continuing successful initiatives but adopting a clear, well-defined strategy focused on overcoming extreme poverty. The BSM “created, revamped, expanded and integrated the social programmes”, linking federal government activities with those of state and municipal governments (Rousseff, 2014, p. 17).

The commitment was to address the various aspects of poverty in all their complexity, recognizing the need for “strategies tailored to territorial and regional lines of action and the characteristics of target populations” (Campello and Mello, 2015, p. 51) with different needs and vulnerabilities (Campos et al., 2015, p. 125).

<sup>3</sup> Established as a non-profit, charitable, educational, environmental and philanthropic legal person governed by private law and classified as a Civil Society Organization in the Public Interest (OSCIP).

As President Dilma Rousseff has pointed out, if poverty is multidimensional, the challenge was to implement “strategies that were different from one another, were different for each context and each target group”, and were capable of creating the conditions and opportunities necessary for the most vulnerable sectors (Rousseff, 2014, p 17).

In addition to guaranteeing food security, it was necessary to create the conditions for the economic independence of households. This was to be accomplished by combining income supplements for households through conditional cash transfers (*Bolsa Família*)<sup>4</sup> with linked access, and at the same time, with rights, services and instruments for productive inclusion, such as water, credit for production, technical assistance and public procurement of family farm products, so that new generations would have better opportunities and not run the risk of hunger and a return to poverty. The tool for ensuring that programmes would target and be tailored to families in extreme poverty was the Unified Social Programme Register (CadÚnico), a single database that permitted a better understanding of poverty situations and the planning of different actions referencing that public.

In line with this, the urgency of strengthening the strategy of adaptation to semiarid conditions was recognized, and the centrality of “promoting universal access to water in rural areas” was defined as “a key step in overcoming extreme poverty” (Campos et al., 2015, p. 118).

In the Brazil without Extreme Poverty strategy, guaranteeing access to water meant guaranteeing access to water for human consumption and production. It required instruments that would guarantee this right to the entire population in the Semiarid Region through water infrastructure projects such as the interconnection of the São Francisco River basins and the channel of the Alagoas hinterland, networks that supply cities and communities<sup>5</sup>. It also had instruments to boost family farm production, such as irrigated perimeters and action under the National Irrigation Policy, along with a range of appropriate technologies for accessing and managing water for production.

<sup>4</sup> See the chapter “Productive inclusion and cash transfers in overcoming poverty” in this publication.

<sup>5</sup> There is a series of water infrastructure projects in the Programme for Accelerating Growth, which targets the Semiarid Region. This programme is under the Ministry of National Integration and other federal programmes.

To tackle the challenge of serving over 750,000 poor households in the Semiarid Region, the programme enlisted the efforts of civil society organizations with expertise in cistern building – “a policy that had already been recognized as effective and inclusive”. (Campos et al., 2015, p. 118). Nevertheless, to broaden its scope and acquire scale, with continued faith in promoting “decentralized and territorialized access” in partnership with civil society, and emphasis on the role of farmers, it was necessary to come up with «a new institutional arrangement» with «more partners», new management and monitoring mechanisms and changes in the implementation model and regulatory framework (Ibid., p.118).

The main programmes for adapting to conditions in the Semiarid Region include the National Programme for Universal Access and Use of Water (*Água para Todos*), launched in 2011; the National Programme to Support Rainwater Capture and Other Community Technologies for Access to Water (Cistern Programme), launched in 2013; and the Harvest Guarantee Programme, launched in 2002<sup>6</sup>.

## ÁGUA PARA TODOS

*Água para Todos*<sup>7</sup> was created as a new institutional arrangement for promoting universal access to water and its use for human consumption and agricultural and food production in rural areas, contributing to health advancement, food security and the development of rural communities in situations of social vulnerability.

It involved organizing and integrating a series of federal programmes and activities aimed at providing access to water for family farms, particularly programmes of the Ministry of Environment (MMA; *Água Doce* programme), the Ministry of Social Development and the Fight against Hunger (MDS; activities in water for human consumption and production), and the Ministry of National Integration (MI; water access and management technologies).

The programme includes the Brazil without Extreme Poverty Plan’s roadmap

<sup>6</sup> The Brazil without Extreme Poverty Plan has other policies and instruments that are part of the strategy for adapting to conditions in the Semiarid Region, among them the Programme for the Promotion of Productive Activities and the Environmental Preservation Programme (*Bolsa Verde*).

<sup>7</sup> Established by Decree No. 7,535, of 26 July 2011.

for rural productive inclusion, and its main task is to encourage greater use of technologies, infrastructure and equipment for the capture, storage, treatment and distribution of water from bodies of water, wells or springs and the optimization of its use, financed by different sources from the Federal Budget (OGU), with budgetary action linked to various ministries.

Thus, Brazil without Extreme Poverty coordinated intergovernmental linkage with the federal agencies charged with food and nutrition security, water infrastructure and the public water supply, health, the environment and rural development. It also coordinated with states, municipalities, and civil society organizations (Campos et al., 2015) to stay focused on the delivery of these services to the poorest populations and ensure that the established target was met.

*Água para Todos* is administered by the Ministry of National Integration (MI) and the National Administration Committee, made up of federal agencies (MDS, MCidades, MMA, MS) and organizations representing rural workers and family farmers (CONTAG and FETRAF). Other institutions also sit on the Committee as invited members, among them the National Water Agency (ANA), the *Companhia de Desenvolvimento dos Valles do São Francisco e do Parnaíba* (The São Francisco and Parnaíba Valley Development Company) (CODEVASF) and the Bank of Brazil Foundation.

To assist with programme administration, state management committees were created to serve as bodies for social dialogue, to receive requests and proposals from civil society and to monitor and evaluate processes. These committees are also responsible for establishing municipal committees. These latter are consultative bodies comprised mainly of civil society representatives elected by the community itself to monitor the selection and mobilization of the communities and families to be served, as well as the execution of the works themselves. Women and health workers are encouraged to participate in these committees.

*Água para Todos* offers guidelines, criteria and procedures for community engagement through social participation, including the creation of municipal and community committees to oversee the identification and training of

beneficiaries, even in activities for monitoring the installation of equipment, data gathering and system maintenance. The criteria for selecting the beneficiaries include residence in municipalities recurrently in a state of public emergency or crisis due to water shortages and lack of social organization.

For programme execution, standard components were provided for the equipment, which is classified as collective or single-family water supply systems. These components include: (a) cisterns for the capture of rainwater for human consumption; (b) systems for the collection, intake, treatment, storage and distribution of water for human consumption from bodies of water, wells or springs; (c) cisterns for farm production; (d) dikes or small dams for farm production; (e) small drip irrigation systems; (f) underground dams; and g) wells.

The beneficiary group consists of low-income populations registered in CadÚnico and residing in rural communities with limited access to water, populations served by deficient water supply systems or even those where the supply is irregular. Cross-checking CadÚnico with information from SIG *Cisternas*<sup>8</sup> enables the Management System for Universalization of Access to Water to provide “a list of households to be served in each municipality, together with their location, over and above the active search conducted” by the institutions participating in the programme (Campos et al., 2015, p 125).

Given the magnitude of the challenge, to improve the performance of the partners involved in programme execution and prevent overlapping, the strategy of territorializing the activities was adopted, setting targets for groups of municipalities, where each partner had to take action to universalize the service.

Although the programme has been embraced by the Federative Units, giving it national coverage, it was launched in the Semiarid Region (states of Alagoas, Bahia, Ceará, Maranhão, Minas Gerais, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Sergipe), and in May 2015 was expanded to the states

<sup>8</sup> El SIG Cisternas was developed by MDS to support programme management and monitoring; it was used by the partners for the registration of cisterns and other technologies and has information about the rural household and property.

in the North (Amazonas, Pará, Rondônia), Center-West (Tocantins and Goiás) and Rio Grande do Sul<sup>9</sup>.

## CISTERNS

As indicated, one of the objectives of the Brazil without Extreme Poverty Plan is universal access to water in the Semi-arid Region, and cisterns are one way of guaranteeing that right.

In 2003, MDS began partnering with the One Million Cisterns Programme Association (AP1MC), which by 2010 had built 329,500 brick plate cisterns. To meet the BSM's objective, it was necessary to broaden existing partnerships and forge new ones with states, municipalities, municipal consortia and *Banco do Nordeste*, in addition to expanding to other regions.

The purpose of the Cistern Programme<sup>10</sup>, coordinated by MDS, is to promote access to water using cisterns and other simple, low-cost, easy-to-install social technologies to benefit low-income rural households affected by drought or an irregular water supply.

It is based on the premise that people can live and farm in the Semi-arid Region and that State action should increase the alternatives for resilience to guarantee a better quality of life.

The cisterns provided by the programme can be for human consumption and installed in homes (16,000 litre storage capacity) or schools (52,000 litres), or for farm production, for individual or collective household use (52,000 litres). Farmers also benefit from a series of other technologies, such as underground and trench dams.

When given access to these technologies, the household also receives training in water management and use, along with a series of materials for the creation of gardens, orchards, small livestock pens, and chicken coops.

<sup>9</sup> Through the Cistern Programme, the Sanear Amazônia (Clean up Amazônia) programme will give households from extraction areas in the municipalities of Acre, Amazonas, Amapá and Pará access to water through the collective technologies of the Multipurpose Community System for Access to Rainwater and the Independent Multipurpose System for Access to Rainwater.

<sup>10</sup> Established by Law No.12,873, of 24 October 2013, and regulated by Decree No. 8,038, of 4 July 2013.

The programme's target group consists of low-income rural households affected by drought or an irregular water supply, giving priority to traditional groups and communities registered in CadÚnico.

Programme implementation involved a stream of activities designed to give households autonomy, passing through different stages of direct interaction with the beneficiary population and its community organizations, providing support in learning processes and employing a participatory methodology: mobilization for selecting the communities and households to be served; training of future users, both men and women, and the labour to be used; and collaborative project construction, making it a priority to use individuals and materials from the region.

Due to the nature of the participation and the use of social technologies and technologies for evaluating obstacles to its implementation in the legal frameworks for voluntary cash transfers of federal funds, an important change was made in the rules for the formalization, execution and reporting of activities that recognizes the special characteristics of the programme.

In dialogue with a range of social organizations, proposals were made that have led to changes in legislation and new administrative regulations that simplify procedures and standardize instruments, streamlining the processing of proposals and the entire contracting process<sup>11</sup>.

In this new implementation system, partner institutions “formalize service contracts with private, non-profit organizations pre-accredited by MDS” – contacts that are exempt from the public tender requirement. This is based on the edict permitting public calls for proposals “for the execution of technologies using standard methodologies and unit values”, with reporting “based on computerized results, geolocation” and signature by households of the Agreement of Receipt (Campos et al., 2015, p. 129).

<sup>11</sup> Law No.12,873/2013, Decree No. 838/2013 and MDS Ministerial Decision No. 99, of 20 September 2013, which established the criteria and procedures for the registration of entities.

Under this new institutional scenario, the federal government partnered with states, the Federal District, municipalities, public consortia, such as public associations and private non-profit entities, including civil society organizations in the public interest (OSCIP), such as AP1MC, through partnership agreements or arrangements. Dispensing with public tenders, these entities were able to contract private non-profit organizations (the executors) through public calls for proposals in which pre-accredited service providers participated and standardized instruments were used.

At first, the partnerships were confined to a small set of public, private and charitable institutions, but activities unfolded in the context of extensively decentralized funding, as partners hired a large number of private institutions “with local or territorial operations” (executors), which contributed their experience, technical capacity, capillarity and proximity to the beneficiaries (Campos et al., 2015, p. 133).

The new legal framework has produced other innovations, such as provisions for an initial advance of up to 30% of the total value of the contract. This is essential for initiating the activities contracted, bearing in mind the profile of the executors, which, as non-profits, lack the financial structure and/or working capital to defray the initial programme implementation costs.

Monitoring and transparency are guaranteed by the Management Information System (SIG *Cisternas*), which contains georeferenced data on the beneficiaries and the stages of each cistern’s construction.

According to the most recent Social Information Report (September 2015), through partnerships with ASA, the states, public consortia, BNB and other executors, MDS furnished more than 1.2 million cisterns and some 160,000 technologies to provide access to water for food production, along with 888,800 cisterns to store water for human consumption and 51,701 technologies for production under the Brazil without Extreme Poverty Plan alone<sup>12</sup>.

<sup>12</sup> Source: Relatório SOFI Brasil, FAO, 2015. For national data for MDS food security programmes, visit <http://aplicacoes.mds.gov.br/sagi/Rlv3/geral/index.php#>.



The importance and effectiveness of utilizing social technologies to facilitate universal access to water are widely known in Brazil and beyond and play a key role in facilitating adaptation to conditions in the Semiarid Region<sup>13</sup>.

The activities continue to expand on several fronts – for example, cistern construction in schools and in the homes built under the national rural housing programme, *Minha Casa Minha Vida*, in the region.

Programme evaluation studies show that cisterns improved the quality of drinking water, lowered the incidence of water-borne diseases and reduced the time and effort involved in obtaining water (TCU, 2006; EMBRAPA, 2009).

Beyond these direct effects, by “purchasing materials, hiring construction workers and using local techniques” in the community and the region, the programme helped to “optimize local potential” and stimulate the regional economy (Campos et al., 2015, p. 123). One positive effect has been its creation of employment opportunities for youth, providing work in “mobilizing and selecting households, in directing the arrival of materials and in coordinating training activities” (Ibid, p. 123). Another positive effect has been its “strengthening of grassroots organization” (Ibid, p. 123) through the creation of municipal and community committees, which participated in the launch of the programme and social oversight.

## HARVEST GUARANTEE

The purpose of the Harvest Guarantee Programme<sup>14</sup> is to provide a minimum income for family farmers in municipalities systematically subject to crop losses due to drought or excessive rains or flooding.

To participate in the programme, farmers must enrol before planting. If they show a loss of at least 50% of their total bean, corn, rice, cassava and cotton crop or the fruits of other farming activities tailored to conditions in the Semiarid Region, they can file an insurance claim. The value of the benefit for the 2015/2016 harvest year was set at R\$ 850.00, to be paid in five equal instalments.

<sup>13</sup> FAO cooperation with MDS, particularly through Project UTF/BRA/085/BRA, has made significant contributions to the evaluation of social technologies, implementation processes (including financial execution) and the regulatory framework. For more information, visit <http://www.fao.org/brasil>.

<sup>14</sup> Created by Law No 10,420/2002.

Farmers' enrolment is preceded by state and municipal participation in the programme and by a selection process approved by the municipal rural development boards. To participate in the programme, farmers must register annually in the Harvest Guarantee Roll, a register that complements the main one used for issuing the Declaration of Eligibility for PRONAF (DAP). Under official guidelines, new enrolments should preferentially be in the woman's name.

Harvest Guarantee beneficiaries must meet PRONAF criteria, harvest 0.6-5.0 hectares of crops authorized by the Administrative Committee and, in the 12 months prior to enrolment, have an average gross monthly household income equal to or less than one and a half minimum wages<sup>15</sup>, excluding rural social security benefits. To be eligible for coverage, farmers who enrol commit to participating in educational and technical training programmes for adapting to conditions in the Semiarid Region.

To be eligible for compensation, farmer's losses are verified through a review of official statistics, sampling reports and agronomy and climate indicators.

The Harvest Guarantee's design combines "the concept of index insurance with emergency assistance to poor farmers" (Zukowsky, 2015, p. 85). One of its most original features is the financing through the Harvest Guarantee Fund linked with MDA, whose main sources of revenue are resources from the Federal Budget (OGU), the individual contributions of family farmers and the annual contributions of the participating states and municipalities.

In 2015, the contribution of family farmers to the Fund was 1.75% of the estimated annual benefit, and the contribution of the municipality was 5.25% of the provisions for the municipality under the agreement between the state and the municipality. The state's contribution was 17.5% and the federal contribution was at least 35% of the estimated total annual benefits.

In 2016, the contributions will be 2% for farmers, 6% for municipalities, 20% for states, and at least 40% for the federal government.

<sup>15</sup> On 1 January 2015, the value of the national minimum wage was R\$ 788.00 and in January 2016, it was adjusted to R\$ 880.00..

In nominal terms, for the 2015/2016 harvest year, the contributions for individual participants have been set at R\$ 17.00 for family farmers, R\$ 51.00 for municipalities, R\$ 102.00 for states, and a minimum of R\$ 340.00 for the federal government.

The Administrative Committee is made up largely of representatives of the federal government, together with representatives of states and municipalities that have formalized their participation in the programme and entities representing family farmers and nongovernmental organizations. It is the Committee's responsibility to set the value of the benefit paid each year, the amount of the quotas available for the states, and the timetable of stages and procedures.

According to MDA, there were 771,668 members in 1,035 municipalities in the 2011/2012 harvest year, including 377,044 women. In the 2014/2015 harvest year, there were 1,162,086 members in 1,248 municipalities. Of this total, 607,758 were women, representing an increase of around 51% in total enrollees, some 61% of whom were women<sup>16</sup>.

Payouts in the 2014/2015 harvest year came to R\$ 668.5 million, benefitting 786,501 farmers in 734 municipalities in 8 states. In the 2015/2016 harvest year, the number of enrollees reached 1.35 million (Source: SAF/MDA, November 2015).

## POLICY LINKAGE

The adaptation policies and instruments selected and described earlier interface with virtually all the food and nutrition security and sustainable rural development policies. A good example of the emphasis on linking the policies is the Harvest Plan for the Semiarid Region, whose two iterations (2013/2014 and 2014/2015) have promoted the integration of agricultural, land, territorial development and rural women's policies<sup>17</sup>.

<sup>16</sup> In this regard, visit [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_383/Garantia-safra%202015-2016.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_383/Garantia-safra%202015-2016.pdf).

<sup>17</sup> For information on the Harvest Plan for the Semiarid Region 2013/2014, visit [http://www.mda.gov.br/sitemda/sites/sitemda/files/ceazinep-df/cartilha\\_plano\\_safra\\_semiarido\\_baixa.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/ceazinep-df/cartilha_plano_safra_semiarido_baixa.pdf).

The Harvest Plan contains specific instruments suited to conditions in the region. Especially important is the National Technical Assistance and Rural Extension Programme (PRONATER), which offers services through public calls for proposals for specific groups and purposes – for example, for women, for agroecology, for the management of cooperatives<sup>18</sup>.

These services are also provided by the Dom Helder Câmara Project, administered by MDA in cooperation with the International Fund for Agricultural Development (IFAD), with resources from the Global Environment Fund. The project provides technical assistance to fight poverty and supports sustainable rural development through participatory planning, management, and social oversight processes, serving nearly 15,000 households in 77 districts in 6 states in the Semiarid Region<sup>19</sup>.

Another important instrument is the Investment Credit for Adaptation to the Semiarid Region (PRONAF *Semiárido*)<sup>20</sup>, which finances the construction, expansion, rehabilitation or modernization of production infrastructure, including infrastructure for farming and non-farming production and services projects.

There are other important initiatives that foster adaptation to the Semiarid Region. The Programme for the Advancement of Rural Activities<sup>21</sup>, a key component of the BSM's line of action for productive inclusion, has national coverage but focuses its service objectives on states in the Northeast region, especially targeting extremely poor households in the Semiarid Region. Its objective is to boost the productive capacity of these households to increase their food production and income.

<sup>18</sup> For information on PRONATER, see the chapter “Research and rural extension for family farming” in this publication.

<sup>19</sup> Activities implemented by the Dom Helder Project to promote adaptation to the Semiarid Region include: the household Biowater System for the treatment and reuse of household gray water for food production, which reduces the contamination of backyard gardens; and the Cotton in the Agroecological Food Production Consortium, whose successes include the accreditation by MAPA of farmers' associations as a Participatory Agency for Evaluating Adherence to Organic Farming Practices (OPAC) (Source: information provided by SDT/ MDA in January 2016). For information on the activities of the Dom Helder Project, visit <http://projeto-domhelder.gov.br/site/o-projeto-dom-helder.html>.

<sup>20</sup> For information on the conditions of PRONAF *Semiárido*, visit <http://www3.bcb.gov.br/mcr/>, chapter 10, section 8.

<sup>21</sup> For information on the Programme on the Promotion of Rural Activities, see the chapter “Productive inclusion and cash transfers in overcoming rural poverty” in this publication.

Through a single design, it links elements of social development policy, non-reimbursable cash transfers (of R\$ 2,400-R\$ 3,000) for small investments through the *Bolsa Família* payment and rural development mechanisms and technical assistance and rural extension services (ATER) – a design in which mutually reinforcing social and production policies contribute to the organization or expansion of production activities.

Families registered in CadÚnico may participate, whether living in extreme poverty (with a monthly household income per capita of up to R\$ 77.00) or simply poverty (with a monthly household income per capita of up to R\$ 154.00). To qualify for ATER services, they must possess the Declaration of Eligibility for the Programme for Strengthening Family Farming (DAP) or show that they are beneficiaries of the National Land Reform Programme.

The programme has financed the production projects of 193,831 families, 55.3% of them in the Semiarid Region. Its main outcomes with these families were: improved production, income and nutrition and greater entrepreneurial skills and capacity to create new opportunities for economic independence, which helped them remain in their communities in better circumstances.

Other important initiatives were implemented by the Brazilian Agricultural Research Corporation (EMBRAPA), which has an office in Petrolina, Pernambuco, focused on the sustainability of agricultural production systems in the Semiarid Region dependent on rain, irrigation and natural resources, and on the development of technologies for sustainable use and productive integration of the *caatinga* ecosystem<sup>22</sup>.

Another institution working in this field is the National Institute for the Semiarid Region (INSA)<sup>23</sup>, linked with the Ministry of Science, Technology and Innovation (MCTI). Headquartered in Campina Grande, Paraíba, the institute has projects in information and knowledge management, desertification and climate change, conservation and the sustainable use of biodiversity, water resource management and social technologies as part of an effort to integrate

<sup>22</sup> For information on the activities of EMBRAPA *Semiárido*, visit <https://www.EMBRAPA.br/semiario>. The unit's Master Plan 2008- 2011-2023 is available from <https://www.EMBRAPA.br/semiario/plano-diretor-da-unidade>.

<sup>23</sup> For information on INSA activities, visit <http://www.insa.gov.br/> and [http://www.insa.gov.br/?page\\_id=39#VkSeMyu-PaM9](http://www.insa.gov.br/?page_id=39#VkSeMyu-PaM9).

with the National Science and Technology Strategy (ENCTI 2012-2015)<sup>24</sup>.

Since 2014, the Representation of the Food and Agriculture Organization of the United Nations (FAO) in Brazil has had a Project Coordination Unit headquartered in INSA facilities in Campina Grande. Its purpose is to support regional projects to strengthen family farming and food production, fight desertification, promote action to reverse soil degradation and mitigate the effects of the drought.

## LESSONS AND CHALLENGES

Brazil is in the throes of one of the worst and longest droughts in recent history, but what we are seeing is a situation very different from the past, when there were no policies for adapting to conditions in the Semiarid Region and no social security network. Today, hardships do not result in human deaths, rural exodus, the looting of fairs and markets, endless lines of people waiting to receive a tin of water or emergencies. These are a thing of the past<sup>25</sup>.

The recent policies described show the importance of coordinating unions, social movements, NGOs and government institutions and their ability to mobilize and lay new foundations for differentiated policies for the majority of the population. The paradigm of adapting to conditions in the Semiarid Region, based on recognition of the diverse life forms in the region in terms of biodiversity, the “collective generation of knowledge” and social integration led to successful activities to guarantee food and nutrition security and sovereignty (Conti and Schroeder, 2013, p. 198).

Recognition of the activities to promote access to water for human consumption and production and guarantee household income led to the design of an agenda for the continuity and expansion of current policies, in addition to facilitating the planning of a qualitative leap forward with the creation of a National Policy for Adaptation to Conditions in the Semiarid Region. This policy integrates a broader set of issues and actions with a shared approach to

<sup>24</sup> For information on ENCTI, visit [http://www.mct.gov.br/upd\\_blob/0218/218981.pdf](http://www.mct.gov.br/upd_blob/0218/218981.pdf).

<sup>25</sup> See *Semiárido Vivo – Nenhum Direito a Menos! Available from [http://aspta.org.br/wp-content/uploads/2015/11/Semiarido\\_Vivo.pdf](http://aspta.org.br/wp-content/uploads/2015/11/Semiarido_Vivo.pdf)*. Accessed 3/11/2015.

sustainable development and expresses a commitment to the implementation of permanent systemic policies<sup>26</sup>.

The rich experience in the implementation of policies in the region resulted in a model of governance that promotes intersectoral and federative integration, coordinates the decentralized execution of activities and includes processes for learning and strengthening social oversight and social organizations.

There is a wealth of cumulative experience in the public institutions operating in the region and many successful civil society experiences that should be systematically recorded and replicated. This is a good way to continue developing solutions for access to water and sanitation infrastructure, land and the regularization of landholdings; for linkage between the organization of production, marketing and employment and income generation; for promoting the participation of women and youth through technical assistance and rural extension and an educational strategy tailored to the regional context – a strategy that values peoples, communities, and local cultures (CONTAG, 2013).

Securing economic independence and autonomy in access to water and water management breaks the bonds of clientelism and dependence to which families are subject, freeing them from ineffective solutions that fuel the drought industry and opening new opportunities for local and regional development (Ruano and Baptista, 2011).

<sup>26</sup> CONSEA Recommendation No. 01/2006. Visit <http://www4.planalto.gov.br/consea/eventos/plenarias/recomendacoes/2006/recomendacao-no-001-2006/view>. Accessed 3/11/2015.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**ASA.** Undated. *Portal da ASA*. Available from <http://www.asabrasil.org.br/>. Accessed 3/11/2015.

**BRAZIL.** 2004. *Decree No. 4,962, of 22 January 2004*. Regulates the law creating the Harvest Guarantee Plan and issues rules for its Harvest Guarantee Administrative Committee. Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2004-2006/2004/Decreto/D4962.htm](http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2004/Decreto/D4962.htm). Accessed 3/11/2015.

**BRAZIL.** 2011. *Decree No. 7,535, of 26 July 2011*. Establishes the National Programme for Universal Access and Use of Water (Água para Todos). Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2011/Decreto/D7535.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2011/Decreto/D7535.htm). Accessed 3/11/2015.

**BRAZIL.** 2013. *Decree No. 8,038, of 4 July 2013*. Regulates the National Programme to Support Rainwater Capture and Other Social Technologies for Access to Water (Cistern Programme). Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2013/Decreto/D8038.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2013/Decreto/D8038.htm). Accessed 3/11/2015.

**BRAZIL.** 2002. *Law No. 10,420, of 10 April 2002*. Creates the Harvest Guarantee Fund and establishes the Harvest Guarantee Benefit. Available from [http://www.planalto.gov.br/ccivil\\_03/leis/2002/L10420a.htm](http://www.planalto.gov.br/ccivil_03/leis/2002/L10420a.htm). Accessed 3/11/2015.

**BRAZIL.** 2013. *Law No. 12,873, of 24 October 2013*. Establishes the Cistern Programme. Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2013/Lei/L12873.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2013/Lei/L12873.htm). Accessed 3/11/2015.

**BRAZIL.** MDA. Undated. Portal do MDA. Available from <http://www.mda.gov.br/sitemda/secretaria/saf-garantia/sobre-o-programa>. Accessed 3/11/2015.

**BRAZIL.** MDS. Undated. Portal do MDS. Available from <http://mds.gov.br/assuntos/seguranca-alimentar/acesso-a-agua-1/programa-cisternas>. Accessed 3/11/2015.



**BRAZIL.** MI. Undated. Portal do MI. Available from <http://www.mi.gov.br/web/guest/agua-para-todos>. Accessed 3/11/2015.

**CAMPELLO, T.** and **MELLO, J.** 2015. O processo de formulação e os desafios do Plano Brasil Sem Miséria: por um país rico e com oportunidades para todos. In: **CAMPELLO, T., FALCÃO, T.** and **COSTA, P. V.** (Orgs.). *O Brasil Sem Miséria*. Brasília: MDS.

**CAMPOS, A.** *et al.* 2015. Programa Cisternas, uma ferramenta poderosa contra a pobreza. In: **MELLO, J.** (Org.). *A inclusão produtiva rural no Brasil Sem Miséria: o desafio da superação da pobreza no campo*. Brasília, DF: MDS. (p. 118-135). (Cadernos de Estudos Desenvolvimento Social em Debate, nº 23).

**CONTAG.** 2013. Diretrizes para a convivência com o Semiárido. Uma contribuição da sociedade civil para a construção de políticas públicas. Recife, PE: CONTAG. Available from <http://www.contag.org.br/arquivos/portal/Diretrizes%20para%20a%20convivencia%20com%20o%20semiario.pdf>. Accessed 3/11/2015.

**CONTI, I. L.; SCHROEDER, E. O.** (Coords.). 2013. *Convivência com o Semiárido brasileiro. Autonomia e protagonismo social*. Brasília: AECID; IABS; MDS; FAURGS; REDEgenteSAN; Ed. IABS. (Serie Cooperación Brasil-España. Acceso al agua y convivencia con el Semiárido. Programa Cisternas. BRA007-B). Available from <http://www4.planalto.gov.br/consea/publicacoes/convivencia-com-o-semiarido-brasileiro.-autonomia-e-protagonismo-social>. Accessed 3/11/2015.

190 **DUQUE, G.** 2015. Água para o desenvolvimento rural: a ASA e os Programas P1MC e P1+2 – desafios da participação civil – governo. In: **GRISA, C.** e **SCHNEIDER, S.** (Orgs.). *Políticas públicas de desenvolvimento rural no Brasil*. Porto Alegre, RS: Editora da UFRGS. (p. 201-16).

**EMBRAPA.** 2009. *Avaliação da sustentabilidade do Programa Cisternas do MDS em parceria com a ASA*. Petrolina, PE: FUNDER/FAO; Embrapa Semiárido; SAGI/DAM/MDS.

**FAO.** 2015. O estado da segurança alimentar e nutricional no Brasil 2015: agendas convergentes. Relatório 2015. Brasília, DF: FAO.

**MCTI.** 2012. Estratégia Nacional de Ciência, Tecnologia e Inovação 2012-2015: balanço das atividades estruturantes 2011. Brasília: MCTI. Available from [http://www.mct.gov.br/upd\\_blob/0218/218981.pdf](http://www.mct.gov.br/upd_blob/0218/218981.pdf). Accessed 3/11/2015.

**ROUSSEFF, D.** 2014. Prefácio. In: **CAMPELLO, T., FALCÃO, T.** and **COSTA, P. V.** (Orgs.). O Brasil Sem Miséria. Brasília: MDS.

**RUANO, O.** and **BAPTISTA, N.** 2011. Acesso a água como fator de segurança alimentar e nutricional no semiárido brasileiro. In: BRASIL. MDS. Fome Zero: uma história brasileira. Brasília: MDS. Vol. 2. (pp. 117-34).

**TCU.** 2006. Relatório de avaliação de programa: *Ação Construção de Cisternas para Armazenamento de Água. Relator Ministro Guilherme Palmeira.* Brasília, DF: TCU, Secretaria de Fiscalização e Avaliação de Programas de Governo.

**ZUKOWSKI, J. C.** 2015. Seguro agrícola e desenvolvimento rural – contribuições e desafios do SEAF. In: **GRISA, C.** e **SCHNEIDER, S.** (Orgs.). *Políticas públicas de desenvolvimento rural no Brasil.* Porto Alegre, RS: Editora da UFRGS. (p. 83-106).



# AGROECOLOGY AND FAMILY FARMING

One of the most important events of the International Year of Family Farming was the International Symposium on Agroecology for Food Security and Nutrition, held by the Food and Agriculture Organization of the United Nations (FAO) in September 2014.

It was not a matter of introducing the issue of agroecology in this multilateral gathering, but of revisiting it in a new international context marked by the confluence of the economic, environmental, social, energy and food crises, which called for new international commitments and improvements in the response of the countries and multilateral organizations.

Given this confluence of crises, the challenge was to promote convergence of the sectoral responses devised for different issues, based on a critique of the effects of transformation of agriculture since the Green Revolution and the new models for constructing the sustainable development agenda.

The matters discussed included proposals for mitigating and adapting to the growing frequency of extreme weather events associated with the increase in greenhouse gas (GHG) emissions<sup>1</sup>; the headway made in international

---

<sup>1</sup> For information on Brazilian mitigation and adaptation initiatives, see the chapter “Agriculture and climate change” in this publication.

commitments for the sustainable use of natural resources and the preservation of biodiversity, with recognition of the rights of rural communities and the challenges to implementing these commitments; and especially, recognition of the role of family farming in guaranteeing the food supply of nations, creating jobs, and revitalizing rural regions.

This understanding reinforced the notion that solutions developed under traditional paradigms would not be enough to remedy the complex situation created by the confluence of crises and that changes were needed in food production, distribution and consumption systems (Petersen and Londres, 2015, p. 1).

Given the adverse social and environmental impact of the current production model, Brazil and other countries in the region are adopting new agricultural policies that include a differentiated agroecological approach that values the experiences of family farmers and traditional rural communities.

In the 1960s, Brazilian agriculture began an intensive transformation process that substantially boosted agricultural yield and productivity. The Brazilian government offered a variety of economic, educational, research and technical assistance and rural extension incentives to rapidly increase the use of agrototoxic chemicals, synthetic fertilizers, commercial seed, tractors and other farming machinery throughout the country, primarily for the production of monocultures.

## REACTION TO THE PRODUCTION MODEL

The growing use of this modern technology was accompanied by greater inequality in rural areas and caused many family farmers to abandon farming, resulting in heavy economic and social losses. The 1970s witnessed the birth of a social movement that strongly opposed the Green Revolution technology model and defended sustainable agriculture, promoting the use of alternative technologies, an appreciation of traditional knowledge and wisdom and the adoption of fair practices.

This reaction triggered the development of local and community initiatives to promote the use and dissemination of alternative technologies, spurred

on by nongovernmental organizations such as FASE<sup>2</sup> and AS-PTA<sup>3</sup>. This was accompanied by demands for new public policies, including an alternative rural development strategy<sup>4</sup>, which were brought to the public's attention through events sponsored by social movements.

One of the main civil society initiatives was the creation of the National Agroecology Coalition (ANA)<sup>5</sup> in 2002 as an entity linking and building consensus among movements, unions, associations, cooperatives, social movements, networks and civil society organizations working to promote agroecology, the strengthening of family farm production and the creation of sustainable rural development alternatives. The Coalition's work in promoting agroecology includes sharing ideas and experiences, influencing public policies and communicating with society, in addition to connecting with other networks and forums devoted to related issues such as health, solidarity economics, food and nutrition security, environmental justice and feminism (ANA, [undated]).

Today, ANA plays a key role in fostering unity among sectors to influence both institutional entities for social participation in public policy administration and national bodies, such as the National Council on Food and Nutrition Security (CONSEA) and the National Board for Sustainable Rural Development (CONDRAF), supported by the work of its teams (urban agriculture, communicators) and thematic working groups (biodiversity, women and technical assistance and rural extension) (ANA, [undated]).

An important organization in the academic sphere is the Brazilian Association of Agroecology (ABA)<sup>6</sup>, founded in 2004, made up of professionals and students

<sup>2</sup> FASE (Federation of Social Assistance and Educational Agencies) is a non-profit nongovernmental organization founded in 1961. It is committed to regional, community and associative organization and development in the fight against inequality, through the proactive work of women's, Afro-descendants' and indigenous people's movements and movements for socially and environmentally sustainable development. For more information on FASE, visit <http://www.fase.org.br>.

<sup>3</sup> AS-PTA – Family Farming and Agroecology is a non-profit association governed by civil law. Working since 1983 to strengthen family farming and promote sustainable rural development in Brazil, it has contributed to the creation of several networks of organizations and movements devoted to these issues. For more information on AS-PTA, visit <http://www.aspta.org.br>.

<sup>4</sup> As is the case of the Alternative Sustainable Rural Development Project of the National Confederation of Farmworkers (CONTAG). Available from <http://www.contag.org.br/imagens/f2215padrss.pdf>. Accessed 25/11/2015).

<sup>5</sup> For information on the National Agroecology Coalition, visit <http://www.agroecologia.org.br/>.

<sup>6</sup> For more information on ABA activities, visit <http://aba-agroecologia.org.br>.

from different disciplines. The Association works to support the transition to sustainable farming and rural development models. It does so through events (Brazilian Agroecology Congress), public policy analysis and technical and scientific publications (*Revista Brasileira de Agroecologia*), information about experiences and communication initiatives targeting the general public to advocate for the protection of biodiversity as essential for achieving sustainable agroecosystems (ABA, 2015). The ABA participates in a variety of civil society and social forums on public policy administration, supported by its working groups (gender; agroecology education; agrotoxic chemicals and transgenic foods; knowledge generation) and in collaboration with the Latin American Scientific Society on Agroecology (ABA, 2015).

Another important civil society initiative is the Enduring Campaign against Agrotoxic Chemicals and for Life<sup>7</sup>, launched in 2011 to educate the public about the risks of agrotoxic chemicals, both to the people who apply them on the farm and the consumers who eat the contaminated foods, and to propose measures to restrict their use in Brazil.

Since 2008, Brazil has occupied first place in the global ranking of agrochemical use (MMA, [undated]). Notwithstanding their toxicity, due to the importance and scale of their use in Brazil agrochemicals enjoy extensive legal protection in the country, for production and marketing and use with genetically modified organisms (GMOs or transgenics).

## NEW PUBLIC POLICIES

In 2003, as a result of civil society initiatives and the federal government's new rural development agenda, new public policies to promote agroecology and organic farming began to be adopted.

One of them is the policy to support organic food production, which gained new impetus with the passage of Law No. 10,831<sup>8</sup>, of 2003, establishing the country's organic production system and certification procedures. Under this

<sup>7</sup> More than 100 organizations in 22 states have joined the campaign. For information on its activities, visit <http://www.contraosagrototoxicos.org/index.php/campanha>.

<sup>8</sup> Law No. 10,831, of 23 December 2003. On organic farming. (Available from [http://www.planalto.gov.br/ccivil\\_03/leis/2003/L10.831.htm](http://www.planalto.gov.br/ccivil_03/leis/2003/L10.831.htm). Accessed 25/11/2015).

law, organic products are crops raised using specific techniques, optimizing the use of available natural and socioeconomic resources and respecting the cultural integrity of rural communities. The objective is to ensure economic and ecological sustainability; protect the environment; maximize social benefits and minimize dependence on non-renewable energy through cultural, biological and mechanical methods, when possible, rather than synthetic materials; and eliminate the use of GMOs and ionizing radiation in any phase of the production, processing, storage, distribution and marketing process.

In 2007, Decree No. 6,323<sup>9</sup> established the Brazilian Organic Conformity Assessment System and created organic production commissions in the federative units to support the necessary action for the development of organic production, through the integration of agents from the public and private organic farming sectors, social participation in planning and democratic administration of public policies.

The legal concept of “organic production system” is broad, covering ecological, agroecological, biodynamic, natural, regenerative, biological and permacultural production. Under the new legal framework, certification institutions must be officially recognized or belong to family farmers who sell directly to consumers, as long as the traceability of the product and free access to production sites are guaranteed.

## ADVANCEMENT OF AGRECOLOGY

The creation of a set of differentiated policies for strengthening family farming and rural communities and promoting the economic independence of rural women was accompanied by internalization of the agroecological approach in several tools.

In 2003, lines of financing were created that focused on the sustainability of agroecosystems. These included the investment credit for adaptation to conditions in the Semi-arid region (PRONAF Semiárido) and credit for agroforestry systems (PRONAF Floresta), described in the rural credit manual (MCR)<sup>10</sup>.

<sup>9</sup> Decree No. 6,323, of 27 December 2007. Regulates Law No. 10,831 on organic farming. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2007/Decreto/D6323.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Decreto/D6323.htm). Accessed 25/11/2015).

<sup>10</sup> For information on the criteria for PRONAF Semiárido and PRONAF Floresta, see the chapter “Credit and income guarantees for family farms” in this publication.



In 2004, the Programme for the Food Acquisition Procurement, (PAA) began offering incentives for agroecological and organic production, providing additional payment for these products of up to 30% of the prices of conventional products (Galindo et al., 2014).

One year later, in 2005, another credit line was created for investment in agroecology (PRONAF Agroecologia)<sup>11</sup> to finance organic production systems consistent with the standards set by the Ministry of Agriculture, Livestock and Food Supply (MAPA), or agroecologically based systems or systems transitioning to agroecologically based systems consistent with the standards set by the Ministry of Agrarian Development (MDA). The credit line also financed costs related to the start-up and maintenance of the enterprise.

In 2006, the Brazilian Agricultural Research Corporation (EMBRAPA) launched the Reference Framework in Agroecology with the object of presenting concepts and strategies for institutionalizing this approach in research, development and innovation policies, in conjunction with other public policies, especially those focused on sustainable territorial development<sup>12</sup>.

In 2007, the National Register of Regional, Traditional, or Native Crops was created to support the use, management and preservation of these genetic resources as a way of preserving agrobiodiversity and supporting the adoption of agroecological practices. Farmers who use seeds for these crops can obtain Family Farm Insurance (SEAF).

In 2009, the National Plan for the Advancement of Sociobiodiversity Product Chains (PNPSB) was created, coordinated by MDA, the Ministry of Environment (MMA) and the Ministry of Social Development and the Fight against Hunger (MDS) to take integrated action to promote social inclusion, the preservation and sustainable use of biodiversity through sustainable technologies and access to credit, technical assistance and rural extension and guaranteed minimum prices, among other strategies (MDA, MMA and MDS, 2009).

<sup>11</sup> For information on PRONAF *Agroecologia*, visit <http://www.mda.gov.br/sitemda/publicacoes/caderno-pronaf-agroecologia>.

<sup>12</sup> For information on the Reference Framework, visit <http://ainfo.cnptia.embrapa.br/digital/bitstream/item/66727/1/Marco-referencial.pdf>

One year later, in 2010, the National Technical Assistance and Rural Extension Policy (PNATER) adopted the principles of ecological farming as the preferred approach for developing sustainable production systems. A specific network devoted to this issue was created, whose members included public and private institutions that provided services in this area<sup>13</sup>.

Advancement of a sustainable food supply and sustainable, decentralized agroecologically based systems for the production, extraction, processing and distribution of food was considered one of the eight basic guidelines of the First National Food and Nutrition Security Plan (PLANSAN 2012-2015) introduced by the Interministerial Chamber on Food and Nutrition Security (CAISAN) in 2011<sup>14</sup>. Increased State action in promoting sustainable agroecological family farming and fostering appreciation for and protection of agrobiodiversity are among the 10 main challenges noted in the plan.

One of the important bodies created for social participation is the CONDRAF Agroecology Committee, formed in 2008. Made up primarily of nongovernmental organizations, its purpose is to promote, monitor and evaluate the public policies and tools for promoting sustainable rural development and the transition from conventional production models to sustainable systems<sup>15</sup>. Other relevant entities have been EMBRAPA's Permanent Agroecology Forum, created in 2008, in which nongovernmental organizations participate; and the Sectoral Chamber for the Organic Farming Production Chain, linked with MAPA, created in 2004 and active until 2010.

## NATIONAL AGROECOLOGY POLICY

In 2012, the National Agroecology and Organic Production Policy (PNAPO) was instituted by Decree No. 7,794<sup>16</sup>. Its purpose was to integrate, link

<sup>13</sup> For information on the Thematic Network on Agroecology, visit [http://portal.mda.gov.br/dotlrn/clubs/redestemat-icasdeater/agro-ecologia/one-community?page\\_num=0](http://portal.mda.gov.br/dotlrn/clubs/redestemat-icasdeater/agro-ecologia/one-community?page_num=0).

<sup>14</sup> For information on PLANSAN, visit [http://www.mds.gov.br/webarquivos/publicacao/seguranca\\_alimentar/Plano\\_Cai-san.pdf](http://www.mds.gov.br/webarquivos/publicacao/seguranca_alimentar/Plano_Cai-san.pdf).

<sup>15</sup> For information on the purpose and composition of the Committee, visit [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_64/64.%20Cria%20o%20Comit%C3%AA%20de%20Agroecologia%2C%20do%20CON-DRAF%20%28formato%20pdf%29\\_0.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_64/64.%20Cria%20o%20Comit%C3%AA%20de%20Agroecologia%2C%20do%20CON-DRAF%20%28formato%20pdf%29_0.pdf).

<sup>16</sup> Decree No. 7,794, of 20 August 2012, instituting the National Agroecology and Organic Production Policy. (Available from [http://www.planalto.gov.br/CCIVIL\\_03/\\_Ato2011-2014/2012/Decreto/D7794.htm](http://www.planalto.gov.br/CCIVIL_03/_Ato2011-2014/2012/Decreto/D7794.htm). Accessed 25/11/2015).

and adjust policies and programmes that fostered agroecological transition and organic production based on the principles of agroecology, thereby contributing to sustainable development and the quality of life of the population through the sustainable use of natural resources and the supply and consumption of healthy foods.

Several ministries working in this area, together with civil society, collaborated in the drafting of this decree. The input from civil society included a package of proposals from the National Agroecology Coalition (ANA) containing premises, guidelines, objectives and priority actions that should be included in the national policy and plan, based on extensive regional and national discussions held with the support of the Ministry of Environment (ANA, 2012, p. 2).

The policy that was adopted included two new definitions that would come to guide public policies:

- a) agroecologically based production: production that optimizes the integration of productive capacity, the use and conservation of biodiversity and other natural resources, ecological balance, economic efficiency and social justice; and
- b) agroecological transition: the gradual shift from traditional or conventional practices and ecosystem management through transformation of the productive and social foundations of land and natural resource use, leading to agricultural systems based on ecological principles and technologies.

To orient the financial system in the selection of agroecological projects for PRONAF support, MDA Decision No. 38/2014 listed the inputs that should not be part of an agroecological project. They are: highly soluble synthetic fertilizers; agrototoxic chemicals, with the exception of registered biologicals and phytosanitary products approved for use in organic farming; growth regulators and synthetic additives in animal feed; and genetically modified organisms (MDA, 2014).

The Decree established intersectoral and intergovernmental management, with social participation, through two bodies: the Interministerial Chamber

for Agroecology and Organic Production (CIAPO), made up entirely of government officials, whose purpose was to integrate and coordinate intragovernmental action; and the National Commission on Agroecology and Organic Production (CNAPO), in which there was parity between government and civil society participation.

## AGROECOLOGICAL BRAZIL

Immediately following the publication of this decree, social stakeholders working to promote agroecology mobilized to ensure that the tools they had proposed for implementing the policy would be included in the National Agroecology and Organic Production Plan (PLANAPO).

In addition to the discussions held in CAISAN and CNAPO, the proposal was debated in several forums, including the National Agroecology Coalition, the Brazilian Association for Agroecology (ABA), the Semiarid Coalition (ASA), CONDRAF, CONSEA, the Interministerial Commission on Agroecology Education and the Permanent Agroecology Forum of EMBRAPA.

The First National Plan, dubbed “Agroecological Brazil,” was launched for the triennium 2013-2015 (PLANAPO 2013-15). The plan reflects the consensus that agroecological practices require the existence of public services, especially for rural youth and women, and evidence from agroecological research; differentiated rural credit services; changes in technical assistance and rural extension services; professionals with qualifications from the formal and informal educational system; measures to support cooperatives and organizations; and new types of insurance against climate risks (CIAPO, 2013a).

The plans involve the action of 10 ministries and consist of 125 initiatives grouped under 14 goals and organized into 4 strategic lines of action: production; natural resource use and conservation; knowledge; and marketing and consumption.

The following activities are illustrative. All of them have specific targets and include the value of the resources to be allocated: availability of resources

to finance costs; differentiated technical assistance for the agroecological transition, with targets for youth, women and women's production groups, and for sustainable agro-extraction activities; research, development and technology transfer; support for university extension and technical and professional training projects; improvements in the management of 150 cooperatives and associations; certification of organic production, which includes support for environmental registration and regularization; collective technologies for the capture and storage of water for production in the Semiarid environment; incentives for the production of agroecological and organic seeds, expanding seed banks and distribution centres; PAA procurement of a variety of native seeds; the creation of new technical regulations and increased production of the inputs used in organic and agroecological production; the advancement of organic and agroecological products among consumers; greater public procurement of organic and agroecological family farm products by the PAA and the National School Feeding Programme (PNAE); and guaranteed minimum prices, with procurement of and subsidies for organic, agro-ecological, and socio-biodiverse products.

Major programmes for financing investments in equipment procurement and for launching or modernizing agro-industrial enterprises are the *Ecoforte* (Ecostrong) programme, a joint project of the Bank of Brazil Foundation (FBB) and *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES) to intensify sustainable practices and strengthen the cooperative networks and associations of producers of agroecological, organic, sustainable extraction or socio-biodiversity products<sup>17</sup>, and the *Terra Forte* Programme of the National Colonization and Land Reform Institute (INCRA), with resources from BNDES, centered on land reform settlements.

An important initiative in education and the advancement of sustainable practices is the Programme for Environmental Education and Family Farming, funded by the Ministry of Environment<sup>18</sup>.

<sup>17</sup> Visit, for example, <http://www.fbb.org.br/reporter-social/fbb-seleciona-projetos-que-estimulam-a-agroecologia-na-agricultura-familiar.htm>.

<sup>18</sup> For more details, visit <http://www.mma.gov.br/destaques/item/10207-o-peaaf-no-plano-nacional-de-agro-ecologia-e-produ%C3%A7%C3%A3o-org%C3%A2nica-planapo>.

## ACHIEVEMENTS AND NEW ACTIVITIES

The First PLANAPO, covering the period 2013-2015, is in the final phase of execution, and the consolidated review of its activities is still in progress. However, the federal government has disclosed some preliminary results from the first year of the plan: 132,000 households received technical assistance and rural extension services through public calls for proposals for projects to promote agroecology, sustainability, extraction activities and fishing; 5,000 women benefitted from specific rural extension services; 5,000 young people benefitted from ATER under an alternating system; 4,800 young people benefitted from socio-productive inclusion activities with training in agroecology training; 462 women's production groups and 64 research projects received support (CIAPO, 2013b).

Other data on the initial execution that are illustrative: 72,000 community projects built to provide water for production in the Semiarid region; 45,000 people enrolled in courses on agroecology or organic farming; regulation of phytosanitary products for use in organic farming; health surveillance plans prepared for populations exposed to agrototoxic chemicals; expansion and assessment of participatory systems and social oversight organizations to guarantee the quality of organic products; 32 projects approved in *Terra Forte*; 33 projects launched in *Ecoforte* networks; R\$ 7 million in PAA procurement from family farms; 3.65% of PNAE resources spent on organic and agroecological foods, being the target 5% of programme resources (CIAPO, 2014).

In November 2015, MDA and MDS launched the National Seed and Seedling Programme for Family Farms, aimed at increasing access by family farmers to quality seeds and seedlings appropriate for the territory and used in organic and agroecological farming, through support for programmes and activities for the production, improvement, salvaging, conservation, multiplication and distribution of these agricultural inputs purchased and donated by the PAA (MDA, 2015).

The Second PLANAPO, for the period 2016-2018, is in the final phase of discussions between the federal government and civil society organizations (Brazil, 2015). The proposals being discussed include linking agroecology and

organic farming with “issues related to the social function of land ownership and agrarian justice, as well as the territorial approach” and greater emphasis on sanitary standards, urban and peri-urban agriculture, socio-biodiversity, medicinal plants and access to water (ANA, 2015, p. 4).

CONSEA often makes pronouncements on agroecology issues in the form of recommendations to improve measures for the evaluation, control, and inspection of agrototoxic chemicals and monitoring of their impact, or non-approval of the release of restricted transgenic and genetically modified plants<sup>19</sup>.

The draft National Plan for the Reduction of Agrototoxic Chemical Use proposed in the First PLANAPO and linked with the National Food and Nutrition Policy and System, is in the final phase of discussion in the federal government. Its preparation involved diverse areas of government related to this field and benefitted from the input of civil society organizations and entities, such as a specific recommendation issued by CONSEA (2012, 2013).

## AGROECOLOGY IN THE REGIONAL AGENDA

Brazil’s development of public policies in agroecology, in association with other countries, has aided discussions at the regional level, focusing on the human right to healthy food.

Agroecology was added to the agenda of the Specialized Commission on Family Farming of MERCOSUR (REAF) during its discussions on risk management and farm insurance, which came to emphasize the revamping of production and sustainable use of resources.

204 At MERCOSUR’s XX Specialized Meeting, held in Caracas, Venezuela, in 2013, agroecology and seeds were added to the agenda items of the Thematic Group on Adaptation to Climate Change and Risk Management, with a commitment by the countries to map existing initiatives and policies in the region.

<sup>19</sup> For the complete recommendations of CONSEA, visit <http://www4.planalto.gov.br/consea/eventos/plenarias/recomendacoes>.

This marked the start of conversations among the countries on the international framework for biodiversity and genetic resources; the internationalization of conventions; regulatory frameworks and national policies to promote agroecology and the use of native or local seeds, particularly specific credit lines and technical assistance and rural extension services (MERCOSUR, 2013, 2015).

Another important initiative was a regional course on the right of farmers to genetic resources, which dealt, *inter alia*, with the International Treaty on Plant Genetic Resources for Food and Agriculture (IT PGRFA)<sup>20</sup> and its internalization by the countries, with emphasis on distributing the benefits generated by their use and disseminating information on the experiences of family farmers and their organizations in the preservation and reproduction of seeds.

During the FAO International Symposium on Agroecology for Food Security and Nutrition, held in Italy, in 2014, Brazil made a commitment to launch a regional initiative. This proposal was added to the agenda of the Community of Latin American and Caribbean States (CELAC) with its inclusion in the Plan of Action of the Ad Hoc Working Group on Family Farming and Rural Development. The Plan of Action was approved at the Ministerial Meeting on Family Farming, held in November 2014 in Brazil, and later ratified by the III Summit of Heads of State and Government (San José, Costa Rica, January 2015), which declared “its support for holding a regional agroecology event to intensify the sharing of experiences and promote sustainable development policies” (CELAC, 2014; FAO, 2015a).

The Regional Seminar on Agroecology in Latin America and the Caribbean, held in June 2015, in Brazil, was a joint event sponsored by CELAC, the Specialized Meeting on Family Farming of MERCOSUR (REAF), the Ministry of Agrarian Development of Brazil (MDA), the Alliance for Food Sovereignty of the Peoples of Latin America and the Caribbean and FAO. This event facilitated exchanges on public policies and practical experiences in agroecology among associations, social movements, researchers and government representatives<sup>21</sup>.

<sup>20</sup> The International Treaty of Plant Genetic Resources was approved in 2001, entered into force in 2004, was ratified by Brazil in 2006 and promulgated in Decree No. 6,476, of 2008 (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2008/Decreto/D6476.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2008/Decreto/D6476.htm)). Among the countries of the expanded MERCOSUR, only Brazil, Uruguay and Venezuela have ratified it to date. For more information, visit <http://www.planttreaty.org/es>.

<sup>21</sup> For more information on the Regional Seminar on Agroecology, see Petersen and Londres (2015) and the final report, available from <http://www.fao.org/3/a-i4327e.pdf>.



This initiative contributed to the implementation of the CELAC Plan for Food and Nutrition Security and the Eradication of Hunger by making agroecology an important component of national strategies to promote sustainable agricultural development and progress towards inclusive food systems, creating a virtuous circle among healthy food production, natural resource conservation and the strengthening of family farming and rural communities (FAO, 2015b).

The seminar contributed to the establishment of a regional agenda based on the many recommendations approved, among them: develop and implement legal frameworks and regulations for agroecology to move forward with a food sovereignty approach; establish a regional network for sharing practices and information; create mechanisms to promote South-South cooperation; and incentivize the production of appropriate and healthy foods (FAO, 2015b).

Thus, the region now has a set of initiatives that have internalized the agroecological approach in public policies resulting from decades of social movements of campesino farmers, traditional communities, indigenous and original peoples, herders and extraction workers (FAO, 2015a).

This scenario is marked by the growing importance of South-South cooperation to strengthen the connections between family farming, food security, health and the preservation of biodiversity by linking sustainable food production with sustainable consumption, opening new development opportunities for the Latin American and Caribbean countries and the region.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**ABA.** 2015. *Portal da Associação Brasileira de Agroecologia*. (Available from <http://aba-agroecologia.org.br>. Accessed 1.º/1/2016).

**ANA.** 2012. *Propostas da Articulação Nacional de Agroecologia – ANA para a Política Nacional de Agroecologia e Produção Orgânica*. Rio de Janeiro, RJ: ANA. 18p.

**ANA.** Undated. *Portal da Articulação Nacional de Agroecologia*. (Available from <http://agroecologia.org.br>. Accessed 1.º/1/2016).

**ANA.** 2015. *Propostas da Articulação Nacional de Agroecologia para o II Plano Nacional de Agroecologia e Produção Orgânica – II Planapo (2016-2019)*. Rio de Janeiro, RJ: ANA. 50p.

**BRASIL.** 2015. Alterações para o Planapo II são apresentadas no Seminário Dialoga Brasil Agroecológico. *Portal da Secretaria-Geral da Presidência da República*. (Available from <http://www.secretariageral.gov.br/noticias/2015/setembro/17-09-2015-alteracoes-para-o-planapo-ii-sao-apresentadas-no-2o-dia-do-seminario-dialoga-brasil-agroecologico>. Accessed 25/11/2015).

**BRASIL.** Undated. Brasil Agroecológico. *Portal da Secretaria-Geral da Presidência da República*. (Available from <http://www.secretariageral.gov.br/iniciativas/brasil-agroecologico>. Accessed 25/11/2015).

**BRASIL.** 2007. *Decree n.º 6 323, of 27 December 2007*. Regulates Law nº 10 831, on organic farming. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2007/Decreto/D6323.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Decreto/D6323.htm). Accessed 25/11/2015).

**BRAZIL.** 2012. Decree No. 7,794, of 20 August 2012. Institutes the National Agroecology and Organic Production Policy. (Available from [http://www.planalto.gov.br/CCIVIL\\_03/\\_Ato2011-2014/2012/Decreto/D7794.htm](http://www.planalto.gov.br/CCIVIL_03/_Ato2011-2014/2012/Decreto/D7794.htm). Accessed 25/11/2015).

**BRAZIL.** 2003. Law No. 10,831, of 23 December 2003. On organic farming. (Available from [http://www.planalto.gov.br/ccivil\\_03/leis/2003/L10.831.htm](http://www.planalto.gov.br/ccivil_03/leis/2003/L10.831.htm). Accessed 25/11/2015).

**CELAC.** 2014. Declaración Ministerial de la CELAC sobre agricultura familiar. Brasilia. (Available from [http://www.familyfarmingcampaign.net/archivos/documentos/declaracion\\_reunion\\_ministerial\\_af\\_celac\\_con\\_marco\\_funcionamiento\\_y\\_plan\\_.pdf](http://www.familyfarmingcampaign.net/archivos/documentos/declaracion_reunion_ministerial_af_celac_con_marco_funcionamiento_y_plan_.pdf). Accessed 2/1/2016).

**CIAPO.** 2013a. Câmara Interministerial de Agroecologia e Produção Orgânica. *Proposta do Plano Nacional de Agroecologia e Produção Orgânica*. Brasília, DF: MDS. (Available from <http://www.secretariageral.gov.br/noticias/arquivos-noticias/planapo>. Accessed 25/11/2015).

**CIAPO.** 2013b. Câmara Interministerial de Agroecologia e Produção Orgânica. *Plano Nacional de Agroecologia e Produção Orgânica – Planapo*. Brasília, DF: MDS. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_img\\_19/BrasilAgroecologico\\_Baixar.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_img_19/BrasilAgroecologico_Baixar.pdf). Accessed 25/11/2015).

**CIAPO.** 2014. Câmara Interministerial de Agroecologia e Produção Orgânica. *Balanço do 1.º ano do Planapo*. Brasília, DF: MDA. (Available from <http://www.agroecologia.org.br/index.php/publicacoes/outras-publicacoes/outras-publicacoes/balanco-planapo-novembro-2014/download>. Accessed 25/11/2015).

**CONSEA.** 2012. Mesa de controvérsias sobre impactos dos agrotóxicos na soberania e segurança alimentar e nutricional e no direito humano à alimentação adequada. Relatório final. Brasilia: CONSEA. 112 pp. (Available from <http://www4.planalto.gov.br/consea/eventos/mesas-de-controversias/sobre-agrotoxicos-2012/arqui-vo-4.pdf>. Accessed 4/12/2015).

208 **CONSEA.** 2013. Exposição de Motivos No. 003-2013, of 1 July 2013. Brasilia: CONSEA. (Available from <http://www4.planalto.gov.br/consea/eventos/plenarias/exposicoes-de-motivos/2013/e.m.-no003-2013/view>. Accessed 6/12/2015).

**FAO.** 2014. Simposio Internacional de Agroecología para la Seguridad Alimentaria y Nutrición. (Available from <http://www.fao.org/about/meetings/afns/es/>. Accessed 6/12/2015).

**FAO.** 2015a. Final Recommendations of the Regional Seminar on Agroecology in Latin America and the Caribbean. Brasilia. (Available from <http://www.fao.org/3/a-au442e.pdf>. Accessed 2/1/2016)

**FAO.** 2015b. Agroecología es clave para erradicar el hambre en América Latina y el Caribe. (Available from <http://www.fao.org/americas/noticias/ver/es/c/297484/>. Accessed 2/1/2016).

**GALINDO, E. P.; SAMBUICHI, R. H. and OLIVEIRA, M. A.** 2013. Compras de produtos agroecológicos e orgânicos da agricultura familiar pelo Programa de Aquisição de Alimentos. In: MDS. PAA: 10 anos de aquisição de alimentos. Brasilia. (Available from [http://www.mds.gov.br/webarquivos/publicacao/seguranca\\_alimentar/livroPAA10Anos.pdf](http://www.mds.gov.br/webarquivos/publicacao/seguranca_alimentar/livroPAA10Anos.pdf). Accessed 26/11/2015).

**MDA.** 2014. Decision No. 38, of 4 July 2014. Rules for simplified credit plans or technical projects for the financing of agroecologically based systems or agroecological transition under the National Programme for Strengthening Family Farming – PRONAF. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_img\\_23/PORTAR-IA%20N%C2%B0%2038,%20DE%204%20DE%20JULHO%20DE%202014%20-%20AGROECOLOGIA.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_img_23/PORTAR-IA%20N%C2%B0%2038,%20DE%204%20DE%20JULHO%20DE%202014%20-%20AGROECOLOGIA.pdf). Accessed 25/11/2015)

**MDA.** 2015. Governo facilita acesso a sementes e mudas. Portal do Ministério do Desenvolvimento Agrário. (Available from <http://www.mda.gov.br/sitemda/noticias/governo-facilita-acesso-sementes-e-mudas#sthash.pXAeXF9W.dpuf>. Accessed 26/11/2015).

**MDA; MMA and MDS.** 2009. Plano Nacional de Promoção das Cadeias de Produtos da Sociobiodiversidade. Brasilia: MDA, MMA, MDS. (Available from [http://www.mda.gov.br/sitemda/sites/sitemda/files/user\\_arquivos\\_64/PLANO\\_NACIONAL\\_DA\\_SOCIOBIODIVERSIDADE-\\_julho-2009.pdf](http://www.mda.gov.br/sitemda/sites/sitemda/files/user_arquivos_64/PLANO_NACIONAL_DA_SOCIOBIODIVERSIDADE-_julho-2009.pdf). Accessed 26/11/2015)

**MERCOSUR.** 2013. *MERCOSUR/REAF/ACTA n° 02/13*. Caracas, Venezuela.

**MERCOSUR.** 2015. *MERCOSUR/REAF/ACTA n° 02/15*. Assunción, Paraguai.

**MMA.** Undated. Agrotóxicos. *Portal do Ministério do Meio Ambiente.* (Available from <http://www.mma.gov.br/seguranca-quimica/agrotoxicos>. Accessed 2/1/2016).

**PETERSEN, P.** and **LONDRES, F.** 2015. Seminario Regional sobre Agroecología en América Latina y el Caribe. Rio de Janeiro, RJ: AS-PTA Agricultura Familiar e Agroecologia. (Available from <http://aspta.org.br/2015/11/fao/>. Accessed 25/11/2015).

## CADASTRE AS A TOOL FOR ENVIRONMENTAL MONITORING AND RESTORATION

The 1970's expansion of the agricultural frontier, especially in the Centre-West and North of Brazil, was fuelled by substantial government financial incentives for agricultural projects and the stimulation of internal migration, yielding a development model characterized by intensive deforestation.

In response to the environmental and social impact of this model, the government adopted an agenda aimed at preserving biodiversity and supporting sustainable development, revamping a number of policies, including forestry policy, creating new agencies and amending the legal framework. One of the principal changes was the Plan of Action for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAM), which was later to become a similar initiative for the *Cerrado* (savannah) region under the Public Forest Management Law.

The action taken to slow deforestation includes the creation of protected areas, inspection, operations to combat illegal activities and new monitoring and control instruments, in addition to the strengthening of state environmental agencies, which are the main entities responsible for forest management and support for sustainable production.

The policy to reduce deforestation in the Amazon was the context for the first initiatives by environmental agencies in the use of computerized systems for obtaining georeferenced information on rural properties. This activity, known as rural environmental registration, shed light on the conditions of Permanent Preservation Areas (APP)<sup>1</sup>, Legal Reserves (RL)<sup>2</sup> and areas of use. In some states, with support from the Pilot Programme to Preserve the Brazilian Rainforest (PPG7)<sup>3</sup>, control mechanisms that combined inspection, monitoring and licensing were created and improved, among them the Mato Grosso Rural Property Licensing System, which was replicated in other states. The first environmental mapping and property geo-referencing initiatives also appeared, yielding an environmental situation analysis and identifying liabilities – essential for environmental regularization (Pires, 2013, pp. 17, 18).

These innovations shed light on the differentiated dynamics of deforestation, adding information on the scale of rural properties to the more general analysis plan (Pires, 2013, p. 11), facilitated by the instruments of the National Institute for Space Research (INPE), the entity responsible for measuring the deforestation rate. Two of the principal systematic monitoring instruments essential for the Amazon Protection System (SIPAM)<sup>4</sup> are the PRODES system, which annually records the cleared surface through an analysis of satellite images, and DETER, a system for real-time detection of deforestation in the Amazon that issues daily alerts to support inspection activities, capturing clearing activity and indicators of environmental degradation in minute detail.

## RURAL ENVIRONMENTAL REGISTER

In 2007, given the possibility of intensified deforestation, the government instituted new measures, such as the publication of a list of municipalities with higher deforestation rates and the embargo of illegally deforested areas, adopting stricter measures that included requiring proof of environmental

<sup>1</sup> Permanent Preservation Areas are protected areas that may or may not be covered by native vegetation. Their environmental function is to preserve water resources, the landscape, geological stability and biodiversity; facilitate the gene flow of fauna and flora; protect the soil and guarantee the well-being of human populations.

<sup>2</sup> Legal Reserves are areas on a rural property or landholding covered by native vegetation that are set aside to ensure sustainable economic use of the property's natural resources, contributing to the conservation and restoration of ecological processes and promoting the preservation of biodiversity, as well as providing refuge and protection for wildlife and native vegetation.

<sup>3</sup> For information on the PPG7, visit <http://www.mma.gov.br/port/sca/ppg7/capa/>.

<sup>4</sup> For information on SIPAM activities, visit <http://www.sipam.gov.br>. Accessed 16/10/2015.

and land regularization for access to rural credit and inspections of lumbering activities<sup>5</sup>. One of the requirements for taking a municipality off the list was that at least 80% of its registrable area be entered in the Rural Environmental Register (Cadastro Ambiental Rural, CAR).

Next, the federal government created the *Mais Ambiente Programme* (Decree No. 7029, of 10/12/2009) to promote the environmental regularization of rural properties. Incentives included the suspension of fines for parties in compliance with environmental regulations and the creation of CAR as one of its instruments, henceforth giving the responsibility to the Ministry of Environment (MMA).

In addition to the desired integration of inspection, monitoring and licensing, the innovations introduced in this period were the use of digital tools tailored to the needs of environmental policy, among them “satellite imaging or digital geo-referencing of boundaries and of the conditions of APPs and RLs on properties and the development of electronic databases” (Pires, 2013, p. 14).

Following this trajectory, Law No.12,651/2012, known as the new Forest Code, brought innovations such as the provision that the federal government, states and/or the Federal District would adopt environmental regularization programmes (PRA) and the Rural Environmental Register itself (Arts. 59 and 29, respectively, of the Forest Code).

The new Forest Code contains general regulations on protecting vegetation for the purpose of sustainable development. Its principles include government action to make the use of land for productive purposes compatible with water, soil and plant conservation; create and mobilize economic incentives to promote the preservation and recovery of native vegetation; and promote sustainable production activities.

As an instrument of the new legal framework, CAR has national coverage, with shared responsibility by the federal government, the states, the Federal District and the municipalities. As an online public register of required information on rural properties, it serves as an integrated database for control, monitoring,

<sup>5</sup> Decree No 6,321, of 21 December 2007.



environmental and economic planning and action to combat deforestation, among other activities.

The Register will allow for simplified registration of properties in land reform settlements, landholdings of traditional peoples and communities or properties located in environmental preservation areas.

Registration with CAR began in 2014 and is scheduled to end in May 2016. Properties are registered with a declaration of full responsibility by the owner or possessor that contains proof of ownership or possession and identification of the property in a memorandum describing it and its georeferenced boundaries and delimiting the areas of social interest and public utility, with information on the location of the remaining native vegetation, the permanent preservation areas, the restricted use area, the consolidated area and the location of the RL. The environmental agency is responsible for reviewing and verifying the information provided, indicating pending matters or inconsistencies, where necessary.

The National Colonization and Land Reform Institute (INCRA) ensures that land reform settlements have access to CAR. These settlements occupy an area of approximately 80 million hectares.

Registration with CAR is not considered title to the land for the purposes of recognizing the right to its ownership or possession, nor does it eliminate the need to comply with the general reviews of property registers that exist for other purposes, including taxation. Registration of the legal reserve with CAR eliminates the obligation to register it with the Property Registration Notary.

## REGISTRATION AS A PREREQUISITE

In addition to being a legal requirement, registration with CAR is a prerequisite for accessing a range of public programmes. In May 2017, financial institutions will begin granting agricultural credit, whatever the modality, only to rural property owners registered with CAR. This requirement is important for obtaining financing under more favourable conditions than those in the private market. It is also a prerequisite for participation in programmes for the regularization of possessions and properties, instituted by the Forest Code.

Registration of the property owner or possessor in environmental regularization programmes and compliance with the provisions of the respective Declaration of Commitment<sup>6</sup> regularizes the use of these areas, suspends certain penalties stemming from past environmental offenses or infractions and converts fines to the delivery of preservation services, among other effects.

Regarding family farmers, registration in CAR is a prerequisite for simplifying the procedures for obtaining authorization to operate and remove vegetation in APPs and RLs and for occasional activities or those with a low environmental impact.

Registration with CAR is also a prerequisite for the issue of the Environmental Reserve Quota (CRA), instituted by the Forest Code. CRAs are instruments representing the area with native vegetation; landowners can purchase them from other rural properties in the same ecosystem and state to compensate for legal reserve shortages on their own property. This quota can be traded through contracts in the spot and futures markets.

## CAR APPLICATIONS

In addition to access to the aforementioned environmental regularization programmes and agricultural credit, CAR can be an important mechanism for supporting the plans developed as instruments of the National Policy on Climate Change (PNMC)<sup>7</sup>, such as the Plan of Action for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAM) and its regional and state correlates<sup>8</sup>, the Sustainable Amazon Plan (PAS), the Action Plan for the Prevention and Control of Deforestation and Forest Fires in the *Cerrado* (PPCerrado) and the Action Plan for the *Caatinga* (PPCaatinga).

Through its environmental assessment of properties, CAR is an instrument that aids planning for the recovery of environmental liabilities, even for the

<sup>6</sup> The Declaration of Commitment is a legal instrument established in the Forest Code and the Environmental Crimes Law (Law No. 9,606/1998) that allows physical and legal persons to make the necessary changes in their activities to meet the requirements imposed by the environmental authorities.

<sup>7</sup> For information on the objectives, guidelines and instruments of the PNMC, see Law No. 12,187/2009.

<sup>8</sup> For information on regional plans, visit <http://www.mma.gov.br/florestas/control-e-preven%C3%A7%C3%A3o-do-desmatamento>; and on state plans, visit <http://www.mma.gov.br/florestas/control-e-preven%C3%A7%C3%A3o-do-desmatamento/planos-estaduais>. Accessed 16/10/2015.

purpose of environmental restoration and regularization. On a larger scale, the Register can be used to guide strategies to promote conservation, expand protected areas and create ecological corridors and additional spaces for the conservation of other natural resources. It can also be used in the development of “territorial and environmental management policies”, in “water basin planning”, in the creation of mechanisms to pay for future environmental services and of “incentives for reducing emissions resulting from deforestation and forest degradation” (Pires, 2013, pp. 33, 35).

With CAR, there is also the possibility of establishing an important interface with the National Forestry Information System (SNIF)<sup>9</sup>, particularly with the National Forest Inventory (NFI), created as a continuous monitoring system to generate information on forest resources and serve as the basis for developing, instrumenting and executing public policies and projects related to the use and conservation of these resources. The Brazilian Forestry Service (FSB), an agency of MMA, is responsible for creating and managing SNIF and NFI.

CAR is also an important source of information for keeping the IBGE’s National Register of Addresses for Statistical Purposes (CNEFE) up to date. This register is used for the Agricultural Census and Demographic Census.

CAR is part of the National Environmental Information System (SINIMA) and is supported by the Rural Environmental Register System (SICAR), which has nationwide coverage and, among its other responsibilities, receives and manages the data collected by CAR from all the federative entities, providing online information to the public about the environmental regularization of rural properties throughout the nation<sup>10</sup>.

The degree of public access to the information collected by CAR is not yet clear. The data are of interest to property register notaries, financial institutions and sectoral entities and will be available on request from the administrator of the Rural Environmental Register System, respecting the restricted nature of some of the information.

<sup>9</sup> For information on the Forestry Information System and the Forestry Inventory, visit <http://www.florestal.gov.br/snif/> and <http://ifn.florestal.gov.br/>, respectively. Accessed 16/10/2015.

<sup>10</sup> SICAR is available from <http://www.car.gov.br>, and its database is compatible with the National Spatial Data Infrastructure (INDE), which is part of the National Statistical and Mapping System and is designed to organize the generation, storage, access, sharing, dissemination and use of federal, district, and municipal geospatial data.

## MANAGEMENT AND FINANCING

CAR is managed by MMA, which acts in conjunction with the states of the federation. The Register's database is of interest to several other federal agencies, such as the Ministry of Agriculture, Livestock and Food Supply (MAPA), the Ministry of National Integration, the Ministry of Science and Technology, the Ministry of Agrarian Development (MDA), the Ministry of Social Development and the Fight against Hunger (MDS), the Ministry of Defence and the Ministry of Planning, Budget and Administration (MPOG), as well as state and municipal governments.

Every state and the Federal District have signed cooperation agreements with MMA and the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) to promote environmental regularization, especially in activities related to CAR. Only five states have registration systems that are already integrated into SICAR (Rondônia, Alagoas, Bahia, Minas Gerais and São Paulo); three are in the integration process (Pará, Mato Grosso do Sul and Espírito Santo); and the others use SICAR directly (Brazil, 2015a).

In addition to the resources from the federal budget, implementation of CAR is supported by the Amazon Fund<sup>11</sup>. This fund allocates resources from donations to non-reimbursable investments in activities by the federal, state and municipal governments, universities and the non-profit sector for the prevention, monitoring and fight against deforestation and the advancement of conservation and sustainable use, primarily in the Amazon. Created in 2008 and administered by Brazilian Development Bank (BNDES), the Fund has a Steering Committee (COFA), made up of representatives of the federal and state governments and civil society, that works to secure donations from multilateral institutions, nongovernmental organizations and individuals.

## SOCIAL PARTICIPATION

To implement CAR, the federal government engaged in extensive efforts to mobilize and train agents, enlisting the participation of municipal governments

<sup>11</sup> For information on Amazon Fund activities, visit: [http://www.fundoamazonia.gov.br/FundoAmazonia/fam/site\\_pt/Esquerdo/Fundo/](http://www.fundoamazonia.gov.br/FundoAmazonia/fam/site_pt/Esquerdo/Fundo/). For information on the Rural Registration Support Fund, visit [http://www.fundoamazonia.gov.br/FundoAmazonia/fam/site\\_pt/Galerias/Arquivos/Downloads/Orientacoes\\_CAR\\_APROVADO\\_COFA\\_082015.pdf](http://www.fundoamazonia.gov.br/FundoAmazonia/fam/site_pt/Galerias/Arquivos/Downloads/Orientacoes_CAR_APROVADO_COFA_082015.pdf). Accessed 16/10/2015.

and nongovernmental partners, such as the National Confederation of Farmworkers (CONTAG), the National Federation of Family Farmworkers (FETRAF), the Landless Workers' Movement (MST), the National Agriculture and Livestock Confederation of Brazil (CNA), the Organization of Brazilian Cooperatives (OCB), the Brazilian Association of Vegetable Oil Industries (ABIOVE) and the Brazilian Association of Meat Exporters (ABIEC).

Since May 2013, application of the Forest Code has been monitored by a private observatory<sup>12</sup> operated by seven civil society institutions in collaboration with other participants, with support from the Climate and Land Use Alliance (CLUA)<sup>13</sup>.

The participating organizations of the Forest Code Observatory are also involved in the Observation, Verification and Learning Initiative of the Rural Environmental and Environmental Regularization Register (INOVACAR)<sup>14</sup>, coordinated by Conservation International (CI-Brazil), with support from CLUA. The objectives of INOVACAR are to generate transparency, promote social oversight and participation and contribute to learning during the implementation of CAR, especially in the Amazon.

## ACTIVITIES IN THE *CERRADO*

Implementation of CAR in the *cerrado* (savannah) is supported with resources from the Project for Environmental Regularization of Rural Properties in the Cerrado (CAR-FIP *Cerrado*). This project includes the Brazil Investment Plan, financed by the Brazilian government, and the Forest Investment Programme (FIP)<sup>15</sup>, administered by the World Bank with the participation of the Inter American Development Bank (IDB) and other agencies and linked with the Climate Investment Fund (CIF). Executed by MMA in partnership

<sup>12</sup> The Forest Code Observatory is made up of: the Amazon Environmental Research Institute (IPAM), WWF- Brazil, SOS Mata Atlântica, Instituto Centro de Vida (ICV), The Nature Conservancy (TNC), Conservation International (CI) and the Socio-environmental Institute (ISA). For information on Observatory activities, visit <http://www.observatorioflorestal.org.br/>. Accessed 16/10/2015.

<sup>13</sup> CLUA is a collaborative initiative of the ClimateWorks Foundation, the David and Lucile Packard Foundation, the Ford Foundation and the Gordon and Betty Moore Foundation. For information on its activities, visit <http://www.climateandlandusealliance.org/>. Accessed 16/10/2015.

<sup>14</sup> For information on INOVACAR activities, visit <http://www.inovacar.org.br/>. Accessed 16/10/2015.

<sup>15</sup> The FIP helps national governments develop strategies for reducing greenhouse gas emissions stemming from deforestation and forest degradation.

with state environmental agencies, the project supports the Register's implementation as a strategy for reducing deforestation and forest degradation and improving sustainable forest management. Working in conjunction with other sectoral programmes, it is aimed at reducing greenhouse gas emissions and protecting forest carbon reserves.

The projects that support the *PPCerrado* in initiatives connected with CAR, in line with CAR-FIP, include the Programme to Prevent and Control Deforestation and Burning in the *Cerrado*, which receives funding from the government of the United Kingdom.

## EXPANSION OF THE REGISTER

As of September 2015, around 240 million hectares of more than 2 million properties were registered with CAR. This corresponds to 60% of the area subject to registration, which, according to estimates based on the IBGE Agricultural Census 2006, comes to roughly 398 million hectares (Brazil/MMA, 2015b), revealing the Register's significant coverage. The Centre-West and North regions have the highest coverage rates, with approximately 62% of the land registered to date.

Growing interest has recently been observed in registering with CAR, seen in the increase in the number of properties listed in the Register. In August, the monthly increase was 565.7 thousand hectares on 80.8 thousand properties; in September, the figure was 5.696 million hectares on 241.8 thousand properties (Brazil, 2015b).

## LESSONS LEARNED AND CHALLENGES

CAR was implemented only recently, and its agenda is still a work in progress. Nevertheless, some lessons can be drawn from it.

Despite the initial resistance and questions raised, the need and usefulness of integrating monitoring, inspection and licensing was confirmed, together with the Register's potential as a key mechanism for the identification and remediation of environmental liabilities and the coordination of policies, the alignment of incentives and the stimulation of investment.

Even with their specific characteristics, the connection between land and environmental regularization was clear, as was the importance of coordinating sectoral instruments based on a common territorial reorganization strategy informed by the need to preserve biodiversity and promote sustainable use and the socioeconomic development of the regions.

The creation of the Rural Environmental Register has opened the door to initiatives for the assessment of agricultural systems that include environmental, agricultural and socioeconomic information and offer new possibilities for academic research and policy planning.

The results to date show the important role that civil society organizations play in mobilizing their members to register and suggest that this is a wider phenomenon in states with specific programmes to support registration that have a mechanism in place that uses geo-technologies to inventory environmental assets and liabilities and grant property licenses.

Once significant spatial coverage has been achieved, the following stages of the environmental liability regularization and remediation process become important: analysis and validation of the information from state environmental agencies and calculation of the liabilities requiring environmental remediation, forest assets and environmentally regularized properties. These activities will make it possible to integrate databases, obtain a general picture of the country's environmental assets and liabilities and guarantee that the quality of registration is minimally homogenous.

In addition to integrating all state systems, the consolidation of CAR and its national system (SICAR) still requires a differentiated strategy for family farmers and traditional peoples and communities, as well as social oversight mechanisms capable of ensuring transparency and widespread public access to the information in the Register for periodic supervision of both federal and state policies.

To date, only a few states have launched initiatives to implement the environmental regularization programme. An INOVACAR survey conducted in May 2015 in 21 Brazilian federative units reveals that only four of them (Bahia, Paraná, Rondônia and São Paulo) have issued general regulations for their programmes, and eight (Acre, Amazonas, Federal District, Goiás, Maranhão, Pará, Santa Catarina and

Tocantins) are in the final phase of doing so. This failure to define the situation can create uncertainty among people who own or occupy properties who have not registered due to a lack of clarity about the potential consequences, and it may discourage registration (INOVACAR, 2015).

The new powers granted by the Forest Code to state and municipal agencies such as CAR require efforts to expand and strengthen these entities, modernize the mechanisms for coordinating the federal and state governments and take advantage of the new sources of financing available. One option for further exploration is the integration of other agencies in the registration process, given the Register's usefulness for different areas of government.

The Rural Environmental Register, therefore, has great potential, not only as an isolated, self-sufficient instrument but as part of a package of activities for reducing deforestation, ensuring environmental and land regularization and promoting sustainable production.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BRAZIL.** 2007. *Decree No. 6,321, of 21 December 2007.* On action for the preservation, monitoring and control of deforestation in the Amazon. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2007/Decreto/D6321.htm](http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2007/Decreto/D6321.htm). Accessed 21/10/2015).

**BRAZIL.** 2012. *Decree No. 7,830, of 17 October 2012.* On SICAR, CAR and PRAs. Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2012/Decreto/D7830.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2012/Decreto/D7830.htm). Accessed 12/10/2015).

**BRAZIL.** 2014. *Decree No. 8 235, of 5 May 2014.* Establishes general supplementary regulations for PRAs. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2014/Decreto/D8235.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2014/Decreto/D8235.htm). Accessed 21/10/2015).



**BRAZIL.** 2012. Law No. 12 651, of 25 May 2012. Forest Code (compilation). (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2012/lei/L12651compilado.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/L12651compilado.htm). Accessed 12/10/2015).

**BRAZIL.** MMA/CAR. Undated. *Portal do CAR*. (Available from <http://www.car.gov.br/>. Accessed 12/10/2015).

**BRAZIL.** MMA/CAR. Undated. *Consulte a Legislação*. Complete legislation on the CAR. (Available from <http://www.car.gov.br/#/legislacao>. Accessed 12/10/2015).

**BRAZIL.** MMA. Undated. *Portal do Ministério do Meio Ambiente*. (Available from <http://mma.gov.br/desenvolvimento-rural>. Accessed 12/10/2015).

**BRAZIL.** SFB. Undated. *Portal do Serviço Florestal Brasileiro*. (Available from <http://www.florestal.gov.br/>. Accessed 12/10/2015).

**BRAZIL.** MMA. 2015a. Cadastro Ambiental Rural – Boletim Informativo, Julho de 2015. Brasília: SFB/MMA. (Available from <http://www.florestal.gov.br/cadastro-ambiental-rural/numeros-do-cadastro-ambiental-rural>. Accessed 12/10/2015).

**BRAZIL.** MMA. 2015b. Cadastro Ambiental Rural – Boletim Informativo, Setembro de 2015. Brasília: SFB/MMA. (Available from <http://www.florestal.gov.br/cadastro-ambiental-rural/numeros-do-cadastro-ambiental-rural>. Accessed 16/10/2015).

**INOVACAR.** 2015. *A implementação do Cadastro Ambiental Rural (CAR) e do Programa de Regularização Ambiental (PRA) nos estados brasileiros*. II Relatório de Acompanhamento – May 2015. Brasília: INOVACAR. (Available from [http://inovacar.org.br/uploads/documents/relatorio%20de%20acompanhamento\\_maio2015\\_v2.pdf](http://inovacar.org.br/uploads/documents/relatorio%20de%20acompanhamento_maio2015_v2.pdf). Accessed 12/10/2015).

**PIRES, M. O.** 2013. O Cadastro Ambiental Rural: das origens às perspectivas para a política ambiental. Brasília: Conservation International. (Available from <http://inovacar.org.br/uploads/documents/O%20Cadastro%20Ambiental%20Rural%20-%20Origens%20e%20Perspectivas.pdf>. Accessed 12/10/2015).

## AGRICULTURE AND CLIMATE CHANGE

In the 1990s, matters related to climate change took on importance in the international agenda. A major milestone in this regard was the recognition of climate change as a global problem, based on the finding that average ocean temperatures were rising and the density of the air above the Earth's surface was increasing, exacerbating the greenhouse effect.

The main cause of these changes is the increase in greenhouse gas (GHG) emissions, especially carbon dioxide, largely from human activities such as the burning of fossil fuels, industrial and agricultural activities and deforestation. The increasing frequency of extreme weather events has serious implications for human populations and ecosystems and can lead to the disappearance of islands and coastal cities, the expansion of desertification and/or the extinction of animal and plant species.

The United Nations Framework Convention on Climate Change was signed at the International Conference on Environment and Development (1992) and subsequently ratified by 175 countries. With its entry into force, the signatory countries began to meet annually in Conferences of the Parties to discuss its implementation. In 1997, they signed the Kyoto Protocol, an international

agreement that recognized the principle of joint and differentiated responsibility and set compulsory 2020 GHG reduction targets for the developed countries, since they have historically been the greatest producers of emissions and also have the economic wherewithal to cover the costs. A new agreement with targets for all countries is currently under discussion.

Also in 2000, the Brazilian Forum on Climate Change (FBMC) was created for the purpose of mobilizing society to discuss and take a position on both the problems stemming from climate change and the Clean Development Mechanism (CDM). The Forum was chaired by the President of Brazil and consisted of 13 ministers, the Executive Director of the National Water Agency (ANA) and representatives of civil society with exceptional expertise or responsibilities in this field. The FBMC is supported by 15 state forums and coordinates and participates in research on the economic and social implications of climate change that is used for policy-making.

In step with the international agreements ratified, Brazil adopted a strategy to combat climate change that contained a series of programmes and plans for the protection of forests and biodiversity, along with incentives for sustainable activities in the Amazon and *Cerrado* areas, two of the ecoregions most affected by deforestation and changes in land use.

The year 2004 marked the launch of the Action Plan to Prevent and Control Deforestation in the Legal Amazon (PPCDAM), which has significantly reduced the deforestation rate. The plan involves the integrated activities of 13 ministries, around 150 territorial and agricultural land use activities, environmental monitoring and control and the advancement of sustainable production activities. The plan also promotes partnerships between federal agencies, state governments, prefectures, civil society organizations and the private sector.

One of the pillars of PPCDAM is its satellite surveillance system, which aids monitoring operations in the Amazon. Two of the main instruments used by the National Institute for Space Research (INPE) for systematic monitoring are the Programme for Estimating Deforestation in the Amazon (PRODES), to identify and quantify deforestation in forested areas through images that record clearing, for year-to-year comparison, and the Real-time System for Detection of Deforestation (DETER), a rapid survey conducted twice monthly

to identify new deforestation foci, permitting immediate government action against loggers.

A similar strategy was adopted in 2010 to preserve the *Cerrado* region. The Action Plan for the Prevention and Control of Deforestation and Burning in the *Cerrado* (PPCerrado) includes 151 actions for reducing the loss of plant cover and creating alternatives for the protection and sustainable use of the ecoregion's natural resources. In addition to the activities to deter illegal deforestation, it includes action to promote sustainable production, technical assistance and training, monitoring and control, appropriate land use, environmental education, the creation of protected areas, increased use of carbon from forests planted by the pig iron industry and ecological and economic macrozoning of the *Cerrado* region.

At the 2009 Conference of the Parties (COP-15, 2009) Brazil made a voluntary commitment to reduce the projected greenhouse gas emissions for 2020 by 36.1% to 38.9%, or approximately 1 billion tons of CO<sub>2</sub> equivalent (CO<sub>2</sub> eq)<sup>1</sup>.

## LOW-CARBON AGRICULTURE

To meet this commitment, in 2009 Brazil instituted the National Policy on Climate Change (PNMC) and the National Plan on Climate Change, with targets and instruments established by law, and also created the National Fund on Climate Change.

Based on data from the greenhouse gas inventory, which revealed that agricultural activities were responsible for the bulk of emissions, the government developed the Sector Plan for Climate Change Mitigation and Adaptation for the Consolidation of a Low-carbon Economy in Agriculture (also known as the Low-carbon Agriculture Plan, or the ABC Plan), as one of the PNMC's sector plans.

<sup>1</sup> Brazil's INDCs (Intended Nationally Determined Contributions), presented at the Conference of the Parties - COP 21, Paris, in December 2015, include commitments to absolute CO<sub>2</sub> emission reduction levels for the entire economy and are heavily related to the issue of land use, including mitigation and adaptation activities aimed at reducing emissions by 37% by 2015 and 43% by 2030; they include increasing the use of biofuels; restoring and reforesting 12 million hectares of land by 2030; fueling 45% of the energy grid with renewable sources (wind, biomass, and solar power); recovering 15 million hectares of degraded grasslands; 5 million hectares of integrated crop, livestock, and forestry systems (MMA, personal communication, February 2016).

The ABC Plan's general objective is to guarantee the continuous improvement of systems and practices for the sustainable use and management of natural resources – systems and practices that promote the reduction of GHG emissions and, moreover, increase the fixation of atmospheric CO<sub>2</sub> in the vegetation and soil of Brazil's agricultural sectors.

The mitigation potential of activities under the ABC Plan is an estimated GHG emissions reduction of 133.9 to 162.0 million tons of CO<sub>2</sub> eq. by 2020, when new international commitments under the Framework Convention are scheduled to go into effect<sup>2</sup>.

The general guidelines of the ABC Plan include the following actions and targets: (i) recovery of 15 million hectares of degraded grasslands through proper management and fertilization; (ii) increased adoption of integrated crop livestock-forestry (CLF) and agroforestry systems (AFS) on 4 million hectares; (iii) expanded use of direct seeding on 8 million hectares; (iv) expanded use of biological nitrogen fixation (BNF) on 5.5 million hectares; (v) advancement of reforestation activities in the country, expanding the current area planted with forests for the production of fibre, timber and cellulose on 3 million hectares to 9 million hectares; (vi) increased use of technologies to treat 4.4 million cubic meters of manure for power generation and organic fertilizer production; and (vii) adaptation to climate change.

In selecting these activities and targets, consideration was given to the economic importance of the activities in question (livestock and grain production), the large scale of the enterprises and the efficiency of these technologies in reducing GHG emissions (Sparovek, 2015).

226 The ABC Plan adheres to the principles and guidelines of the PNMC, and its activities include: publicity and information campaigns; training for technical personnel and rural producers; technology transfer; studies and planning for mapping priority areas; the provision of inputs; research, development and innovation; and incentives, including tax exemptions. It also includes activities

<sup>2</sup> According to the ABC Observatory, the potential mitigation of GHG emissions from Brazilian agriculture between 2012 and 2023 could reach 1.8 billion tons of CO<sub>2</sub> eq., a figure some 11 times higher than the target set in the ABC Plan (Assad, 2015).

that span all programmes, such as sensitization and awareness-raising, land and environmental regularization and technical assistance and rural extension, as well as the creation of the Multi-Institutional Virtual System on Climate Change and Agriculture to monitor implementation of the plan.

Another action taken for adaptation to climate change was the creation of the Climate Intelligence in Agriculture Programme, with changes in rural insurance and pest/blight risk analysis (MAPA, 2012).

## CREDIT LINES

Meeting the objectives of the ABC Plan will require resources on the order of R\$ 197 billion between 2011 and 2020, financed with credit lines (80% of the total) and budgetary funds. Federal expenditure to equalize the financial burden is estimated at some R\$ 33 billion.

According to the ABC Observatory, the sources of financing utilized to date include Rural Savings, Brazilian Development Bank (BNDES), the Constitutional Fund for Financing the Centre-West, and in 2013/2014, hybrid (debt/equity) capital instruments. In 2014/2015, Rural Savings accounted for 84.9% of the total financing for the ABC Programme. The Bank of Brazil (BB) and BNDES act mainly as transfer agents. In addition, cooperatives (SICREDI, *Cooperativa Banco do Brasil S.A.*– BANCOOB) and regional banks (BRDE), among other institutions, act as disbursement agents for private banks.

The ABC Plan has its own credit line, the Programme for the Reduction of Greenhouse Gas Emissions in Agriculture (or the ABC Programme), approved in 2011, for rural producers (physical or legal persons) and their cooperatives, including transfers to cooperative members<sup>3</sup>. Investment lines of the National Programme to Strengthen Family Farming (PRONAF), such as PRONAF Eco, for renewable energy and environmental sustainability, and PRONAF Floresta, for agroforestry systems, also finance other activities with similar objectives<sup>4</sup>.

<sup>3</sup> BACEN Resolution No. 3,979 and its amendments can be found in the Rural Credit Manual (MCR) (available from <http://www3.bcb.gov.br/mcr/>).

<sup>4</sup> Other credit lines outside the ABC Programme provide funding for technologies not covered by the programme – for example, the Programme to Finance Environmental Preservation and Monitoring (FNE Verde) of the Constitutional Fund for Financing the Northeast (FNE). For more information on PRONAF, see the chapter “Credit and income guarantees for family farms” in this publication.

Unlike traditional credit to finance an isolated activity, the financing provided by the ABC Programme is for production systems and technologies and therefore requires the preparation of technical projects that are more complex and focus on the interaction between agricultural activities and the existing natural resources on farms.

The ABC Programme has the same activity structure as the ABC Plan (Recovery, Integration, Direct Seeding, Nitrogen Fixation, Forests, Manure Treatment, Environment) but includes some of the financeable elements of activities not originally covered in the Plan, such as those related to organic systems (ABC *Orgânico*); palm forests (ABC *Dendê*); green fertilization; stump and root removal; fence installation and repair; the purchase of cattle, sheep and goats for breeding, fattening and slaughter and of the semen of these species; acquisition of domestically manufactured machinery and equipment for crop and livestock production not financed by other programmes; and the construction and modernization of processing facilities and other installations on rural properties.

The ABC Programme's credit limits for the 2015/2016 harvest year are R\$ 2 million per beneficiary, but can be as high as R\$ 5 million when the financing is for the planting of commercial forests by large producers. The investment costs can also be financed, with a limit of 30% of the amount financed; however, this figure can be as high as 40% when the project includes the purchase of livestock. The repayment term ranges from a minimum of five years (for greenhouse construction) to a maximum of 15 years (for the restoration and maintenance of permanent preservation or legal reserve areas), with grace periods ranging from one to six years.

The effective interest is 8% p.a.; however, it can be lowered to 7.5% p.a. for beneficiaries of the National Programme to Support Medium-sized Rural Producers (PRONAMP). This creates a differential with other official rural credit lines (except PRONAF) – however, at levels lower than those applied at the beginning (rate of 5.5% and 5.0% p.a.). The ABC Plan, in effect from 2010 to 2020, has national coverage and is governed by the priorities set in strategic regions.

Pursuant to PNMC guidelines, the ABC Plan was designed to encourage and support the participation of the federal, state, district and municipal governments, as well as the productive sector, academia and civil society organizations, in the implementation of programmes and activities.

The ABC Plan, the first sector plan created under the PNMC, was approved in May 2011 after consultation with government agencies and representatives of the civil society organizations indicated by the Brazilian Forum on Climate Change (FBMC), among them the Agriculture and Livestock Confederation of Brazil (CNA), the National Confederation of Farmworkers (CONTAG) and the Organization of Brazilian Cooperatives (OCB). However, implementation of the plan began only in 2013 with the publication of the Interministerial Decision.

#### ADMINISTRATION OF THE ABC PLAN

The plan has a three-tier governance structure. The first is called the “national strategy,” consisting of the Interministerial Committee on Global Climate Change (CIM), a deliberative body coordinated by the Civil Office, responsible for evaluating implementation of the activities and proposing measures. The Executive Group on Climate Change (GEx), coordinated by the Ministry of Environment (MMA), is part of the Interministerial Committee. The second tier, under the Executive Committee of the ABC Plan, is called the “national tactic” and is linked with and coordinated by the Ministry of Agriculture, Livestock and Food Supply (MAPA); its purpose is to follow up, monitor and review the plan at the national and state level with representatives of 23 institutions, including MDA, the Ministry of Finance, the Brazilian Agricultural Research Corporation (EMBRAPA), FBMC, CNA, CONTAG and OCB. The third tier is the “state operational tier,” run by the State Management Group (GGE) to promote the coordination and linkage of the plan in each state; activities are coordinated by the respective state secretariat of agriculture in collaboration with representatives of state environmental and agricultural research agencies and official banks, as well as representatives of civil society (productive sector, labour, universities, cooperatives, unions, nongovernmental organizations, etc.).



In 2009, the National Council on Food and Nutrition Security (CONSEA) suggested that the National Plan on Climate Change be amended to include the “dimensions of the human right to sufficient and healthy food, as well as food sovereignty, security and nutrition,” as well as initiatives “to promote social inclusion” (CONSEA, 2009, p. 2).

The final ABC Plan includes some of the elements identified by CONSEA and refers to their contribution to the Brazil without Extreme Poverty Plan (BSM) as an instrument for heightening resilience and reducing the social vulnerabilities of rural communities living in extreme poverty. In addition, localities covered by the *Terra Legal* programme for the regularization of landholdings in the Legal Amazon<sup>5</sup> and the Territories of Citizenship programme, which coordinates infrastructure investments, production inclusion and the exercise of social rights, were selected as sites for implementation of the ABC Plan (MAPA, 2012).

Public-private partnerships are considered essential for strengthening activities under the plan and replicating them in states and municipalities. The following are some examples of initiatives supported by MAPA and EMBRAPA.

The CNA, in partnership with the British Embassy, is implementing the ABC Training Project, conducting economic feasibility studies and providing training to the technical personnel that develop projects for the ABC Programme. Private and government banks, as well as the Brazilian Association of Forest Plantation Producers (ABRAF)<sup>6</sup>, also participate in this initiative.

The National Service for Rural Apprenticeship (SENAR), a parastate agency connected with the CNA system, participates in initiatives of the ABC Plan for training technical assistance agents in the use of the technologies recommended by the plan in areas already converted to agricultural use, with resources from the World Bank, FAO and BNDES<sup>7</sup>. The initiatives include the ABC *Cerrado* Project

<sup>5</sup> The *Terra Legal* programme was established by Law No. 11,952/2009 to regularize legitimate occupation of the land in federal areas of the Legal Amazon, giving priority to family farmers and their communities. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2009/lei/11952.htm](http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/lei/11952.htm)).

<sup>6</sup> For information on the activities of the ABC Training Project, visit <https://abccapitacao.wordpress.com/o-projeto/>.

<sup>7</sup> For information on SENAR activities related to the ABC Plan, visit, <https://abcsenar.wordpress.com/about/>.

(or Forest Investment Programme – FIP-ABC)<sup>8</sup>, the Programme for the Restoration of Degraded Areas in the Amazon (PRA-DAM) and the ABC Training Programme.

## MONITORING

Since May 2013, implementation of the ABC Plan has been monitored by its own private Observatory, coordinated by the Getulio Vargas Foundation (GVAgro) Centre for Agribusiness Studies, developed in partnership with the Climate and Land Use Alliance (CLUA).

In 2015, the ABC Observatory coordinative the consultative process on amending the ABC, in which 21 organizations participated, including: (i) sector organizations, such as the Brazilian Association of Meat Exporters and the Brazilian Machinery and Equipment Association; (ii) business advancement groups, such as the Brazilian Agribusiness Association, OCB, CAN, and the Federation of Industries of São Paulo State; and (iii) environmental organizations, such as Friends of the Earth and Brazilian Amazon, The Nature Conservancy, and WWF Brazil (Observatório ABC, 2015).

The ABC Plan closely interfaces with other government efforts, especially with the seven sector mitigation and adaptation plans already developed under the PNMC, among them PPCDAM and PPCerrado, mentioned earlier. The ABC Orgânico credit line for the introduction and improvement of organic farming systems interfaces directly with the National Agroecology and Organic Production Policy (PNAPO) and its respective national plan (PLANAPO)<sup>9</sup>, launched in 2013.

The ABC Plan, still in the implementation phase, has an operating plan that details the products, indicators and targets for two implementation phases (2011-2015 and 2016-2020). The monitoring strategy includes periodic measurement of reductions and their financial implications for the country (MAPA, 2012). The information on these indicators, however, is still limited and scattered, especially the information on the characteristics of the beneficiaries and the subactivities of the ABC Programme (Observatório ABC, 2015; Sparovek, 2015).

<sup>8</sup> For information on the activities of the FIP-ABC Project, visit <http://www.agricultura.gov.br/portal/page/portal/Internet-MAPA/pagina-inicial/desenvolvimento-sustentavel/projeto-fip-abc>.

<sup>9</sup> For information on this topic, see the chapter “Agroecology and family farming” in this publication.

State ABC Plans are already up and running in 14 federative units (Amazonas, Bahia, Federal District, Espírito Santo, Goiás, Maranhão, Minas Gerais, Mato Grosso, Pará, Paraná, Piauí, Rondônia, Rio Grande do Sul and Tocantins), and two other states (Ceará and Sergipe) are expected to launch their plan in the near future.

Data on ABC Programme disbursements – the rural credit line – compiled by the Observatory and MAPA, show disbursements totalling R\$ 11.4 billion in 43,300 operations since 2011. Asymmetric distribution has been observed between different regions in the country and between the North and Northeast regions, which have broad expanses of degraded grasslands and are therefore considered a priority under the ABC Plan; however, their participation is still low. The concentration of access to these resources is illustrated by the fact that just five states (Minas Gerais, Goiás, São Paulo, Mato Grosso and Mato Grosso do Sul) account for 66.5% of the total funds disbursed by the ABC Programme in the 2014/2015 harvest year.

No information is available on the profile of the beneficiaries, but the existing data show a high average value per operation, especially in the Centre-West (R\$ 371,100) and Northeast (R\$ 280,500), indicating a higher probability of assistance to more capitalized producers.

A qualitative analysis by USP/ESALQ (University of São Paulo College of Agriculture) based on credit operations in 2013 confirmed the predominance of large rural producers among ABC Plan beneficiaries and a wide range of profiles in terms of the size of landholdings and income level (Sparovek, 2015).

The low participation of family farming in the ABC Programme is associated with the fact that this sector has its own investment credit line, PRONAF *Mais Alimentos*, that enables family farmers to obtain financing for their activities under better conditions.

There have been reports of operational difficulties and delays in finalizing loan agreements. This is because, in addition to the information necessary for preparing projects, the concession of credit is subject to the general requirements of the Central Bank, which include evaluations and proof of the necessary security

and regularization of land tenure. The requirement that technical projects be differentiated from other credit operations is important for lowering the risk of the operations, even though it creates additional barriers to the release of funds (Sparovek, 2015).

Among the challenges to meeting the targets for transitioning to low-carbon agriculture is the need to broaden and diversify the beneficiaries, including those who have less experience obtaining credit. Another challenge is ensuring that the credit actually serves as an instrument leading to the adoption of sustainable technologies and systems. For that, loan agreements under the ABC Plan must begin to include binding environmental commitments by producers to meeting GHG emission reduction targets or monitoring CO<sub>2</sub> fixation (Sparovek, 2015).

## GENERATION OF POWER

Another major component of the ABC Plan is increasing the use of manure treatment technologies to generate power and organic compost. If manure is disposed of in nature without treatment, it emits biogas with a high concentration of methane, one of the main components of atmospheric pollution and 20 times more polluting than CO<sub>2</sub>.

One of the most important initiatives today is being implemented by *Itaipu Binacional* (Brazil and Paraguay) and several committed partners to generate power through renewable energy sources, especially biogas produced by the treatment of organic agricultural waste from the meat (poultry and swine) and milk production chains – both with the significant participation of family farms. Family farming for food production is also becoming an energy producer<sup>10</sup>.

This development is especially important for Itaipu, since it prevents animal waste from accumulating in rivers, and ultimately, in reservoirs, where it could result in intense fertilization of algae, or eutrophication, polluting and degrading the quality of the water.

<sup>10</sup> The contribution of family farming to the reduction of greenhouse gas emissions through biogas production was one of the few quantified initiatives of the ABC Plan.

Biomass power production consists basically of using the biogas released by decomposing organic matter in biodigesters to power motor generators capable of fully meeting the energy needs of a rural property, or at least meeting them during peak hours, when electricity rates are higher. The electricity produced can also be sold to distributors.

After confirming the environmental, technical and economic feasibility at different production scales, Itaipu joined with 15 other institutions to create the International Centre for Renewable Energy – Biogas (CIBiogas-ER), focused on knowledge generation, technology transfer and public policy-making<sup>11</sup>. Biogas production systems have been installed in 11 demonstration units (an international unit is being installed in Uruguay), located in starch manufacturing plants, small and medium-sized rural properties, cooperatives, farms and companies that convert manure or industrial waste to electricity, thermal energy and biofuels, as well as biofertilizers. These units are pilot projects and environments for research and the generation of evidence on the technical and economic feasibility of biogas applications.

In 2011, a reference laboratory was set up in Foz do Iguaçu, Paraná, in partnership with the United Nations Industrial Development Organization (UNIDO), the Itaipu Technological Park Foundation (ITPF), the Federal University for Latin American Integration (UNILA), the University of Natural Resources and Life Sciences (BOKU), Vienna, Austria, and EMBRAPA, for the analysis of different types of biomass, with a focus on biogas production.

There is great potential for expansion, given the available knowledge and technologies, the characteristics of the climate, with high average temperatures, and the presence of biodiversity experts specializing in the degradation of organic matter. These are comparative advantages that allow for very efficient biogas production with only moderate use of technologies, in comparison with countries in cold climates, where biodigestion is widely used.

## PARTICIPATION OF FAMILY FARMING

In addition to their limited use of the credit line, few family farms are enrolled in the ABC Plan, because rural organizations and social movements do not

<sup>11</sup> For more information on biogas, see Bley Jr. (2015). On the work of CIBiogas, see <http://www.cibiogas.org>.

consider this Plan either the mechanism or the tool for solving the sector's land-use problems, such as the recovery of river springs, the development of forestry systems, the reduction of carbon emissions from dairy production and the treatment of manure from swine and poultry production (MMA, personal communication, November 2015).

The connection between mitigation and the adaptation of family farming to climate change in the terms discussed in the MMA can take place through the ecological transition strategy developed by PLANAPO in coordination with other policies. It can be furthered by defining the role of family farming in meeting the climate change targets (Intended Nationally Determined Contributions) established in the National Plan for Adaptation to Climate Change (PNA)<sup>12</sup> and the Sustainable Development Goals, and in the field of energy with the production of renewable fuels.

Also worth noting are the activities of extraction workers and traditional peoples and communities, which are important for exploiting the potential of areas in sustainable use conservation units, community forests and their territories, combining the reduction of environmental vulnerability with improvements in the living conditions of these groups, increasing income and employment opportunities (MMA, personal communication, November 2015).

The ABC Plan offers a systemic approach to national operations, but, as with other complex public policy arrangements, its implementation depends largely on organization at the state level and, especially, on the action of local intermediaries, such as financial agents, technical assistance services and producers' organizations, which play a key role in publicizing the plan, establishing the profile for the access to the various credit modalities and tailoring the respective instruments to the different situations.

There are other initiatives apart from the ABC Plan that supplement and increase the capacity of the Brazilian government to take action on climate change. The

---

<sup>12</sup> The PNA is in the final phase of preparation by the federal government in collaboration with civil society organizations, the private sector and state governments. Its objective is to reduce national vulnerability to climate change and promote management of the risks associated with this phenomenon. For information on this topic, visit <http://www.mma.gov.br/clima/adaptacao/plano-nacional-de-adaptacao>). The public consultation phase ended on 7/12/2015 (visit <http://hotsite.mmda.gov.br/consultapublicapna/>).

National Fund on Climate Change (*Fundo Clima*), an instrument of the PNMC, provides non-reimbursable funds through the MMA for adaptation and mitigation activities in the most vulnerable sectors, and through BNDES, for the execution of mitigation activities linked primarily with sectoral adaptation plans, activities with a potential financial return and public sector investments in areas such as renewable energy (solar, wind, biomass), efficient modes of transport and efforts to fight desertification. Fund's resources stem mainly from oil.

Recently, EMBRAPA and MMA, in partnership with the United Nations Development Programme (UNDP) and with resources from the Global Environment Fund (GEF), launched a project to develop and promote techniques for managing the extraction and use of non-timber forest products (fruits, seeds, chestnuts, almonds, rubber, fibre, etc.) and promoting agroforestry systems in the *Cerrado*, Amazon and *Caatinga* regions. Another line of action is the identification of financial and market bottlenecks that keep communities of extraction workers and family farmers from increasing their production and income. Stressing the integration of programmes, the project will be implemented in 76 municipalities participating in the Territories of Citizenship Programme.

### PROGRESS AND CHALLENGES<sup>13</sup>

The ABC Plan contains major innovations in several areas. One innovation is the integration of efforts to meet international commitments on climate change, proposing mitigation and adaptation activities through intersectoral action and the use of a systematic institutional approach to the concession of subsidized loans.

236 Furthermore, civil society organizations participated in the formulation of the plan, incorporating some dimensions of the human right to sufficient and healthy food and food and nutrition security, together with initiatives to promote social inclusion. The plan also has private training and monitoring mechanisms to organize information about the programme, conduct studies and connect some of

<sup>13</sup> The result of MMA cooperation with the FAO Regional Office for Latin America and the Caribbean (FAO RLC), the guidelines were developed for agroenvironmental policies that deal with the aforementioned State action to promote agricultural and agrarian development and reduce rural poverty and food insecurity, integrating the environmental dimension as a prerequisite for their formulation and implementation (MMA/FAO, undated).

the direct and indirect beneficiaries – without, however, including representatives of the family farmers served by other government programmes<sup>14</sup>.

The results to date indicate that there are challenges to the effectiveness of the plan, related to its coverage and its integration with other programmes, including those that adopt territorial management (Piatto et al., 2015, p. 50).

Although the majority of the actions recommended for reducing emissions are nothing new to Brazilian agriculture, their implementation is “still getting off the ground and limited in areas of the Centre-West and North-Northeast” where the agricultural frontier is expanding (Observatório ABC, 2015, p. 3).

Many of the problems confronting the plan stem from its initial implementation phase, the lack of training for producers and the technicians responsible for preparing projects, the still limited knowledge and lack of publicity about low-emission technologies, the complexity of its composition and the workings of its decision-making bodies in the three tiers. The result is a lack of transparency in the monitoring and supervision of the work of each agency involved in the implementation of the plan (Observatório ABC, 2015, pp. 7-12).

The merit of the ABC Plan is its advancement of a more in-depth analysis of the problems related to land use, which has contributed to the mitigation solutions in Brazil’s INDC’s, presented in COP 21.

Despite its initial and only partial implementation, the ABC Plan provides a strategic path for mitigating the effects of climate change and adapting agriculture to the new scenario of extreme weather events by valuing and increasing social participation and social oversight; ensuring greater intersectoral and intergovernmental coordination and action to combat illegal deforestation and protect and preserve biodiversity; and creating economical alternatives for the sustainable use of forests and more sustainable agricultural production.

<sup>14</sup> Worth noting is the MDS Cistern Programme, which, in addition to building cisterns to store water for human consumption, also provides social technologies for access to water for production purposes, in partnership with states and municipalities. Between 2011 and 2015, 158,000 systems for the capture and storage of water for production, known as secondary water, were provided. (MDS, 20/01/2016, <http://mds.gov.br/area-de-imprensa/noticias/2016/janeiro/programa-cisternas-acesso-a-agua-avanca-no-semiarido>). For more information on this topic, see the chapter “Adaptation to conditions in the Semiarid region” in this publication.



## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**ASSAD, E.** (Coord.). 2015. *Invertendo o sinal de carbono da agropecuária brasileira. Uma estimativa do potencial de mitigação de tecnologias do Plano ABC de 2012 a 2023. Sumário Executivo.* Rio de Janeiro, RJ: Observatório ABC. (Relatório 5, ano 2). (Available from <http://mediadrawer.gyces.com.br/original/sumario-atualizado.pdf>. Accessed 21/9/2015).

**BLEY JR., C.** 2015. *Biogás, a energia invisível.* Foz do Iguaçu, Itaipu Binacional. (Available from [https://cibiogas.org/sites/default/files/Biogas\\_Ebook\\_FINAL.pdf](https://cibiogas.org/sites/default/files/Biogas_Ebook_FINAL.pdf). Accessed 4/11/2015).

**BRAZIL.** 1999. *Decree of 7 July 1999.* Creates the Interministerial Committee on Global Climate Change. (Available from [http://www.planalto.gov.br/ccivil\\_03/DNN/Anterior%20a%202000/Dnn07-07-99-2.htm](http://www.planalto.gov.br/ccivil_03/DNN/Anterior%20a%202000/Dnn07-07-99-2.htm). Accessed 21/9/2015).

**BRAZIL.** 2000. *Decree No. 3,515/2000.* Creates the Brazilian Forum on Climate Change. (Available from [http://www.planalto.gov.br/ccivil\\_03/decreto/D3515.htm](http://www.planalto.gov.br/ccivil_03/decreto/D3515.htm). Accessed 21/9/2015).

**BRAZIL.** 2000. *Decree of 28 August 2000.* On the Brazilian Forum on Climate Change. (Available from [http://www.planalto.gov.br/ccivil\\_03/DNN/2000/Dnn28-8.2000.htm](http://www.planalto.gov.br/ccivil_03/DNN/2000/Dnn28-8.2000.htm). Accessed 21/9/2015).

**BRAZIL.** 2007. *Decree No. 6,263, of 21 November 2007.* Creates the Interministerial Committee on Global Climate Change (CIM). (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2007/Decreto/D6263.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Decreto/D6263.htm). Accessed 21/9/2015).

**BRAZIL.** 2010. *Decree No. 7,390, of 9 December 2010.* Partially regulates the PNMC. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2010/Decreto/D7390.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2010/Decreto/D7390.htm). Accessed 21/9/2015).

**BRAZIL.** 2009. *Law No. 12,114, of 9 December 2009.* Creates the National Fund on Climate Change. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2009/Lei/L12114.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Lei/L12114.htm). Accessed 4/11/2015).

**BRAZIL.** 2009. *Law No. 12,187, of 29 December 2009.* Establishes the National Policy on Climate Change. (Available from [www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2009/Lei/L12187.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Lei/L12187.htm). Accessed 21/9/2015).

**BRAZIL.** 2008. *Plano Nacional sobre Mudança do Clima. PNMC. Brasil.* Brasília: Interministerial Committee on Climate Change. (Available from [http://www.mma.gov.br/estruturas/smcq\\_climaticas/\\_arquivos/plano\\_nacional\\_mudanca\\_clima.pdf](http://www.mma.gov.br/estruturas/smcq_climaticas/_arquivos/plano_nacional_mudanca_clima.pdf). Accessed 21/9/2015).

**BACEN.** Undated. *Manual de crédito rural.* (ABC Programme). (Available from [http://www3.bcb.gov.br/mcr/Manual/09021771806f5013.htm?fullName=7%20-%20Programa%20para%20Redu%C3%A7%C3%A3o%20da%20Emiss%C3%A3o%20de%20Gases%20de%20Efeito%20Estufa%20na%20Agricultura%20\(Programa%20ABC\)](http://www3.bcb.gov.br/mcr/Manual/09021771806f5013.htm?fullName=7%20-%20Programa%20para%20Redu%C3%A7%C3%A3o%20da%20Emiss%C3%A3o%20de%20Gases%20de%20Efeito%20Estufa%20na%20Agricultura%20(Programa%20ABC)). Accessed 21/9/2015).

**CONSEA.** 2009. *Exposição de Motivos No. 08-2009, of 3 November 2009.* (Available from <http://www4.planalto.gov.br/consea/eventos/plenarias/exposicoes-de-motivos/2009/e.-m.-no-008-2009/view>. Accessed 21/9/2015).

**MAPA.** Undated. *Portal do Ministério da Agricultura, Pecuária e Abastecimento sobre Desenvolvimento Sustentável.* Available from <http://www.agricultura.gov.br/desenvolvimento-sustentavel>. Accessed 21/9/2015.

**MAPA.** 2012. *Plano setorial de mitigação e de adaptação às mudanças climáticas para a consolidação de uma economia de baixa emissão de carbono na agricultura.* Brasília: Casa Civil da Presidência da República/MAPA/MDA. Available from [http://www.agricultura.gov.br/arq\\_editor/download.pdf](http://www.agricultura.gov.br/arq_editor/download.pdf). Accessed 21/9/2015.

**MAPA/MDA.** 2013. *MAPA/MDA Interministerial Decision No. 984, of 8 October 2013.* Establishes the ABC Plan. (Available from <http://pesquisa.in.gov.br/imprensa/servlet/DFViewer?jornal=1&pagina=2&data=09/10/2013&captchafield=fristAccess>. Accessed 21/9/2015).

**MMA.** Undated. *Portal do Ministério do Meio Ambiente sobre Clima.* (Available from <http://www.mma.gov.br/clima>. Accessed 21/9/2015).

**MMA and FAO.** Technical Cooperation Project “Strengthening Agro-environmental Policies in Latin America and the Caribbean through dialogue and exchange of national experiences”. (Available from <http://fao.org/in-action/programa-brasil-fao/proyectos/politicas-agroambientais/pt/>). Accessed 21/01/2016).

**OBSERVATORIO ABC.** 2015. *Propostas para revisão do Plano ABC*. Rio de Janeiro, RJ: Observatório ABC. (Available from <http://www.observatorioabc.com.br/propostas-para-revisao-do-plano-abc?locale=pt-br>). Accessed 21/9/2015).

**PIATTO, M.; COSTA JR., C. and GUEDES PINTO, L. F.** 2015. *Evolução das emissões de gases de efeito estufa no Brasil (1970-2013): setor de agropecuária*. São Paulo, SP: Observatório do Clima. Available from [http://www.imaflora.org/downloads/biblioteca/55ca3a26a856a\\_agropecuaria\\_2015.pdf](http://www.imaflora.org/downloads/biblioteca/55ca3a26a856a_agropecuaria_2015.pdf). Accessed 21/9/2015).

**SPAROVEK, G.** (Coord.). 2015. *Avaliação da implementação do Plano Setorial de Mitigação e de Adaptação às Mudanças Climáticas para a Consolidação de uma Economia de Baixa Emissão de Carbono na Agricultura – PLANO ABC*. Piracicaba, SP: ESALQ/USP. (Technical Cooperation Project IICA/BRA/02/015).

# REGISTRATION AND ADVANCEMENT OF SMALL-SCALE FISHING AND AQUACULTURE

For years, small-scale fishers' movements have called for differentiated treatment in fisheries policy. In 2003, after many struggles and significant mobilization efforts, these movements led the federal government to create the Special Secretariat for Aquaculture and Fisheries (SEAP) under the Office of the President. SEAP is responsible for developing and implementing the country's fisheries policy.

In the context of a social dialogue, work began on the creation of a new agency and the development and implementation of the first differentiated actions and policies for small-scale fishers, based on a recognition of the unique characteristics of this sector and even its internal and regional differences.

A benchmark in this recent trajectory was the upgrading of the Secretariat's status to that of Ministry of Fisheries and Aquaculture (MPA) and the enactment of Law No. 11,959<sup>1</sup> instituting the National Policy for Sustainable

---

<sup>1</sup> Under Law No. 11,959/2009, "aquaculture is the cultivation of organisms whose life cycle in the natural state occurs entirely or partially in aquatic environments," and fishing is "any operation, activity, or act aimed at extracting, collecting, catching, harvesting, or capturing fish stocks" (Art. 2, sections II and III of Law No. 11,959/2009).

Development of Aquaculture and Fisheries (PNDSAP), both announced on 29 June 2009, Fishers' Day.

The MPA's creation put the management of fisheries policy under a single federal agency. The objective of the national policy was to promote "the sustainable development of fishing and aquaculture as a source of food, employment, income and recreation, guaranteeing the sustainable use of fish stocks and maximization of the economic benefits derived therefrom, in harmony with the preservation and conservation of the environment and biodiversity; the planning, advancement and supervision of fishing activities; the preservation, conservation and recovery of fish stocks and aquatic ecosystems; and the socioeconomic, cultural and professional development of people involved in fishing activities and their communities" (Art. 1, Law No. 11,959/2009).

Under this law, fishing is considered artisanal when practiced "directly by a professional fisherman, either independently or as part of a family operation, with his own means of production or that furnished through a partnership agreement, without a boat or with a small boat" (Art. 8, I, a, of Law No. 11,959/2009). Aquaculture is considered family aquaculture when practiced by a single family unit, under Law No. 11,326 of 2006 (Art. 19, IV, of Law No. 11,959/2009) – that is, the identification of an artisanal fisherman or fish farmer goes back to the concept of the family unit defined in the law institutionalizing the differentiated policies for agriculture and family farms. Using the general criteria for classification as a family production unit, specific requirements were established for classification as a family fisherman or family fish farmer (Law No. 11,326/2006, Art. 3, § 2, II and IV)<sup>2</sup>.

Hence, a key element for the differentiation of fisheries policy for small-scale fishing and aquaculture is registration. One of the main demands of the fishers' movement was therefore professional regularization, accomplished by obtaining a professional identification card that would guarantee the legal practice of their profession and the enjoyment of basic rights, such as the right to social security benefits.

<sup>2</sup> For information on the criteria for the definition of family farming, see the chapter "Identification and registration of family farms" in this publication.

## REGISTRATION OF FISHING ACTIVITY

The General Register of Fishing Activity (RGP) is the federal government's instrument for the management and sustainable development of fishing activities. The RGP enables fishers to obtain concessions, permits, authorization and licenses for the legal practice of fishing and the exploitation, cultivation, preservation, processing, transport, marketing and search for fish stocks<sup>3</sup>.

Created in 1967, the RGP was reoriented in 2009 with the adoption of the National Policy for Sustainable Development of Aquaculture and Fisheries, aimed, among other things, at guaranteeing food security and the safety of the food produced; the protection of ecosystems and maintenance of ecological balance, based on the principles of biodiversity preservation and the sustainable use of natural resources; and the protection and security of workers and populations with traditional knowledge.

The register's regulations, drafted in March 2015, include the issuance of certificates or licenses, authorization, preauthorization to fish and fishing permits in nine categories: professional artisanal fisherman; professional industrial fisherman; aquaculturist (fish farmer); artisanal fisherman's assistant; apprentice fisherman; fishing outfitter; amateur or sport fishing company; fishing boat operator; and fishing company (Decree No. 8,425/2015).

Subsistence fishers who fish for personal consumption or non-profit barter using the tools stipulated in specific legislation are exempt from registering with the RGP, as are indigenous peoples and others who fish for subsistence.

For the purposes of national policy, professional small-scale fishers are defined as physical persons resident in the country who fish commercially, either independently or as part of a family economic unit, with their own means of production or that provided through a partnership agreement and may work without a boat or using a fishing boat.

<sup>3</sup> Registration in the RGP does not exempt a party from regularly registering with the Federal Technical Registry of Potentially Polluting Activities and Users of Environmental Resources (CTF/APP), administered by the Ministry of Environment (MMA); being certified by the maritime authority to professionally operate a boat; obeying the law concerning indigenous peoples and lands, etc.

As a complement, the National Policy for the Sustainable Development of Traditional Peoples and Communities (PNPCT) recognizes that small-scale fishers may be included among the culturally differentiated groups and recognizes them as such, acknowledging that they have their own systems of social organization, occupy and make use of territories and natural resources for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices generated and passed down by tradition.

The Register gives fishers access to several federal programmes, such as credit, technical assistance and rural extension in fishing and aquaculture (ATEPA), social assistance, unemployment insurance, etc.

Fishers can take advantage of several other programmes, such as *Bolsa Família*, the Programme for the Advancement of Rural Productive Activity, direct subsidies for extraction products through the Brazilian Price-Support Policy for Biodiversity-derived Products (PGPM-Bio), the Rural Housing Programme and other health and education programmes (for the complete list, see CAISAN, 2014). The registration certificate is also additional proof of fishing activity to obtain social security benefits.

In the case of the *Bolsa Família* programme, as of September 2015, 140,205 small-scale fishing families were registered in CadÚnico, 112,094 of them *Bolsa Família* beneficiaries.

The RGP is supported by the Information System of the General Registry of Fishing Activity (SisRGP), which is part of the National Information System on Fisheries and Aquaculture (SINPESQ). Created in 1995, this system collects, aggregates, processes, analyses, shares and disseminates information on the national fisheries sector. Implemented with the collaboration of the IBGE, it follows the standards of the National Spatial Data Infrastructure (INDE), including the requirements of the Brazilian Public Electronic Identification Infrastructure (ICP) and the Electronic Governance Interoperability Standards (e-PING)<sup>4</sup>.

<sup>4</sup> INDE is part of the National Statistical and Mapping System. Its purpose is to facilitate and organize the generation, storage, access, sharing, dissemination and use of federal, state, district and municipal geospatial data. The ICP is a hierarchical chain of entities aimed at guaranteeing the authenticity, integrity and legal validity of documents in electronic format, applications for assistance and approved applications that use digital certificates, as well as effecting secure electronic transactions.

In addition to SisRGP, the System has 10 other modules, including the Yearbook of the General Register of Fishing Activity; the Aquaculture Census; the System for Monitoring Federal Water Concessionaires (SINAU) and the National Spatial Data Infrastructure for Fishing and Aquaculture (INDE-*Pesca*).

The list of professional fishers and aquaculturists registered with the RGP is available on the system's website<sup>5</sup>. The documents proving registration with the RGP and fishing authorizations, permits or licenses are valid nationwide.

The ministry that manages the RGP is responsible for forwarding information on the fishing and/or aquaculture licenses, permits and authorizations issued to the Ministry of Environment (MMA) for monitoring, supervision and other activities of the environmental agency.

With the administrative reform of October 2015, the functions of the Ministry of Fisheries and Aquaculture were subsumed by the Ministry of Agriculture, Livestock and Food Supply (MAPA). This ministry became the entity responsible for overseeing the national fisheries and aquaculture policy, as well as RGP management of activities related to production, transport, processing, transformation, marketing, sourcing and storage; promoting production; and regulating and supervising activities under its purview; as well as granting licenses, permits and authorizations for aquaculture and different types of fishing throughout the nation's territory, including continental and inland waters, national marine waters of the Continental Shelf and Exclusive Economic Zone, adjacent areas and international waters, excluding federal conservation units, subject to the environmental licenses provided for in the current legislation<sup>6</sup>. This ministry is even responsible for verifying the veracity of the information provided by fish farmers for registration and licensing and can make inquiries and cross-check the information with other federal databases, such as the National Register of Social Information (CNIS) – for monitoring and recording the activities of workers –, the General Employment and Unemployment Register (CAGED) and the Annual Social Information Report (RAIS).

<sup>5</sup> The list of fishermen is available from <http://sinpesq.mpa.gov.br/rgp/>.

<sup>6</sup> Once MAPA approves a technical project, the National Assets Service authorizes the use of physical spaces in national bodies of water for aquaculture purposes to promote sustainable development, higher fish production, social inclusion and food security.



## SOCIAL PARTICIPATION AND CONTROL

The main instruments for social participation in fishing activities are the National Aquaculture and Fisheries Board (CONAPE), the National Conference on Aquaculture and Fisheries, the National Meeting of Women Fishery and Aquaculture Workers and the Shared Management System (SGC), through the Standing Management Committees (CPG). Small-scale fishers also participate in the National Commission for the Sustainable Development of Traditional Peoples and Communities (CNPCT).

CONAPE is a collegiate body created under MAPA in 2003/2004 and comprised in equal parts of government and civil society representatives. Its purpose is to contribute to the development of the National Fisheries and Aquaculture Policy and foster coordination and discussions between the different levels of government and civil society for the implementation and advancement of these activities<sup>7</sup>. CONAPE has gradually refined its operating mechanisms, improving procedures for selecting civil society representatives and creating thematic committees to deal with specific topics, among other measures.

The Board promoted and organized a National Conference on Fisheries and Aquaculture in 2003, 2006 and 2009<sup>8</sup>. These conferences were preceded by state conferences and seminars that strengthened the role of traditional small-scale fishing communities in defining and guiding sectoral policies.

The objective of the 1st National Meeting of Women Workers in Fisheries and Aquaculture, held in 2004, was to propose sectoral policies aimed at eliminating the social inequalities affecting women working in fisheries and aquaculture. The topics discussed included workers' rights and the right to social security; health care and environmental and cultural issues; and specific projects for production and access to credit. The meeting was preceded by state meetings in which women discussed their situation and drafted demands and proposals. The mobilization of women had an impact on the national policy formulated, which recognizes artisanal fisherwomen as agents of production.

<sup>7</sup> For information on CONAPE activities and related legislation, visit: <http://www.mpa.gov.br/conape>.

<sup>8</sup> For information on the deliberations of the National Conferences on Fisheries and Aquaculture, visit <http://www.ipea.gov.br/participacao/conferencias-2/556-i-conferencia-nacional-de-aquicultura-e-pesca>.

The shared management system for the sustainable use of fish stocks (except in aquaculture) was established in 2009 with the adoption of the national policy and oversees the joint activity of MAPA and MMA, sharing responsibilities and functions among representatives of government and civil society. The two ministries, coordinated by MAPA, are responsible for establishing regulations, criteria, standards and measures for organizing these activities, as well as assisting, advising and participating, jointly with the Ministry of Foreign Affairs (MRE), in negotiations and events that address issues related to the enforcement of rights and interference in national fishery and aquaculture interests.

The system's organizational structure includes a technical coordinating committee, as an advisory body, and participatory forums and collegiate bodies, the Standing Management Committees and sectoral technical chambers being the main advisory bodies on fish stocks. These committees and chambers are entities marked by parity in the representation of government and civil society, with some interface when it comes to the use of fish stocks, with representatives from the extractive fishing sector (artisanal, industrial and recreational fishers), the post-harvest sector (processing and marketing entities) and the nongovernmental organization sector.

In October 2015, the shared management system had ten committees, six marine, three continental and one on ornamental fish.

The committees and chambers are advised by science committees that conduct research, studies, situation analyses and evaluations based on scientific information and empirical surveys of fishers. The subcommittees coordinate and supervise preparation of the management plans of Brazil's main fisheries, using even the information produced and distributed by the National Information System on Fisheries and Aquaculture.

## FISHERIES AND AQUACULTURE HARVEST PLAN

The main federal instruments for promoting the sustainable development of fishing activity, increasing production, productivity, employment generation and the economic organization of fishers and aquaculturists, are part of the Fisheries and Aquaculture Harvest Plan (PSPA) 2015/2016, launched in 2015

to provide continuity for and supplement the 1st PSPA 2012/2014, launched in October 2012 (MPA, 2015). The pillars of this plan are credit, technical assistance and marketing.

According to the federal government, data from the Central Bank and Brazilian Development Bank (BNDES) indicate that the funds applied to credit between October 2012 and December 2014 under the 1st PSPA totalled R\$ 1.332 billion and involved 46,087 loan agreements. Between January and August 2015, the figure was R\$ 269.3 million and 6,959 loan agreements, versus R\$ 287.6 million and 9,742 loan agreements during the same period in 2014. Between October 2012 and August 2015, the states of Santa Catarina, Paraná and São Paulo together accounted for 43.4% of the total value applied and 20.6% of the total loan agreements executed. The states of Amazonas, Pará and Minas Gerais together accounted for 33.4% of the total contracts executed and 12.0% of the total value applied, indicating regional concentration in the execution of the plans.

To take advantage of the programmes of the National Policy for Family Aquaculture and Rural Family Enterprises that make up the PSPA, such as the PRONAF, ATER, PAA and PNAE credit lines, fishers and aquaculturists must also possess the Declaration of Eligibility for the National Programme to Strengthen Family Farming (DAP)<sup>9</sup>. To obtain it, they must meet the following requirements: (1) they must not own, under any title, property larger than 4 fiscal modules; (2) they must employ family labour in the economic activities of their enterprise; (3) a certain percentage of their household income must come from the economic activities of their establishment or enterprise, as defined by the Executive Branch; (4) they must administer their enterprise with their family; (5) they must fish waters with a total surface area of up to 2 hectares or that occupy up to 500 m<sup>3</sup> of water, when their operations are performed in net-tanks in the case of aquaculturists; and (6) they must practice small- scalefishing in the case of fishers.

The programmes of the Fisheries and Aquaculture Harvest Plan specifically for small-scale fishers that can be accessed through registration in the RGP and

<sup>9</sup> For information on the DAP, see the chapter “Identification and registration of family farms” in this publication.

possession of the DAP include the Programme for Revitalization of the Small-scale Fishing Fleet (*Programa Revitaliza*), launched in 2010. The purpose of this programme is to promote environmental, social and economic sustainability through the construction, rehabilitation and modernization, replacement and acquisition of small fishing vessels (of up to 20 gross tons)<sup>10</sup> Its objectives include improving the health and safety of ship workers and the quality of the fish processed and preserved on board. *Revitaliza* has a credit line in PRONAF *Mais Alimentos*.

Another important policy is the guarantee of unemployment insurance benefits of one month's minimum wage<sup>11</sup> for professional fishers who exclusively and uninterruptedly work as small-scale fishers, whether individually or as part of a family enterprise, during the closed season when fishing is barred to preserve species<sup>12</sup>.

In addition to registering with the RGP, to be eligible for unemployment insurance, beneficiaries must have a fishing license and active registration status through a license issued by MAPA; their social security contribution must also have been paid in the 12 months immediately prior to their needing the benefit, or since the last closed season. Workers that support small-scale fishing and family members of the professional artisanal fisherman are excluded from the benefit. Furthermore, fishers cannot collect this benefit if they have another employment relationship; another source of income derived from fishing; or are receiving conditional cash transfers from the federal programme or ongoing Social Assistance or Social Security benefits, with the exception of accident insurance or a death pension.

According to preliminary data from the Ministry of Labour and Social Security (MTPS), some 1 million professional fishers received the unemployment insurance benefit for small-scale fishers in 2015.

Another important instrument is economic subsidies for diesel fuel, instituted in 1997, for owners, outfitters, or renters of Brazilian fishing vessels, whether

<sup>10</sup> Gross tonnage is an adimensional indicator of boat capacity, calculated in terms of the volume of all interior spaces.

<sup>11</sup> The minimum wage on 1/1/2015 was R\$ 788,00. On 1/01/2016 it was raised to R\$ 880,00.

<sup>12</sup> For information on unemployment regulations, visit [http://www.mpa.gov.br/files/docs/Pesca/Defeso/tabela\\_defeso-2.pdf](http://www.mpa.gov.br/files/docs/Pesca/Defeso/tabela_defeso-2.pdf) and <http://www.ibama.gov.br/servicos-recursos-pesqueiros/defeso-aguas-continetais>.

physical or legal persons, to boost the competitiveness of national fishing activities, bringing the domestic price of this fuel in line with international prices.

This subsidy is provided through compensation to RGP-approved beneficiaries and is equivalent to up to 25% of the diesel fuel price billed at the refinery, without the Tax on the Circulation of Merchandise and Services (ICMS). According to the federal government, in 2014, 2,940 fishing vessels benefitted from the diesel fuel subsidy, in comparison with 1,937 in 2013 and 1,176 in 2012.

Increasing the income and improving the quality of life of fishers, traditional communities and the owners of small and medium-sized aquaculture operations is one of the priority activities of the Plan for Sustainable Development of Aquaculture and Fisheries in the Amazon (2009-2015). This plan was created to support sustainable growth and reduce social, economic and territorial inequalities, offering an alternative to the prevailing animal protein production systems and the deforestation of areas in the Legal Amazon. Its guidelines include promoting the integration of public programmes among the different levels of government and civil society; the rehabilitation, expansion and maintenance of infrastructure and logistical units, such as the Integrated Centres for Small-Scale Fishing and Aquaculture; docks; ice warehouses and factories; processing plants; refrigerated trucks; transport vessels; pisciculture fairs, markets and stations; and literacy courses and vocational training at the technical and intermediate level.

There are different sources of financing for the various instruments of the National Policy for Sustainable Development of Aquaculture and Fisheries. RGP maintenance and operation are funded with resources from the Federal Budget (OGU). The unemployment insurance benefit for small-scale fishers is financed by the Workers' Support Fund (FAT), under the Ministry of Labour and Social Security, whose main source of funding is contributions to the Social Integration Programme Fund (PIS) and the Civil Service Asset Formation Programme (PASEP). The credit lines are financed by the compulsory funds listed in the Rural Credit Manual: Rural Savings, BNDES, the Constitutional Financing Funds (FCO, FNE, FNO) and the Merchant Marine Fund (FMM).

## CHALLENGES

The changes introduced in the General Register of Fishing Activity within the framework of the national policy make the RGP an important instrument for increasing the visibility and recognition of small-scale fishers and for facilitating access by this population to specific public programmes that promote food and nutrition security.

The activities associated with the Register have made a significant contribution to the development, maintenance and strengthening of fishing communities.

The lessons learned from the implementation of activities and increased access have been the main reference for promoting changes in laws, regulations and administrative procedures to economically strengthen these organizations and the exercise of their rights.

Among these rights is the right to territory, which has been guaranteed by streamlining the demarcation of marine territories for small-scale fishing and of the lands of traditional peoples and communities; increasing the effectiveness of proposals for sustainable use permits (TAUS) in federally protected areas and regulating and promoting small-scale fishing in conservation units to encourage the sustainable use of these areas.

Another major issue is tailoring environmental licensing procedures to small scale fishing and family aquaculture practices, recognizing their particular characteristics, as well as simplifying administrative procedures and access by small-scale fishers to the DAP and RGP and, hence, PRONAF, PAA, PNAE and unemployment insurance, among other programmes. It is harder for artisanal fisherwomen to obtain the DAP and register with the RGP, because of difficulties proving their fishing and fish processing activities (CAISAN, 2014).

With regard to social participation, there is recognition that the representation of small-scale fishing and fisherwomen in the National Aquaculture and Fisheries Board could be diversified and that direct interaction between other government agencies working in this area and small-scale fishers' movements could be increased in all phases of public programmes targeting the sector.

Broadening the scope of the instruments of the National Plan for Sustainable Development of Aquaculture and Fisheries will require ongoing improvement of their regulatory aspects, the entities responsible for their implementation and the mechanisms for registration, concession, monitoring, evaluation and control to guarantee that the programmes effectively reach their target public.

One of the challenges from the standpoint of government coordination is improving the shared management of fish stocks to include other sectors of civil society directly affected by fishing activities, chiefly fishing communities –especially in the formulation of management plans (CAISAN, 2014; Silva, 2014). One possibility already identified by MAPA and MDA is a joint review of the regulations governing the closed season with entities of the Shared Management System to ensure the sustainable use of fish stocks.

The development and implementation of small-scale fishing and aquaculture policies is a recent phenomenon, but it has already revealed its great potential for guaranteeing food and nutrition security, boosting income and increasing the contribution of this sector to the sustainable development of local and regional economies.

## LEGAL FRAMEWORK AND BIBLIOGRAPHIC REFERENCES

**BRAZIL.** 2006. *Law No. 11,326 of 24 July 2006*. Establishes the guidelines for formulating the National Policy on Family Farming and Rural Family

Enterprises. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2004-2006/2006/Lei/L11326.htm](http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2006/Lei/L11326.htm). Accessed 30/9/2015).

**BRAZIL.** 2009. *Law No. 11,959, of 29 June 2009.* On the National Policy for the Sustainable Development of Aquaculture and Fisheries (ratifies Decree-Law No. 221, of 1967). (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2009/Lei/L11959.htm](http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/Lei/L11959.htm). Accessed 30/9/2015).

**BRAZIL.** 2009. *Decree No. 6,981, of 13 October 2009.* On the joint action of the Ministries of Fisheries and Aquaculture and Environment in matters related to the sustainable use of fish stocks (regulates Art. 27, § 6, I, of Law No. 10,683, of 2003). (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2009/Decreto/D6981.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Decreto/D6981.htm). Accessed 30/9/2015).

**BRAZIL.** 2015. *Decree No. 8,425, of 31 March 2015.* On criteria for registration with the RGP and for obtaining authorization, a permit or a license to fish. (Available from [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2015-2018/2015/Decreto/D8425.htm](http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2015/Decreto/D8425.htm). Accessed 30/9/2015).

**CAISAN.** 2014. *Subsídios para a discussão sobre “O papel da Pesca Artesanal e da Aquicultura Familiar na Segurança Alimentar e Nutricional” na XIV Plenária do CONSEA.* Brasília, 28 May 2014. 21 pp. (Available from <http://www4.planalto.gov.br/consea/eventos/plenarias/documentos/2014/subsidios-da-caisan-para-a-discussao-sobre-201co-papel-da-pesca-artesanal-e-da-aquicultura-familiar-na-seguranca-alimentar-e-nutricional201d-na-xiv-plenaria-do-consea>. Accessed 30/9/2015).

**IBAMA.** Undated. *Portal Ibama. Recursos pesqueiros.* (Available from <http://www.ibama.gov.br/institucional/recursos-pesqueiros>. Accessed 30/9/2015).

**MPA.** 2015. *Plano Safra Pesca e Aquicultura 2015/2016. Um caminho para o crescimento dos brasileiros.* Brasília: MPA, 2015. 120 pp. (Available from [http://www.mpa.gov.br/files/docs/Planos\\_e\\_Policas/plano\\_safra/Livro\\_do\\_Plano\\_Safra.pdf](http://www.mpa.gov.br/files/docs/Planos_e_Policas/plano_safra/Livro_do_Plano_Safra.pdf). Accessed 30/9/2015).

**MPA and MMA.** 2009. *Interministerial Decision/MPA/MMA/ No. 02 of 2009.*



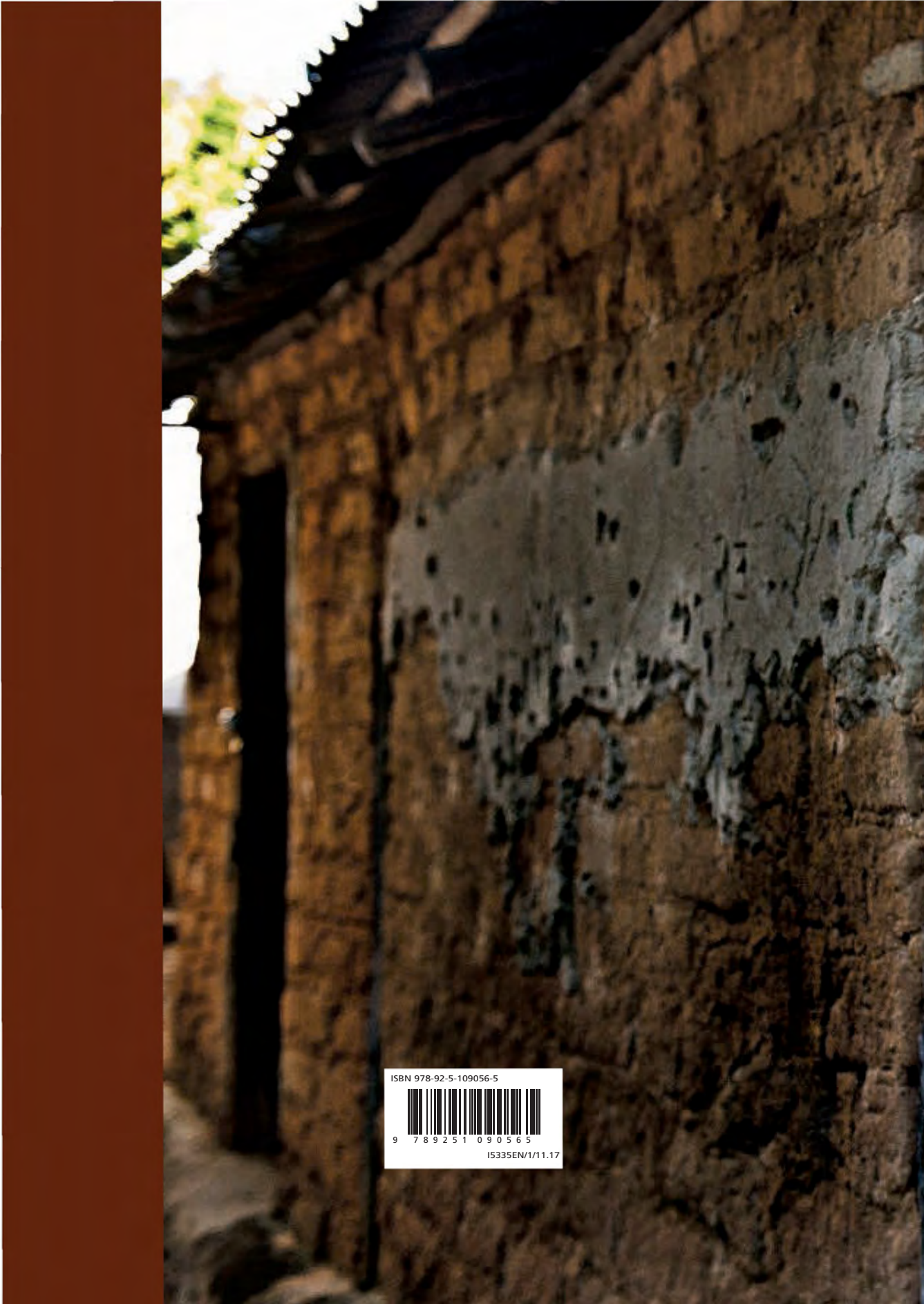
Regulations for the shared management system for sustainable use of fish stocks. (Available from [http://www.icmbio.gov.br/cepsul/images/stories/legislacao/Portaria/2009/p\\_mpa\\_mma\\_02\\_2009\\_regulamentagestaocompartilhada\\_regulamentar\\_dec\\_6981\\_2009.pdf](http://www.icmbio.gov.br/cepsul/images/stories/legislacao/Portaria/2009/p_mpa_mma_02_2009_regulamentagestaocompartilhada_regulamentar_dec_6981_2009.pdf). Acessado em 30/9/2015).

**MTE.** 2016. *Portal do Trabalho e Emprego. Seguro-Desemprego.* (Available from [http://acesso.mte.gov.br/seg\\_desemp/](http://acesso.mte.gov.br/seg_desemp/). Accessed 4/1/2016).

**SEAP.** 2004. *Regulatory Instruction SEAP No. 03, of 12 May 2004.* RGP implementation standards and procedures. (Available from [http://sinpesq.mpa.gov.br/rgp\\_cms/images/publico/CGRA/instrucao\\_normativa\\_03\\_de\\_12mai04-rgp.pdf](http://sinpesq.mpa.gov.br/rgp_cms/images/publico/CGRA/instrucao_normativa_03_de_12mai04-rgp.pdf). Accessed 30/9/2015).

**SILVA, A. P.** 2014. *Pesca artesanal brasileira. Aspectos conceituais, históricos, institucionais e prospectivos.* Palmas, TO: Embrapa Pesca e Aquicultura, 2014. 32 pp. (Boletim de Pesquisa e Desenvolvimento nº 3). (Available from <http://www.infoteca.cnptia.embrapa.br/bitstream/doc/995345/1/bpd3.pdf>. Accessed 30/9/2015).





ISBN 978-92-5-109056-5



9 789251 090565

IS335EN/1/11.17