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From Fome Zero to Zero Hunger:

A global perspective

José Graziano da Silva (Coord.)

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Foreword

We are now approaching 2020, which means that one third of the time set to reach the Sustainable Development Goals has passed. What we have seen is a growing commitment across the world to the Zero Hunger agenda. Countries are advancing in setting up platforms that will be able to show how much they progress each year. The United Nations system and development partners are working hard to facilitate these mechanisms, establishing monitoring frameworks and platforms for reporting as well as promoting policy dialogue and the exchange of experiences among countries and partners, taking into consideration each of the 17 goals.

FAO has an important role to play as an organization that has been strongly committed since its foundation to eradicating hunger across the globe. This means that FAO can use, and is using, all of its expertise to support countries in formulating, implementing, monitoring and evaluating policies, programmes, strategies, policies and initiatives that contribute to a world that is food secure, i.e. where everybody can access food that is sufficient in terms of quantity, quality and regularity.

However, FAO is not alone in this task. Many countries have been doing their homework for decades. One of FAO's roles is precisely to learn from these countries' successful experiences and share those lessons with other countries. The Brazilian Zero Hunger initiative is one such example. Launched in 2003, it was the main factor that enabled the country to swiftly achieve the first Millennium Development Goal and then to eradicate hunger by 2014.

Many countries were inspired by Brazil's Zero Hunger strategy, which was undoubtedly one of the key elements that contributed to the election of José Graziano da Silva as Director-General of FAO in 2011. It is therefore fitting that he conclude his term of office with a book showing how this initiative became an inspiration across the world under his mandate.

Indeed, this book not only traces the evolution of the implementation of Zero Hunger over the years, but shows how its principles and concepts took root in all regions, from Latin America and the Caribbean to Africa and Asia. The book presents the different contributions made by the partners involved, from the whole UN System – through the Zero Hunger Challenge – to family farmer platforms, civil

society, and parliamentary fronts against hunger and malnutrition. It also looks at the challenges that the world is facing in achieving food security and nutrition for all, including rising obesity, climate change and, most alarming, the recent reversal in progress towards reducing hunger.

We still have 10 years left to achieve the Sustainable Development Goals. This book will help to guide us towards the collective goal of a world free from hunger and malnutrition.

Qu Dongyu

Director-General of FAO (as of 1 August 2019)

Introduction

The fight against hunger: from the Brazilian experience to a global commitment

For millennia, the lives of people, communities and civilizations have been marked by a permanent threat. That threat is hunger, a scourge that leads to weakness, desperation and, in the most extreme cases, death. Escaping hunger has been one of the main common threads throughout history, causing large-scale migration, wars, conflicts and enormous sacrifices. But it has also given rise to unexpected alliances and served to sharpen human ingenuity and consolidate solidarity and fellowship between communities.

As a result of that ingenuity, that solidarity and the human inclination to escape the shackles of need, the second half of the twentieth century saw a significant increase in food production.

Although that increase took – and still takes – a considerable toll on the planet’s natural resources, it helped to keep pace with population growth and to reduce the episodes of famine that periodically plagued much of the world. It has now been several decades since our incapacity to produce enough food for all stopped being the reason why hundreds of millions of people are not eating enough for a decent and fulfilling life.

Today, on the contrary, we produce more than enough food for the entire global population and even waste enormous amounts each year. If, at the end of the second decade of the twenty-first century, more than 820 million people are trapped in the vicious circle of hunger, this is primarily due to a lack of political will to eliminate its root causes.

If it has been done before, it can be done again

Recent history provides us with examples that if we want to get something done, then it can be done. Such examples include the rebuilding of Europe after the Second World War and the more recent case of Brazil. At the dawn of this century, in 2000, more than 11 in every 100 Brazilians were not eating enough.

As was the case in dozens of other countries, millions of people in Brazil were trapped in an endless spiral of hunger, poverty and lack of opportunities that was

repeated generation after generation. At that time, right at the turn of the century, the United Nations members set certain targets in order to achieve a fairer and more decent world by 2015.

The aim of the Millennium Development Goals was that by 2015 all nations would reduce the percentage of hungry people among their inhabitants by half with respect to 1990. But in Brazil, as of 2003, the Government decided to be even more ambitious. Reducing hunger was not enough. It had to be eliminated. “Fome Zero” (Zero Hunger) was the motto chosen, which even became the name of a ministry dedicated specifically to the task.

In order for expressions of goodwill to have meaning, they must be followed by effective decisions and programmes. And that requires funding. One of the characteristics of the Brazilian case is that the political commitment led to plans and investments aimed specifically at rescuing millions of people from hunger and poverty. The economy was growing fast and the country decided that the hungry had to be specifically taken into account in its budgets and to receive their share of the increasing wealth. The plan prepared by Luiz Inácio Lula da Silva’s Executive focused on breaking the vicious cycle and turning it into a virtuous one, where food production, the country’s macroeconomic policy and social protection systems and programmes would be coordinated and would feed back into each other. For instance, the federal government started to provide nutritious school lunches for children from the most disadvantaged neighbourhoods.

As well as improving their diet, this encouraged them to attend class. Moreover, the food was bought from small-scale farmers in vulnerable situations, which enabled many excluded families to benefit from a source of income that allowed them to improve their circumstances and develop their businesses. This system was complemented with other policy initiatives, including credit subsidies, capacity development activities, and subsidies and grants programmes, adding up to 30 different measures included within different social and developmental programmes.

A global commitment

Since then, the Zero Hunger programme (developed by economist and agronomist José Graziano da Silva, then Special Minister for Food Security in Brazil and FAO Director-General, 2012–2019) has been considered one of the major successes in hunger and poverty reduction at the international level. Now seen as a model, the programme and its components are being replicated and adapted by countries aiming to move in the same direction.

By 2015, the world in general had made considerable progress: whereas in 1990, 23.3 percent of the planet’s inhabitants were not eating enough; 25 years later,

that number had dropped to 12.9 percent. Seventy-two countries (from the Plurinational State of Bolivia to Nepal and from Mozambique to Uzbekistan) managed to reduce hunger by half on time.

However, the overall objective was not achieved and in 2015 there were still 780 million hungry people in the world. Brazil, for its part, took less than a decade to join the ranks of “hunger-free” countries. The country reached Zero Hunger in just a few years as a result of its political commitment, reflected in effective investments and programmes.

In fact, Latin America was a pioneer in taking on this challenge and is the region that has made the most progress in terms of hunger and poverty reduction since the start of the twenty-first century. At the end of the 1990s, there were 66 million people (14.7 percent of the region’s population) suffering from hunger and without access to the food needed for a healthy life. Within a decade and a half, that percentage dropped to five percent and the number of people affected decreased by 34 million (bearing in mind, moreover, that in that period the population increased by some 130 million).

The region’s success story is the result of the countries’ top-level political commitment in a context of macroeconomic and political stability that facilitated greater public spending on social programmes aimed at the most vulnerable in society, although progress has been slowing in recent years. Inspired and impressed by advances in the fight against hunger, then United Nations Secretary-General, Ban Ki-moon, made an appeal to world leaders and to all actors from both civil society and the private sector during the 2012 Rio+20 Conference on Sustainable Development. That appeal, known as the Zero Hunger Challenge and supported by the entire United Nations system, called on countries to redouble their efforts to eliminate hunger from the face of the earth once and for all.

Subsequently, numerous initiatives under the umbrella of Zero Hunger were launched in Asia and the Pacific in 2013. African Heads of State also joined the initiative in 2014 by adopting the Malabo Declaration, which determined to put an end to hunger on the continent by 2025. Lastly, the entire international community took on the global target of Zero Hunger by 2030 when it was included as a Sustainable Development Goal (SDG 2) in the ambitious agenda adopted by all world leaders at the United Nations headquarters in 2015.

However, implementation of the SDGs has so far failed to produce positive results. In 2016, hunger increased for the first time after over a decade of decline and reached more than 820 million people in 2018. According to most experts, the combination of conflicts and climate disasters is behind this increase.

This upward trend should serve as a warning that things need to change if we really want to eliminate all forms of malnutrition by 2030. Recognizing the right of all people to adequate food, as an increasing number of countries are doing (thanks above all to parliamentary alliances between different political groups united against hunger), is a step in the right direction, but declarations alone are not enough.

It is still possible

FAO insists that we still have time to achieve SDG 2, but that this will require strengthening global commitment (and investments) and preventing hunger, food insecurity and all forms of malnutrition from losing prominence on the global agenda due to other emerging issues, such as migration or climate change, which are also related. No plan for ending poverty and hunger will be worth the paper it is written on if it lacks the funding (which demonstrates real commitment) to be put into practice. In this regard, investments from traditional development actors (cooperation from developed countries or organizations such as the World Bank) will not be enough.

Developing countries must be capable of mobilizing more resources and the involvement of the private sector will probably have to go beyond small corporate social responsibility projects. However, even in places with political will, specific programmes to fight against hunger and the money to implement them, there are cases where progress is not visible or advances are too slow. This requires an analysis of what is going wrong: where are the bottlenecks that are undermining the effectiveness of the efforts made and which efforts are indeed yielding results?

There is little use, for example, in investing in improving the capacity of vulnerable coastal communities to fish and to process fish if there is no fight against the illegal fishing that is decimating stocks and, therefore, the number of potential catches among these communities. Nor is it very effective to allocate funds to supporting family farmers if women (and the households they sustain) are excluded from those programmes for legal or cultural reasons.

In some cases, such as in the Horn of Africa or the Dry Corridor of Central America, a focus is needed on generating resilience among those who live off agriculture and livestock farming in the context of an increasingly unpredictable climate. In others, such as in West Africa, an enabling environment is needed to develop agro-industry and create opportunities and jobs for a growing population. In addition, in places such as the small island states of the Pacific or the Caribbean, the economic impact of the population's dependency on food imports will need to be mitigated.

The recipe for Zero Hunger must be specific to each territory and its circumstances. However, the example of Brazil reveals a necessary ingredient for any recipe to

work: the adoption of measures to make food systems inclusive and sustainable not only in environmental terms, but also from the social and economic point of view. As long as food systems (with all their elements and actors, from seed to table), urban systems and transport systems are geared solely towards economic growth and profit, it will be hard to make progress towards SDG 2 (or indeed any of the other SDGs). Constant urbanization; population growth; climate change; the deterioration of natural resources, biodiversity and micro-biodiversity; irregular allocation of budget to social policies; and the emergence of disruptive technologies present both obstacles and opportunities in the fight against hunger.

The key to success, as shown in different examples around the world, from post-war Europe to Brazil in the 2000s, and including other places that have experienced progress, such as Ethiopia and Bangladesh, requires placing the hungry and the poor centre stage and ensuring that they too enjoy the fruits of economic growth. While the criteria of inclusion, efficiency, equity and sustainability are being incorporated into economic activity (particularly in food systems), we need to invest words, actions, laws, programmes and resources to free humanity from this age-old scourge, which today comes in many guises, including undernutrition, obesity and micronutrient deficiencies. Brazil reached Fome Zero in one decade. Eliminating hunger is not a technical matter or one linked to food production. It is a matter of will. Zero Hunger is still possible.

From Fome Zero to Zero Hunger: a global perspective

It is in this perspective that this publication addresses the dynamics and hopes underlying the transformation of a national project to eradicate hunger, the Brazilian Fome Zero strategy, into the international challenge of achieving Zero Hunger by 2030. It does so by echoing a first book by Graziano da Silva *et al.* (2013)¹ that looked at the evolution of the Brazilian Fome Zero programme, critically assessing its beginnings, its implementation and the results achieved. In a range of articles, the publication aimed to share the design and reach of the programme, but also to analyse its main technical and political features.

In fact, Brazil has stood out internationally these past two decades for its impressive achievements in terms of socio-economic development. Among the country's greatest accomplishments is the eradication of hunger, formally recognized in 2014 when Brazil was removed from the FAO Hunger Map. It is also estimated that 39.5 million people were lifted out of poverty between 2003 and 2016, while the Gini coefficient fell from 58.1 to 51.5 and the revenues of the poorest 40 percent grew 7.1 percent in real terms.

1 Graziano da Silva, J., Del Grossi, M. & Galvão de França, C. (eds). 2013. *The Fome Zero (Zero Hunger) Program: The Brazilian experience*. Ministry of Agrarian Development. Brasília, DF, Brazil.

From Fome Zero to Zero Hunger: a global perspective seeks to contribute to recent international efforts to promote a comprehensive approach that addresses the different and interrelated causes of hunger and malnutrition. Considering that the number of hungry people is still growing, it is critical to review recent global initiatives in the fight against hunger and poverty in order to renew perspectives, strengthen actors' technical expertise and political capacity to engage with this agenda, and promote a sustained commitment to achieve Zero Hunger. Hence, building on the previous publication on *The Fome Zero (Zero Hunger) Program: The Brazilian experience*, this new book gathers a diversity of experiences, approaches and visions that have helped advance Zero Hunger as a global development goal. In doing so, it highlights successful contributions to meeting this agenda, while critically assessing current and future challenges and proposing new ways forward. In this regard, the publication's main goal is to provide useful inputs and concrete evidence for policymakers, governments, experts and members of the academia to support the debate, design and implementation of effective Zero Hunger policies.

The first chapters offer a comprehensive narrative of how the Fome Zero programme was implemented in Brazil, to what extent it guided the Zero Hunger Challenge, and how the latter framework is now shaping regional and national actions towards meeting this goal. The chapters that follow look at different angles of the recent accomplishments and lessons learned from the Zero Hunger agenda and the way forward.

Political commitment at the highest level is essential to achieve Zero Hunger. The first chapter addresses this commitment by examining the experience of the Fome Zero programme in Brazil in the words of former Brazilian President Luiz Inácio Lula da Silva.

The Brazilian Fome Zero strategy continues to be a milestone programme for the eradication of hunger, both in terms of design and of implementation. Chapter 2 revisits this experience and updates its impact in today's Brazil.

The Hunger-Free Latin America and the Caribbean Initiative led by Brazil and Guatemala marked the first engagement at a regional level to fight hunger and malnutrition. The Initiative and its positive developments are presented in Chapter 3.

Following these first two important experiences, the launching of the Zero Hunger Challenge (ZHC) in 2012 transformed the fight against hunger into a global commitment. Chapter 4 revisits the vision and the goals that underline this important framework.

Regions have great potential in leading the transformation of the ZHC goals into concrete actions. Chapters 5 and 6 present the different initiatives undertaken in Africa and in Asia and the Pacific to further develop this agenda.

The right to food must be upheld as its guiding principle. Chapter 7 analyses the importance of adopting a rights-based approach to the fight against hunger, while Chapter 8 highlights the key role played by parliamentary fronts in translating such an approach into regional and national efforts to enshrine the fight against hunger in legal frameworks and in long-term public policies.

Family farming plays a central role in securing more sustainable food systems. In this sense, Chapter 9 discusses the potentialities of the UN Decade of Family Farming 2019–2028 in contributing to the Zero Hunger agenda. Chapter 10 debates the shortcomings of the Green Revolution and the need to promote a transformative agenda to ensure the implementation and transition to sustainable food and agricultural systems in countries.

The programme has become an international reference and supported developing countries in their efforts in addressing hunger and poverty eradication. Chapter 11 analyses the synergies between Fome Zero and SDG Goals 1 and 2, while drawing attention to some of the complexities of implementing this agenda.

Finally, building on the lessons of Fome Zero in Brazil and after an 8-year mandate as Director-General of FAO, Graziano da Silva discusses the present and future challenges of the Zero Hunger agenda in Chapter 12.

Persistent and new adversities triggered by conflicts, economic crisis and climate change call for continued political commitment and effective action to fight hunger. Strengthening this commitment at all levels and implicating all relevant stakeholders is key to ending a scourge that can no longer undermine people's right to a dignified, healthy and productive life. The present publication aims to contribute to this agenda by sharing past and present experiences and lessons from the Zero Hunger agenda and by shedding light on current obstacles and future challenges.

Eradicating hunger: A political will

Luiz Inácio Lula da Silva¹

Excellency, Chairman of the 39th FAO Conference, Mr Ropati, my dear friend José Graziano da Silva, Director-General of FAO, my dear friend Her Excellency Michelle Bachelet, President of the Republic of Chile, my dear friend His Excellency Ibrahim Boubacar Keïta, President of Mali, His Excellency Commodore Josaia Voreqe Bainimarama, Prime Minister of Fiji, dear friend His Excellency Domingos Simões Pereira, Prime Minister of Guinea-Bissau and dear friend His Excellency Ralph Gonsalves, Prime Minister of Saint Vincent and the Grenadines. Dear friends, Ministers, Heads of State, Delegates to the 39th Conference and dear brothers and sisters, I would like to thank you all for the honour of being invited by FAO to its 39th Conference to deliver a lecture paying homage to Frank McDougall, one of the great inspirers of this Organization, who fought for the cause of food in the world.

In truth this honour belongs to the Brazilian people for the success achieved in overcoming hunger and poverty in my country. This is an opportunity to recall the historical ties between FAO and Brazil which is one of the 44 countries that founded this great Organization at the 1943 Conference. In the 1950s, working side by side with Frank McDougall was one of the most important Brazilian scientists, Josué de Castro. He devoted his life to studying the deeper roots and causes of hunger in Brazil and in the world and he wrote two fundamental books on the issue – *The geography of hunger* and *The geopolitics of hunger*. Josué de Castro's ideas have helped us to understand that hunger is not a natural phenomenon. It is a social phenomenon caused mainly by uneven economic structures. Josué de Castro alerted us to the fact that “*hunger and war do not obey any natural law, they are human creations*”.

In January of 2012, another Brazilian came along to give his contribution to FAO: Professor José Graziano da Silva was elected Director-General, expressing a broad consensus among countries to discuss hunger much more seriously. To our great

¹ This chapter consists of the text of the twenty-ninth McDougall Memorial Lecture, delivered to the FAO Conference in 2015.

joy, our brother José Graziano served his first term honouring the life commitment that brought him here: a permanent fight against hunger and extreme poverty. Along with other multilateral organizations, governments and civil society of many countries, FAO acted boldly so that the highest number of countries could meet the food security targets of the Millennium Development Goals. Seventy-two countries have reached the target of halving the number of people in their population subject to hunger, and 29 countries achieved the more ambitious target of the World Food Summit.

It was with great pride that we received, last year, the news that Brazil was no longer on the map of hunger. This means that we are watching the first generation of Brazilians grow up without having to face the drama of hunger. The Brazilian experience has proven that it is indeed possible to overcome hunger when the fight against extreme poverty is escalated to national policy with resources that are guaranteed in the budget; when social programmes on food, health, education and support for family, small- and medium scale farmers are combined; when permanent strategies are adopted for income distribution, job creation, and wage growth. This is the reason I would like to share with all of you the way in which we achieved this success.

Besides paying homage to the FAO founders, I would also like to pay homage to three of our brothers who dreamt of ending hunger 12 years ago. Yet in these 12 years, those brothers have helped us to end hunger in Brazil.

First I would like to pay homage to my brother José Graziano, our FAO Director-General, who led the design of the Zero Hunger programme even before we were in the government. And then he became the first Extraordinary Minister for the Fight against Hunger in Brazil. God knows how mercilessly he was criticized by the Brazilian media because he said that the poor needed to receive cash transfers. Another brother who we should also pay homage to is Minister Patrus Ananias, who was the Minister for Social Development and the Fight against Hunger and who is now the Minister for Agrarian Development and is attending this Conference. And my sister Tereza Campello who is currently Brazil's Minister for Social Development and the Fight against Hunger: She is responsible for coordinating the Programme to Fight Hunger, Bolsa Família, the family grant programme, and the Brazil without Extreme Poverty Programme set up by President Dilma Rousseff. I would like to pay homage to these three people because today I can come here and give my testimony that it is indeed possible to end hunger in the world. We need to want it.

In 2002, the year when I was elected President of Brazil, 11 million families were surviving on less than one dollar a day in Brazil. More than 50 million people were going

hungry; almost one third of the Brazilian population at that time. Children were sentenced from birth to suffer from malnutrition and diseases and if they did manage to survive they were sentenced to the stigma of extreme poverty and social exclusion. Millions of mothers and fathers were permanently afflicted because they had no means of providing their family's daily bread. In reality, the Government only governed for one-third of the population, while the great majority were forgotten as if we did not all live in the same homeland. In my inaugural speech, I said that I would have fulfilled my life's mission if by the end of my term every Brazilian could eat three meals – breakfast, lunch and dinner – every day. We prepared ourselves for this challenge by travelling around the country, holding discussions with scientists and social organizations and studying international and local experiences. Then we developed the Zero Hunger programme under the coordination of our dear José Graziano.

The Zero Hunger programme is a coordinated set of public policies involving cash transfer, credit to family farmers, land reform, healthcare, education, school meals, and vocational training, amongst many other government actions. Such a broad strategy could only work with the participation of civil society and that is why we created the National Council for Food and Nutrition Security, made up of various representatives of civil society in Brazil. The Council worked to formulate the programmes and today continues to oversee them, assess the results, and draft new food security strategies.

The best-known part of the Zero Hunger programme is Bolsa Família, a family grant programme that pays a monthly income to the poorest families provided three conditions are met: their children are attending school, the children are having all their vaccinations and pregnant women are undergoing all the medical examinations recommended by the World Health Organization. The Bolsa Família or family grant is considered one of the best conditional income transfer programmes in the world and now serves 14 million families or 54 million people. President Dilma Rousseff has improved the strategy, developing a new programme called Brasil Sem Miséria, or Brazil Without Extreme Poverty, supplementing the necessary income to ensure all families served by the programme remain above the poverty line. This may come as a surprise, but we did not spend much money on this.

If Presidents decide to wait for the finance sector of Government, or for the Finance Minister to tell them there is leftover money available, they would never succeed in developing a cash transfer programme, because there would always be some newspaper claiming that the money would be better spent building a road. Someone would always say that it would be better to invest in building a bridge. Someone would always say that another Government priority should come before the poor because there is global tendency to treat the poor as statistical data. They are simply a

beautiful number, a statistic to be used during electoral campaigns. But after the election campaign is over, this statistic vanishes from the minds of most people who win elections.

I want to prove that in Brazil we spent only 0.5 percent of the GDP. We spent half a percent of our GDP looking after the 54 million people who were not getting enough calories and proteins to survive in our country; 0.5 percent of the GDP. We achieved the miracle of no longer treating the poor as simply statistical data, a number, a figure; instead we treated the poor as human beings, as men, women and children who had the same right to eat as many calories as the richest man in the country could afford. And this should certainly be possible and everybody can do it, even if it takes a while. If we do not start today, the only thing that we can be sure of is that the number of poor in the world will increase. So we have a great responsibility. The Brazilian case demonstrates that lack of priority rather than lack of money is the main factor determining our success.

The major hurdle that we faced when implementing our social protection programme was prejudice by the Brazilian media and by some privileged sectors of society. They claimed that the Bolsa Família, the family grant programme, would encourage laziness and idleness; people would not want to work anymore but would just live on the programme; it only amounted to a pittance that the Government doled out to beggars – and that it was a way of biasing people in to vote for Lula in the upcoming elections. An unimaginable amount of negative press coverage was directed against the Zero Hunger programme. Who would have thought that giving meals to the poor would have caused such indignation and outcry amongst those who are able to eat more than three meals a day?

This was absurd and we were iron-willed to make the programme a success. Critics then said that the Government had to announce an exit strategy out of poverty, say how long it would continue to hand over money to the poor and explain the way out of this programme. My response was, how could we talk about exit before the poor had even walked in the door. Very well. Our stubbornness won the day and our practical experience demonstrated that all the criticism was completely unfounded. I know that same thing is now going on in many other countries that are adopting conditional income transfer programmes. This is why I want to highlight some lessons that we in Brazil learned with the income transfer policy represented by the Bolsa Família, the family grant programme.

The programme did not lead to laziness as many would claim. Quite the opposite: more than 70 percent of the heads of households enrolled in the programme had a stable job although their income was not enough for them to live on. The Bolsa Família does not replace work or jobs. It supplements family income to help people

break out of the poverty cycle. The guaranteed basic income also frees citizens politically because they are no longer forced to exchange their vote for a pair of shoes or for a kilo of beans as was very common in Brazil before the *Bolsa Família* programme. A basic income is a public right that has been gained by people who were always previously overlooked in Brazil. To guarantee this right in a democratic way, we set up a single national registry of families living in a situation of poverty. This single national registry is overseen by the General Attorney's office and is updated constantly.

Mr Chairman if you would permit me to address my colleagues at FAO: if you do not have a proper national register that you can use to locate the person who will receive that benefit, you may think that you are handing over money to the poor but the money may actually stay in the hands of the middleman. This is the reason I continually insist that one of the most extraordinary achievements of the *Bolsa Família* programme has been to set up a single national registry so we have direct information about where recipients live. The payment itself is made without human intervention. It is made through a magnetic card of a state-owned bank without any red tape and middlemen. It is an ATM card, and the people who withdraw the money do not owe any favours to anyone. They receive their money through these electronic cards and they can do whatever they wish with the money.

Back in the old days in Brazil, food baskets were distributed to the poor: you received a box containing salt, three kilos of beans, and two kilos of rice. We thought that the best thing that we could do to guarantee the independence of those needing support from the Government was to give them the money in cash so that they could buy whatever they wished and in the quantity that they wished. Then we did something different, something that the women of Brazil demanded of me: the magnetic card or the ATM card that we use is issued in the mother's name instead of the father's name for a very simple reason. Almost everybody here is married or we know someone who is married, and we all know that our sisters are better at taking care of the family and they are more committed to doing so. I think that men might be tempted to enjoy drinking a few beers in a pub with that money. Men might think of spending a dollar here and there on beer and this is the reason we prefer to hand over the ATM card to the women because we know that women will buy the daily bread and milk that their children need to survive. The programme is a complete success because 99 percent of the cards in Brazil are given to women to help them take care of their children. As a result, women achieve a new position, a much more relevant and respected position in their families as well as in their local communities.

So my dear friends, transferring income to the poor is ultimately very beneficial to the country as a whole because it increases demand, business, production and

job creation. It generates a virtuous cycle of development. One story I always tell is about Guaribas, the first city in Brazil to receive the Zero Hunger programme. This a very poor city, located in one of the poorest states in Brazil. After the city started to receive the Zero Hunger programme, the first sign of individual entrepreneurship appeared. A woman set up a beauty parlour and for the very first time the poor women in that city had enough money to go there and have their hair done. A lot of people said those women could not do that. I said that yes, most certainly they could do it. They watch privileged ladies going to the beauty parlour every day so why should they not go to a beauty parlour themselves once? An income transfer policy therefore allowed thousands of entrepreneurs to surface in Brazil. This was another way of proving that a very simple income transfer to the poor will allow the growth of a new service industry throughout our country.

Another important thing was the strengthening of agriculture. This was extremely important because agriculture was essential to the food security strategy and Brazil has almost doubled its agricultural output over the last twelve years. The figures that I am going to give you cover large and small-scale farming, but the financing of agriculture in Brazil increased from R\$ 21 billion to R\$ 180 billion, which equates to growth of R\$60 billion.

Even more important than the increase in output and the most important factor contributing to growth in output, was land reform and here I refer to my dear José Graziano: his father was my advisor at the time when Graziano was a full time professor at university.

Graziano's father, who was a great farmer and committed to humanitarian ideals was the one who started the family dream that led to his son being appointed Director-General of FAO.

In these 12 years since 2003 we made 51 million hectares of land available for the land reform programme in Brazil. That accounts for 51 percent of all the land made available for reform in five hundred years of Brazil's history. We did it in twelve years. We achieved 51 percent of everything that was done in five hundred years.

It was no easy task as you can imagine, but we managed to prove that it is certainly possible to do it and Brazil has approximately four million family farms, which account for 70 percent of the food production reaching the tables of Brazilian workers.

These medium-sized and small-scale family farm holdings are responsible for the food reaching our tables because agroindustry is more geared toward export and the credit supplied to family farmers went up from R\$1 billion in 2003 to R\$10 billion in 2014.

Land, credit, technical assistance, sun and rain were therefore all that the country needed to achieve a qualitative leap forward in generating income transfer to the Brazilian poor. We also adopted a very efficient system for crop insurance as well as a minimum purchase price policy to offer stability and guarantee future prices for small farmers. This is important because if the Government does not offer guarantees for family farmers, they will lose when there is a lot of rain and their crops are destroyed by flooding, and they will lose when there is too much sun, and their crops are destroyed by droughts. When they manage to produce, the marketplace does not guarantee a minimum price for their products and they sometimes need to give it away almost for free.

The Government has therefore agreed to guarantee a minimum purchase price so that small-scale family farmers know that they will never lose out; they will produce and will be able to sell their goods.

We have also passed an act in Congress to set up a school meal programme in Brazil that gives out school meals to 47 million children every day in Brazil's public schools.

Every day 47 million children receive at least one school meal per day until they are 17 years of age, if I am not mistaken. With the primary aim of helping local development, we approved legislation that makes local governments purchase 30 percent of food for school meals locally from family farmers with the aim of disseminating and increasing local agricultural production and developing a local market ensuring that money circulated in these small towns.

This local support for family farmers was an extraordinary achievement. We also invested in environmental education, offering incentives – some financial – for preserving native forests and spring water.

Minister Tereza Campello, who is with us today, is responsible for a revolution that took place during President Dilma Rousseff's Government. Minister Patrus initiated a programme that was ultimately so successful that the Northeast region, the most arid in the country, managed to build more than one million water cisterns to collect rainwater so that people could have drinking water. One million two hundred thousand water cisterns have been built. Now they have invented something called a productive water cistern that is able to collect a little more water so that families can not only have drinking water but also grow produce in their gardens or give water to their animals or livestock. I wish this new programme every success.

We developed another very important programme called Electricity for All. One day, President Dilma, who used to be Minister for Energy, brought me a document showing that two million people in Brazil had no access to electricity in their homes.

I asked her to come up with a programme that would allow us to take electricity to all homes. There were people living five hundred metres away from a hydroelectric power plant who had no access to electricity. Some people had never watched Brazil play football on television. I had already run for and lost three elections for the presidency and some people had never seen me as a candidate on television.

I therefore decided to develop an ambitious government programme called Electricity for All. I know many people here in this room will have experienced living in a house where the only source of light was a kerosene lamp: we used to call it a *candeeiro*.

You had to carry the lamp around. The light it gave off was like candlelight and the women would sew under it even though they could hardly see. People had to live as if they were in the eighteenth century and even today people in many parts of the world have to make do with candlelight.

We developed a programme that levied a small fee on consumers who could afford to pay more as part of the electricity bill. With R\$ 28 billion we took free electricity to people living in remote areas in Brazil.

To give you an idea of what this meant, one 70 year old woman who had never seen an electric light was so scared of the electricity when she turned on the light that she ran out of her house: she was dazzled by so much light.

There is another story that I have told many times in Brazil but it is the first time that I am going to tell it here.

When we put electricity into the home of a woman living in a very poor part of Brazil, she kept endlessly turning the lights on and off, on and off, on and off. When her husband asked her why she was turning the lights on and off, she replied that she was doing it because she had never seen her child asleep before.

Touching stories like this illustrate the impact of social programmes that we must develop in our countries. They offer people who have never had anything in their lives an opportunity to have the bare necessities. The Electricity for All programme created almost 500 000 jobs privileging local businesses since the idea was to create and develop income at local community level.

This miracle meant that the percentage of the population with access to power increased from 78 percent to 97 percent, affecting fifteen million people.

When we started to develop the Electricity for All programme, once again people voiced their prejudices, saying that Lula and the Government only think of the poor, and nothing for those living in big cities.

Interestingly enough, 79 percent of the households that had power put into their homes bought TV sets. Seventy-three percent bought refrigerators. Fifty percent bought other electrical appliances, various kinds of equipment and water pumps.

We actually sold 2.4 million TV sets and 2.2 million refrigerators because of the Electricity for All programme alone. We also installed seven million electricity masts, one and a half million transformers, and one and a half million kilometres of electric cables and wires. To illustrate what this means: one and a half million kilometres of electrical wires or cables would encircle the earth thirty-five times.

No private company, however humanitarian, would ever have done that because it would not have been profitable. It was simply socially fair and ethically necessary and only the Government could have taken this responsibility.

I would like to tell you about another important achievement under the income transfer programmes. You may recall that in early 2008 at the time of the food crisis, people started to voice concerns that the prices of soybean, other food commodities and oil were very high.

At first the blame was put on China because now it is fashionable to blame China for everything; the Chinese were the ones who were buying everything and that is why everything was so expensive. But then we discovered that China was not responsible. The future markets had much higher oil reserves than China and were buying up the soybean production.

Ultimately, the very financial system that underwent meltdown in 2008 was speculating with the agricultural production on future markets causing a lot of problems to the poorest countries in the world.

I therefore developed a programme called More Food [*Mais Alimentos*] and we decided to finance agricultural machinery to increase the production of family farmers in Brazil. Amazingly enough, this programme sold 58 000 tractors and 28 000 small trucks as well as thousands more small trucks and vans.

I believe the programme sold 14 000 harvesters at very low interest rates under long-term finance schemes, which was the only way for small farmers to gain access to funding. The More Food programme was extended to Africa and Latin America.

I am not sure whether sales have started yet, because it takes a while after the programme is launched to go through the bureaucratic formalities. The time lag is sometimes longer than our term in office. I know because I went to Ghana recently and they have been waiting for funding for three years.

I know this programme is being rolled out to other countries, which are being offered the same funding as the small farmers in Brazil. We decided to do this to help countries gain access to this technology.

You can ask the Brazilian ministers present at this General Assembly about it. Our Minister for Foreign Affairs, Mauro Vieira, who is here, is following this programme.

I am very proud of another achievement we introduced to ensure that young people do not have to move out of their areas: we set up 18 new public federal universities in the country, and also 148 campuses over the twelve years. President Dilma Rousseff has also set up 365 vocational training schools with the aim of bringing about a kind of peaceful revolution that is respectful to all.

We have tried to share the benefits of our decisions throughout society as a whole in Brazil. These new universities and vocational training schools mean that thousands of youngsters have had access to higher education for the very first time. They are also helping to develop the interior of the country and ensure that students do not have to live under bad conditions in Brazil's big cities.

As a result of these and other policies, besides increasing food production, we increased the income of small-scale family farmers by 52 percent in little more than ten years. All of this has concurred with the objective of fighting hunger and extreme poverty. In twelve years the actual value of salaries has grown by 74 percent. Family income went up by a third and by two thirds in the poorest families. The supply of credit went up from 24 percent to 57 percent of GDP.

The combined result of all of these policies is well known – and José Graziano da Silva should be very proud of this because he was one of the creators and developers of this policy: we managed to lift 36 million from extreme poverty. Another forty million were raised to the middle class threshold and we created 22 million formal jobs in Brazil.

This is the result of a set of policies focusing on proving that the poor are not part of the problem. When looked at properly, the poor are part of the solution for our countries. If you lend one million to a rich person, that money will go into a bank account. If you lend 10 dollars to a poor person, it will help to feed

mouths, the money will circulate and everybody will be able to participate. This is the miracle that made of our policies in Brazil and I am overjoyed to see extraordinary examples in virtually all of Latin America and other regions.

Evo Morales developed a programme called *Embarazada* in Bolivia. This provides pregnant women or single mothers with financial support, and other programmes have been developed. This is a revolution for Bolivia, for people who have never had anything.

I also know that successful experiences are going ahead in Africa and this makes me feel very optimistic about overcoming this problem.

It is very important that FAO should be a kind of sounding board for all these successful experiences so that we can share knowledge gained through best practices with the rest of the world.

During the Olympic Games we will have another conference on Nutrition for Development, as took place in the 2012 London Olympic Games.

Dear friends, the results achieved by many countries, in cooperation with FAO, within the Millennium Goals are very encouraging. FAO is working with extraordinary numbers, but the numbers are still small, relatively speaking, because we still have 800 million hungry people. We reduced the numbers by 200 million but the truth of the matter is that those who are hungry cannot afford to wait. We have to hurry. Paradoxically, this urgent situation has come about when the world is able to produce much more food than it consumes.

The problem is not lack of food production. The problem is lack of income for people to buy food. The world's rulers must understand that drought and floods are natural phenomena, but hunger is the responsibility of mankind and must be overcome as a matter of urgency.

I was very happy because in 2013 I had the opportunity to participate in an important forum in Addis Ababa with José Graziano and Ms Zuma, Chairperson of the African Union, to sign a commitment to eradicate hunger in Africa by 2025.

I was even happier to find that this commitment was confirmed in 2014 by the African Union Committee of Heads of State and Government. Now that Heads of State and Government have approved it and if the rich and highly developed world is prepared to support this project, we can really dream of actually ending hunger in Africa as well as in all other countries in the world.

I would like to end, dear friends, by telling you that next September at the UN General Assembly, the UN will enter into a commitment concerning the Sustainable Development Goals. The first step toward achieving full social development is to eradicate hunger and extreme poverty. This great step forward demands the commitment of citizens and governments according to the spirit of the Milan Charter, which we signed yesterday.

Non-governmental organizations certainly have a very important role to play in actions against hunger and poverty – extreme poverty – in the world. But I must again stress that this struggle demands permanent sources of financing; we need a national policy to end hunger.

It is well known that the very poor do not organize themselves in political parties. They do not have trade unions to represent them. They cannot go on marches. They do not have lobbies in congress. They do not hold protest marches. They do not even have access to the media or support from the press. The poor rely on the political vision of the world's leaders and this is why it is extremely important that we should adopt this approach.

The Millennium Goals balance sheet shows hunger, disease and malnutrition remains high among the people of Asia and Africa who live in situations of conflict, be it internal conflicts or wars with other countries. In these regions, the map of hunger and the map of war are superimposed, forming a tragic picture. This reminds us that there can be no peace where there is hunger. Even where violence is not the immediate cause of poverty, wars exacerbate the suffering of the civilian population, especially the most vulnerable.

Hunger and poverty are also the deeper root causes of the increase in people migrating because they have lost hope for a future in their own land. If we wish to build a secure world for all, it is much more effective to attack the root causes of hunger, rather than focus on the perverse results of this tragedy.

We have never been so close to achieving the dream of ending hunger. We have previously unimaginable scientific knowledge that allows us to produce food in abundance. We have the material resources and technology to invest and fight poverty and hunger throughout the world. We have the most powerful moral argument, which is the tragedy of hundreds of millions of famished children and we have practical evidence that it is indeed possible to overcome hunger as we did in Brazil and as has been done in many other countries.

Promoting food security in a healthy and environmentally sustainable way is much more than a dream: it is a humanitarian cause. A cause capable of uniting people,

governments, and institutions. This first quarter of the 21st century could indeed be the moment to build a safer world for all: a world free of hunger and poverty. My wish is for all of you, men and women, delegates to this 39th FAO Conference, to take this message to your countries: breaking bread is the first step toward building peace.

Brazil's Fome Zero strategy

Mauro DelGrossi, Gala Dahlet, Paulo de Lima and Saulo Ceolin

“If, at the end of my term, all Brazilians have the possibility of having breakfast, lunch and dinner, I will have fulfilled the mission of my life.”

Luiz Inácio Lula da Silva – Brazilian President (2003–2010)
Inaugural Speech, 1 January, 2003

Introduction

In 2003, the struggle to eradicate hunger in Brazil was transformed into an important and daring initiative in Brazil's political agenda. From the beginning, under President Lula, that goal would guide the Federal Government's vision. Fome Zero (Zero Hunger) was a holistic strategy, not a single public activity, and was aimed towards the whole population (not focused on any particular target). It comprised a bundle of programmes and measures implemented between 2003 and 2010, and was so successful that Brazil became an international reference regarding food security and poverty reduction policies.

Three key aspects underpinned the design and implementation of these policies. First, the fight against hunger and poverty became a top priority in the Government's agenda. Secondly, both objectives guided the country's macroeconomic policy. Finally, a comprehensive food and nutritional security system was developed and shaped new policies and legal and institutional frameworks that provided a solid political basis for the implementation of the programme. Civil society mobilization around the issue, which notably resulted in the reestablishment of the National Council for Food and Nutrition Security (CONSEA), was also a fundamental driving force behind this agenda.

The reasoning behind these key policy aspects was the necessity for the state to, on the one hand, implement mechanisms that would guarantee access to food for the most vulnerable populations and, simultaneously, address the need to stimulate the supply side for cheaper food products. Both sets of policies were central in

order to include those who had historically been excluded from the benefits of the country's social and economic development, thus upholding the right to food of all peoples, explicitly recognized in the Brazilian Constitution in 2010. In this regard, the main innovation of the Fome Zero programme relies on the integration of structural policies into emergency policies in its design, enabling concrete changes to happen both in the short and long term. Thus, while the Bolsa Família (Family Grant) programme might be its most famous component, Zero Hunger relies on four main pillars: food access; strengthening of family agriculture; income generation; and articulation, mobilization and social control.

This chapter gives an overview of the Fome Zero strategy and its scope, beginning with a description of the project, followed by its design and implementation in 2003, and its evolution over time. The last section offers a general analysis of some of the results for Brazilian society during its implementation.

Background

The current Constitution of the Federative Republic of Brazil, adopted in 1988, is a progressive and comprehensive political and legal framework that guarantees the social rights of Brazilian citizens and serves as a foundation for significant social advancement, including food and nutritional security. After its promulgation, certain societal sectors and the Federal Government began addressing hunger and food insecurity.¹ Brazilian geographer Josué de Castro had already denounced hunger in 1946; however, few public policies had been implemented to broadly or effectively deal with the problem.

In 1991, during the mobilization of then candidate Lula's Parallel Government, an important version of a national food security plan was developed: the National Policy on Food Security (Silva and Silva, 1991). In 1993, the National Council for Food and Nutrition Security (CONSEA) was established² to elaborate a plan to fight hunger, and the Brazilian Movement for Ethics in Politics and Citizenship Action against Hunger, Poverty and for Life took shape,³ mobilizing the Government and civil society (de Mattos and Bagolin, 2017). As experience accumulated in major Brazilian municipal governments (Graziano da Silva, 2010), ideas about food and nutritional security were extensively debated among experts, social movements, business professionals, religious leaders and others.

1 Although the Federal Constitution of 1988 was an important milestone at the time of its dissemination, the human right to food was only incorporated in 2010, with Constitutional Amendment 64: http://www.planalto.gov.br/ccivil_03/constituicao/emendas/emc/emc64.htm.

2 Decree 807 of April 24, 1993: http://www.planalto.gov.br/ccivil_03/decreto/1990-1994/D0807.htm.

3 See: <http://www.acaodacidadania.com.br/>

In 2001, a national strategy was launched (Graziano da Silva, Belik and Takagi, 2001), based on the diagnosis that hunger in the country was caused by poverty and the concentration of wealth, which was hampering access to sufficient nutritional food. More than nine million families were estimated to be suffering from food insecurity (DelGrossi, 2010). It was determined that, to break the cycle of hunger, the State needed to intervene in the economy to create virtuous cycles and bring millions of families into the food consumption market (Graziano da Silva, Belik and Takagi, 2001). To that end, the strategy sought to combine a set of emergency actions with a set of structural actions, resulting in four types of policies:

- › Specific: For families – this included the Food Card Programme (cash transfers for food purchases), basic food baskets, food security stocks, and the expansion of school meal programmes.
- › Structural: This included employment and income generation, universal social security, incentives for family farming and expanded agrarian reform, a scholarship programme and the application of a minimum wage.
- › Community and household food security: People in rural areas were encouraged to grow food; support in small and medium-sized cities concentrated on food banks and urban agriculture; and popular restaurants, food banks and partnerships with retail enterprises were the focus in large cities.
- › National: Implementation of the Fome Zero strategy by 2003.

When President Lula da Silva took office in 2003, the fight against hunger was expressed as Fome Zero (Box 1.1). It engaged various sectors of the Federal Government in a bundle of programmes and activities in cooperation with state and municipal governments. The agenda combined social policies to provide immediate relief with structural economic changes, such as job creation, an increased minimum wage and mechanisms to foster economic growth. It was decided to implement Fome Zero initially in the Northeast semi-arid region of the country, where poverty and hunger had historically been concentrated.

BOX 1.1 Initial design of Fome Zero

STRUCTURAL PROGRAMMES

- 1 Agrarian reform:
 - › Preparation of the National Agrarian Reform Plan (PNRA).
 - › Emergency settlement plan for 60 000 camped families.
 - › Recovery of settlements in precarious conditions, benefiting 40 000 families.
- 2 Strengthening of family farming:
 - › Expansion of the assistance provided by PRONAF B to 200 000 families.
 - › Financing for family farms' second crop.
- 3 Emergency Project for Coexistence with the Semi-arid Region:
 - › Harvest insurance.
 - › Emergency water supply.
 - › Construction of small water supply facilities: cisterns and underground dams.
- 4 Programme Against Illiteracy:
 - › Pre-literacy courses in municipalities covered by Fome Zero.
 - › Education programme in agrarian reform for young people and adults.
- 5 Job Generation Programme:
 - › Financing for housing and sanitation.

SPECIFIC PROGRAMMES

- 1 Subsidized restaurants for low-income groups.
- 2 Food banks.
- 3 Expansion of the School Meal Programme.
- 4 Food Card Programme.
- 5 Food education.

Source: Takagi, 2010, p. 58

Unlike social programmes targeting individuals, Fome Zero brought together numerous programmes and activities that mobilized many aspects of government. Capitalizing on existing institutions and programmes, it focused on organizing public measures to guarantee food and nutritional security.

Another special characteristic of Fome Zero was its principle that the human right to food was a universal right, a principle distinct from other countries' efforts that focused on particular subpopulations (Belik and DelGrossi, 2003). Among these efforts, voluntary donation campaigns in the public and private sectors were highlighted in national media, along with the Food Card Programme (cash transfer) for families in situations of serious food insecurity. The Food Card Programme was

helping about 1.9 million families in 2 369 Brazilian municipalities (43 percent of all municipalities) throughout the country. Of these, 1.4 million families lived in the semi-arid region, and an estimated 72 percent of extremely poor Brazilian families in the northeast were reached (Balsadi, DelGrossi and Takagi, 2004).

Another important structural initiative in 2003 was the Programa de Aquisição de Alimentos (Food Acquisition Programme (PAA)). The initiative targeted both family farms having difficulty marketing their produce and hungry urban residents. The PAA bought produce from farmers at fair market prices and then donated it to food-insecure urban households. This approach broke two vicious cycles: rural unemployment and urban hunger. Success required integrating economic and social policies. The PAA model was later used to influence the school-based food programmes.

Management committees were created in the municipalities – comprising representatives of the public and the municipal government – to monitor the Fome Zero activities, the selection of eligible families and the socio-economic and nutritional characteristics of the families receiving the benefits. For the first time in the history of these municipalities, citizens were aware of the families that were beneficiaries of the social programmes. This approach strengthened civil society at the community level (Takagi, 2010).

During this period, the idea of measuring food security as levels of food insecurity entered the discourse. The measure was to be based on individual experiences with hunger and was intended to supplement conventional wealth measures and anthropometric health indicators. The outcome of the studies that focused on creating the measure was the Brazilian Household Food Insecurity Measurement Scale (Pérez-Escamilla *et al.*, 2004), which inspired the 2010 Latin American and Caribbean Food Security Scale (ELCSA) and the FAO Food Insecurity Experience Scale (FIES).

In 2004, Fome Zero expanded its activities (Box 1.2). It is important to note that it remained a broad governmental strategy that brought together dozens of federal programmes and measures in coordination with state and municipal governments and organized civil society. The merging of economic with social policies facilitated the interruption of the vicious cycles of hunger and poverty. Between 2004 and 2010, to support the human right to adequate food, and with effective support from CONSEA, the national framework was improved through the creation of the National System for Food and Nutrition Security (SISAN).⁴ To formalize and improve inter-sectoral cohesion among public policies, the Inter-ministerial Chamber of Food and Nutrition Security (CAISAN) was created in 2007 to monitor the various governmental departments involved.

4 Law 11 346, of 2006: http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/lei/l11346.htm.

BOX 1.2 Fome Zero

1) ACCESS TO FOOD

- › Income: Family Grant programme (Bolsa Família)
- › Food programmes:
 - *School Meal Programme (PNAE)*
 - *Distribution of vitamin A and iron*
 - *Food for specific population groups*
 - *Food and nutrition education*
 - *SISVAN*
 - *PAT*
- › Local and regional FNS networks: subsidized restaurants, community kitchens, fairs, urban agriculture and food banks.
- › Water: cisterns

2) STRENGTHENING OF FAMILY FARMING

- › Financing of family farmers (PRONAF)
 - *Agricultural insurance and harvest insurance*
- › Food Acquisition Programme (PAA)



3) INCOME GENERATION

- › Social and professional qualification: Next Step/Family Grant Programme
- › Solidarity-based economy and productive inclusion
- › Focused productive microcredit
- › Regional FNS arrangements: CONSADS, Territories of Citizenship

4) ARTICULATION, MOBILIZATION AND SOCIAL CONTROL

- › Social Assistance Reference Centres (CRAS) and Programme for Integral Family Care (PAIF)
- › Social control councils and committees
- › Citizenship education and social mobilization
- › Donations
- › Partnerships with companies and organizations

Source: Aranha, 2010, p. 95

Fome Zero activities

Bolsa Família (Family Grant) Programme

Bolsa Família was created in 2004 by merging the conditional cash transfer programmes.⁵ It comprised monthly cash transfers to families that varied depending on the ages of family members and required that pregnant women sought prenatal care, children were in school, and families complied with a basic health agenda. To be eligible, families needed to be registered at their local municipal social assistance offices in the Cadastro Único, better known as Cadunico, which gathers, organizes, and manages data on families, such as address, education, work, income, and so on. The Bolsa Família programme's expenditures increased from BRL 3.8 billion (international \$ 3.7 billion) in 2004 to BRL 13 billion (international \$ 9.4 billion) in 2010,⁶ reaching almost 50 million people (12 million families) and making it the largest income-based social service in Latin America.

Many studies have assessed the effects of Bolsa Família. The first one looked at the academic performance of children up to 17 years of age and found that the national average of school attendance increased by 4.4 percent to 11.7 percent, educational advancement was six percent higher among beneficiaries than non-beneficiaries (BRASIL, 2010, p. 119), and the mandatory health monitoring had served more than six million families in 2010. Notably, the results found that 93 percent of children and 82 percent of adults could get at least three meals per day. Some other important studies on the Bolsa Família programme reported the following:

- › Soares and Sátyro (2009): The programme modestly contributed to the reduction of income inequality and poverty, but the transferred amounts were also modest; the programme did not discourage people from seeking work, nor did it impact the fertility rate of the recipient families. The authors also pointed out that it favoured federal relations by assigning the selection of beneficiaries to the municipalities.
- › Jannuzzi and Pinto (2013): The programme had a strong gender bias in favour of women regarding cash transfers.
- › Magalhães Júnior, Jaime and Lima (2013): Pregnant beneficiaries received more prenatal care than pregnant non-beneficiaries (1.6 more visits on average), and birth weights among beneficiaries were higher (3.26 kg)

5 Law 10 836, of 2004: http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2004/Lei/L10.836.htm.

6 International \$ is given by the purchasing power parity (PPP) conversion factor. It is the number of units of a country's currency required to buy the same amounts of goods and services in the domestic market as a United States dollar would buy in the United States of America. See <https://data.worldbank.org/indicator/PA.NUS.PPP>.

than those of non-beneficiaries (3.22 kg). Further, the proportion of infants exclusively breastfed during the first six months of life was higher among beneficiaries (.61) than non-beneficiaries (.53), and immunization rates were higher among beneficiaries than non-beneficiaries.

Programa de Aquisição de Alimentos (Food Acquisition Programme – PAA)

The PAA was part of the 2003 suite of programmes that aimed to stimulate the production of food surpluses and generate income for poor farmers.⁷ The programme aimed to draw them into the formal economy and promote food donations for families suffering from food and nutrition insecurity. The Government ran the programme by acquiring the food, waiving public bidding, and locking prices at no higher than those of the regional market. By focusing on community-level and regional food, the programme prioritized residents' local produce. Because it guaranteed prices at the regional market level, it also guaranteed fair prices paid for the farmers' produce, which helped most poor farmers who had difficulty selling their produce for fair prices, as pointed out by Peraci and Bittencourt (2010).

Invariably, in a context of high property concentration and imperfect or non-existent markets, free market rules lead to the exclusion of certain enterprises. Farmers must often compete against large-scale enterprises and bulk sales, which is challenging for many farms (Sanches Peraci and Bittencourt, 2010, p.197).

Between 2003 and 2010, the PAA purchased 3.2 million tonnes of food grown on 164 000 family farms, which was served to more than 15 million people at public eating facilities (BRASIL, 2010). Several surveys on the PAA yielded the following conclusions:

- › Delgado, Conceição and Oliveira (2005): The PAA indirectly influenced the situation by publicizing procured food prices, which increased the prices for all the farmers in the area and avoided the need for government subsidies to compensate for low prices.
- › Sparovek *et al.*, (2007): The PAA had a structural effect, by creating new markets for poor farmers and by teaching family farmers how to access complex markets.
- › Chmielewska, Souza and Lourete (2010): The PAA encouraged farms to expand their productivity.

7 Law 10 696, of 2003: http://www.planalto.gov.br/ccivil_03/LEIS/2003/L10.696.htm.

- › Campos and Bianchini (2014): The PAA influenced the relationship between family farms and their local oligopsonies in favour of farms so that the farmers could negotiate better terms in markets with relatively few buyers.
- › Mielitz (2014): The PAA collaborated with farmers' associations and cooperatives to facilitate their adoption of hygiene standards.
- › Martins (2014): The PAA improved produce quality and hygiene, particularly for milk producers who had adopted new production techniques, and it universalized preventive vaccinations against livestock diseases.
- › Galindo, Sambuichi and Oliveira (2014): The PAA fostered the production of organic, agroecological products and those derived from Brazilian socio-biodiversity.

Programa Nacional de Alimentação Escolar (The National School Feeding Programme – PNAE)

Starting in 1955, Brazil provided snacks for children at large urban schools, which the Government extended in 1965 to include school-based meals. In 1994, the Government stopped buying food for this distribution and transferred the responsibility to the states and municipalities (DelGrossi and Marques, 2015). The Fome Zero programme built on this initiative by directing these institutional purchases to family farms, which created virtuous cycles of income and employment in rural areas. After intense debate regarding the educational system and community schools, a law was passed in 2009 requiring at least 30 percent of the food purchased for school-based meals to be directly purchased from family farms. This step prioritized agrarian reforms, traditional indigenous communities and *quilombo* (settlements first established by escaped slaves) communities.⁸

In 2010, the PNAE served food to 45 million students daily, and buying from family farms had been adopted by almost 2 000 municipalities. The number of municipalities buying from family farms increased every year from 2004 to 2010, but full adoption is considered a challenge for various reasons (Machado *et al.*, 2018). Some studies on the influences of PNAE reliance on family farms found the following:

- › Belik and Chaim (2009): Although PNAE implementation varied across municipalities, public participation was a common feature of the outstanding municipalities in the programme.
- › Toyoyoshi *et al.* (2013): Most of the municipalities rewarded for their performance in improving student nutrition had bought fruit, fruit pulp

8 Law 11 947, of 2009: http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/lei/l11947.htm.

and vegetables, although processed sugar products were purchased by 67 percent of the municipalities. Despite the advances, this study concluded that a greater variety of foods would be needed to promote children's healthy eating habits.

- › Oliveira (2015): The PNAE was associated with increased income and higher quality of the family farms' produce.
- › Baccarin *et al.*, (2017): Unprocessed or vegetable products with little processing dominated the PNAE; however, lack of processing encouraged formalization and the establishment of farmers' organizations.

Programa Nacional de Fortalecimento da Agricultura Familiar (National Programme to Strengthen Family Farming – PRONAF)

Since the 1960s, Brazil's main agricultural policy to stimulate production had consisted of subsidies. However, the credit was not widely accessed by family farms until PRONAF, the country's first family farm programme, was created in 1996.⁹ The programme featured a federal subsidy with below market interest rates. Because its initial resources were limited, PRONAF credits were focused in the south. However, because support for family farms was a structural policy in the Zero Hunger strategy, PRONAF's resources grew over time until PRONAF was implemented at the national level, especially in the Northeast of Brazil. Its resources increased from BRL 4.5 billion (international \$ 4.6 billion) in 2003–2004 to BRL 16 billion (international \$ 11.5 billion) in 2010–2011 (BRASIL, 2010). During that period, the credit system was simplified, values were expanded and special lines of credit were created, such as credit for young adults, women, agribusinesses and agroecology. PRONAF also added a line of credit dedicated to agrarian reform settlers (PRONAF A) and poor farmers (PRONAF B).

In 2004, PRONAF significantly expanded after the implementation of the *Seguro da Agricultura Familiar (Brazilian Insurance for Family Farming – SEAF)* to protect farmers in the event of crop failure from drought, flood, frost, wind, and pests and diseases. SEAF provided security to millions of farmers who used PRONAF, by eliminating the risk of indebtedness in the event of crop failure. They also received financial aid. The insurance initially guaranteed eight crops, which had expanded to 35 by 2010 (Sanches Peraci and Bittencourt, 2010). In 2006, insurance protection from price variations became available through the Family Farming Price Guarantee Programme (PGPAF), in which the Government set a reference price when credit was granted (usually before planting). When negative price variations occurred at the time of sale, family farmers' debts were discounted via PRONAF, proportional to the price drops (DelGrossi and Marques, 2015).

9 Decree 1946: http://www.planalto.gov.br/ccivil_03/decreto/D1946.htm.

In 2007 and 2008, the inflation rate on the price of food increased, which put part of the food security guarantee strategy at risk. Aiming to increase the supply of commodities, PRONAF launched an investment line in 2008, the More Food Programme, with subsidized interest rates and payment plans over periods up to ten years. At the same time, an agreement was reached with the tractor and agricultural machinery industries, which were providing equipment specific to this line of credit. The combination of stocks boosted supply and mitigated the food price crisis (Maluf, 2010). It is important to note that the implementation of PRONAF in 1996 came seven years before the 2003 Fome Zero strategy began, and it established the institutional foundations and facilitated the expansion of existing policies for family farms, such as the PAA and the PNAE (Flexor and Grisa, 2016).

Programa Cisternas (the Cistern Programme)

The Cistern Programme is part of the structural policy dimension of the Fome Zero strategy.¹⁰ It refers to the implementation of the Government's "1 million cisterns" programme¹¹ in the country's semi-arid region. The Cistern Programme defines water as food and as a fundamental part of food and nutrition security. It marked the Government's change of focus from combating drought to coexisting with drought. Relevant research has found that the pluvial regime in most of the semi-arid region was concentrated during a short period with no precipitation during the rest of the year. The Cistern Programme is about building devices that capture and preserve rainwater for use throughout the year for humans (in water reservoirs) and small animals. The Programme is widely supported at the community level by interested families who learn about cisterns and their uses. Between 2003 and 2010, more than 300 000 cisterns were built in the semi-arid region (BRASIL, 2010). Studies on the impacts of the Cistern Programme are encouraging: Palmeira (2006) found improved health conditions among beneficiaries, increased time for other activities and positive outcomes on family members' self-esteem. An evaluation conducted between 2008 and 2010 found that 94 percent of beneficiaries reported significant improvements in quality of life after a cistern was installed, and 86 percent of them were very satisfied with the device. The beneficiaries' average water storage ranged from six to 12 months (EMBRAPA, 2010).

Other Fome Zero activities

More than a dozen activities were part of the Fome Zero initiative (Aranha, 2010), among which the following stood out:

- › Public food and nutritional equipment were given to popular restaurants, community kitchens and food banks. In 2010, more than 122 000 meals per

10 Currently, the National Programme of Support to the Capture of Water of Rain and Other Social Technologies, Law 12 873: http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2013/lei/l12873.htm

11 Coordinated by the organization Articulação no Semiárido (Articulation in the Semi-arid) www.asabrasil.org.br.

day were served at 89 popular restaurants in 73 major Brazilian cities, and 642 communal kitchens were supported by the Government (BRASIL, 2010).

- › Benefício de Prestação Continuada (Continuous Cash Benefit) provided cash transfers equal to the minimum wage for elderly members of poor families who did not contribute to the social security system, as well as for disabled people. In 2010, more than three million families received this benefit (BRASIL, 2010).
- › Programa de Alimentação do Trabalhador (Workers' Food Programme) gave tax incentives to employers who provided food for their low-income workers (Aranha, 2010).
- › Brazilian Vitamin Supplementation Programme was for children at risk of food insecurity (Aranha, 2010).
- › Support provided to social and solidarity economy organizations (Aranha, 2010).
- › Microcredit and banking inclusion was advanced by the establishment of more than 12 million urban microcredit operations between 2003 and 2010. In rural areas, almost 690 000 operations were conducted annually by Agroamigo (BRASIL, 2010).

In light of their efforts to disseminate, mobilize and monitor the Fome Zero programme, CONSEA and the numerous state and municipal councils on food and nutritional security deserve special attention. CONSEA's activities were effective, with the participation of a broad range of enterprises and leaders who helped to complete and monitor the activities (Belik, 2010).

Activities indirectly related to Fome Zero

In addition to the activities that officially integrated the various Fome Zero programmes, dozens of others were implemented that helped to guarantee the human right to food. These activities included the following (BRASIL, 2010):

- › 2001: Agrarian reform to settle landless families was the main structural activity of Fome Zero in 2001. Between 2003 and 2010, 3 456 settlements were created for 586 000 families who received about 47 million hectares for agricultural production. The environmentally differentiated nature of the settlements to support traditional communities is noteworthy.
- › 2003: Inflation control was an early concern because the annual rate of inflation in 2002 was 12.5 percent, which was reduced to 3.1 percent in 2006, although it increased to 5.9 percent in 2010.

- › 2003: Since 2003, gradual increases in minimum wage have been implemented to establish the minimum wage of workers and their social security benefits. Between 2003 and 2010, wages increased from international \$ 169 in January 2003 to international \$ 318 in December 2010,¹² which was a real wage increase of about 88 percent that increased the food purchasing power of millions of households.
- › 2003: The Programa Garantia Safra (Crop Guarantee Programme) is a partnership among federal, state and municipal governments and family farms in the north-eastern semi-arid region, to create a fund to help farmers affected by extreme weather events, such as drought and flood. The number of beneficiaries increased from 200 000 in 2003 to 661 000 in 2010, and the fund guaranteed incomes for these families.
- › 2003: The Assistência Técnica e Extensão Rural (Technical Assistance and Rural Extension – ATER) linked federal financial support to state public assistance institutions for family farms and agrarian reform settlements.
- › 2003: The Programa Brasil Sorridente (Smiling Brazil Programme) is an oral health programme that served over 91 million people in 85 percent of Brazil's municipalities.
- › 2003: Family health was addressed by expanding the teams providing basic healthcare to families to minimize health risks and hospitalization. In 2010, about 100 million Brazilians received some form of healthcare from Brazil's Family Health strategy.
- › 2003: Modernization and expansion of Previdência Social (Social Security) between 2003 and 2010 was part of Zero Hunger, reaching a protection rate of about 77 percent of the population aged 60 years or over in 2010 (BRASIL, 2010).
- › 2004: The Programa Nacional de Produção de Biodiesel (National Biodiesel Production and Use Programme – PNPB), launched in 2004, provided for the addition of biodiesel (of vegetable or animal origin) to diesel fuel (derived from petroleum). The programme's sustainability was guaranteed by the effective participation of more than 100 000 family farms that provided resources for biodiesel production (BRASIL, 2010). The programme started with a two percent addition of biodiesel to the diesel sold to

¹² International \$, PPP conversion factor considering private consumption, from the World Bank: <https://data.worldbank.org/indicador/PA.NUS.PRVT.PP> (accessed April 2019).

consumers (known as B2). As of 2018, the addition reached ten percent (known as B10).¹³

- › 2007: The Programa de Aceleração do Crescimento (Growth Acceleration Programme – PAC) comprised investments in infrastructure. Implemented in 2007, it focused on energy, logistics and social infrastructure.

Some results of the Fome Zero programme

Because Fome Zero was a bundle of activities, programmes and initiatives, a holistic assessment system could not be developed, and the effects of its components could not be isolated or evaluated separately. The activities and economic growth initiatives, such as minimum wage increases, generated a synergy with positive results. The results presented below therefore concern Brazilian society overall. The statistical changes recorded for the Fome Zero period bear witness to a sharp decrease in poverty, from 35 percent in 2003 to less than 20 percent in 2010. More than 28 million Brazilians rose out of poverty and 36 million Brazilians entered the middle class (BRASIL, 2010), mostly thanks to higher incomes from paid employment (Neri, 2008). The drop in poverty rates can be observed for all of the poverty indicators shown (Figure 2.1).

Brazil, which had one of the world's worst income/wealth inequalities, experienced an impressive and continual reduction in the Gini index, which dropped from 58 to less than 53 (Figure 2.2). In fact, there was a so-called “pro-poor” growth phenomenon during the period, in which the poorest groups benefited the most (Figure 2.3).

The World Bank (2019)¹⁴ summarized the evolution of Brazil's socio-economic indicators as follows (World Bank, 2019a)

The country experienced economic and social progress between 2003 and 2014, when more than 29 million people rose out of poverty and inequality significantly decreased. The Gini coefficient fell by 6.6 percent (from 58.1 to 51.5) during that period. The incomes of the poorest 40 percent of the population increased by an average of 7.1 percent (in real terms) between 2003 and 2014, which is in contrast to the 4.4 percent increase in income in the overall population. However, since 2015, the pace of poverty and inequality reductions seems to have stagnated.

13 Law 13 263, dated 2016: http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2016/lei/l13263.htm

14 Available at: <https://www.worldbank.org/en/country/brazil/overview> (accessed 1 May 2019).

FIGURE 2.1 Changes in Brazil's poverty rate

Source: World Bank, 2019b (2011 PPP)

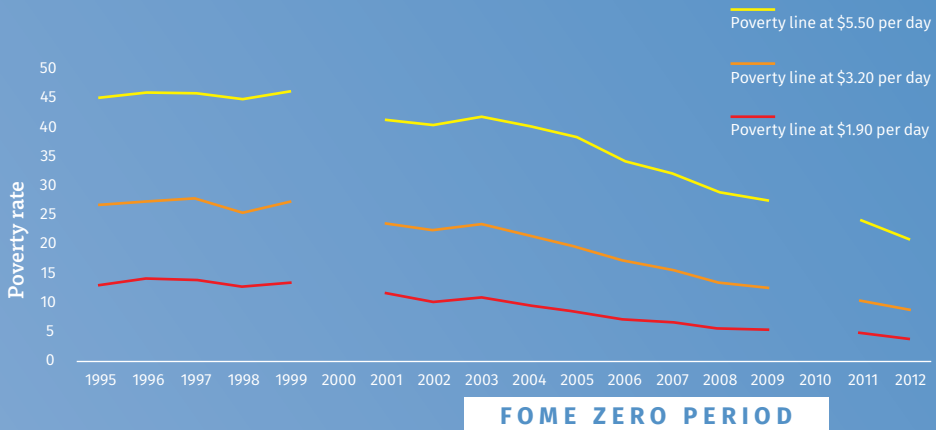


FIGURE 2.2 Changes in Brazil's Gini index

Source: World Bank, 2019b

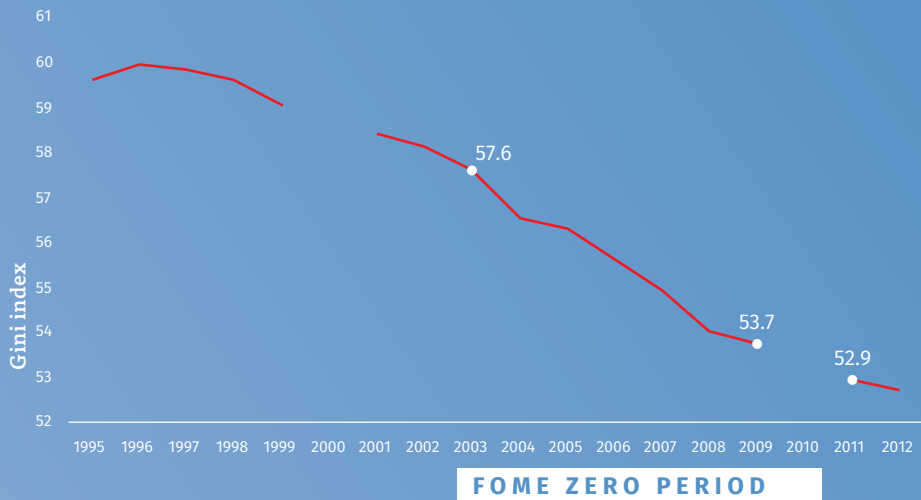


FIGURE 2.3 Proportion of income in the first and second poorest quintiles in Brazil

Source: World Bank, 2019b

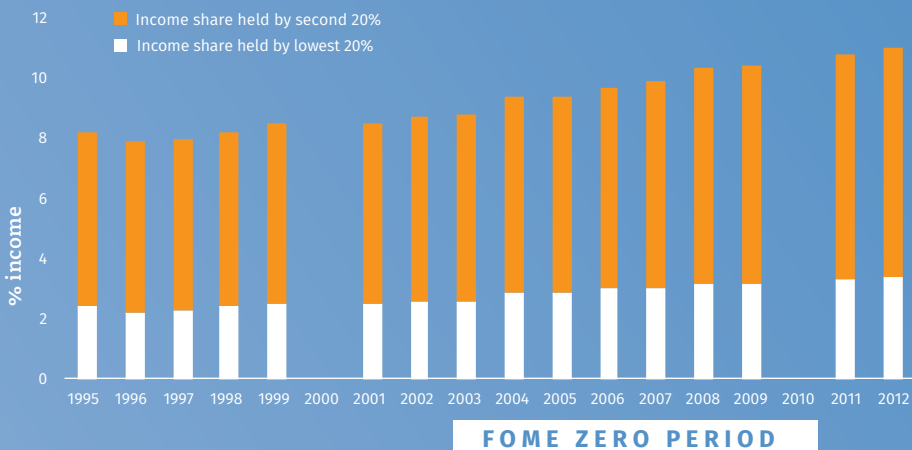


FIGURE 2.4 Brazil's under-five mortality rates

Source: World Bank, 2019b

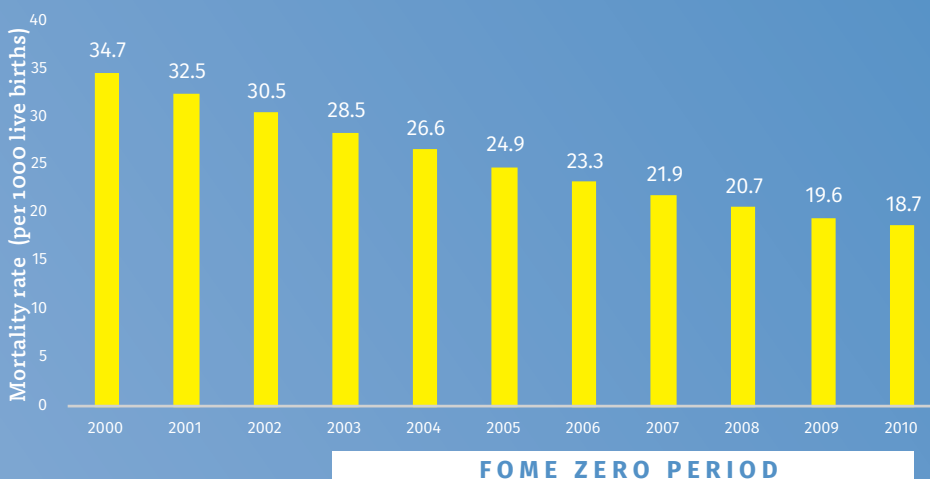
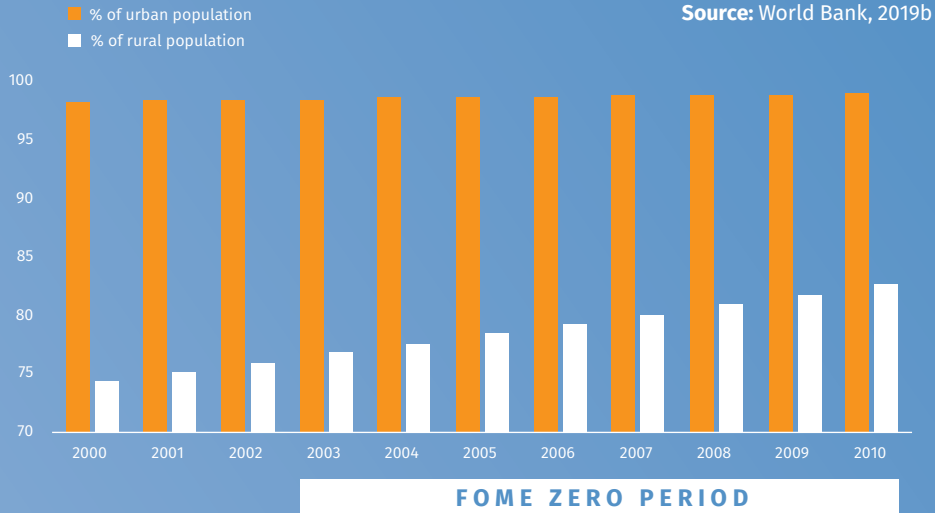


FIGURE 2.5 Changes in the proportion of urban and rural populations with access to potable water in Brazil



The under-five mortality rate is another important indicator of social development,¹⁵ in which Brazil witnessed a significant decline between 2003 and 2010 (UN, 2010). The increased income among the country's poorest people combined with the suite of public services created a favourable context for reducing the mortality of children under five years of age (Figure 2.4).

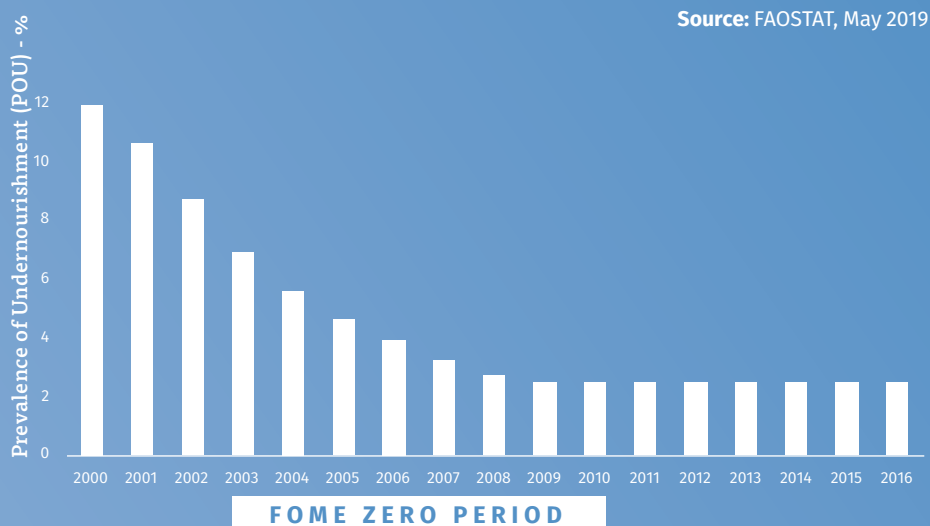
The share of the population using public drinking water for cooking also increased in the country, particularly in rural areas (Figure 2.5).

Regarding food security and nutrition, international indicators point to a reduction in the number of undernourished people (Figure 2.6), which allowed Brazil to reach the Millennium Development Goals (2000–2015) and leave the FAO Hunger Map (FAO, IFAD and WFP, 2014) (Figure 2.8).

FAO pointed out that the Brazilian Fome Zero strategy was a first step in translating the decision to end hunger into activities to accomplish that goal, which led the country to put food, nutritional security and social inclusion at the top of the national

¹⁵ The under-five mortality rate is the probability per 1 000 that a newborn baby will die before reaching age five.

FIGURE 2.6 Changes in the number of undernourished people in Brazil



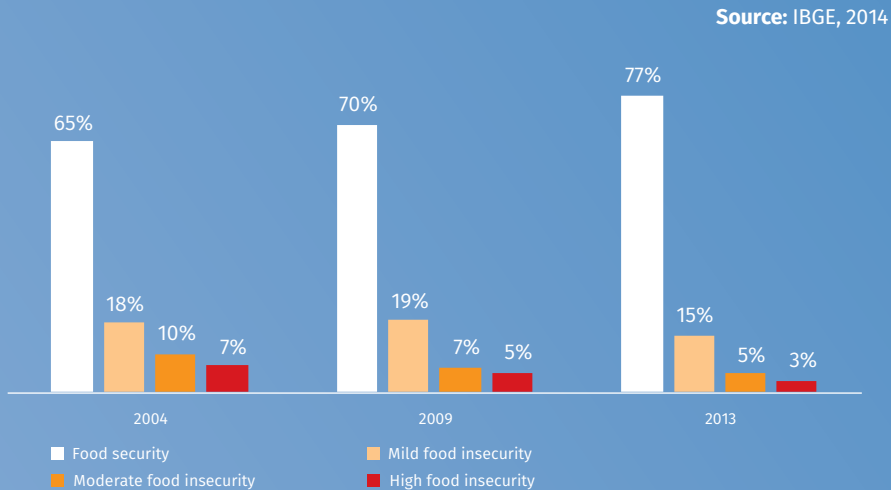
agenda by linking macroeconomic, social and agricultural policies (FAO, IFAD and WFP, 2014). The country's advances in food and nutritional security were also confirmed by Brazilian Household Food Insecurity Measurement Scale (EBIA) data for 2004, 2009 and 2013 (Figure 2.7).

Furthermore, the Food Insecurity Experience Scale (FIES) data confirmed that the proportion of the population with serious levels of food insecurity was very small: just 0.3 percent of the Brazilian population experienced severe insecurity between 2014 and 2016 (FAO *et al.*, 2017).

Conclusion

In 2003, Brazil implemented a national Zero Hunger strategy that merged a bundle of public activities and measures, organized and coordinated with lower governmental levels to universalize the human right to adequate and nutritious food. It linked social policies with economic growth policies, strengthening, on one hand, social policies' productive role, and, on the other, recognizing the need for cross-sectoral complementarity between different areas of the economy or the state to effectively address food (in)security and poverty. In fact, by considering the close relationship between hunger and poverty, the design of the Fome Zero programme effectively takes

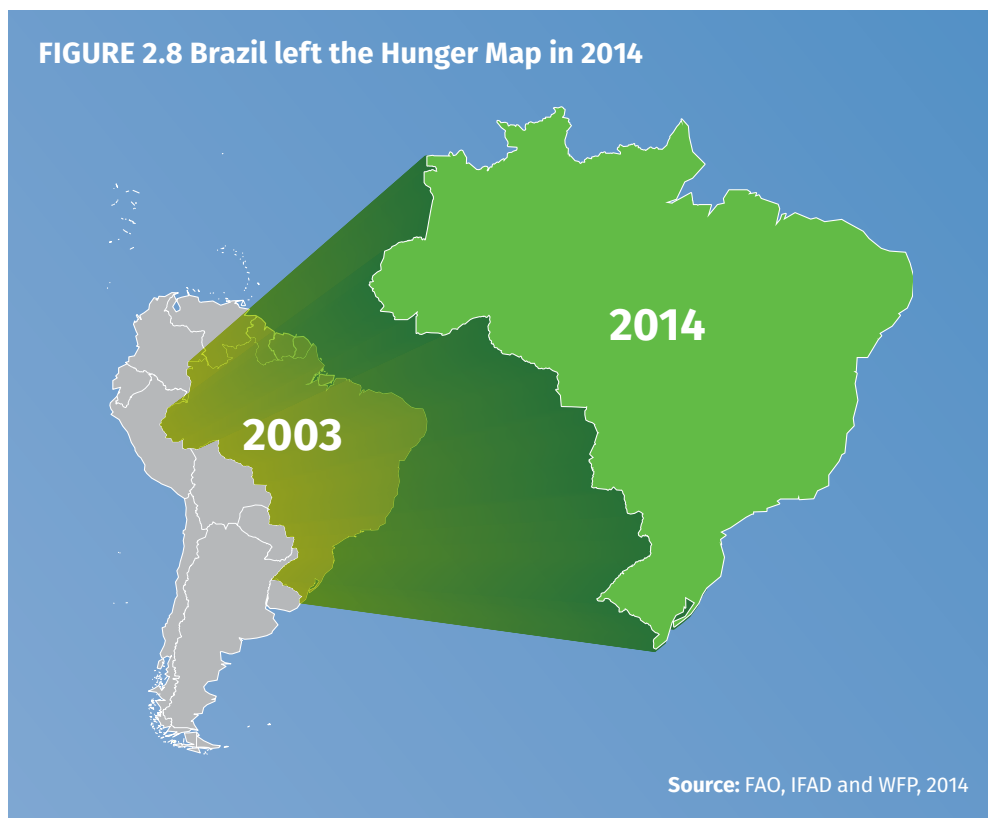
FIGURE 2.7 Brazilian Household Food Insecurity Measurement Scale results for 2004, 2009 and 2013



into account the direct link between food security and social policy. Additionally, the State's intervention was essential to implement and oversee this multisectoral agenda, shifting away from the perception of food security and nutrition as a responsibility of the individual or the family, to officially becoming a State concern. Such a preponderant role of the State allowed for successful local policies for fighting hunger to be scaled up, but also for the programme to be constantly improved. The positive results are evident in the social and economic indicators for those years. Paid employment and wages increased, poverty and inequality rates declined, and child malnutrition and child mortality rates also declined, along with other positive results, such as improved school attendance. In accomplishing Goal 1, by guaranteeing the human right to food for its population, Brazil made great strides toward achieving all eight Millennium Development Goals.

These encouraging achievements in Brazil became part of the debate around the formulation of the post-2015 development agenda. In light of this successful experience and in the wake of an acute world food crisis in 2008, United Nations Secretary-General Ban Ki-moon launched the Zero Hunger Challenge (ZHC) on the occasion of the UN Conference on Sustainable Development in 2012 (Rio+20). Resuming and complementing the Fome Zero programme's holistic approach to

FIGURE 2.8 Brazil left the Hunger Map in 2014



ending hunger, the ZHC seeks to boost economic growth, reduce poverty and protect the environment through five main goals: to end malnutrition in all its forms; to ensure all people have access to adequate food, all year round; to make all food systems sustainable; to increase the productivity and income of smallholders, women in particular; and to adapt food systems to eliminate food waste and loss.

The 2030 Agenda for Sustainable Development adopted in 2015 echoes the ZHC in the second of the seventeen goals: “to end hunger, achieve food security and improved nutrition and promote sustainable agriculture”. Indeed, the ZHC call for action also complements other SDGs, reiterating the vision that the fight against hunger and poverty will only be effective if addressed through a comprehensive and bold approach.

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Brazil's Fome Zero and the Hunger-Free Latin America and Caribbean 2025 Initiative

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Overview

In 2005, the Latin American and Caribbean countries took a decisive step forward in their commitment to eradicating hunger and malnutrition in their region, by setting up the Hunger-Free Latin America and Caribbean Initiative. The agreement was unprecedented on the regional and global scene. These countries placed hunger at the centre of the political agenda, pledging to eradicate it definitively from their region by the year 2025.

This chapter analyses the progress of the initiative from its inception, inspired by Brazil's Fome Zero programme, to the present day. It traces the region's achievements over a period of nearly 15 years. The main advances are highlighted, in terms of devising and implementing public policies aimed at eradicating hunger. Also, the chapter does not ignore the important role played by the main areas of regional integration and the mechanics of cooperation between the region's countries and institutions.

The chapter concludes with a brief reflection on the current context and the need to renew the commitment to rise to the old and new challenges which the region now faces.

From Brazil's Fome Zero to the Hunger-Free Latin America and Caribbean Initiative

"Il n'est rien au monde d'aussi puissant qu'une idée dont l'heure est venue".

There is nothing more powerful in the world than an idea whose hour has come: Victor Hugo's phrase is quoted by John Kingdon (1984) in his book *Agendas*,

alternatives and public policies, where he argues that the notion of “*an irresistible movement that sweeps over our politics and our society, pushing aside everything that might stand in its path*” aptly illustrates the progress of the Zero Hunger Challenge. For Kingdon, three streams must come together in order to get an issue on to the political agenda: the problem stream, the policy stream and the political stream. If viable solutions to a problem are not devised, that problem will not achieve inclusion on the political agenda. Spectacular ideas may create waves in academia or in think tanks but, if they do not respond to a problem which is considered urgent, sufficient political momentum will not build up.

In the case of Zero Hunger, there is a confluence of these three streams: hunger, identified as a problem by various stakeholders in society; a set of available solutions; and the political will to tackle the problem by means of public policy. That was the case in Brazil, and is now so Latin America-wide. It has even become the second of the Sustainable Development Goals.

This chapter reviews this progression and shares some reflections from the viewpoint of the FAO Regional Office for Latin America and the Caribbean, which was one of the many supporters of this initiative.

The social structure of the hunger problem

In the early 1990s, approximately 68.5 million people, representing around 15.3 percent of the population of Latin America and the Caribbean, were suffering from hunger (FAO, 2014). Despite the growing importance of its role on the global scene as a food exporter, paradoxically the region co-existed with hunger and malnutrition.

In Rome, at the headquarters of the Food and Agriculture Organization of the United Nations (FAO), the International Conference on Nutrition was held in 1992 followed, four years later, by the World Food Summit (1996). Both helped to raise concern at global level about the problem of hunger. The World Food Summit reaffirmed the right of everyone to have access to safe and nutritious food. It generally accepted the following definition of food security: “*...when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life*” (FAO, 1996).

This definition became the keynote for the relation between the four pillars of food and nutrition security (FNS): availability, access, utilization and stability. This was to prove fundamental in devising new policies oriented towards achieving food and nutritional security.

One result of the World Summit was that the Member Nations undertook to halve the number of people in hunger in the world by 2015 (FAO, 1996). This commitment

was then taken up by the Millennium Development Goals in 2000, Goal 1 of which was to halve the percentage of poor and hungry by 2015 (with 1990 figures as a baseline).

By the early 2000s, Latin America and the Caribbean were starting to forge the political environment which would indelibly mark the ensuing decade, in terms of action against hunger. The debate on food security moved on from conventional planning of what to do to grow more food (in the 1970s and 1980s) towards a vision centred on the problems of access to food (late 1990s). This, in turn, led to a new concept of vulnerability to food insecurity (Graziano, Ortega and Faiguenbaum, 2008). It was a process of thorough reflection on people's behaviour in the face of uncertainty, irreversible factors and restrictions on the election process, which began to be discussed at the Millennium Summit (2000) and the World Food Summit (2002). The World Summit lent further credence to the idea that it was essential to form a broad alliance across all sectors. Greater financial investment in food security policies was also necessary from everyone involved, especially governments.

The accumulated knowledge from academia, social organizations, international bodies and regional and national experiences drew attention to the need to group various policies under the 'umbrella' of food and nutrition security (FNS). The Special Programme for Food Security (PESA)¹⁶ should be highlighted here. A need began to emerge to coordinate policies of different types, such as those targeting agricultural smallholdings and rural development, social protection and food, assistance with nutritional health, and education and training in food and nutrition.

In 2001, Brazilian presidential candidate Luiz Inácio Lula da Silva unveiled his manifesto. He proposed a project embracing these principles, which would have a transformational effect on action against hunger (Instituto Cidadania, 2001). Elected president in 2003, he launched the Fome Zero programme, to be led by José Graziano da Silva, as a public policy priority. Fome Zero was to guide and coordinate a series of programmes with the common objective of eradicating hunger and malnutrition in the country, by tackling their root causes. These included poverty, especially rural poverty. The programme was the practical expression of

16 The Central American PESA programmes sprang up in the wake of the 1996 World Food Summit as an initiative by three of the region's countries (Honduras, Guatemala and Nicaragua), where the prevalence of hunger and chronic malnutrition was among the highest in the region. Originally designed to tackle the problem of food security with a strong emphasis on agriculture and fisheries, it evolved into an analysis of the multiple, interrelated causes and consequences, and extended its planning to sectors other than agriculture and fisheries. It became a very valuable learning source for an understanding of the set of problems and for strategy and policy design.

a basic idea: that hunger was something unacceptable in a resource-rich country like Brazil, also a major food grower and exporter. Furthermore, as a government programme, it incorporated the main solutions to the problem of hunger, as they had evolved through decades of experimentation by local governments and non-governmental organizations, in various locations. The political will became explicit when President Lula da Silva publicly committed to ensuring that everyone in Brazil should have access to three meals a day. He set up the Ministry of Food Security and the Fight Against Hunger. Underpinning this was the most advanced thinking in the contemporary discussion on action against hunger. The idea that eradicating hunger was feasible, desirable and necessary to the country's development took centre stage in Brazilian politics.

Fome Zero was devised with broadly based social support and inspired by the idea that the active participation of different sectors was essential to make the programme work. Fome Zero was given the highest national priority, and was to guide the approach of the country's multiple economic and social policies. This made it possible to bring together both structural policies and emergency initiatives against hunger and poverty. Institutional and legal frameworks were adjusted to Fome Zero and a series of innovative policies and public programmes were created, targeting the poorest section of the population who were suffering hunger. *"The programme has approved a set of 31 interrelated, coordinated and mutually reinforcing programmes to achieve its objectives, a combination of short, medium and long-term initiatives"* (Graziano da Silva, 2012). Fome Zero ultimately inspired an entire region and set an example as successful action against hunger, not only in Latin America and the Caribbean, but also worldwide.

President Lula da Silva was deeply committed to regional integration processes and inspired by the results Brazil was achieving with the Fome Zero programme. In 2005, the Summit on Chronic Malnutrition in Latin America and the Caribbean was held in Guatemala City. Lula and Guatemala's President Oscar Berger managed to persuade the other countries attending the summit of the need to place the fight against hunger at the centre of national and regional policies. Thus, in 2006, all countries in the region approved and ratified the Hunger-Free Latin America and Caribbean Initiative (IALCSH). This was a political commitment inspired by Brazil's Fome Zero, which set itself the aim of eradicating hunger from the region by 2025. The declared goal of the initiative was highly ambitious at the time, since it actually went beyond what was proposed by the Millennium Development Goals.

The Hunger-Free Latin America and Caribbean Initiative: a new understanding of action against hunger

In the context in which it was launched, the initiative sought to consolidate action against food and nutritional insecurity¹⁷ based on three main principles (Faret and Rapallo, 2014):

1. **Hunger is a political problem:** since technical solutions are already known, the main challenge for successful action against hunger is to achieve political commitment which helps to place national efforts within a framework of broad, long-term policies which consolidate governmental commitments.
2. **Hunger is a violation of human rights:** the human right to sufficient food must be the starting point for the development of policies accessible to citizens who hold this right. Therefore the only acceptable number of hungry people is zero, and any development aim which differs from this goal is inadequate.
3. **Hunger can be combated actively via international development cooperation:** a clear call for the participation of cooperating agencies, as major players, in advising how to draw up public policies, and in their role of mobilising and coordinating different stakeholders in local, national and continental political processes.

This series of principles, inspired by the assumptions and experience of Brazil's Fome Zero programme, marked a radical new understanding of action against hunger, and of the role which different players could and had to play. Rather than a technical matter, it was primarily a political issue, and would entail the political will to achieve the necessary changes and reach negotiated solutions. This, in turn, would require the participation of all players fulfilling lead roles in defining food and nutrition security policies in those countries. International cooperation was not incompatible with this new approach, and was to become fully involved in the various national, regional and global processes as they developed in the ensuing years. In accordance with what was agreed in the Paris Declaration on Aid Effectiveness, the action of international bodies was increasingly closely aligned with the public policies of the target countries, while respecting their sovereignty and internal processes (Beduschi Filho, 2012).

FAO played a decisive role in this, as Technical Secretariat to the initiative, with the support granted by the Spanish Agency for International Development Cooperation (AECID) through the FAO-Spain Programme. Through this cooperation, FAO implemented the Support for the 2025 Initiative project. The project adopted an innovative

¹⁷ The initiative's specific goal was: "by 2025, to put an end to hunger and ensure access for all people, especially the poor and vulnerable, including children aged less than one year, to healthy, nutritious and sufficient food all year round". <http://www.ialcsh.org/iniciativa/>

approach, different from conventional international cooperation projects. More flexible and adaptable, the project expected to be especially influenced by the region's political dynamics, with its variable scenarios, prone to change. This implied the definition of differentiated strategies, in accordance with the windows of opportunity as they opened, and with the processes specific to each country. Rather than being a project with a traditional framework of logic, this one ventured into facilitating and supporting public policymaking. It was a new field of action, in which learning was paramount.

South–South cooperation and the strengthening of regional integration processes, as a key element of the initiative

A central element of the Hunger-Free Latin America and Caribbean Initiative is the promotion of South–South cooperation processes. The region was in the front line of strategies against hunger, and the lessons from various national programmes and processes – especially Brazil's Fome Zero programme – offered valid examples of a different way of thinking and elaborating public policy.

Brazil took the regional lead, making a firm investment in various forms of bilateral and trilateral cooperation and strengthening regional integration organizations. The FAO–Brazil Cooperation Programme, consisting of varied projects, was one of the many instruments used to support other countries in the region, which had recently begun to define their food and nutrition security strategies and policies.

At regional integration level, this programme also played a decisive role in the cohesion and strengthening of the areas concerned. Among other roles, the programme has been prominent in the Union of South American Nations (USAN) and in the Southern Common Market (Mercosur). Within Mercosur, it is worth mentioning the establishment, in 2004, of the Specialised Meeting on Family Farming (REAF) (IFAD–Mercosur programme, CLAEH, 2015). This was an inclusive space for dialogue on public policies, bringing together social organizations and family farmers, rural women's organizations and indigenous peoples with representatives of government, the academic world and international bodies. It is important to note the political and financial commitment made to its functioning by the Mercosur member countries, with the technical and financial support of the International Fund for Agricultural Development (IFAD), FAO and other cooperation bodies.

Given the key role of family farming in strategies for eradicating hunger and alleviating poverty, REAF is a forum which has made a decisive contribution to boosting this sector. REAF has advocated the need for differentiated public policies. It has promoted discussion, the pooling of experience and the strengthening of organizational capacities and the institutions of government on various themes associated with family farming. Acting as a Regional Technical Secretariat, and with national coordination offices in each of the Mercosur (member and associate) states, it has

inspired a full agenda of regional and national activities which have taught valuable lessons and will influence the formation of national public policies on family farming. Topics such as access to land, to rural services, to credit and to markets, and cross-cutting themes of gender and rural youth are among those discussed in the REAF technical groups. Thus, REAF has become an innovative experiment in terms of participatory policymaking and models of extended governance.

Central America and the Caribbean have also made important advances in their integration mechanisms which favour food security.

A flagship programme in Central America is Hunger-Free Central America, set up in 2014 under a cooperation agreement between FAO and the Mexican Agency for International Development Cooperation (AMEXCID). The programme encourages processes in support of an effective working political and institutional framework for the achievement of food and nutrition security in nine of the region's countries (Belize, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and the Dominican Republic). Hunger-Free Central America has also developed various regional initiatives as part of the Central American Integration System (SICA). One of these has been to strengthen the governance of food and nutrition security as a way of making the policies, programmes and plans in this field more effective, through action on a number of fronts (regulatory, organizational, technological, political and cultural) (FAO, 2016).

In the Caribbean (FAO, 2015), in 2010, the member states of CARICOM (the Caribbean Community) adopted the Regional Food and Nutrition Security Policy and an action plan for implementing it. The basic action under the policy and plan fell within the framework of the four pillars of food and nutrition security. It is also important to note the PetroCaribe programme (FAO and Petrocaribe, 2015), set up in 2005, which has generated over 100 social and production programmes and projects in 19 countries of the region. These have contributed significantly to the reduction of the undernourishment statistics in most of its member countries.

As a regional legislature, the Latin American Parliament (Parlatino) has made a key commitment to including FNS on the public and legislative agenda of Latin America and the Caribbean. This takes the form of discussion and consultation processes, which have led to the adoption of various framework acts such as the Model Law on the Right to Food, Food Security and Sovereignty in 2012, the Model Law on Food for Schools in 2013 and the Model Law on Family Farming in 2016. These legal frameworks are non-binding but represent a regional endorsement of the concepts of the right of the whole population to food and dietary and nutrition security. Furthermore, they symbolise the commitment of national parliamentarians, further evidence of which is the active development of the regional Parliamentary

Front against Hunger, which has national chapters (at present 19 of the region's countries have parliamentary fronts against hunger). These are constantly initiating processes of dialogue between multiple players, promoting the conceptualisation and positioning of the right to food in their parliaments, and supporting the drafting of regulations and policies for action against hunger, malnutrition and poverty.

Within the scope of knowledge management and advocacy of the right to food, it is essential to refer to the creation, in 2011, of the Right to Food Observatory for Latin America and the Caribbean (RFO-LAC). *“Designed as a regional network, consisting of many information, investigation and distribution centres, it serves the objective of promoting the exchange and management of knowledge surrounding food and nutrition security. To date, RFO-LAC has more than 50 member-universities, which also encourage the active participation of the academic world in public policymaking oriented towards guaranteeing the human right of adequate diet. The Observatory supports the output of studies, indicators and recommendations which can be very useful in the processes of development, implementation and control of laws and/or public policies applied at local, national or regional levels”* (RFO-LAC, 2011).

Lastly, we should report on the progress made within the framework of the Community of Latin American and Caribbean States (CELAC). In January 2015, the CELAC 2025 Plan for Food Security, Nutrition and Hunger Eradication marked the consolidation of a long process of political discussion on giving food and nutrition security a stronger position on the public agenda of Latin America and the Caribbean (ECLAC, FAO and ALADI, 2016). The plan was devised with the support of FAO, the Economic Commission for Latin America and the Caribbean (ECLAC) and the Latin American Integration Association (ALADI). It was based on the successful public policies devised by the region's own countries, including programmes of food for schools, support for family farming, food supply and social security programmes, healthy eating, risk management and adaptation to, and mitigation of, climate change.

Adopted in the year in which the Millennium Development Goals (MDGs) reached their conclusion, this is an ambitious regional plan which now constitutes the roadmap for achieving the new Sustainable Development Goals (SDGs).

Completion of the Millennium Development Goals – the set of public policies that made it possible

In 2014, Latin America and the Caribbean were the first region of the world to achieve target 1c¹⁸ under the Millennium Development Goals. The target was to

¹⁸ Goal 1 is to “eradicate extreme poverty and hunger”. It consists of targets 1a (halve, between 1990 and 2015, the proportion of people living on less than \$1.25 a day), 1b (achieve decent employment for women, men and young people) and 1c (halve, between 1990 and 2015, the proportion of people who suffer from hunger).

halve (between 1990 and 2015) the proportion of people suffering hunger. In 1990, this percentage stood at around 15.3 percent whereas, in 2014, it was 6.1 percent, despite differences between sub-regions and countries. The more ambitious target of the World Nutrition Conference (1996), to halve the population in absolute terms suffering from hunger, was also nearing achievement. Latin America had also already achieved that target.

An important point to note is that the region underwent a period of unprecedented development from 2002 to 2012. Encouraged by the macroeconomic context that allowed strong growth rates and a favourable political environment, many countries were able to design and implement a series of public measures which would contribute to progress towards the MDGs on action against hunger and poverty. Over this period, as stated, there was a noticeable process of close cooperation and integration, which proved a decisive influence on the strategies of food and nutrition security in the countries of the region.

Three fundamental aspects can be identified as typical of the focus adopted (ECLAC, FAO and ALADI, 2016):

1. “The presence of more institutional dimensions for public policy design, which means expanding the traditional mechanisms of policy discussion and design, to add new institutional mechanisms of participation, and taking account of the variables inherent to political activity, to be able to forge the consensus needed for the sustainable implementation of food and nutrition security strategies;
2. Recognition of the multisectoral nature of the hunger and malnutrition problem, which means implementing mechanisms of inter-sectoral coordination and broad-based governance for the design of more integrated policies, with multidisciplinary and inclusive means of execution and evaluation; and
3. The implementation of food and nutrition security policies in a “dual track” logic, which includes short-term measures to provide an immediate response to the effects of hunger and malnutrition, together with the application of medium- and long-term policies to make the processes of economic and social progress sustainable, thereby ensuring the stability of food and nutrition security.”

As described, Brazil's Fome Zero and all the related programmes have inspired the national processes, which have led to a series of legal, institutional and political frameworks and detailed and complementary policies and instruments.

Fundamental achievements to record are:

1. Food security laws: during the period 2009–2016, more than 50 bills were brought forward in Latin America, leading to 23 laws and three constitutional amendments, passed to *put an end to hunger and recognize the right to food*. With the support of the Parliamentary Fronts against Hunger mentioned above, it must be noted that laws and bills on food security have been passed and enacted in ten of the region's countries, with related framework laws, such as the laws and bills on food for schools and healthy eating in 11 of the region's countries, and laws and bills on family farming in eight of its countries, among others (FAO, 2017).
2. Mechanisms of extended governance, with many new councils, committees, commissions and other fora for policymaking and dialogue, with a strong presence in the public and private sectors, among NGOs, social movements, academia, parliamentarians, etc. These make up the National Food and Nutrition Security Systems. Around 20 countries in the region have created nationwide and sometimes local mechanisms of governance (Celac Platform, 2016). Such wide experimentation has led to optimization of the instruments and the strengthening of various social stakeholders in the public discussion forums involved in FNS. They are genuine fora for social learning, which have resulted in new, innovative solutions rising to the challenge of hunger eradication in those countries.
3. Conditional Cash Transfer Programmes (CCTs): these non-contributory social security programmes for income transfers were set up and consolidated in practically all countries of the region and have proved fundamental to the reduction of chronic infant undernutrition. The first experiments in Latin America began in some Brazilian cities (1995) and at national level with Mexico's Progresas Programme (1997). From 2000 to 2015, these programmes became widespread so that, by 2015, the region had 30 CCTs active in around 20 countries. The number of individuals living in recipient households under the CCT programmes "increased from fewer than one million in 1996 to 131.8 million in 2015, or 20.9 percent of the region's total population. The regional coverage of recipient households of CCT programmes increased from fewer than 300 000 in 1997 to 29.8 million in 2015, or 17.5 percent of total households in the region" (ECLAC, 2017). The link between CCTs and strategies against hunger and for food and nutrition security was a core issue in the political dialogues promoted by FAO and other partners (such as UNDP and ECLAC) in Latin America. The key idea which was gaining momentum was that the availability of monetary resources is essential for access to food, but is not enough to guarantee food security. For that to happen, further action is necessary, such as nutrition education, regulations and incentives to eat a healthy diet.

4. Programmes to boost family farming which, despite variations from one country to another, included dimensions such as access to credit for farming families, access to production resources such as land and water, access to technical assistance services and market outlets. These programmes reinforced food production for self-consumption and for the supply of local and institutional markets. They also made a significant contribution to the national production of certain items. Family farming's bid to become part and parcel of FNS strategy demonstrated its relevance and importance.
5. Food for schools programmes, especially associated with systems of public procurement from family farms. These involved management models which involved the families, and had a nutritional focus. In 2013, all countries of the region had some kind of programme of food for schools, which served a recipient population of around 85 million boys and girls (WFP, 2013).
6. Complementary programmes specifically for access to water for human consumption; programmes for improved seed; strategies for technical assistance using 'farmer-to-farmer' methods; rural homes programmes; and food enrichment programmes; among others. All these took different forms, in different contexts, and yielded different results.

The post-2015 period and Agenda 2030 – the “old and new” challenges

Despite the progress made and the region's fulfilment of the MDGs, in 2015 there were still 37 million people in Latin America and the Caribbean suffering from hunger: a completely unacceptable figure. The region had come a long way, but was still far from fulfilling the commitment made in 2005 to eradicate hunger completely by 2025.

The Hunger-Free Latin America and Caribbean Initiative had indeed succeeded in influencing international discussions and had snowballed at world level. In 2012, the former UN Secretary General, Ban Ki-moon, took up the challenge by addressing the United Nations Conference on Sustainable Development (Rio+20). He launched the Zero Hunger Challenge to put an end to all forms of hunger and malnutrition. Three years later, in 2015, the Zero Hunger Challenge became Goal 2 of the United Nations Sustainable Development Goals (SDGs), unanimously adopted in September that year. Goal 2 is to “end hunger, achieve food security and improved nutrition and promote sustainable agriculture.” This relates closely to Goal 1, which is to “end poverty, in all its forms, everywhere.” Though far from achieving what had been planned ten years earlier, this marked another step towards a global political commitment to eliminate hunger.

Despite the commitment of Agenda 2030, what we have seen since 2015 has not been an accelerated reduction in hunger statistics, but first a flatlining and then a rise in these figures. In 2017, the region had about 39.3 million undernourished people (FAO, 2019). The increase occurred mainly in the countries of South America, the sub-region which had been considered an example to the world up to 2015.

Furthermore, there was a rising trend in other forms of malnutrition (overweight and obesity), leading to the paradox of countries co-existing with a large percentage of their populations going hungry and another large percentage overweight and/or obese. Worse, and more worrying: many of the overweight and obese individuals are the poorest and worst nourished.

Far from being able to rest on its laurels, the region must now strengthen its strategies against hunger. It must not discontinue the programmes (social security, strengthening of family farming, food for schools etc.) which have yielded so many results. Many of the challenges remain the same: hence it is important to continue the model already implemented. But there is also a need to go further, work out new policies and strengthen the means of implementing them: enhance what has already worked, improve where there is room for improvement, and create what needs to start from scratch. If we add to the 'old' challenges new ones such as the reported increase in other forms of malnutrition, or the impacts of climate change and consequent environmental vulnerability, it is clear that we are a long way off from fulfilling the Zero Hunger Challenge, though it is still possible. It is not just a question of focusing strategies on the population suffering from hunger, but moving forward to create more inclusive, healthier and more sustainable food systems. Some of the areas needing further action are: innovation for rural development, reduction of geographical inequalities and incentives for better provision for links between cities and the country, reduction of food losses and waste, reinforcement of food supply systems and measures for adaptation to climate change.

All this occurs within a much less favourable macroeconomic context. Some economies are practically at a standstill (others in actual recession). This means that, more than ever, the idea is gaining momentum that all players must get involved in eradicating hunger. It is not only a task of governments, but of society as a whole (organizations, academia, consumers, the private business sector etc.) In the spirit of Agenda 2030, which urges cooperation, our conclusion is that we can only definitively achieve Zero Hunger with the participation of all, leading to a fairer, more prosperous and more equal region.

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The Zero Hunger Challenge, an initiative of Ban Ki-moon in 2012

David Nabarro and Florence Lasbennes

How Fome Zero in Brazil inspired leaders to shoot for Zero Hunger worldwide

In 2008, the prices of some cereals on world markets rose by as much as 30 percent within three months and food riots broke out in more than 30 nations (Adam, 2008). Reacting to these developments, the then Secretary-General of the United Nations, Ban Ki-moon, established a High-Level Task Force (HLTF) on the Global Food Security Crisis. It brought together top-level expertise across the United Nations System, the World Bank, the World Trade Organization (WTO) and the Organisation for Economic Co-operation and Development (OECD). The UN Secretary-General was the chairman of the Task Force, assisted in this function by the FAO Director-General as Vice-Chair.

The HLTF's most immediate task was to establish a Comprehensive Framework for Action (CFA) in support of food and nutrition security of all people, everywhere (FAO, 2012). The framework was designed for use by different UN system actors, working together, as they engage with national governments, with food producers and processors, with businesses, with civil society and with regional and multilateral entities.

FAO convened a World Food Summit in 1996 which established the definition of food security. The CFA built on this definition in its first edition, released in 2008. It was notable because of its comprehensive focus that brought together different dimensions of food insecurity: it emphasized the need for all people to be able to access nutritious food at all times; it made the link between food insecurity and the risk of malnutrition; it highlighted the feasibility of food systems being sustainable (and of reducing food loss or waste); and it stressed the importance of contributing to increased incomes for smallholder farmers. The CFA was inspired by comprehensive food security approaches that were being implemented around the world (including Fome Zero in Brazil).

The CFA was updated following extensive consultation among UN Member States and a wide group of stakeholders in 2010 (FAO, 2012). The scope of food security was expanded beyond a focus on the production of different food commodities to include (a) their impact on people's nutrition and health, on environmental sustainability and on climate action; (b) the right to food and the ways in which food systems affect the realization of human rights, especially among women, indigenous peoples and local communities; (c) the challenges of supporting farmer livelihoods especially when these are stressed by a lack of clarity on land ownership, breakdowns in governance, the effects of climate change and/or conflict; (d) the conditions under which smallholder farmers are able to engage within different value chains; (e) options for ensuring that all agriculture and food systems are not only sustainable, but also regenerate damaged ecosystems; (f) opportunities for businesses to engage in food system development; (g) the challenge of over-nutrition and diet-related disease; and (h) the influence of bilateral and multilateral trading agreements.

As the HLTF revised the CFA, the complexity of influences on the behaviour of food systems became increasingly apparent, and the range of perspectives on those influences deepened as the CFA was being debated among multiple groups of actors. The HLTF explicitly adopted a systems approach to its work for food security and nutrition.

The revised CFA explicitly acknowledged that people's food security is the outcome of multiple interconnected processes at local level, and that these are substantively influenced by national government policies, local political processes, and by international standards for food and agriculture, trade rules and marketing practices (Updated Comprehensive Framework for Action, 2019).

By connecting networks of different actors with interests in food and nutrition security and building up relationships between them, the HLTF encouraged open and respectful debate about ways in which food systems might evolve in different settings. It was evident that – in practice – potential directions for food systems development are constantly contested by different interests.

Food and nutrition security for all through sustainable agriculture and food systems

Following another wave of food price volatility and droughts in 2011/12, the HLTF agreed on a joint position to contribute to a stronger focus on agriculture, food and nutrition at the UN Conference on Sustainable Development (known as Rio+20), held in June 2012 (FAO, 2012).

Remembering the hunger he had experienced as a child and inspired by the success of countries that have prioritized the eradication of hunger, Secretary-General Ban

Ki-moon saw the challenge of ending hunger among all people everywhere as being key for sustainable development. He decided that he needed to address this daily emergency and sought a crisp, inspiring and unambiguous message that he could use to rally support at Rio+20. He wanted to do this without appearing to pre-empt discussions on specific elements of the post-2015 development agenda.

Following intense consultation with Graziano da Silva, FAO's Director-General, who had been responsible for the successful Fome Zero programme in Brazil, as well as with other HLTF leaders and representatives of governments, civil society, businesses and researchers, the Secretary-General developed his Zero Hunger Challenge (ZHC, 2012).

The Zero Hunger Challenge: a call to action for ending hunger everywhere

The Secretary-General intended for the Zero Hunger Challenge (ZHC) to influence the direction in which food systems evolve, so that they have a substantive impact on all people's ability to access the nutritious food they need, on the environmental sustainability of food production systems, on reducing food loss and waste, on the nutritional status of young children, and on the livelihoods of small-scale food producers.

As he was developing the ZHC, the Secretary-General wanted to be sure that it resonated with those whose interests in relation to the transformation of food systems were aligned with his own. In its early development, the concept was repeatedly shared with Graziano da Silva and the then heads of the World Food Programme (WFP) and the International Fund for Agricultural Development (IFAD). It was designed to take account of different positions shared during the Rio+20 negotiations, including by the G77 group. The G77 group, who were consulted in New York and Rome, expressed the need to be supported by development aid in their efforts to mitigate and adapt to climate change triggered by developed nations. Civil society groups and businesses were invited to comment through the World Economic Forum and the UN Global Compact.

The draft ZHC underwent multiple reviews and revisions within and beyond the UN system. Given the Secretary-General's determination to have a meaningful proposal by the June 2012 Rio+20 meeting on the post-2015 Sustainable Development Agenda, this process had to be completed within days, rather than weeks.

At the heart of the ZHC as it was developed, is the challenge of ending hunger and malnutrition within our lifetime. The ZHC maintains that this can be achieved through a focus on five elements: all food systems become sustainable, smallholder productivity and income is doubled, losses or waste of food are reduced to zero,

everyone is able to access adequate nutritious food all year round, and stunting in children less than 2 years of age is eliminated.

By proposing an “all-or-nothing” approach within four of the five elements, the Secretary-General’s ZHC is a call to action which unequivocally indicates the desired direction for the evolution of food systems. The content is the same as that articulated in the CFA, but offered more starkly through the five ZHC propositions. There is the added urgency of the transformation being requested within “our” lifetime.

Focusing thought and action on food systems through the ZHC

The request for a clear and communicable message and the tight time frame for its development focused the minds of all those consulted. The Secretary-General’s constant challenge was “Would you be ready to pursue the five propositions of the ZHC within their own positioning, decision-making, and actions?” The general answer was yes, though some balked at the 0 percent and 100 percent targets. These were strongly advocated by Graziano da Silva who said “if you enable 50 percent to benefit, what happens to the other 50 percent” – the logic of Fome Zero, and a logic that made absolute sense to the Secretary-General.

On 21 June 2012, the Secretary-General chaired an event titled “Zero Hunger Challenge – Food for life and the life of food”, with the participation of the Heads of FAO, WFP and UNICEF, as well as the President of Niger, the Deputy Prime Minister of the United Kingdom, and ministers of several countries.

The Secretary-General’s vision quickly gathered support from numerous stakeholders, ranging from UN agencies to grassroots activists. Its simplicity (focusing on no hunger and everyone having access to nutritious food with an end to undernutrition in children), and its comprehensiveness, have made it attractive to governments, civil society organizations (CSOs), businesses and intergovernmental organizations.

The HLTF decided to focus its work around the ZHC, aiming to turn the aspirational statements into concrete progress. Through this strategy, Zero Hunger actors (including, but not limited to HLTF entities) are encouraged to catalyse local-level ownership of the ZHC, reorient their programmes in line with the ZHC priorities and monitor progress.

As soon as the ZHC had been announced, the Secretary-General requested members of the HLTF to use it as a straightforward way to communicate his view of where food systems should be headed: he asked HLTF members to promote the ZHC widely with a view to it framing discussions about hunger and food within the

post-2015 development agenda. HLTF members were also asked to think through whether the ZHC itself was sufficiently precise to enhance concerted action for food system transformation at local, national and international levels. Did they think that it needed a qualifying document to help those who use it to answer questions and navigate obstacles?

HLTF members connected within and outside the UN and explored options for securing political backing for a potential post-2015 goal of Zero Hunger, perhaps within a specific time frame, linked to the five propositions. There was strong support from WFP and the humanitarian community as well as FAO and farmers' supporters. Others were more circumspect, and this added to the richness of the debate, especially on the pillar relating to ecosystem services. It clearly needed to be worked through within the context of each local setting.

Building momentum around the ZHC

Questions about the validity of the ZHC in different settings called for the constant building of connections and the establishment of links between governments, advocates for food and nutrition security, and all other actors involved in the functioning of food systems. This meant engaging farmers, fishers, forest dwellers, businesses involved in food chains, together with actors engaged in nutrition, health, environment and rural economies in the ZHC. This is where FAO and WFP played decisive leadership roles, supported by UNICEF and other HLTF members. In general, the construct of the challenge seemed to work as it offered a valuable collective identity. Nobody wanted the ZHC to result in a top-down international initiative. HLTF members accompanied its adaptation to local, national and regional realities.

As the ZHC became more widely accepted and was rolled out, stakeholders sought information about the scientific basis for the five ZHC pillars so that they could justify it in their own settings: this information was collated and made available by the HLTF coordination team between 2012 and 2014. FAO led this process by co-chairing the working groups and hosting the HTLF coordination team and facilitating its access to the best available knowledge and science.

National governments intensified their reporting to FAO on policies through which they improved food and nutrition security and influenced the performance of their food systems with a view to increasing their effectiveness at reducing hunger. Governments were recognized by FAO for their contributions.

Advocacy groups used the ZHC to encourage policies that incorporated a systems approach when thinking through how food systems should evolve. They encouraged sensitivity in the application of new approaches with all who have a critical role within food systems. This is especially the case with groups who tend to be

left out of the discussion including women farmers, food processors, market sellers and carers of small children, and especially women from indigenous peoples, local communities and vulnerable groups. The correct use of the ZHC means ensuring that people (rather than food products) are at the centre of policy and practice relating to food systems.

Practitioners who analyse the ZHC and its implications can focus on the ways in which different influences together impact on people's experiences of the food systems in which they play a role.

Engagement in the ZHC on social media has grown quickly, with Zero Hunger fans all around the world. A high-quality website was launched in English on 15 October 2012, in time for the 39th session of the Committee on World Food Security, and closely followed with versions in all UN languages. The website was regularly updated with recent knowledge and news on the advancement of the ZHC and issues related to hunger and malnutrition. It served for many, particularly those outside the UN system, as the primary source of information on the ZHC. The ZHC website was regularly visited by more than 13 million people every month.

Additionally, a blog for the ZHC was created. It allowed for a greater variety of information sharing on Zero Hunger, including news stories from around the world on ZHC activity, blogs from ZHC participant organizations, expert opinion pieces by independent authorities and editorial posts.

Social media channels for the dissemination and promotion of the ZHC and advocacy of its main elements were identified, launched and developed. These included accounts on Twitter²¹, Facebook²², Google+, Pinterest²³ and YouTube²⁴, all linked from the ZHC website. These accounts provided one of the most active forms of interaction and participation in the ZHC, from a very diverse range of interested stakeholders. Such engaged stakeholders included UN system organizations and high-level individuals, government members, CSOs, religious leaders and organizations, chefs and food-related organizations, and citizens from around the world.

Social media served to create a community of individuals, local and small-scale organizations, and major stakeholders, in which people learn together and from each other about the ZHC and related issues, as well as where stories are shared about how they and others around the world are participating in and advancing the ZHC.

21 Zero Hunger Challenge Twitter: @ZeroHunger (also available at <https://twitter.com/zerohunger?lang=fr>)

22 Zero Hunger Challenge Facebook: <https://www.facebook.com/ZeroHungerChallenge/>

23 Zero Hunger Challenge Pinterest: <https://www.pinterest.com/zerohunger/>

24 Zero Hunger Challenge YouTube: <https://www.youtube.com/channel/UC8scOaCY6oO2H3nCe5eOTFg>

Social media engagement grew rapidly and exponentially, increasing from a baseline of approximately 100 in August 2012 to over 4 500 engaged users by July 2013. That number more than doubled in 2014.

Increasing interest in the ZHC around the world

In 2014, outreach and engagement on the ZHC with governments, farmers' organizations, civil society, business groups, development banks and the UN system at all levels was undertaken throughout the year by ZHC participant organizations, high-level individuals and the public. HLTF members, especially FAO, IFAD and WFP, encouraged the widest variety of stakeholders to take up the ZHC as a compass for future work on food and nutrition security and to share experience on concrete actions towards ending hunger and malnutrition within our lifetime. They also encouraged the emergence and maintenance of a broad-based movement, consisting of government programmes, multisector partnerships and social mobilization, infused with optimism that Zero Hunger could and would be achieved. They engaged in the Committee on World Food Security, the General Assembly of the United Nations, and the World Economic Forum Annual Meeting in Davos. FAO played a key role in engaging national governments and supporting the development of regional national initiatives on Zero Hunger by focusing its regional conferences on the ZHC.

A coalition of university presidents from around the world launched a new initiative in support of the ZHC in December 2014: Presidents United to Solve Hunger (PUSH, 2014), featuring commitments to emphasize research on hunger, nutrition and sustainable food systems, encouraging effort towards “Zero Hunger campuses” and catalysing student engagement against hunger.

By June 2014, Zero Hunger actions were taking place in approximately 150 countries through regional initiatives, national programmes and official statements of interest. The African Union, ECOWAS, the Hunger-Free Latin America and the Caribbean Initiative, and the 41 Members of the FAO regional conference for Asia and the Pacific, were all aligned in launching efforts in the name of the ZHC. They were supported in their efforts by FAO's mobilization of its national and regional offices to provide policy guidance and technical advice to Members. Independently of those regional initiatives, actions for Zero Hunger are being tracked in 38 countries, including government programmes, new legislation, statements of intent and calls for action.

The UN and the authorities in Milan determined that FAO's involvement in Expo 2015 Milano would be undertaken under the theme of “the Zero Hunger Challenge: United for a Sustainable World”. The UN had a presence throughout the Expo grounds, with displays and information about its own contributions to the Challenge.

Intensive promotion of the ZHC by governments, civil society and the UN system has contributed to ensuring that food and nutrition security and sustainable agriculture have remained high on national, regional and international development agendas. As the Sustainable Development Goals were developed by nations between 2012 and 2015, the focus on Zero Hunger remained consistent: the ZHC promoted integrated approaches that respond to the multiple, interconnected causes of hunger and malnutrition.

At Rio+20, countries agreed to launch a process to develop a set of Sustainable Development Goals (SDGs), which would build upon the Millennium Development Goals (MDGs). A series of informal intergovernmental negotiations on the 2030 Agenda for Sustainable Development took place throughout 2015 at the UN, with each session focusing on a different element of the outcome document. These negotiations were the most open and inclusive to ever take place in a UN context, with CSOs, the private sector, academia and other stakeholders welcomed, included and consulted at every stage of the process.

The Agenda also took into account other inputs and processes, including the Report of the Open Working Group on Sustainable Development Goals (FAO, 2013), which was agreed following 18 months of inclusive intergovernmental negotiations and served as the main basis for negotiations, and “The Road to Dignity by 2030”, the synthesis report of the UN Secretary-General (UNGA, 2014).

Government representatives, who were involved in negotiations on the Sustainable Development Agenda quickly recognized that the ZHC reflects the reality of the challenges faced by people everywhere as they seek agriculture and food systems that enable better nutrition and contribute to sustainable and resilient communities.

ZHC and the Sustainable Development Agenda: Goal 2 = Zero Hunger

2015 was a pivotal year in the history of the United Nations. The three interlinked global events on financing for development (Addis Ababa, July), the United Nations Summit for the adoption of the 2030 Agenda (New York, September) and the United Nations Framework Convention on Climate Change – 21st Conference of the Parties (UNFCCC–COP21) for the adoption of a universal agreement on Climate Change (Paris, December), provided the basis for a new era of universal sustainable development. During 2013 and 2014, global consultations and intergovernmental negotiations embraced the vision encompassed by the ZHC as the appropriate one for framing the post-2015 development agenda.

This multi-actor exploration of food systems certainly influenced several government representatives and observers, as they considered how to incorporate

agriculture and food systems into work on the post-2015 development agenda. They were attracted to the ability of the ZHC to combine three foci that had often been quite distinct – the role of food systems in (a) nourishing people, (b) nurturing the planet, and (c) enabling hundreds of millions of people to be resilient and not become food insecure when their livelihoods are stressed.

The 2030 Agenda for Sustainable Development was agreed in September 2015 with elements of the ZHC in Goal 2 (Zero Hunger) and Goal 12 (food loss and waste). The eventual wording of SDG 2 with its associated targets has some similarity to the ZHC (Sustainable Development Goals Knowledge platform, 2015).

The Milano Group

In September 2015, the Secretary-General was impatient to see movement on the Zero Hunger Challenge and – given that it had clearly had some impact on the design and content of SDG 2 – he asked a group of senior practitioners from governments, the research community, businesses, civil society and the UN system to offer practical guidance on how food systems need to evolve if the Sustainable Development Agenda is to be realized.

The group met for the first time on World Food Day (15 October 2015) in Milan and was subsequently known as the Milano Group. The ZHC and the Sustainable Development Agenda formed the basis of this group's work over five meetings between 2015 and 2018.

Preliminary results were made available in 2016: there was no alternative but to initiate system change at local level as the issues are locally specific. They could be supported through global position statements based on best research evidence, as well as by international movements such as those to reduce food loss and waste, improve access to nutritious food and scale up nutrition by reducing the risk of malnutrition in all its forms. But real progress would take place locally.

The report of the Milano group, completed in 2017 and published in 2018, called for a four-part transformation of food systems, so that they simultaneously: (a) support the livelihood security and resilience of food producers and processors; (b) contribute to the good nutrition and health of every person; (c) regenerate ecosystem services everywhere; and (d) mitigate climate change through reduced emissions and increased carbon sequestration.

The transformation should take place at local level, guided and informed through governance that functions in the public interest, backed up by effective water- and land-use planning, with metrics that are useful for all concerned to measure progress.

The complexity of the transformation implies that, ideally, multiple stakeholders support a common approach to system transformation. This will result in some being asked to change the way they produce, process, market and consume food and will be challenging for them if there are no satisfactory alternatives on offer. Those whose livelihoods are likely to be affected should be included in the conversation about how it will happen. If the transformation is perceived to lead to winners and losers, it will inevitably be politically contested. Ideally, those whose lives have to change should be accompanied through the changes that will be asked of them.

ZHC and multi-stakeholder transformation

The reality that transformative change is politically challenging means that there is a need for multi-stakeholder coalitions to support integrated analysis of science-based pathways for transformation and then to engage different stakeholders in considering these options. Dialogues between those with different interests linked to the four-part transformation are being established. These Food Systems Dialogues provide opportunities for different actors to explore their differences and seek out ways to work together for the better functioning of food systems in line with the ZHC.

Dialogues, and associated alliances and coalitions, are being advanced in multiple settings, especially within countries in ways that involve national and local governments, food producers and processors, as well as those focusing on nutrition, health, the environment and climate, with the involvement of legislators, investors, consumers and auditors, all intent on supporting the transformation.

Conclusion

Building on successful national programmes like *Fome Zero* in Brazil, the ZHC has changed the narrative around hunger from one of despair to one of positive determination. FAO's Director-General, by encouraging a shift from reducing hunger to ending it once and for all, has inspired leaders everywhere to pursue this vital ambition. The elements of the ZHC have been included in the Sustainable Development Goals. The comprehensiveness and universal nature of the Zero Hunger vision has the potential to significantly contribute to the massive transformations needed for the delivery of the 2030 Agenda for Sustainable Development. It offers a ready-made platform to communicate the importance of food security, nutrition and sustainable agriculture to delivering on the promise of the 2030 Agenda and the Climate Agreement, and to promote collective action by groups of stakeholders supporting governments to create sustainable, inclusive and resilient food and nutrition systems that deliver for all people. It has given further impetus to the work of FAO whose mandate covers the critical nexus of food, agriculture and the environment.

The ZHC encouraged a common identity about the optimal direction of food systems. This was achieved through a clear narrative that is comprehensive, systemic

and connects sectors and actors. The ZHC enabled shared access to information about means for advancing food security and encouraged the sharing of details about multiple complex processes, with comprehensive updates being shared at regular intervals. The ZHC also fostered meaningful relationships among multiple stakeholders and across sectors. For many who are involved in food security and nutrition, the ZHC has encouraged the development of trust, a shared meaning, as well as effective aligned action.

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Zero Hunger in Africa

Coumba D. Sow and David Phiri

Overview

This chapter describes how the Brazilian Fome Zero programme inspired African countries and their regional institutions in the fight against hunger. The international community recognized the efforts made by African countries in working towards the Millennium Development Goals (MDGs). From 1990–92 to 2015, 12 countries achieved MDG 1c of halving the proportion of undernourished people. Despite that progress, there are still 256 million food-insecure people in Africa. Considering that context, and taking into account aggravating factors such as climate change, conflicts, and lack of access to adequate resources, the African Union (AU) reiterated its Maputo Declaration of 2003 and adopted the 2014 Malabo Declaration to end hunger by 2025. This chapter discusses actions taken since then by regional economic communities and a number of countries, and progress made in reshaping agricultural policies and investment plans to improve food security and nutrition using the Zero Hunger approach of the 2014 Malabo Declaration and Sustainable Development Goal 2.

Introduction – Where it all began

Fome Zero was launched in 2003 in Brazil to eradicate hunger and malnutrition by tackling the underlying causes, particularly rural poverty. The initiative had several components, key among them being a conditional cash transfer programme targeting households living in extreme poverty, creation of water catchment sites in arid and semi-arid areas, health and nutrition education, distribution of dietary supplements, creation of low-cost restaurants, and access to microcredit.

African Heads of State and Government met in Maputo, Mozambique in July 2003, the same year that Fome Zero was launched in Brazil, with the aim of finding solutions to increasing levels of food insecurity in Africa at a time when 30 percent of the continent’s population was chronically undernourished. This meeting led to the Maputo Declaration, which established the Comprehensive Africa Agriculture Development Programme (CAADP) as a framework to champion agricultural

development and food security in Africa by raising agricultural productivity and increasing public investment in the sector. Part of the commitment made by Heads of State in Maputo was to increase public investment in agriculture to a minimum of ten percent of national budgetary allocations, and to raise agricultural productivity by at least six percent per year. To date, 44 Member States have signed the CAADP agreement, and almost the same number of countries have formulated National Agriculture Investment Plans (NAIPs) or National Agriculture and Food Security Investment Plans (NAFSIPs) to guide the implementation of their national agricultural priorities. This confirms the importance that the continent accords to agriculture for its economic development, as it contributes to close to 23 percent of gross domestic product (GDP) and represents an enormous source of employment – up to 55 percent of the active population (ILOSTAT, 2017).

Ten years on from the inception of CAADP, there had been demonstrable progress in the reduction of hunger and undernourishment in the continent. Agriculture took centre stage in discussions in many countries. However, despite positive progress, opportunities for improvement remained, in particular with respect to implementing the Maputo decision to increase the national budgetary allocation to agriculture to at least ten percent. Fewer than ten countries have achieved the Maputo target of allocating ten percent or more.

In addition, the continent continued to experience persistent food insecurity, not to mention inequitable growth. This called for a recommitment to the CAADP process.

Given the clear need to accelerate the CAADP process, and with Fome Zero as an inspiring example, the idea of a unified continental approach to achieving Zero Hunger in Africa was developed during a meeting held in November 2012 in Addis Ababa, between the former Chairperson of the African Union Commission (AUC) Nkosazana Dlamini Zuma, the Director-General of the Food and Agriculture Organization of the United Nations (FAO) José Graziano da Silva, and the former Brazilian President Luiz Inácio Lula da Silva, in his capacity as honorary president of Instituto Lula of Brazil. The three leaders committed to work together towards eradicating hunger and undernourishment in Africa. They also agreed to make food security a priority in the continent, to be achieved by looking beyond increased food production and to include underlying issues such as lack of access to food,²⁵ which in itself is a great threat to food security. This would require the support of national, regional and international stakeholders, combined with the political leadership of the AUC, the technical expertise of FAO and practical experience from Brazil's Fome Zero programme under the leadership of President Lula de Silva.

²⁵ FAO defines lack of access to food as lack of access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet (FAO, 2006).

It is against this backdrop that the African Heads of State and Government met from 29 June to 1 July 2013 in Addis Ababa during a high-level event entitled “Toward African Renaissance: Renewed Partnership for Unified Approach to End Hunger in Africa by 2025 within the Comprehensive African Agriculture Programme (CAADP) Framework”. This meeting would in turn lay the foundations for the 2014 Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods.

Having been a key stakeholder in the Fome Zero initiative, FAO soon after launched the Zero Hunger programme in close collaboration with the AUC and Instituto Lula. The initiative was modelled on Fome Zero but adapted to the contextual realities of African countries.

The Malabo Declaration: Ending hunger by 2025 and the Zero Hunger vision in Africa

In June 2014, Heads of State and Government of the African Union, at their summit meeting in Malabo, Equatorial Guinea, adopted the Malabo Declaration. This declaration reaffirmed Africa’s commitment to end hunger and malnutrition by 2025 and to ensure mutual accountability for results through a biannual review and reporting process. With that pledge, Africa upgraded its vision from reducing hunger to eradicating it, a major milestone.

The Malabo Declaration is a set of seven principles to guide actions at country and regional level within the context of the African Union’s CAADP. It coincided with the ten-year anniversary of the Maputo Declaration.

In 2013, the African Union’s New Partnership for Africa’s Development (NEPAD) reflected on the ten year implementation of CAADP, noting achievements such as agriculture being at the top of the political agenda.

The Malabo Declaration reaffirms the Maputo Declaration and added the following seven commitments:

1. A recommitment to the principles and values of the CAADP process;
2. A recommitment to enhance investment finance in agriculture;
3. A commitment to end hunger by 2025 including:
 - › At least a doubling of productivity (inputs, irrigation, mechanization).
 - › Reduction of stunting to ten percent.
4. A commitment to halve poverty by 2025 through inclusive agricultural growth and transformation;
5. A commitment to boosting intra-African trade in agricultural commodities and services;

6. A commitment to enhancing resilience in livelihoods and production systems to climate variability and other shocks;
7. A commitment to mutual accountability to actions and results.

The NEPAD Planning and Coordinating Agency (NPCA) was tasked to support Member States in implementing the commitments with the support of technical and development partners, where applicable. FAO, as a lead agency in monitoring the then MDG 1c of halving the proportion of undernourishment as well as the World Food Summit goal of halving the absolute number of undernourished people and later SDG 2 of eradicating hunger, has a significant role to play in that support.

Stakeholders for Africa's Zero Hunger roadmap

Regional institution NEPAD

NEPAD, later reconstituted as NEPAD Planning and Coordinating Agency (NPCA), and now as NEPAD African Union Development Agency (NEPAD-AUDA), is an initiative of the African Union (AU), adopted by African Heads of State at the 37th Summit of the AU in Lusaka, Zambia, in 2001²⁶.

The key objective of the initiative is to have a framework to which programmes and project resources are mobilized and stakeholders, including development and resource partners, Regional Economic Communities (RECs) and African countries, would be aligned.

NEPAD, with the support of technical partners including FAO and the International Food Policy Research Institute (IFPRI), assisted more than 40 countries to develop and adopt the CAADP Compact and about 30 related National Agriculture Investment Plans under the framework of the Maputo Declaration (Bahigwa *et al.*, 2015). NEPAD also supports Regional Economic Communities such as the Common Market for Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD), the Economic Community for Central African States (ECCAS), the East African Community (ECA), and the Southern African Development Community (SADC), to develop regional compacts and regional agriculture investment plans.

Furthermore, NEPAD has been steadily advocating for Heads of State and Government to prioritize agricultural development. To that effect, the Heads of State renewed their commitment to NEPAD to drive the execution of the Malabo Declaration. They equally confirmed the CAADP compacts and NAIPs as the main

²⁶ <https://au.int/en/nepad>

vehicles of implementation to enhance agricultural development, with greater emphasis on inter-sectoral collaboration and coordination.

To implement the Malabo Declaration, further key elements that Member States considered important included:

- › the key role that finance, budget, and planning ministries should play;
- › use of other planning tools at country level to foster agricultural growth; and
- › the need to focus on delivery rather than process, that was central during the previous ten years.

As actions and results were central to the decision by the Heads of State, a biennial review was agreed upon to measure progress made by countries in each of the seven Malabo commitments.

In addition to the seven commitments, the Heads of State also committed to a systematic biennial review process using the NEPAD CAADP Results Framework (AUC and NPCA, 2015). The revised CAADP Results Framework includes 40 prioritized indicators, building on the previous CAADP Monitoring and Evaluation Framework (Benin, Johnson, and Omilola, 2010).

From Africa for Africa: Africa Solidarity Trust Fund

The creation of the 2013 Africa Solidarity Trust Fund for Food Security was also a signal by Heads of State of the continent in support of using African-owned resources to end hunger in the region.

The Africa Solidarity Trust Fund (ASTF) is an innovative tool for Africa to fund African development actions. It was established to reinforce food security initiatives in Africa in collaboration with regional institutions and countries to eradicate hunger and malnutrition by 2025, eliminate rural poverty and manage natural resources in a sustainable manner, and it is aligned to the CAADP at national level.

The Fund was established at the 38th Session of the FAO Conference in June 2013, with approximately USD 40 million allocated (USD 30 million from Equatorial Guinea and USD 10 million from Angola), following a proposal by the FAO Regional Conference in Brazzaville in 2012. Civil society in Africa also made a symbolic contribution to the fund.

The ASTF reports that from its creation in 2013 to 2017, it supported 18 projects in 41 countries. Its evaluation confirmed that these projects benefited thousands of vulnerable people in Africa. To cite just some of the results, in Mali and Malawi

2 606 rural families and over 1 200 women and youth were supported to engage in food production and marketing; in Ethiopia, 12 000 rural farmers, including women and youth, increased their income thanks to better access to inputs; and in Niger, 160 000 vulnerable families improved their agricultural productivity and food security with the quality input distribution and investments they were given (FAO, 2019).

ASTF's achievements include leveraging new resources and partnerships in Liberia (Swiss Development Cooperation), Malawi (European Union), Mali (Grand Duchy of Luxembourg, UNHCR), and Niger (Norway).

A new phase of the ASTF aims at growing the partnership, and with replenishment to increase its reach and upscale its successful practices. A round table of Heads of State that was organized in Malabo in June 2019, on the sidelines of the Annual Assembly of the African Development Bank, witnessed the commitment of African leaders including regional banks and institutions and partners. As an outcome, USD 25 million in grants was pledged, with an increase of donors from two to six. The new phase has the objective of continuing to address critical gaps in agricultural development in African countries using home-grown solutions within the NEPAD CAADP context.

Parliamentarians

The idea of a parliamentarian front against hunger emerged recently in Africa. The region has seen a major involvement of parliamentarians in the fight against hunger and malnutrition. They have been initiating actions to position food and nutrition security and the right to adequate food at the forefront of political and legislative agendas at regional level. As a result, parliamentarians from the 250-member Pan African Parliament (PAP) established the Pan African Alliance for Food and Nutrition Security in 2016.

The Parliamentary Network for Food Security in Africa and the Arab World is an initiative by the Association of Senate, Shoora and Equivalent Councils in Africa and the Arab World (ASSECCA) and is facilitated by FAO through its Regional Initiative on Building Resilience for Food Security and Nutrition in the Near East and North Africa. In Eastern Africa, parliamentarians from the countries of the Intergovernmental Authority on Development (IGAD) and the East African Community (EAC) launched a Parliamentary Alliance for Food Security and Nutrition in Eastern Africa in April 2019 with a view to ensuring stronger legislative frameworks, adequate policy measures and more funding to support the eradication of hunger and malnutrition.

Brazil-inspired instruments

The Purchase from Africans for Africa programme

The Purchase from Africans for Africa (PAA Africa) programme is an innovative initiative which aims to promote food security and income generation among vulnerable populations through institutional purchases from smallholder farmers for school feeding programmes. PAA Africa supports both agricultural production through provision of inputs, training and machinery as well as access to markets (IPC-IG, 2017). PAA was inspired by two Brazilian programmes: The Food Acquisition Programme (*Programa de Aquisição de Alimentos*–PAA) and the National School Feeding Programme (*Programa Nacional de Alimentação Escolar*–PNAE).

Smallholder farmers produce most of the food in Africa and access to markets remains crucial for them. The PAA responds to a pressing need in Africa to go beyond increasing production and productivity to connect smallholder farmers to local markets. PAA started in 2012 as a partnership between FAO, the World Food Programme (WFP), the Government of Brazil and the UK Department for International Development (DFID). The programme was then implemented in five countries: Ethiopia, Malawi, Mozambique, Niger and Senegal. It supports farmer associations' access to markets, such as to schools with school feeding programmes, and to adapt their production accordingly.

The pilot project was to demonstrate the impact that policy changes could have on purchases of food from smallholders for a diversified food basket for schools. The implementation of the PAA in Africa required a regulatory framework to better organize purchasing from smallholder farmers and to promote and ensure food safety, coordination with various national agriculture institutions, as well as a budget from national resources (IPC-IG, 2018).

The main objective of the PAA Africa pilot initiative was to reinforce national capacities, and to test purchase and producer support models to accompany governments in developing policies and programmes. The latter includes school feeding programmes such as in Mozambique, linking farmers to a potential local market for local production, boosting local economies and thus creating a virtuous circle to avert poverty.

PAA Africa also supported increasing the productivity of family farming systems and guaranteeing access to food for nutritionally vulnerable children at school. The operationalization of the PAA was through strong capacity development of local producers using Farmer Field School approaches and provision of subsidized inputs and machinery. The challenge remains the creation of a suitable environment for purchasing products. Organizations such as WFP facilitated the purchase of products in countries like Mozambique and Senegal. The objective of any new

phase of the PAA should be to create an environment for adoption by national governments based on the successes of the first phase. Based on the pilot exercise, there is a need for stronger ownership by actors and investment from national budgets to enable the linking of farmers to school feeding programmes.

Homegrown school feeding programmes

At the 26th African Union Summit in January 2016 (Assembly/AU/Dec.589(XXVI), African Heads of State and Government adopted a decision on School Feeding and decided that 1 March would be the Africa Day of School Feeding²⁷.

In Brazil, school feeding has been mandatory in primary and secondary schools since 1955. In 2009, a new policy measure was adopted to introduce at least 30 per cent of organic agricultural products from local farmers. The decision fostered interdisciplinary collaboration from the agriculture, education and health sectors to assist local farmers to have access to markets, such as schools, with quality and high-nutrition products.

According to the World Bank²⁸, there are some 66 million primary school age children who are hungry, 23 million of whom are in Africa. In addition, 75 million children of school age are out of school, 47 percent of whom are in sub-Saharan Africa. Eradicating hunger by 2025 cannot be achieved without developing school feeding programmes and at the same time increasing school enrolment.

NEPAD, as a development agency of the AU, supported African governments to include homegrown school feeding into their policies and strategies as an important initiative to contribute to the eradication of hunger and malnutrition using CAADP. The following countries: Benin, Côte d'Ivoire, Ghana, Kenya, Mali and Nigeria have formally adopted the programme and are implementing it to ensure food and nutrition security for all. Other countries that have started the programme include the Democratic Republic of Congo, Republic of Congo, Lesotho, Madagascar, Malawi, Mozambique, and Zambia.

Following the adoption of the regional strategy to enhance nutrition and strengthen smallholder farming, the AU promoted school feeding as an essential tool to boost adoption by Member States.

The initiative helps support the lives of millions of people, and in particular children and girls, by providing access to education and meals at the same time, while also supporting smallholder farmers' production and access to markets.

27 <https://au.int/en/documents/20181008/school-feeding-guide-member-states>

28 "Education". The World Bank. 2013. Retrieved 18 March 2013.

According to WFP, in West Africa alone, governments invested USD 568 million annually in their programmes. Furthermore, their analysis showed that every USD one invested in school meals generates close to USD ten in social and economic returns: improved health, education and productivity (WFP 2013a; WFP 2013b).

The Africa Day of School Feeding was adopted by the African Union Summit to promote school meals, one of the most popular social safety net initiatives, with positive impact on children, farmers and people.

Social protection and cash transfers

Brazil's Bolsa Família has also made its way to Africa through the implementation of social protection programmes that governments have adopted in recent years after major food and financial crises.

Social safety nets comprise contributory and non-contributory transfers, either in cash (conditional or unconditional), and in-kind transfers. Analysis of cash transfer activities have proven to reduce poverty faster than other social assistance schemes. They also provide autonomy and responsibility to recipients, giving them back their dignity and pride, after being exposed to shocks that have left them vulnerable (De Groot *et al.*, 2015).

Following the trends of Latin America, where by 2008, 18 countries were implementing cash transfer programmes (CTPs), at least 13 countries in Africa have started cash transfer programmes in recent years, including Ethiopia, Ghana, Kenya, Lesotho, Malawi, Senegal, South Africa, Zambia and Zimbabwe (Davis and Handa, 2014).

The need for this form of cash transfer programme as a social protection instrument is rooted in the urgent necessity to support the most vulnerable people in Africa to cope with recurrent external shocks, especially those linked with climate change or conflict, which can have a direct effect on their harvests.

The World Bank mentions more than 120 cash transfer programmes implemented between 2000 and mid-2009 in sub-Saharan Africa. They include aftershock transfers and unconditional cash transfer programmes as well as other forms of protection such as non-contributory social pensions. Cash transfer programmes analysed in low-income countries corresponded to an average of 100 000 beneficiaries approximately, except for Ethiopia which had 1.2 million beneficiaries. (Garcia and Moore, 2012). It is important to note that in January 2009, the African Heads of State adopted the Social Policy Framework (SPF), which provides guidance to Member States as they design their national strategies and programmes on social protection, including cash transfers. The AU strategy aims at providing a framework to reinforce social solidarity, equity, and reduce discrimination and poverty.

The AU considers social policy as directly linked to economic policy and reiterates the importance of social development as an objective to be achieved and a means to enable the environment for sustainable and inclusive growth.

The Malabo Declaration strengthened the earlier resolution on social protection, calling for the integration of social protection with policies to increase agricultural productivity in order to achieve the goal of ending hunger by 2025.

Compared to Latin American models, most African countries (except South Africa and Ethiopia) use traditional, family-based safety nets and formal pension schemes that cover a small portion of the population (Wouterse *et al.*, 2018).

Examples of the social protection instruments that have been implemented during the last decade in Africa include:

- › Productive Safety Net Programme (PSNP) in Ethiopia
- › Ghanaian Livelihood Empowerment Against Poverty (LEAP)
- › Cash Transfer for Orphans and Vulnerable Children (CT-OVC) in Kenya
- › Child Grants Programme (CGP) in Lesotho
- › Social Cash Transfer Programme (SCTP) in Malawi
- › Mozambique Food Subsidy Programme
- › Vision 2020 Umurenge Programme of Rwanda
- › Senegalese Bourse de Sécurité Familiale
- › South Africa's Child Support Grant and Old Age Pensions
- › Child Grant Programme (CGP) in Zambia
- › Social Cash Transfers (SCT) in Zimbabwe.

Cash transfer programmes have a great impact on vulnerable populations, although the nature and magnitude of these impacts vary from country to country, due to differences in programme design, implementation and context. In Ethiopia, most of the transfers were used to buy food but also went to education, agriculture, payment of debts, healthcare, and small entrepreneurship (Devereux *et al.*, 2008). In Ethiopia, Malawi, and Zimbabwe, they improved the way agricultural inputs, seeds and fertilizers were used, generating higher crop yields. Cash transfers, rather than creating dependency, benefit the larger community, as income multipliers that boost the local economy. School enrolment was improved by 43 percent in Malawi for the groups receiving the Malawi Zomba Cash Transfer (Baird *et al.*, 2011). The proportion of expenditure on food increased by 22 percent for the Mozambique Food Subsidy programme (Soares and Teixeira (2010).

The increasing number of hungry and poor people however suggests that African countries will face challenges in using social protection as a driver to eradicate

hunger and poverty by 2025. One of these is finding resources to invest in social protection and meet the growing demand from poor and vulnerable people, learning from the vast experience that countries have gathered from Bolsa Família as well as other Latin American initiatives.

The right to food

Following in the footsteps of the right to food approach in the Fome Zero programme, African countries have continued the trend. In Malawi, civil society suggested a national food security bill in 2010 using the National Food and Nutritional Security System (SISAN) law of Brazil, with a special fund that could help achieve Zero Hunger in the country. Similarly, Mozambique and Uganda proposed the adoption of a law or act on food and nutrition security. In the United Republic of Tanzania, Zanzibar adopted a Food Security and Nutrition Act in 2011, with a request to the State to protect the right to food of the most vulnerable and create a council to coordinate the mainstreaming of food security and nutrition into policies and programmes with the requisite financial resources for implementation.

West Africa is the only region to adopt the right to food approach within its Zero Hunger initiatives. Several countries in the region have also take steps towards the right to food in their constitution. In Niger, as of 2010 the constitution recognizes that “Everyone has the right to life, health, physical and moral integrity, to healthy and sufficient food, to drinking water, education and instruction under the conditions defined by the law.” Nigeria has also initiated the process of introducing the right to food in its constitution (de Shutter, 2014).

Water harvesting with cisterns

Inspired by the “1 million cisterns for Brazil”, the “1 million cisterns for the Sahel” initiative promotes simple and cost-effective rainwater harvesting and storage systems for vulnerable communities, and especially for women.

The semi-arid areas of Brazil are similar to the Sahel region, which is one of the most water-stressed regions in the world. The consequences are devastating for Sahelian rural households, affecting agriculture, food security and nutrition, resulting in increased poverty and leading to migration (FAO, 2019). More than 80 percent of rural households depend on livestock and agriculture, of which 90 percent is rainfed agriculture in the Sahel.

On 31 October 2013, six Sahel countries – Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal – met in Dakar at the High Level Forum for boosting irrigation in the Sahel countries. This took place at the invitation of the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) and the World Bank, along with the African Union Commission, the Economic Community of West African States

(ECOWAS), the West African Economic and Monetary Union (UEMOA) and FAO, in the presence of representatives from international organizations, researchers, civil society, producers, the private sector and technical and financial partners. The Dakar meeting recalled the importance of water for development and the need to fast-track interventions to reach the most vulnerable communities in the Sahel.

Learning from the Brazilian experience with semi-arid areas within the Fome Zero programme, the objective of the initiative is to enable millions of people in the Sahel to access safe drinking water and to have sufficient water for household agricultural production in order to improve their food security and nutrition and to strengthen their resilience (WWDR, 2019). South–South cooperation with the Brazilian civil society organization Articulação no Semiárido Brasileiro (ASA) is facilitated by FAO.

ASA was created in the late 1990s when the Brazilian Fome Zero programme intended to build 1 million cisterns to promote access to water for family consumption, food production and the preservation and multiplication of native seeds. The pilot programme was funded with public resources for the drinking water cisterns. The objective of South–South cooperation is to share knowledge and experience on methodologies used and approaches that helped people in the Northeast of Brazil to cope with water scarcity²⁹. Missions from and to Brazil were organized to exchange knowledge between people from the Brazilian semi-arid region and the Sahel region, particularly Chad, Burkina Faso, Niger, and Senegal.

In 2018, FAO together with partners and communities, launched pilot programmes in Senegal and Niger. In Senegal, 16 cisterns – each measuring 15 m³ – were constructed for families, and three cisterns – each measuring 50 m³ – for agricultural production at community level, reaching 360 beneficiaries. In Niger, FAO constructed five family cisterns and six community cisterns, reaching 500 beneficiaries. Family cisterns cover household drinking water needs during the entire dry season and can be used for micro-gardening. Community cisterns cover water needs for agricultural production in recurring dry spells during the rainy season and ensure an additional production cycle for 0.5 ha of land.

In addition to accessing water, women benefit from climate-resilient inputs for vegetable gardening and training, including on the use and maintenance of cisterns. The project contributes to providing safety nets as local communities also receive cash in exchange for work to build the cisterns using local materials. In the coming three years, the project is expected to reach an additional 10 000 women in Senegal, 5 000 in Niger and 5 000 in Burkina Faso.

²⁹ http://www.asabrasil.org.br/noticias?artigo_id=10441

The goal is to reach the 1 million cisterns in the Sahel. Brazil has already built approximately 1.3 million cisterns benefiting 12 million people.

Zero Hunger in Africa: country-specific and regional success stories

West Africa is the only region in Africa where the Regional Economic Communities (REC) formally adopted a Zero Hunger initiative directly inspired by the Brazilian model. It was adapted to regional needs and to respond to the regional challenges that were in many ways similar to those faced by Brazil as a country. These include drought, food insecurity and malnutrition. In September 2012, the countries of West Africa adopted the Declaration on the Zero Hunger Initiative, asking the Economic Communities for Western Africa (ECOWAS) Commission to implement the political decision. The ECOWAS Zero Hunger initiative officially started in 2014, following the Malabo Declaration. Its objective is to coordinate the participation of all actors in their actions to eradicate hunger and malnutrition in West Africa by 2025 with the implementation of Right to Food legislation in all 15 countries of the region. It is anchored to the Regional ECOWAS Agricultural Policy (ECOWAP/CAADP) and its related Regional Agriculture Investment Plan (RAIP). Compared to other regions in Africa, West Africa is the only region that achieved MDG 1c, reducing by 63 percent the proportion of its people suffering from hunger: the proportion declined from 24.2 percent in 1990–92 to 9 percent in 2014–16. The subregion also made significant progress, reducing by half the absolute number of undernourished people (World Food Summit goal) by almost 13 million between 1990–92 and 2014–16, despite a significant population growth and recurrent droughts in Sahel countries (FAO, 2015). Regional institutions such as the Comité inter-états de lutte contre la sécheresse (CILSS) were empowered with programmes to address climate change challenges, especially after the 2007 and 2012 crises where 18 million people were affected by a food crisis (CILSS, 2012).

Approaches identified and implemented by the Zero Hunger initiative include defining a strategic roadmap for achieving Zero Hunger and malnutrition in West Africa; promoting the Right to Food at legislative level and contributing to its application within ECOWAS; and strengthening the coordination of regional food and nutrition security initiatives and programmes providing actors with a common framework for resource allocation, monitoring and accountability.

The Zero Hunger initiative of the West Africa region also emphasizes better coordination of actions on agricultural policies, social protection and nutrition-sensitive agriculture to facilitate incorporation within national and regional agricultural investment plans and budgets.

In Niger, the 3N Initiative – “Nigériens Nourish Nigériens” – was also inspired by the Fome Zero programme. Since Niger’s independence, significant resources had been

invested in the country's agricultural sector but despite those efforts, food production remained low and people continued to be food insecure every year, according to results published by Cadre Harmonisé.³⁰ The 3N Initiative was designed to reverse the trends in the country. Inspired by the Niger Renaissance Programme, it was adopted by the President of the Republic, who announced on April 7, 2011, the vision encapsulated by the 3N Initiative: *“The Nigerien people have a huge task to overcome a challenge that has something to do with dignity and honour: eradicating hunger. It is shocking that, recurrently, we are reduced to beg our daily bread. The past election showed that our people have a political freedom, they should now have the alliance of freedom and bread.”*

Subsequently the Government of Niger adopted the Sustainable Food and Nutrition and Agricultural Development Strategy, aligning the numerous existing agricultural programmes and policies thus far unable to deliver. For the first time, the issue of food security was considered from a political standpoint, taking into account how to and protect Nigerien people from recurrent and acute food crises and malnutrition. Nigerien farmers are still growing rainfed crops and yield improvement –through the use of an appropriate technology package –is at the centre of the initiative.

900 billion CFA francs were earmarked for the various sectors to achieve the 3N Initiative. As in Brazil, 3N is a strong commitment from the President of the Republic to see Niger reach Zero Hunger. This bold initiative called for various government departments, at all levels, to work together towards the goal and to put in place all required measures to achieve it.

The 3N Initiative draws on the lessons learned from the implementation of Fome Zero in Brazil and builds upon past successful policies in Niger. The overall objective³¹ of the 3N Initiative is to protect Nigerien people from famine and to ensure conditions for full participation in the agricultural production sector and improve their incomes. The specific objectives to achieve this overall goal are:

- › Resolve the national food deficit and improve the quality of food by increasing productivity and crop diversification;
- › Build the resilience of poor households by increasing their income;

30 A Harmonized Framework (Cadre Harmonisé) has been created for the analysis and identification of areas at risk and vulnerable groups in the Sahel by the Permanent Interstate Committee for Drought Control in the Sahel (Comité permanent Inter-États de Lutte contre la Sécheresse dans le Sahel, CILSS) and its partners.

31 3N Initiative (2016), Report on the outcomes of the 3N Initiative 2011–2015.

- › Reduce malnutrition among the most vulnerable groups (children under five and pregnant or lactating women) through diversification and nutrition education;
- › Increase national and local capacities for prevention and management of food crises.

The 3N Initiative places food security and nutrition at the centre and integrates issues related to nutrition, social protection, disaster risk reduction, access to food for the most vulnerable, management, and crisis prevention. These five axes aim at implementing the two dimensions of 3N: the development of sustainable agriculture (73 percent of the national budget) and building the resilience of vulnerable populations. They address both emergency and development aspects (Niger, 2012).

The President established a High Commission, reporting directly to him, with the mandate to mobilize the different ministries and demonstrate the strong commitment of relevant authorities. As in Brazil, a dedicated ministry ensures coordination. In addition, the 3N Initiative's implementation is decentralized to the municipal (commune de convergence) level, where technical services support farmers in defining their priorities and funding needs.

It is at the municipal level that the identification of priorities, planning, and implementation of measures are carried out. The issues addressed primarily concern agricultural development and food security and nutrition. This grassroots approach has allowed Niger to put people at the heart of development dynamics and to be autonomous in deciding on the appropriate responses during crises as well as for long-term development.

There is a strong focus on social protection with subsidies for inputs, instruments such as cash transfers, food distribution (such as through school feeding), cash for work, and tax exemptions for machinery and equipment for agriculture or extension. The programme also addresses nutrition issues through education. The PAA programme was also created to provide local farmers with access to local markets and serves to complement social protection. Cash transfers and food distribution are certainly the most effective measures as they have an immediate effect on the most vulnerable, allowing them to keep their assets.

There is still a need to invest more resources in the agriculture and social sectors as Niger continues to experience food crises. Several initiatives have been launched, but more public investment is required to eradicate hunger and increase agricultural productivity.

In Senegal, three instruments from Brazil's Fome Zero programme are being experimented. The Bourse de sécurité familiale, inspired by Bolsa Família; the distribution

of climate-smart inputs to the most vulnerable farmers; and the “1 million cisterns for the Sahel” initiative. Along with these three instruments, the Government also provides extension and training to farmers.

The conditional cash transfer programme “Bourse de sécurité familiale”, was initiated in Senegal in 2013 by the General Delegation for Social Protection and National Solidarity (DGPSN)³². The objective of this programme is “to contribute to the fight against vulnerability and social exclusion of families with the aim to strengthen their productive and educational capacities”. Its goal is also to end the intergenerational transmission of poverty; to quickly reduce vulnerability to shocks and promote human development; to improve productivity; and to reduce inequalities. The programme equally factors in resilience building.

The Programme National de Bourses de Sécurité Familiale (PNBSF) is a programme that covers the whole country, with 300 000 vulnerable households targeted for the first phase. For five years, each of these households receives FCFA25 000 per quarter. The targeting is achieved according to geographical zones, community level and category. Committees at village level establish the list of the poorest households, which is then validated by a second committee, also at local level. Categories are set by the National Agency for Statistics and Demography (ANSD) and the DGPSN, based on socio-economic surveys. The lists feed into the Single National Register (RNU) with a ranking of households by level of poverty. The PNBSF also uses the involvement of local non-governmental organizations (NGOs) in facilitating the various stages of the process (targeting, awareness-raising, monitoring and support to beneficiary households regarding use of the cash received and management of the claim system).

The cash received by poor households represents between 14 and 22 percent of their average annual income according to official surveys. Often it represents the only income during the lean season. Despite the cash received, households still have difficulties in meeting their basic needs during the lean season. They reported that they use the cash for food, health and education expenses. The cash transfer helps to mitigate shocks and to improve resilience – particularly to avoid reducing the number of meals per day or having to incur debts (FAO, IPAR and IRAM, 2018). So far, the programme has allowed a small number of households to invest in agricultural activities or to start small businesses.

The “1 million cisterns for the Sahel” initiative targets beneficiaries of the PNBSF with the view of demonstrating the positive and rapid impact a full package of services – including water, cash, inputs and training – can have on vulnerable households, thereby lifting them out of poverty more rapidly.

32 <https://www.sec.gouv.sn/programme-national-de-bourses-de-s%C3%A9curit%C3%A9-familiale-pnbsf>

Conclusion

Africa, like the rest of the world, managed to reduce hunger until 2015 – testimony to the fact that hunger eradication in the continent is possible.

Although progress has been made towards achieving Zero Hunger in the continent, it has been slow and hampered by various challenges. Food and agriculture are key to achieving SDG 2 on achieving Zero Hunger, as set out in the 2030 Agenda, which in turn is a prerequisite for achieving all other SDGs.

The 2019 FAO, IFAD, UNICEF, WFP and WHO report on *The State of Food Security and Nutrition in the World* indicates that global hunger is on the rise again, with global hunger at levels witnessed over a decade ago, despite various efforts to achieve food security and nutrition. Limited progress has been made in addressing the multiple forms of malnutrition, including undernutrition, micronutrient deficiency, and overweight and obesity. Globally, the number of undernourished people increased from 804 million in 2016 to more than 820 million people in 2018. Of this number, 256 million are living in Africa.

Within Africa, the incidence of food insecurity has been on the rise, with countries in Eastern Africa and the Horn of Africa – such as Ethiopia, Kenya, Somalia and South Sudan – being the hardest hit by drought. A recent press statement by the Intergovernmental Authority on Development (IGAD) reveals that there are currently 23.4 million food-insecure people in the Horn of Africa region. Despite this number being lower than the numbers recorded in 2017, it still points to several gaps that need to be addressed to achieve Zero Hunger. Key drivers of hunger in the continent include climate variability which affects rainfall patterns and agricultural productivity, environmental degradation, climate extremes such as droughts and floods, conflicts, migration, and unemployment, particularly among youth.

To achieve an Africa without hunger and malnutrition, it is imperative that all stakeholders accelerate and scale up actions towards ending hunger in the continent. This can be done through coordinated and concerted efforts toward SDG 2 and the Malabo commitments. Building the resilience and adaptive capacity of populations, particularly those in rural areas, would significantly improve agricultural productivity and access to food, and thereby move the continent closer to achieving Zero Hunger.

Brazil managed to lift 40 million people out of poverty by implementing an integrated Zero Hunger programme. While contexts differ, and can be affected by factors such as political instability or climate change, Africa has the potential to learn from and adapt these successful experiences. It will take long-term institutional commitment and policy fine-tuning to reach the most vulnerable before the end date of 2025, five years ahead of the SDGs' 2030 target.

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How the Brazilian Fome Zero programme inspired Asia and the Pacific

Hiroyuki Konuma

Our target must be zero

The Asia and Pacific region has managed to drastically reduce the proportion of people suffering from chronic hunger during the past two decades. According to FAO estimates reported in 2013, it had already declined in Asia by almost 50 percent in the period since 1990 (FAO, IFAD and WFP, 2013).

The region was heading towards achieving Millennium Development Goal (MDG) 1, to halve the proportion of hunger by 2015 (by reducing the proportion to 12 percent as compared to 1990), yet it became increasingly clear that even if this goal could be met, the remaining 12 percent represented the most vulnerable and disadvantaged groups of society. Hence, considering that the region was home to two-thirds of the world's hungry people, achieving solid progress in reducing the prevalence of hunger amidst this fringe of the population and, in the long term, eradicating hunger would be extremely difficult, and would require a very well-planned, inter-sectoral, multi-stakeholder and targeted approach.

In view of these challenging circumstances, the success of the Brazilian Zero Hunger programme greatly inspired the Asia and Pacific region, serving as a model to learn from and follow. High-level political commitment, multisectoral and concerted mechanisms, multi-stakeholder consultations, a twin-track approach of mixing short- and long-term measures, targeting the poor and hungry through various social protection measures, and the human right to food approach, are just some of the policies and practices underlying the Brazilian experience that were taken into consideration when planning and implementing the Zero Hunger Challenge in Asia and the Pacific region (FAO, 2013). Indeed, and most importantly, it became clear from the Brazilian experience that the target had to be zero, and not just a reduction in the number and proportion of hungry people, as was the case in the past.

The Brazilian Fome Zero concept was further elaborated in the UN Secretary-General's Zero Hunger Challenge (ZHC), which was launched in June 2012 at the Rio+20 United Nations Conference on Sustainable Development (FAO, 2012). The Secretary-General specifically cited Brazil as an example for others to follow.

Regional coordination mechanism

As a response to the UN Secretary-General's call for action, it was strongly felt that Asia and the Pacific should play a leading role and engage in proactive initiatives to formulate and implement the ZHC at the regional and national level, considering that the largest number of the world's chronic hungry population lives in the region.

As a result, the UN Regional Thematic Working Group on Poverty and Hunger (TWG-PH) agreed to organize a regional launching of the ZHC at an appropriate High-Level Commission Session of the Economic and Social Commission for Asia and the Pacific (ESCAP). The TWG-PH was one of several UN Regional Coordination Mechanisms (RCMs) established by ESCAP, gathering over twenty UN agencies and multilateral/bilateral organizations under the chairmanship of FAO and co-chaired by ESCAP and UNDP.

Launching the Regional Zero Hunger Challenge in Asia and the Pacific

The Zero Hunger Challenge in Asia and the Pacific was formally launched by the UN Deputy Secretary-General, Jan Eliasson, on behalf of the UN Secretary-General on April 2013, in Bangkok, at the 69th Session of ESCAP (FAO, 2013). He called on governments, farmers, scientists, business, civil society and consumers to work together to end hunger in the region. José Graziano da Silva, Director-General of FAO, conveyed the message that one in every eight people in Asia and the Pacific suffered from chronic hunger and nearly two-thirds of the world's chronically hungry people lived in the region. He also emphasized the need for the region to engage in concerted efforts to eradicate hunger. "It is unacceptable that in the 21st century, with all of our technological and agricultural expertise, more than 870 million people globally wake up hungry every morning", stressed Noeleen Hyzer, Executive Secretary of ESCAP, at the ceremony.

Formulation of the Regional Guiding Framework for Achieving Zero Hunger in Asia and the Pacific (RGFZHAP)

In the Asia and Pacific region, the TWG-PH provided a mechanism to bring together all stakeholders and harness efforts. It was the main engine created to translate the global Zero Hunger Challenge into regional- and national-level action plans. However, while the document released by the UN Secretary-General indicated the five central pillars underlying the ZHC and acknowledged the different conditions in each region and country in formulating their own Zero Hunger programmes,

it provided little direction on how to initiate the implementation of programmes at country level. Because of this obstacle, there was a general fear by the TWG–PH members that the global initiative to achieve Zero Hunger led by the UN Secretary-General might simply remain a gesture. While Heads of State and senior officials of UN Member States – including those from Pacific Island countries – attended the launching ceremony of the Regional Zero Hunger Challenge, it was indeed uncertain whether any of these countries would commit to taking on the challenge and eradicate hunger. As mentioned, one of the biggest impediments was the lack of clear direction and guidelines on how to formulate and start implementing a Zero Hunger programme or action plan at country level. Therefore, the TWG–PH decided to formulate a Regional Guiding Framework for Achieving Zero Hunger in Asia and the Pacific (RGFZHAP) (FAO, 2013), in order to help Members in the region to formulate and implement their own national Zero Hunger programmes. The new framework provided more detailed information, as well as policy options and suggestions better adapted to the context of the Asia and Pacific region, which could be modified as needed according to country-specific conditions and requirements.

The Regional Guiding Framework also called for countries to merge the Action Plan with ongoing international initiatives at country-level, such as the Alliance Against Hunger and Malnutrition, Scaling Up Nutrition (SUN) and Renewed Efforts Against Child Hunger and Nutrition (REACH), as well as with existing national policies, strategies and programmes related to food security, hunger and nutrition. In other words, the formulation of a national Zero Hunger programme or action plan should not necessarily be a completely new exercise; instead, it should be based on existing national efforts. It could also serve as an effective tool to bring various sectoral policies and strategies together and harness their effective linkages and complementarity towards achieving the common goal of hunger eradication.

During the formulation of the Regional Guiding Framework, the TWG–PH chose to engage in a multi-stakeholder consultation process to ensure that different voices at different levels were taken into full consideration, including those from regional civil society organizations and institutions such as the Association of Southeast Asian Nations (ASEAN) and the South Asian Association for Regional Cooperation (SAARC). The Regional Guiding Framework was concluded after the full draft was submitted to all stakeholders involved in the consultation process and, only then, was formally presented to the UN Member States of the region at the ESCAP Ministerial Conference on Regional Economic Cooperation and Integration in Asia and the Pacific, in December 2013. On behalf of the TWG–PH, FAO was invited to present the Regional Guiding Framework at the Conference. The document was well received and endorsed by all participants, and the initiative led by the TWG–PH was highly appreciated. In its Bangkok Declaration, the Conference formally highlighted the importance of the Zero Hunger Challenge for strengthening

regional cooperation and assisting countries in formulating and implementing hunger eradication policies at national level.

The first launch of a National Zero Hunger Challenge: the case of Timor-Leste

In January 2014, soon after the ESCAP Ministerial Conference, a first National Zero Hunger Challenge was launched by the Prime Minister of Timor-Leste, Kay Rala Xanana Gusmao, who had also served as the elected chairperson of the 69th UNESCAP Commission Session in April 2013 where the Regional Zero Hunger Challenge was launched. The launching ceremony was attended by Her Royal Highness, Princess Maha Chakri Sirindhorn of Thailand (who became an FAO Special Ambassador for the Zero Hunger Challenge in October 2016), and was co-hosted by Noeleen Heyzer, Executive Secretary of ESCAP and the UN Secretary General's Special Advisor for Timor-Leste. One of the most significant initiatives of Timor-Leste was the creation in 2010, before the regional launching of the ZHC, of an inter-ministerial and multisectoral national institutional mechanism called the National Council for Food Security, Sovereignty and Nutrition in Timor-Leste (KOSSANTIL), modelled on Brazil's pioneering Food and Nutrition Security National Council. This Council played a key role in the formulation of the country's National Zero Hunger Challenge Action Plan (formally named the National Action Plan for Hunger and Malnutrition Free Timor-Leste – PAN-HAM-TIL) by bringing all relevant stakeholders together to efficiently coordinate the formulation process. FAO assisted in these efforts, in close collaboration and coordination with Knut Ostby, UN Resident Coordinator in Timor-Leste, and the members of the UN Country team (such as WFP, WHO, UNDP and UNICEF) by jointly organizing the launching ceremony and formulating the Action Plan through its Technical Cooperation Programme (TCP) resources and technical advisory services, both from its Regional Office and headquarters. Timor-Leste, as announced by the Prime Minister, had committed to earmarking ten percent of the total annual national budget for the implementation of the Zero Hunger Challenge National Action Plan. This bold political commitment came to influence many other countries in securing the allocation of an adequate national budget for achieving hunger eradication.

After a six-month consultation process with various stakeholders in 2014, Timor-Leste concluded the formulation of the country's national action plan to achieve Zero Hunger, also drawing on the RGFZHAP guidelines on the matter. Despite concerns over the duration of this process, the in-depth consultation and nationwide debate allowed for a concerted understanding on how to implement the agreed plan, giving a sense of joint ownership and shared responsibility in its future success. The Action Plan was launched in July 2014 by the country's Prime Minister, with the presence of FAO's Director-General, José Graziano da Silva, thus demonstrating FAO's continued support to the endeavour (FAO, 2013).

Kay Rala Xanana Gusmao, Prime Minister of Timor-Leste, acknowledged that the timely development of the Zero Hunger Challenge Regional Guiding Framework by the UN TWH-PH in Asia and the Pacific, as well as the strong coordination between KONSSANTIL and the UN Resident Coordinator (UNRC) in the country, with technical assistance from FAO, allowed for the Regional Zero Hunger Challenge to be adequately translated into country-level actions in Timor-Leste.

National level launching in Myanmar, Nepal, Viet Nam, Cambodia and Laos

The successful formulation of the National Action Plan for Zero Hunger by the youngest country in Asia, Timor-Leste, greatly influenced other countries in the region (FAO, 2013) and Myanmar was the second to launch a National Zero Hunger Action Plan. The launching ceremony was combined with the celebration of World Food Day on 16 October 2014, where the FAO Regional Representative for Asia and the Pacific was invited to deliver a congratulatory message on behalf of UN agencies in the region. FAO, as chair of the TWG-PH, had actively supported the Myanmar Government in its efforts to design and launch a National Zero Hunger Action Plan, in close consultation and coordination with the UNRC in Myanmar. As the Zero Hunger Challenge was an initiative led by the UN Secretary-General, it was important to follow the lead of the UNRC, responsible for coordinating global UN actions at national level. On the other hand, as food security and hunger issues were usually handled by FAO's ministry counterparts, such as the Ministry of Agriculture in most countries in the region, FAO was able to initiate an informal dialogue with these counterparts using its established network. This was aided by the recognition of the FAO Director-General's well-known contributions to the success of the Brazilian Zero Hunger programme.

As in the case of Timor-Leste, FAO provided technical support to Myanmar at the request of its Government, in close coordination and consultation with the UNRC, including the provision of a technical consultant who was given special tasks. In particular, the following approaches (based on the experience in Timor-Leste) were taken into consideration when providing the technical support to Myanmar:

- › The Zero Hunger Challenge (ZHC) was to be led by the national government, with the UN as supporter/facilitator. Even if the national ZHC formulation process were to take longer than expected, it would be important to spend sufficient time to ensure national leadership and ownership. These processes would be crucial as they would bring all actors and stakeholders together, allowing time for debate, and create a sense of shared responsibility by all for both the implementation and the results.
- › Related government policies, strategies and institutional mechanisms, where they existed, should be taken into full consideration in formulating

the ZHC, which should play a key role in bringing ongoing or planned individual efforts together and facilitate a concerted multisectoral approach and teamwork.

- › The role of the UNRC should be fully respected, as he/she had responsibility at country level on behalf of the UN Secretary-General in assisting recipient governments in implementing UN global priorities and commitments at the national level, such as translating ZHC into national actions.
- › FAO, as a specialized UN technical agency working on hunger and food security, was recognized for its accumulated knowledge and advantages in facilitating the collaboration of the recipient government and the UN Country Team in working together towards the Zero Hunger commitment. While implementing the process, use of regular programme resources such as TCP were to be fully explored in supporting the organization of the launching ceremony and stakeholder consultations/meetings, hiring of technical consultants and other related expenses.
- › Assistance would be provided in establishing a high-level ZHC National Advisory Committee, chaired preferably by the highest government official such as the Prime Minister (or deputy) and co-chaired by the UNRC (if considered appropriate by the government) with members including ministers from all relevant line ministries (agriculture, health, education, etc.), representatives of key UN Agencies such as FAO, IFAD, WFP, WHO, UNDP, UNICEF and the World Bank, and key development partners including the EU and the Asian Development Bank, as appropriate. However, if desired by the government, existing coordination mechanisms should be utilized for such purpose, as in the case of Timor-Leste.
- › Assistance would be provided in organizing multi-stakeholder consultations or workshops which would provide venues for different groups and levels of stakeholders (including civil society organizations and the private sector) to meet and strengthen mutual understanding through debate.

After Timor-Leste and Myanmar, Nepal launched its National Zero Hunger Challenge on 19 December 2014, led by the Deputy Prime Minister. The move was particularly important as Nepal was giving high priority to graduating from its least-developed country (LDC) status by placing emphasis on economic growth, which was not always accompanied by sufficient support for the most disadvantaged groups suffering from poverty and hunger.

On 14 January 2015, the Prime Minister of Viet Nam launched the National Zero Hunger Challenge and committed to formulating a ZHC National Action Plan. The Deputy Prime Minister of Cambodia launched its National Zero Hunger Challenge on 12 May 2015, followed by Laos on 27 May 2015, where it was launched

by the Minister of Agriculture and Forestry on behalf of the Prime Minister. FAO's Regional Representative, on behalf of the UN Regional TWH-PH, delivered congratulatory messages at all of the launching ceremonies. FAO played a similar role in each of these countries, working as a bridge between the national government and the UN Country Team, and facilitating the formulation and launch, through technical and financial support, of the National Zero Hunger Programme/Action Plan.

Moving toward Zero Hunger in Pacific Island countries

The Zero Hunger Challenge in the Asia and Pacific region was launched on April 2013 at UN ESCAP, and the Regional Guiding Framework was formally endorsed at the UN ESCAP Ministerial Conference on December 2013. Representatives of the Pacific Island countries fully participated in the Conference and in related decision-making. During the food price crisis in 2007–2008, the Pacific Island countries faced serious food security challenges due to food price volatility, especially rice. People had become too dependent on imported staple foods such as rice, even though locally available staples such as yam and other tuber crops were abundant. In addition, the Pacific Island countries suffered from overweight and obesity, an added burden of malnutrition. Fiji's cabinet approved the National Zero Hunger Challenge Framework in 2017/18, which is expected to be fully implemented as part of a coordinated approach. Fiji also elaborated a 2020 Agriculture Sector Policy Agenda document, with the aim of modernizing the agriculture sector to ensure productivity and create an enabling environment for smallholder farmers.

Thanks to the concerted efforts of the region's governments, FAO and other UN agencies, the estimated proportion of hungry people in Asia fell from 23.6 percent in 1990 to almost 12 percent in 2015, thereby achieving MDG 1 (Figure 1.1).

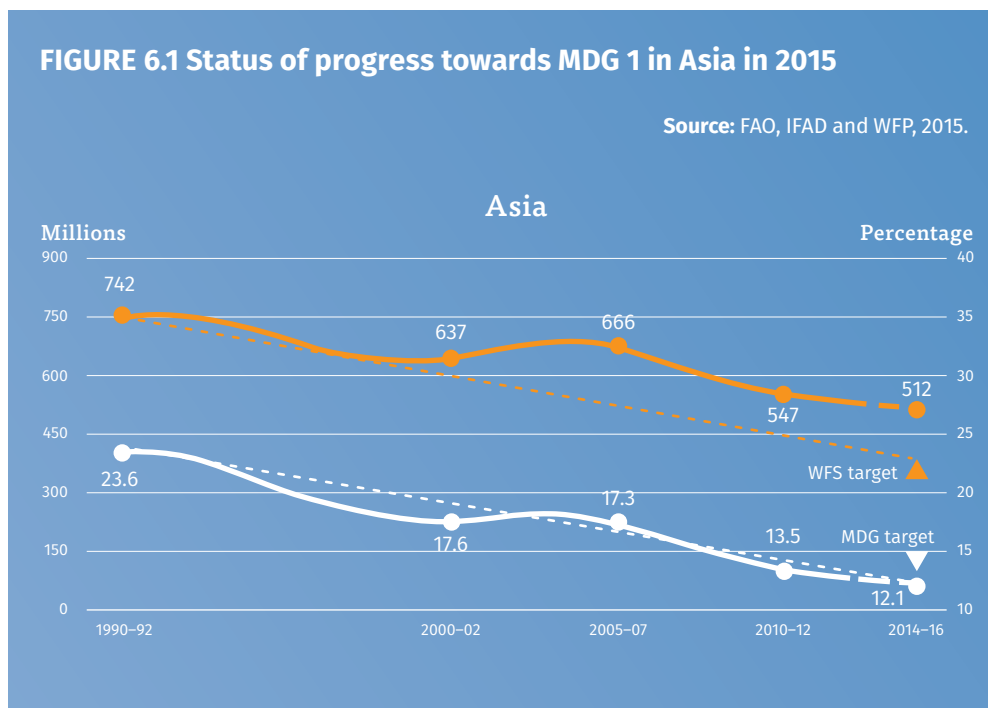
Yet, the goal must be zero, as the remaining bottom 12 percent correspond to the most vulnerable population. Sustainable development will not be achieved if these people are left behind without support.

New challenges

New evidence indicates that global hunger has been on the rise since 2016, and the Asia and Pacific Region is no exception (FAO *et al.*, 2019). This coincides with the first year of the new Sustainable Development Goals (SDGs) global agenda, which started off with enthusiasm and commitments towards achieving the goals by 2030, including hunger eradication (under SDG 2). According to available data, the absolute number of people in the world affected by undernourishment, or chronic food deprivation, is now estimated to have increased from around 804 million in 2016 to more than 820 million in 2018.

FIGURE 6.1 Status of progress towards MDG 1 in Asia in 2015

Source: FAO, IFAD and WFP, 2015.



FAO's 2016 report on *The State of Food and Agriculture* (FAO, 2016) indicated that the main causes of this increase are likely linked to an increase in conflict and to the negative impacts of climate change. There is a great risk of falling far short of achieving SDG 2 target of hunger eradication by 2030, as we have less than 11 years left in which to achieve this goal.

In conclusion, it is clear that the Asia and Pacific region has made good progress in reducing hunger in recent years, drawing on the experience of Brazil's Zero Hunger programme. While implementing ZHC in Asia and the Pacific, it has become increasingly clear that hunger eradication requires a multidisciplinary and horizontal approach (beyond traditional vertical mono-sectoral approaches), bringing together poverty eradication, social protection, gender and rural development. FAO could leverage these multidisciplinary approaches in its main programme, which contributed greatly to reducing hunger and achieving MDG targets in the recent past. However, these efforts alone are not sufficient to achieve the SDG goal of hunger eradication. Many challenges, such as the increase in conflicts and natural disasters, as well as issues associated with health, education and inequality, are beyond FAO's technical mandate. FAO will only make limited progress unless UN Agencies and development partners work more closely as a team, without competing with each other, and harness their knowledge and advantages towards joint efforts to achieve common goals.

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CHAPTER 7

Fome Zero: How Brazil's success story became a model for achieving the right to food

Hilal Elver

Introduction

The Fome Zero strategy, introduced in Brazil during the early 2000s, remains one of the first and most comprehensive examples of the implementation of the right to food at national level. Not only did the programme bring impressive results in reducing poverty, but it significantly contributed to the elimination of hunger and malnutrition throughout the country.

Fome Zero was originally conceived by a non-profit civil society organization in 2001, as part of the greater development of Brazil's National Food and Nutrition Policy (PNAN). President Luiz Inacio Lula da Silva adopted the programme two years later, in what would become a defining moment in Brazil's fight against hunger and poverty. He established the right to food as a political priority for the duration of his presidency and paved the way for the development of legal instruments necessary to enable the realization of this right.

Thanks to the adoption of the Fome Zero strategy and the subsequent commitment of the Lula Government to guarantee "food as a basic human right," Brazil reduced extreme poverty and malnutrition by half by the end of 2009.³³ In just six years, Fome Zero helped to pull 14 million Brazilians out of poverty, and significantly improved the food security, health, and livelihoods of the population.

Due in part to Fome Zero, Brazil was able to meet most of the UN Millennium Development Goals within the time limit of 2015, an achievement shared by few other countries. The immediate success of the Fome Zero programme created a

³³ The percentage of Brazilians living in poverty decreased from 17.4 per cent to less than 9 per cent between 2003 and 2009.

lasting legacy for the right to food in Brazil, and helped mount political pressure on subsequent governments to prioritize the elimination of hunger.

As this chapter explains, the success of Fome Zero is attributed to the unique design of the programme, which afforded specific attention to smallholder producers and explicitly addressed the issue of access, a fundamental pillar of the right to food. However, the Fome Zero model, which has impressed global food and agricultural policy experts, would not have been feasible nor successful without the political will of the government. Since the adoption of Fome Zero in 2003, many other nations in Latin America and elsewhere have demonstrated a similar commitment to eradicating hunger and malnutrition and sought to follow Brazil's example.

While these efforts are undoubtedly positive, challenges still remain to fully realizing the right to food, in Brazil and beyond. Although the right to food is one of the objectives of Fome Zero, access to human rights claim mechanisms remains limited in many parts of the world, including Latin America (Valente and Beghin, 2006). In Brazil, persistent inequality, continued investment in industrial agribusiness and recent efforts to strip away institutions that support public participation in poverty eradication efforts suggest that more work must be done to achieve the progressive realization of the right to food and ensure its endurance.

Arguably, the most important factor behind the success of Fome Zero was the adoption of a human rights-based approach to the fight against hunger. The Fome Zero strategy did not just address hunger as a problem, but as a symptom of a much greater failure to guarantee the right to food and other related human rights. Brazil recognized that exclusion, inequality and discrimination were also causes of poverty and hunger and, therefore, sought to involve all rights-holders in identifying appropriate solutions to progressively realize the right to food. The following section explains what this right actually means, and how it influenced Brazil's approach to combating hunger and poverty.

Promotion of the right to food through Fome Zero

Brief background on the right to food

Together with the National Food and Nutrition Policy (PNAN), the Fome Zero strategy formally recognized the State's responsibility for ensuring access to adequate food for the Brazilian population, in alignment with international human right principles. The human right to adequate food was enshrined in Article 25 of the Universal Declaration of Human Rights (UDHR) in 1948. Recently, the international community celebrated the 70th anniversary of this crucial document. With the UDHR, the right to food became a legal entitlement, codified in Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), adopted in 1966 and enforced in 1976.

While 163 countries, including Brazil, have ratified the ICESCR to date, the right to adequate food has yet to be implemented in an articulated manner at the international and national level. For many years, countries did not know how to put this abstract, yet important legal principle, into practice, and hunger remained an unsolved global problem. Furthermore, during the Cold War period, economic, social and cultural rights were not considered governmental priorities, at least in Western countries. Following this period, ideological divisions between civil and political rights and social, economic and cultural rights softened, and the international community started to take the fundamental right to food more seriously.

Moreover, in 1999, the Committee of the Economic Social and Cultural Rights (CESCR) defined the concept of the right to food in its General Comment 12, in order to guide countries in the implementation of Article 11 of the ICESCR. The Committee stressed that the right to adequate food “shall not be interpreted in a narrow and restrictive sense which equates it with a minimum package of calories, proteins and other specific nutrients”(CESCR, 1999). Instead, nations should also take into account elements of availability, accessibility and adequacy, as well as education on hygiene and breastfeeding, training on nutrition, and the provision of health care. General Comment 12 also stressed the importance of implementing and monitoring the right to food according to each country's needs.

More importantly, the Committee established essential guidelines for countries to formulate and implement national strategies that comply with the human rights principles of accountability, transparency, participation, decentralization, legislative capacity and access to justice. These strategies are fundamental principles of the human rights-based approach to food security and nutrition and, as discussed below, are also at the heart of Brazil's Fome Zero strategy.

Brazil's adoption of a human rights-based approach to food and nutrition governance

Much of the success of the Fome Zero programme is attributed to the strengthening and expansion of national governance and institutions, and also legal frameworks, which were critical in supporting the implementation of the right to food from a human rights-based perspective. The programme translated Brazil's commitment to create an open and transparent policy-making process, and to establish the necessary institutions and laws that would allow for the realization of the right to food. This commitment was also based upon the core human rights principles of participation, accountability, non-discrimination, human dignity, access to justice, empowerment of people, especially of the most marginalized, and rule of law.

For example, as a first step in 2004, the Brazilian Institute of Geography and Statistics undertook a survey to identify those most vulnerable to food insecurity in the country. A Standing Commission on the Human Right to Adequate Food was

established to advise the President and the Government on the incorporation of the right to adequate food in food security policies. The newly-established National Council for Food and Nutrition Security also served as an efficient channel of communication between civil society and the Government on these efforts.

In 2006, the Organic Law on Food Security (LOSAN) created the National Food and Nutrition Security System (SISAN) to effectively uphold the human rights-based approach to the right to food. It did so, by placing human dignity and empowerment at the core of the debates on the creation of new public policies, and by strengthening relations between the Government and civil society (Mendonça Leao and Maluf, 2012). That same year, Brazil's Congress passed the Framework Law that defined the scope of the right to food and the State's correlative obligations (LOSAN, 2006)³⁴. The Framework Law also adopted a food sovereignty perspective when framing this right (LOSAN, 2006³⁵).

In 2010, a powerful nationwide civil society campaign, led by members of the National Council for Food and Nutrition Security (CONSEA), urged the Brazilian Government to take the monumental decision of amending its Constitution to include the right to food as a fundamental human right of every Brazilian. The right to food as a constitutional right requires an approach that reaffirms the right of each person to be the “owner” – and not just a “beneficiary” – of public policies aimed at ensuring food and nutrition security. It meant that the right to food was from now on guaranteed by the Brazilian Constitution and, by extension, the Government might be held accountable for failing to realize this right (Constitution of the Federative Republic of Brazil, 1988).

As part of the rights-based approach, Brazil also created a space for civil society to inform the Government of any barriers or obstacles hindering the achievement of the right to food. In this regard, SISAN was mandated with organizing and strengthening regional and local Brazilian institutions, and creating formal fora for social participation through Food and Nutrition Security Councils. Civil society could thus directly participate in the design and monitoring of food and nutrition security policies.

34 “Adequate food is a fundamental human right, inherent in the dignity of the human person and indispensable for the realization of the rights enshrined in the Brazilian Constitution, and the government should implement the policies and actions that may be necessary to promote and ensure the food and nutrition security of the population”(LOSAN art. 2, 2006).

35 The realization of the human right to adequate food and the attainment of food and nutrition security require respect for sovereignty, which confers primacy to countries in their decisions on the production and consumption of food, (LOSAN, Art. 5, 2006).

CONSEA was an advisory council to the President of the Republic, made up of two-thirds of civil society representatives and one-third of government representatives, and presided by a civil society member. It carried out the important function of providing an institutional space for social control and participation in the creation and implementation of food security policies. When defining the important social role of the Council, its National President stated that “CONSEA is the result of a clear political will to listen to the demands of society. It is the expression of the echoes of citizenship, the voices of the field, the forest, the city. A space for the exercise of democracy, dialogue between government and society, critical views, preparation of proposals, and monitoring of policies on food and nutrition security in its various dimensions summarized in the principle of intersectoriality” (Mendonça Leao and Maluf, 2012).

The central role played by CONSEA under the umbrella of the Fome Zero strategy is a perfect example of the effective implementation of a rights-based approach to food and nutrition security.

Reflecting upon Fome Zero's legacy: implementing the right to food worldwide

Lessons learned from this historic process

As this chapter has demonstrated, the progress made by Brazil in the fight against hunger and poverty resulted from the confluence of both government interest and civil society's claims through a collective, participatory and democratic construction process. The continuity of the main public policies that have contributed to this progress and the convergence of political and social forces are indispensable conditions to overcoming the challenges that still hinder the elimination of all forms of social inequality and violation of rights.

Discussing the lessons learned is an important step in determining how other nations may roll out Fome Zero in a manner conducive to their specific contexts. As many experts have extensively compiled these lessons, this chapter seeks to highlight the following “take-aways” for further consideration (Mendonça Leao and Maluf, 2012).

First of all, Brazil's success stemmed in part from its decision to adopt a participatory structure for multisectoral coordination, while keeping a delicate balance between institutions. At the same time, Brazil sought to facilitate cooperation among public actors for the implementation of food security and nutrition policies. Second, the Government's decision to enshrine the human right to adequate food as a constitutional entitlement helped to elevate efforts to promote food and nutrition security. Third, Brazil created a formal space for open, unrestricted dialogue

between civil society and the Government through Food and Nutrition Security Councils, as discussed above.

Brazil also understood the value of putting the protection of human rights above market interests. Rather than continue to invest exclusively in an export-led agricultural market, Brazil refocused its support on small-scale family farmers, enabling them to produce affordable food for the population. In a correlated effort, Brazil recognized the strategic role of women in the struggle to guarantee food sovereignty, as well as the importance of promoting the responsible management of natural resources to ensure their sustainability. Finally, Brazil managed to integrate ethno-development concerns in the design and implementation of public policies for indigenous peoples, afro-descendants, traditional peoples, peasants, and local communities.

Fome Zero becomes Zero Hunger

As indicated above, Brazil's well-structured and vigorously implemented programme became a poster child for countries to follow in furthering the implementation of the right to food. The Fome Zero strategy itself has transformed into the internationally-recognized Zero Hunger policy. Brazil's achievements in relation to food security and poverty reduction have generated extensive interest at the global level, with the Fome Zero approach being internationalized as a tool for hunger reduction in other countries in Latin America, Africa and Asia. More prominently, the Fome Zero strategy became a reference for SDG 2 of the United Nations' 2030 Agenda.

Over the past few decades, Brazil has also strengthened its South–South cooperation actions as an important axis of its foreign policy. In particular, the school feeding programme and smallholder farming policies have been presented and implementation supported in many other countries with the help of FAO and the World Food Programme (WFP). In 2010, WFP created the Centre of Excellence against Hunger in Brasilia, a knowledge hub for sharing Brazilian experience and best practices in food and nutrition security (Almino, 2017). The latter prioritizes 23 countries, predominantly in Africa. Through its Special Programme for Food Security, FAO also cooperated with over one hundred developing countries in designing and implementing hunger eradication policies, while supporting the creation of national food security plans to achieve this goal, closely following in Brazil's footsteps.

Voluntary Guidelines on the Right to Food: Beyond Brazil

Brazil's contribution to the global implementation of the right to food goes in fact beyond the Fome Zero strategy, as many of the strategy's principles have been captured in other policy guidance. In 2004, a year after Brazil introduced the Fome Zero strategy, and following subsequent commitments of the 1996 and 2002 World

Food Summits, FAO unanimously adopted the Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security (Voluntary Guidelines), to help Members to realize the right to food at national level.

The Voluntary Guidelines provide internationally agreed practical guidance for governments and civil societies to build suitable environments for people to feed themselves in dignity, and to establish appropriate safety nets for those who are unable to do so. The Guidelines incorporated a human rights-based approach, a shift in development rationale, to involve the poor and the hungry in any decision-making that affects their well-being. Since exclusion and discrimination are often the very cause of poverty and hunger, involving marginalized and excluded groups in finding appropriate solutions to hunger also ensures their inclusion in society as a whole.

This was the fundamental principle underlying the Fome Zero strategy as well. In fact, Brazil implemented many of the steps featured in the Voluntary Guidelines and resumed 19 policy areas that are fundamental to the promotion of the right to food. Many of the country's experiences were widely discussed while the Guidelines were under negotiation (FAO, 2007). Brazil's effort to reduce its own inequality has set an example for all nations where hunger still exists. Brazil has translated words into actions that led to the progressive realization of the right to food for all.

Over the past two decades, many Latin American and Caribbean countries started to create a range of policies that adopted a rights-based approach to the elimination of hunger and extreme poverty, consistent with the Voluntary Guidelines. Besides Brazil, the leaders of Argentina, Barbados, Bolivia (Plurinational State of), Chile, Guatemala, Panama, Paraguay and Uruguay also prioritized the achievement of the right to food in their national agenda. Brazil, along with Guatemala, pushed this agenda forward by addressing the fight against hunger as a political priority at the regional level. The Plurinational State of Bolivia also played a leading role, and in 2005, the fight against hunger policy was signed during the visit of Brazilian President Lula to his Bolivian counterpart, Evo Morales.

In December 2007, member states of MERCOSUR reiterated the commitment of the countries to eliminate hunger and fight poverty, showing unanimous support for the Hunger Free Latin America and Caribbean Initiative (Vivero Pol, 2008). The initiative was further endorsed by other countries, as well as by FAO's regional office, with financial support from Spain.

In this early period, five countries had already adopted food security laws: Argentina, the Bolivarian Republic of Venezuela, Brazil, Ecuador and Guatemala.

Furthermore, ten countries had bills under discussion in parliament (Costa Rica, Haiti, Honduras, Mexico, Mozambique, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Nicaragua). Over the years, the right to food was included in more than 25 countries' constitutions, or incorporated in other rights frameworks or sectoral laws.³⁶ While these figures increase every year, there are still significant gaps between the laws and the realities on the ground.

The central aspects of the laws are:

- i. Incorporate a reference to the right to food (although various divergences exist);
- ii. Create a national system of food security designed to coordinate the actions of various ministries to achieve the goal of ending hunger and malnutrition (although various divergences exist since some institutional structures are more powerful than others in terms of decision-making);
- iii. Prioritize vulnerable groups;
- iv. Support the inclusion of civil society in decision-making mechanisms (in some countries this process might include the private sector);
- v. Establish instruments for monitoring and analysing food security (although not all laws incorporate this point).

However, none of the above laws incorporate preventive actions or immediate reparation in the case of experiencing hunger (Vivero Pol, 2008). Whereas claim mechanisms are often associated with the idea of *justiciability*, meaning the possibility of claiming rights in court (UNGA, 2014), they are much broader than that.³⁷ The promotion of justice should include decisions by all public branches of the State and, in particular, the executive branch in charge of implementing policies and programmes to provide public services, as a basis to ensure the realization of constitutional rights (Burity and Franceschini, 2011).

Rights-holders should have more opportunities for recourse in case of right to adequate food violations, beyond court systems, such as quasi-judicial, administrative, and political mechanisms (e.g. CONSEA). Furthermore, civil society's actions are central to push for an effective enactment of the right to food. Indeed, claims for the protection of rights would be seriously impaired if civil society did not play an active role in eliciting, and also following up on, decisions by the judiciary (Burity and Franceschini, 2011).

³⁶ The updated list about the security laws can be found in FAO-LEX database.

³⁷ Report of the Special Rapporteur on the right to food, Hilal Elver - Access to justice and the right to food: the way forward, A/HRC/28/65

Staying on track in Brazil: taking the necessary steps to guarantee the right to food

Challenges

Despite the undeniable progress achieved in Brazil under Fome Zero, many challenges remain. Brazil still has a long way to go if it aims to become a more egalitarian society, as the richest ten per cent of the population earn nearly half (43.5 percent) of the nation's income, while racial and gender inequalities feature among the greatest domestic challenges (Oxfam, 2019).

Furthermore, while the agro-export model is central to Brazil's economic growth (it accounted for 22 percent of Brazil's GDP in 2011), an overwhelming body of evidence shows that the agribusiness sector is exploiting Brazil's huge reservoir of natural resources in unsustainable and irresponsible ways, and that such exploitation is further jeopardizing the livelihoods of smallholder farmers (Oxfam, 2019). Brazil is still one of the world's largest food producers, but poor people are still hungry. Unfortunately, this is also a well-known situation in other places, where governments are pushing for an industrial monoculture type of agriculture amidst a global export-led market, rather than promoting and supporting local production and small food producers.

In its 2009 report, CONSEA identified ten key challenges for the future of hunger eradication and food security in Brazil. These included: the further embedding of the right to food within international, national, and federal policy frameworks; ensuring better inclusion of marginalized groups, such as afro-descendants, indigenous peoples, family farmers, and the urban poor; and combating and mitigating the effects of climate change, which threatens millions of poor farmers in Brazil (CONSEA, 2009). Despite impressive progress, the persisting social inequality is incompatible with the country's current level of economic development and is a continuous stumbling block to the country's development.

CONSEA also found that the number of socially vulnerable people remains high, and that the Federal Government's capacity to implement policies at the local level varies geographically. As a result, certain groups lack access to all the public programmes to which they are entitled. In particular, coordination is patchy in the poor regions of north and northeast Brazil, where the majority of food-insecure people live. Despite recent and important achievements, 7.2 million people reported severe food insecurity, according to a 2013 official survey.³⁸ Ensuring consistent, and unobstructed access to public services and benefits will help address this hunger.

38 See Iris Dias, "The Human Right to Adequate Food: Brazil's right-based development approach," SocialProtection.org (02/04/2017). <https://socialprotection.org/discover/blog/human-right-adequate-food-brazil%E2%80%99s-rights-based-development-approach> (referring to a 2013 National Household Sample Survey conducted by the Brazilian Institute of Geography and Statistics (IBGE)).

Moreover, there is a recurring effort to weaken and criminalize the social movements and organizations fighting for social and environmental justice. As the UDHR explained, “it is essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that human rights be protected by the rule of law.” In Brazil, there is a strong tradition of civil society activism, such as the Movement of Rural Landless Workers, the Movement of People Affected by Dams, the Women’s Movement, the Indigenous Movement etc. Those participating in such social movements should not be criminalized for protesting or adopting strategies based on the right to resist.³⁹ On the contrary, the state must protect and respect these movements. Social mobilization is the main guarantee towards securing respect for and the promotion of human rights, not only in Brazil, but everywhere.

Resurgence of poverty and unraveling of Fome Zero

In 2014, Brazil was removed from the FAO Hunger Map, marking an unprecedented achievement in the fight against hunger and malnutrition. Just three years later, however, a report by 20 civil society organizations warned of the risk for the country to be reinstated on the map (Domenici, 2018). This projection was based on changing social protection policies, which caused 1.5 million families to no longer receive assistance, as well as recent economic crises, unemployment, and regression of public expenditure, that contributed to a resurgence of poverty. A study by Action Aid Brazil shows that between 2015 and 2017, for example, the country moved 12 years backwards in terms of people living in extreme poverty, while levels of poverty regressed to levels from 8 years prior. More than ten million people are now living in these conditions. This phenomenon confirms that there is a strong connection between extreme poverty, hunger, and social protection.

In recent years, rural pensions are becoming increasingly difficult to obtain and food is becoming scarce for Brazilians. Moreover, food prices and cooking gas prices are rising alongside gas prices. Significant reductions and even complete cuts to the Bolsa Família programme, a pillar of Fome Zero, has adversely impacted people. The new system does not permit receiving two benefits together, such as disability and pension funds. According to the former Ministry of Social Development, 80 percent of the revised sickness benefits and 30 percent of disability pensions were recently cancelled (Wanderley, 2019).

39 Valeria Burity, Luisa Cruz, and Thais Franceschini. *Exigibilidade: Mechanims to claim the human right to adequate food in Brazil* (FAO, 2011), p. 30.

Brazil's economic recession caused it to further cut social protection programmes. In November 2018, Oxfam published a report demonstrating that, for the first time in the last 15 years, the reduction of income inequalities in Brazil was paralysed (Oxfam, 2019). The report points out that, in 2016, the amount devoted to social expenditure in federal investment regressed 17 years.⁴⁰

The latest and most disturbing turn in Brazil's success story occurred on 1 January, 2019, when the newly elected President of Brazil, Jair Bolsonaro, abolished CONSEA. As discussed in this chapter, CONSEA is Brazil's most influential governing structure for implementing the right to food, and serves as an international model for social participation. CONSEA brought many important issues to light, besides guaranteeing the effective participation of civil society in the decision-making process. CONSEA's advocacy work ranged from the right to food, to the promotion of pesticide-free food, and healthy food for all. Many important proposals were first debated within CONSEA, before becoming actual policies or public actions for combating hunger.

The move to dissolve CONSEA was interpreted by many as Bolsonaro's first step towards dismantling Brazil's entire food security policy framework and abandoning efforts to progressively realize the right to food. Its shutdown is also seen as a further attack on the weakest and most vulnerable members of society. Simply put, CONSEA was the symbolic and substantive backbone of the right to food in Brazil. As the Special Rapporteur on Right to Food, I wrote a letter in February 2019 to the Brazilian Government, along with other relevant Special Rapporteurs, questioning this decision that might have a severe negative impact on the realization of the right to food and water.⁴¹

Conclusion

Brazil's Fome Zero strategy remains an unparalleled example for implementing the right to food at national level. The Fome Zero recipe relies on an apparently new balance: neoliberal economic policies have often been associated with growing levels of poverty, inequality, violence and deteriorating health and living conditions of the poor. With Fome Zero, however, Brazil offered a novel mixture of neoliberal policies combined with a strong governmental presence through comprehensive and innovative social programmes. Brazil also sought to invest both in industrial agriculture and the promotion of smallholder farmers and agroecological practices.

40 CONSEA was responsible for several historic decisions, including: the inclusion in the constitution of the right to adequate food (Amendment 64, Article 5 of the Federal Constitution), the introduction of the Zero Hunger programme and the Safra plan (a program of credit for family farmers) as well as national policies for supporting agroecology and organic agriculture and a food-buying programme that allowed public institutions (like schools) to buy produce from family farms.

41 BRA 12/02/2019. Previously letters from OHCHR were sent in 4/2018, and 8/2018.

It was not an easy balance to find, but rather one that requires constant attention in order to ensure a fair level of competition. Nevertheless, after only a few years, the formula seemed to be working, and for that, Brazil deserves global recognition.

Brazil's most significant gain has been the creation and institutionalization of a food and nutrition security policy that relies upon the right to food approach. Brazil's Fome Zero strategy embraced human rights principles to not only adopt laws and regulations to address hunger, but to create inclusive and transparent institutions that allowed for the free participation of civil society in all levels of governance (Rocha, 2016). Unsurprisingly, several countries, especially in Latin America, have started to implement national food and nutrition policies according to a human rights-based approach. The Voluntary Guidelines, which promote the same human rights principles embraced by Brazil, remain a critical tool for countries seeking to address poverty, hunger, and malnutrition.

Unfortunately, Brazil's story of success is tentative, as the country faces new challenges that threaten to undermine the right to food and undo much of the progress achieved under Fome Zero. Social protection rollbacks, unsustainable agricultural policies and the shutdown of CONSEA are the most pressing concerns. Brazil's indigenous population (800 thousand people or 0.4 percent of the country's population) is also of particular concern, as the child mortality rate and malnutrition level is very high compared to the rest of Brazilians. Land grabbing and large development projects are also threatening livelihoods. In addition, Brazil is also affected by issues of overweight and obesity because of excessive use of cheap, unhealthy food on the market; this is actually a global problem, as obesity and overweight currently affect more than 50 percent of the world's population.

A rights-based approach to food and sustainable agricultural policies is very fragile, and should be protected against economic and political constraints. Among the most complex issues that negatively affect hunger and malnutrition worldwide are austerity programmes that stem from economic pressures, growing inflation and rising public debt. When difficult times arrive, the most vulnerable populations are the first to lose access to food, directly or indirectly. Unfortunately, this is happening in Brazil. Therefore, it is vitally important that governments take into account vulnerable populations' needs, to be able to ensure adequate protection in times of difficulty. Adopting a human rights-based approach will help to guarantee that these populations are heard and not abandoned.

Good practices like those employed under Fome Zero should be followed, but must also be carefully and constantly nurtured against upcoming hurdles. Progress requires continuing commitment and a steady flow of government resources. It also depends on a strong civil society to maintain public awareness and participation.

Meanwhile, as global hunger continues to increase, governments must consider the interrelatedness of all human rights and of social, political and environmental systems. Achieving Zero Hunger will require more than a Zero Hunger policy; it will require comprehensive, multi-stakeholder and dynamic solutions that mitigate and respond to climate change, man-made conflict and natural disasters.

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CHAPTER 8

The importance of parliamentary fronts for achieving Zero Hunger

**Rodrigo Castañeda Sepúlveda, Carmela Marika Morgillo
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Overview

According to the experience of FAO, parliamentary alliances are fora for political dialogue and fundamental to meeting the Sustainable Development Goals (SDGs), especially the target of Zero Hunger. These alliances hold a privileged position. They can draft legislation, formulate public policy, influence national budgets and set political agendas. This is why FAO has identified them as key allies. The formation of the Parliamentary Front against Hunger in Latin America and the Caribbean (PFH-LAC) in 2009 marked the start of this working model and set the standards for parliamentary alliances to be formed in other regions. Nowadays, FAO works with over 40 national and regional alliances. This chapter reviews FAO's different working experiences with parliamentarians in support of the 2030 Agenda, considers the lessons learned, and outlines the main challenges.

Introduction

The United Nations 2030 Agenda for Sustainable Development has set some demanding goals which have turned out to pose a challenge, both to the credibility of the international system and to each country which adopted the 17 SDGs in New York in 2015. Among them, SDG 2 – Zero Hunger – implies a collective effort by the international community, nations, parliaments, public and private sectors and all organizations of society at large, to assure food for the more than 820 million people who are in a situation of food insecurity (FAO, 2018a).

There are only eleven years left until 2030, so more joint efforts are needed. Parliamentary alliances can play an essential role in achieving this, by placing measures and social programmes on legislative agendas, to eliminate hunger and poverty. Today we are witnessing new phenomena which affect food production and food security. These include climate change, armed conflicts, the economic

crisis and other factors. Conversely, in recent decades, the use of new technology has increased agricultural productivity, generating sufficient food to meet the dietary requirements of the entire planet. Very often, there is a glut. Nevertheless, calculations show that one-third of this food is spoiled or wasted, either at the production stage or during distribution or final consumption (FAO, 2018b).

This scenario highlights the need for the entire agrifood system to work with an integrated focus, including the institutional and legislative framework within which production develops and is shaped (FAO, 2017a). Co-working between parliamentarians and every stakeholder in the agrifood system has a positive impact in improving the system as a whole. For example, civil society organizations are responsible for the production of healthy foods, are closer to the most affected sectors and have a strong presence in rural areas (FAO, 2017b). On the other hand, the private sector has played a fundamental role in the transformation of agriculture, by introducing new technology, altering the value chain and investing. The academic sector and research institutions can also generate significant knowledge to tackle the new challenges.

Nowadays there is a new phenomenon affecting action against hunger: overweight. In 2016 this affected 2 billion adults (aged 18+), over 650 million of whom were obese (FAO, 2018a). This directly impinges on rising public health budgets in every country. FAO and parliamentarians have begun to discuss different types of rules and regulations which seek to inform consumers more clearly and transparently about food products. Chile's Labelling Act is having wide repercussions in parliaments in a number of countries, which are concerned about this issue (FAO, 2018c).

FAO has sought to forge alliances with national and regional parliaments to pool efforts and promote the formation of parliamentary fronts in various countries. Today there are more than 40 parliamentary fronts and alliances worldwide, engaged in action against hunger and malnutrition as a cross-cutting theme on the way to achieving the goal of a hunger-free world by 2030.

The role of parliamentary fronts: a reproducible model

To achieve Zero Hunger and eradicate poverty will call for institutional policies and programmes devised for the long term, backed by the necessary resources to guarantee the full cycle of implementation. The commitment of the parliamentary alliances to political action is crucial.

With the support of a number of donors, especially the Spanish Agency for International Development (AECID), FAO has fostered national alliances and regional parliamentary fronts as cross-party initiatives, seeking to unite political efforts contributing to the elimination of hunger and poverty (FAO, 2017c).

The parliamentary alliances, understood in cross-party terms, can ensure that these challenges remain a priority on political agendas and stay within the scope of responsibility of the state. They play a central role in rethinking how to make and implement policies to guide national programmes towards the SDGs.

The first parliamentary front against hunger came together in Latin America in 2009. Brazil and Guatemala started the Hunger-Free Latin America and Caribbean Initiative (IALCSH)⁴¹ during the Latin American Summit on Chronic Hunger, held in Guatemala City in September 2005. Given the importance of this issue, all countries in the region decided to get together and make the region's first commitment to eradicating hunger (FAO, 2017c).

The Parliamentary Front against Hunger in Latin America and the Caribbean came into being in 2009, through the Regional Project of Support for IALCSH, a joint project between FAO and AECID (FAO, 2017c). The front sought to forge links with other players and strengthen cooperation with existing fronts or social movements, e.g. the Brazilian Parliamentary Front for Food and Nutrition Security, established in 2007 (FAO, 2017c). Brazil's pioneering experiment became a point of reference in Latin America and the Caribbean during this period (PFH-LAC, 2014). The PFH alliances (parliamentary fronts against hunger) had multi-party memberships. They reflected a common interest among parliamentarians and a determination to eradicate hunger, malnutrition and poverty, overcoming opposing political allegiances. At present there are 20 nationwide fronts, 3 regional fronts and 4 sub-national fronts in Latin America and the Caribbean alone.

The SDGs and the 2030 Agenda specifically recognize the essential role of parliamentarians, thereby giving the alliances a renewed framework of action. The 17 Sustainable Development Goals and 169 Targets require revitalized and innovative action by all countries, and inspire cooperation between them (UNGA, 2015). Zero Hunger – SDG 2 – aims to put an end to all forms of hunger and undernutrition by 2030, an undertaking which further increases the relevance of the work of the PFH alliances in the face of global challenges (UNGA, 2015).

The parliamentary alliances are a dynamic model which depends on the context in each country or region. This flexibility has yielded many positive aspects in the search for sustainable and efficient solutions in the fight against hunger. Thus the fronts have become a reproducible experiment. Initiated in Latin America and the Caribbean, the successful model is now made available to other regions.

41 For detailed information about the Initiative, see: <http://www.ialcsh.org/>

TABLE 8.1

Parliamentary alliances	Main topics
<p>Sub-Saharan Africa and MENA Region Regional/Sub-regional: Pan-African Parliamentary Alliance, Eastern Africa Parliamentary Alliance, ECOWAS Parliamentary Network and Parliamentary Network for Food Security in Africa and the Arab World. National: Benin, Congo, Djibouti, Madagascar, Sierra Leone, Somalia, Uganda.</p>	<p>Food security and nutrition; Responsible Agriculture Investments (RAI); Voluntary Guidelines for the Responsible Governance of Tenure (VGGT); Gender in agriculture.</p>
<p>Latin America and the Caribbean Regional/sub regional: Parlatino, Parlandino, Parlasur. National/Departmental: Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Granada, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Vincent and the Grenadines, Uruguay, Buenos Aires, Mexico City, La Paz, São Paulo.</p>	<p>Right to food; Food security and food sovereignty; Family farming; School feeding; Food labelling.</p>
<p>Asia National: Japan, Philippines.</p>	<p>Food loss and waste; Food security and nutrition; Sustainable agriculture and climate change.</p>
<p>Europe Regional: European Parliament National: Italy, Spain.</p>	<p>Right to food; Nutrition; RAI; Family farming; Access to land; Peace and food security; Biodiversity and food loss.</p>

Currently there are around 35 national and sub-national and 8 regional and sub-regional parliamentary fronts and alliances.⁴²

In Africa, the Pan-African Parliament (PAP), which has 250 parliamentarians, founded the Pan-African Parliamentary Alliance for Food Security and Nutrition in 2016. Jointly with FAO, it works to strengthen the technical capabilities of legislative bodies at national and sub-regional levels (FAO, 2017d), and this includes setting up a series of national alliances. In 2016, a European Parliamentary Alliance on the Fight against Hunger was formed in the European Parliament, aiming to keep the subject of food security on the political agenda. Strengthening the link

⁴² From 2005 Graziano da Silva pledged support to the Hunger-Free Latin America and Caribbean Initiative, with FAO as its main sponsor (September 2005). In his years at FAO (in the position of Assistant Director-General for Latin America and the Caribbean, then Director-General from 2012), he promoted political and academic bodies which have helped to make the parliamentary commitment a reality, both in Latin America and the Caribbean (where the first front came together in 2009) and in Africa (2016), Europe (2016) and Asia (2017). Then came the organization of the first Global Parliamentary Summit against Hunger and Malnutrition (2018).

between peace and food security⁴³ was identified as a priority. At national level, parliamentary fronts have been formed in Italy and Spain.

On the Asian continent, in 2017, the FAO Parliamentarian Friendship League was formed in Japan to enable various stakeholders to discuss and take action in relation to issues of nutrition and food. Another country in the region that has managed to form a national alliance is the Philippines. During 2018, sub-regional alliances were formed such as the Eastern Africa Parliamentary Alliance for Food Security and Nutrition (EAPA FSN), the ECOWAS Parliamentary Network to Advance Gender Equality in Agriculture and Food Security and the Parliamentary Network for Food Security in Africa and the Arab World. Table 8.1 summarizes the alliances and fronts working at national level with FAO on specific issues.

In general, the action carried out by FAO with the parliamentary fronts can be summarized as follows (FAO, 2016):

- › **Facilitate the sharing of information** such as good practices on legal frameworks and public policies;
- › Provide **capacity building** for parliamentarians on key issues of food and nutrition security;
- › Provide **support** to members of parliament on the revision and/or development of legislation and public policies;
- › Provide **technical information**, including statistics, on relevant issues of food security to support the measures taken by the respective parliamentary body; and
- › Facilitate **linkages and exchanges** between parliamentarians and parliamentary bodies of the world (e.g. South–South and triangular cooperation).

Progress and results

FAO's experience working with parliamentary fronts has demonstrated that co-operation, dialogue with other sectors and the pooling of experience can lead to legislative progress, especially in guaranteeing the right to food. Over the past five years, FAO has succeeded in extending this model of parliamentary work to countries in Africa, Asia, Europe, the Near East and North Africa. Nevertheless, the progress made in each area differs widely. The parliamentary fronts of Latin America and the Caribbean are at a consolidated stage, drafting and overseeing laws and key policies for the success of Zero Hunger, both in their national parliaments and

⁴³ The first public meeting of the European Parliamentary Alliance on the Fight against Hunger, on 28 September 2016, focused on “implementing SDGs 1 and 2 and dealing with the root causes of hunger: the link between peace and food security.”

in the structuring of model laws at regional level. In the other regions, by contrast, parliamentary alliance initiatives are still under construction and at the institutional organizing stage. Though still in their infancy, they are making an important contribution, by adding new food and nutrition security-related topics to legislative agendas. That is the first step towards subsequent draft legislation.

The Latin American and Caribbean Parliament (Parlatino), with the support of the PFHs and FAO, drafted and passed: the Framework Act on the Right to Food and Food Security and Sovereignty in 2012; the Framework Act on Food for Schools in 2013; the Model Law on Family Farming in 2016; and the Model Law on Artisanal Fisheries in 2017. The regional legal frameworks serve as a reference for such laws, for all countries in the region and worldwide. Although these framework acts are not binding on the countries concerned, they do represent a regional endorsement of the concepts and principles of the topics under discussion, and a development of public policies on these sets of issues.

The Model Law on Family Farming, especially, is considered a major advance, because of the vital importance of this subject to Latin America and the Caribbean. This initiative recognizes family farming as a cornerstone of the eradication of hunger. It refers to the need to rely on special policies, dedicated to family farmers, to improve access to finance, technical assistance, the use of single registers, market access, and state-promoted public procurement. Within this framework, PFH work has helped to have laws on family farming passed in Argentina, Brazil, Ecuador, Guatemala, Honduras,⁴⁴ Peru, Mexico and Uruguay (FAO, 2017c).

The regional PFH and its 20 national chapters are constantly driving processes of dialogue between multiple stakeholders, promoting the conception and discussion of new public policy ideas. This effort of cross-cutting reflection alone is of immense value in the fight against hunger and malnutrition in the context of the new 2030 Agenda.

The parliamentary fronts have also achieved laws and institutional progress at national level, to boost the implementation of the right to food. Uruguay passed Law 19140 on healthy food in educational institutions (2013). In Ecuador, with the front's support, the Fundamental Law on Rural and Ancestral Land (2016) and Official Regulation 134 on the Labelling of Processed Foods for Human Consumption (2015) completed their passage through parliament. In the Plurinational State of Bolivia, the process of capacity building, awareness raising and the construction of alliances

⁴⁴ In the cases of Guatemala and Honduras, laws on family farming have not been passed, though they are now under discussion in both countries. Instead, other types of law have been enacted, which benefit family farming, such as those on food for schools, which require set percentages to be purchased from family farms.

between parliamentary fronts, the Executive and civil society organizations have resulted in the drafting and enactment of legislation on students' right to food.⁴⁵

In the Dominican Republic, the support of the parliamentary front was fundamental in guiding a process of discussion and in raising the awareness of the various stakeholders. In 2016, Law 589-16 was promulgated on Food and Nutrition Sovereignty and Security for the Right to Food. This case is considered a model of integration, due to the close involvement of government institutions, society and United Nations agencies. In the case of Mexico, a constitutional amendment (2011) recognized the right to food⁴⁶ while, in Honduras in 2016, the new Food for Schools Law was passed, sponsored by the Honduran PFH.

Based on the successful experience in the Latin American sub-region, FAO has been supporting the formation of new fronts in the Caribbean. As a result, one PFH was formed in St. Vincent and Grenadines in 2015, and another in Haiti in 2017. In 2018, FAO supported a project to encourage more Caribbean countries to set up chapters of parliamentary fronts and join in the debates and exchanges of experience.

Efforts in Africa primarily address the reinforcement of capacity and the formation of parliamentary alliances. One of the first results was the establishment, in 2016, of the Pan-African Parliamentary Alliance for Food Security and Nutrition (PAPA-FSN) (FAO, 2016a). Through a joint technical cooperation project between FAO and the Pan-African Parliament,⁴⁷ PAPA-FSN has received support for the development of cross-sector capacity to strengthen the role of African parliamentarians in response to the challenges of the 2030 Agenda. The same applies to the drafting of a regional model law on food and nutrition security.

Moreover, the joint project has led to nationwide legal and political assessments of food and nutrition security in four countries: Cameroon, Madagascar, Sierra Leone and Uganda. The cooperation between different players has contributed to the formation of national parliamentary alliances in Sierra Leone and Uganda, while Cameroon is currently working to form such an alliance.

A good example of the progress on the African continent in this field is the Malagasy Parliamentary Alliance for Food and Nutrition Security (APMSAN), formed in February 2017 as the first national parliamentary alliance against hunger and malnutrition on the African continent. Since then, a national strategy has been devised

45 Law 622 on Food for Schools (2014).

46 In amendment of Articles 4 and 27 of the Constitution.

47 FAO TCP/RAF/3612 "Strengthening capacities of Parliamentarians in Africa for an enabling environment for Food Security".

for APMSAN⁴⁸ with the long-term objective of implementing the right to adequate food for all in Madagascar (APMSAN and FAO, 2017).⁴⁹

The initiatives by these alliances in Africa have been welcomed. Parliaments and governments have valued initiatives of this type and granted them the necessary support. Through its regional office for Africa, FAO has implemented a work programme focused on setting up new parliamentary organizations at local level. In this context, parliamentary alliances have been formed in Benin, Djibouti, the Democratic Republic of Congo and Somalia. The effort has expanded even further. In 2017, parliamentarians from six east African countries, (Djibouti, Kenya, Rwanda, South Sudan, Uganda and the United Republic of Tanzania) met in Kigali under FAO sponsorship to form the Eastern African Parliamentary Alliance for Food Security and Nutrition (EAPA FSN). This Alliance has developed an interesting model for its functioning, forging a close tie with the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM).⁵⁰ The aim is to align the Alliance's work with academic partners and anchor policies and legislation to content based on scientific evidence.

In the Middle East and North Africa, FAO has recently begun working with the parliamentary sector. A series of initiatives led by the Afro-Arab Parliamentary Economic Forum, the Association of Senates, Shooras and Equivalent Councils in Africa and the Arab World (ASSECAA) and FAO created the political conditions for the institution of the Parliamentary Network for Food Security in Africa and the Arab World (ASSECAA, 2019). This initiative became official in January 2019. It also reflected the momentum of the regional parliaments of Latin America and the Caribbean, and of the World Parliamentary Summit against Hunger and Malnutrition.⁵¹ This network consists of about 50 parliamentarians from African countries and the Arab world, who have reaffirmed their political commitment to guaranteeing access for everyone to sufficient, good quality food. FAO's offices in the region⁵² support the work of this parliamentary network, recognizing it as a historic achievement and a major advance in the region's effort against food insecurity

48 The strategy was adopted at the parliamentary session of 12 December 2017.

49 There are four priority areas for action: support for the promotion of policies and programmes to improve food and nutrition security in Madagascar; identification and implementation of legislative measures relating to food and nutrition security, and strengthening reporting on the actions at all levels; raising awareness of food and nutrition security at all levels and reviving the APMSAN national consultative platform, and including the Pan-African Alliance for Food and Nutrition Security in this, to boost their joint work (APMSAN and FAO, 2017).

50 The forum numbers over 100 universities in 37 African countries.

51 Detailed information on the Initiative is available at <http://www.fao.org/about/meetings/global-parliamentary-summit/en/>

52 Through the initiative Building Resilience to Enhance Food Security and Nutrition in the Near East and North Africa.

and hunger. The formation of this network has created a space for dialogue, and offers great potential for parliamentarians collectively to meet their commitments to achieving Zero Hunger in Africa and Arab States. One of the particular themes guiding the work of this Alliance is the promotion of investment with a view to guaranteeing plentiful, sustainable food production of good quality, taking account of problems such as the water shortage, flooding, soil erosion, desertification and the spread of diseases and epidemics resulting from climate change.

In Asia and the Pacific, there is no regional parliamentary alliance as yet. Nevertheless, formations of fronts at national level have been increasing in recent years. In 2017, the FAO Parliamentarian Friendship League in Japan was created, with an emphasis on the need to review the regulations on food loss and wastage. With FAO's support, a bill was presented for discussion on this subject.⁵³ Parliamentarians in the Philippines and Bangladesh have also taken up the challenge of forging parliamentary alliances for possible legislation on these issues in future.

The parliamentary alliance in the Philippines was launched in 2017 as the FAO Legislative Advisory Group – Philippines (FLAG–PH). Its primary objective is to promote and harmonize legislative measures about food security and nutrition. It also seeks to devise a coherent and effective strategy in this field. The alliance has been very active from the outset and acts as an institutional forum for inclusive dialogue between different sectors.

In April 2019, with FAO's support, the Bangladesh parliament began the process of forming a national parliamentary alliance with a strong interest in topics of sustainable agriculture. The parliamentary alliance and FAO share the objective of working to transform the farming and food sectors into more sustainable systems of production. They work for proper adaptation to the risks of climate change in a country where extreme climate events are growing in frequency and seriousness (FAO, 2014).

The European Parliament alliance “Fight against Hunger” was formed in 2016. It unites over 30 Members of the European Parliament (MEPs) of different nationalities, political groupings and parliamentary committees. Through this alliance, MEPs are making an active contribution to consolidating the political commitment to act against hunger and malnutrition at EU level and worldwide. It offers them a platform where they can express their shared concerns and jointly advocate the policies and programmes that are essential to build a world in which there is Zero Hunger. Some of the more specific lines of working are intelligent and sustainable

⁵³ This bill is still being drafted.

Box 8.1 Global Parliamentary Summit against hunger and malnutrition

(MADRID, 29 AND 30 OCTOBER 2018)*

Around 200 parliamentarians from 80 countries attended the first Global Parliamentary Summit.

It was co-organized by FAO together with the Spanish Parliament, the Spanish Agency for International Development Cooperation (AECID) and the Latin America and the Caribbean Parliamentary Front against Hunger with the support of the European Commission and IFAD.

The summit addressed three major themes approached from the angle of parliamentary action: the priorities on the path towards Zero Hunger, the challenge of healthy nutrition for all, and effective action to achieve SDG 2.

It consisted of two days of dialogues and exchanges of experience on establishing policies, enacting legislation, assigning specific budgets and forging alliances, agreements and actions aimed at achieving SDG 2 by 2030.

The Declaration of Madrid was adopted, reaffirming the political commitment of the parliamentarians to achieving Zero Hunger and fighting against malnutrition through four key dimensions: policies, programmes and legal frameworks; governance and coordination; evidence-based decision making; and implementation on the ground.

* Detailed information on the initiative is available at <http://www.fao.org/about/meetings/global-parliamentary-summit/en/>

investment in agriculture and rural development, sustainable forestry, family farming, access to land, peace and food security, biodiversity and food wastage.

At national level, Italy and Spain have formed parliamentary fronts. In 2017 the Italian Chamber of Deputies announced the formation of the FAO Parliamentary Alliance for Food Security. Initially that alliance consisted of nearly 50 parliamentarians from different political parties and set out to contribute to the goal of Zero Hunger, in line with the commitments of the Milan Charter.⁵⁴ The alliance has a special focus on Italian cooperation and the development plans of African countries, and pays special attention to the issue of gender.⁵⁵ As for Spain, its Parliamentary

54 For detailed information on the initiative, see: <http://carta.milano.it/it/>

55 For detailed information on the initiative, see: http://www.camera.it/leg17/1132?shadow_primapagina=7540

Alliance was launched in 2018, with 169 parliamentarians at the start. Its aim is to move forward jointly in action against hunger and malnutrition, and support the progressive implementation of the right to food in a context of sustainability, and in line with SDG 2 of the 2030 Agenda.

Given the broad appreciation of the role of parliamentary initiatives in the social agendas of the countries concerned, and above all the strong interest in fora for the pooling of experience among parliamentarians, FAO, AECID and the Spanish Senate jointly promoted the Fourth World Parliamentary Summit against Hunger and Malnutrition. Held in October 2018 (FAO, 2018), the summit took a firm stance on the responsibility it bears, the role of parliamentarians in the new world situation and the need to join forces with other members of government and society. One of the summit's achievements was to identify and exchange political experience, laws and good practices which appear to be fundamental to the achievement of the goal of Zero Hunger, especially through the formation of a network of parliamentary alliances.

Lessons learned and challenges faced

The experience of FAO with parliamentary alliances demonstrates that the work of these bodies is a crucial tool in achieving sustainable results in the eradication of hunger. This experience has highlighted the various challenges, and the lessons learned, from the work of the PFHs.⁵⁶

Certainly, this working model is in its infancy in the context of international cooperation, and will always depend on the national situation and political environment in which it is implemented. But, in general terms, the biggest lessons learned, and the future challenges, are as follows:

- 1. The need to institutionalize.** PFHs are vulnerable to political change. This means institutional status is a key tool in guaranteeing continuity. Institutionalizing a parliamentary alliance is the only way of making sure that the network, with all its progress and achievements, survives changes of government. By institutionalizing, it is possible to improve coordination and ultimately the action plans of the alliances. Institutional status also allows the creation of systems of reporting and monitoring, and keeping food and nutrition security as a priority on political agendas. The result is a commitment that transcends political interests. The parliamentary fronts and alliances have identified the goals of the 2030 Agenda as their main framework for action. This also enables them to ensure the continuity of their processes and initiatives.

⁵⁶ This reflection has relied on the work already done and reported in the publication *Parliamentary fronts against hunger, and legislative initiatives for the right to adequate food and nutrition* (FAO, 2017d).

2. **A forum for the exchange of knowledge and experience at international level.** This could be categorized as belonging to the triangular cooperation models. As stated above, the work of Latin America and the Caribbean has become a frame of reference for other regions. Although work with parliamentarians is relatively new, and there are no guidelines for it, the exchange of knowledge has led to recognition of PFHs and ways of forming them, all over the world. This has only been possible by creating the fora for dialogue that are crucial to knowledge exchange, not only between parliamentarians, but also other stakeholders. They have created an atmosphere in which it has been possible to learn from both successes and failures. Thus dialogue and cooperation with society at large have facilitated local input and led to support and validation, in the form of draft legislation.
3. **A virtuous circle between academia and parliamentary fronts.** Action against hunger is closely linked to other emerging phenomena, such as climate change, migration, access to information, population growth etc. These issues call for reflection and constant updating (FAO, 2018a). The technical capacities of the parliamentary alliances and technical equipment for them are essential, together with the new knowledge deriving from research. Experience has shown that action is much more effective when parliamentarians and science work together. A message from parliamentarians alone does not have enough authority, while scientists grouped within a university lack the power to change laws. Ultimately, co-working between parliamentarians and the world of science generates a message to which the public is receptive, and confers the legitimacy to legislate accordingly.
4. **Need for sustained funding in support of processes.** Financial resources are the key to guaranteeing the consolidation, effectiveness and sustainability of the work of the PFHs. It takes a long time to launch and consolidate initiatives such as these, and the process needs funding to drive it forward, as the results from the parliamentary fronts of Latin America and the Caribbean show. Because of the way national parliaments work, an external institution and available funds are needed to trigger the process.
5. **Long-term global initiatives.** As discussed in detail in this document, the role of parliamentarians is essential to making public policies sustainable. One important challenge is to involve these fronts and alliances in global initiatives and in international fora for discussion, which provide ways of moving forward with framework agreements for laws or regulations which, in turn, facilitate progress at national level. One global initiative in which

the involvement of the work of the parliamentary fronts is vital is the United Nations Decade of Family Farming 2019–2028 (UNDFE).

These challenges, and the lessons learned, mark a first step on the way to understanding and making genuine use of the potential of the parliamentary fronts in action against hunger. To achieve this, it is necessary to make thorough changes in the statutory and judicial framework. It is also necessary to acknowledge that action against hunger is a problem of public policy, not of individuals. Only in this way will ensuring food and nutrition security for the population be recognized as a duty of government. This is where working with parliamentary fronts and alliances proves crucial.

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CHAPTER 9

Family farming in the global agenda and the United Nations Decade of Family Farming

Guilherme Brady and Francesco Pierri¹

This chapter highlights the key role that family farmers and their organizations can play in transitioning towards more sustainable food systems and rural development, contributing to meeting the ambitious goals of the 2030 Agenda for Sustainable Development. It also provides an overview of some of the milestones that created awareness within the international community on family farming, setting the conditions for the United Nations Decade of Family Farming (UNDFE) to be approved by the UN General Assembly.²

Introduction

Family farmers include peasants, indigenous peoples, traditional communities, fisherfolk, mountain farmers, pastoralists and many other groups, representing every region and biome in the world. Given this enormous diversity, there is no single definition for family farming, although it can be broadly regarded as a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production that is managed and operated by a family and predominantly reliant on family capital, including both women's and men's labour. Family and the farm are linked, co-evolve and combine economic, environmental, reproductive, social and cultural functions. (Garner and O Campos, 2014).

Multiple definitions exist in the literature and at the national level. Several countries have defined criteria and parameters to identify family farmers in order to design and implement policies that specifically address their issues, constraints and development potential. Noting that farm sizes vary depending on

1 The authors would like to acknowledge significant contributions provided by Anna Korzenszky (FAO) and Sara Hassan (FAO).

2 UN Resolution adopted by the General Assembly (A/RES/72/239)

agricultural ecosystems and production systems, some of the most common criteria and parameters include:

- › management of farm production by the family or a member of the family;
- › farm size that varies depending on the agricultural ecosystem and production systems;
- › family's place of residence;
- › proportion of family labour in total labour force;
- › proportion of farm income in total income; and
- › family capitalization (capital value of what a farmer or family farm possesses – land, machinery, input and production stocks, etc.).

It is important to bear in mind the vast diversity that exists within the concept of family farming, for example, in terms of land size, productive sectors asset base, access to infrastructure and services, proximity and access to markets, degree of commercialization, types of markets engaged in, and degree of specialization within farming activities at the household level. These factors all influence the types of strategies and approaches adopted by family farmers and their economic, social and environmental outcomes.

In both developed and developing countries, family farming represents the predominant form of food and agricultural production: more than 90 percent of all farms (600 million farms) are run by families and rely primarily on family labour, producing more than 80 percent of the world's food in value terms (FAO and IFAD, 2019a).

Paradoxically, almost 80 percent of the world's poor and food insecure live in rural areas, mostly depending on agricultural production for their subsistence. Most of the rural poor are small-scale family farmers who depend on agriculture and aquaculture for their food and income but face many external policy and economic constraints in accessing natural and productive resources, opportunities and markets. Worldwide, farms of less than 1 hectare account for 70 percent of all farms but operate only 7 percent of all agricultural land. Slightly larger farms, of 1–2 hectares, account for 14 percent of all farms and control 4 percent of the land, while farms in the range of 2–5 hectares account for 10 percent of all farms and control 6 percent of the land.

Land concentration and competition among different land uses, driven by corporate interests and urban-biased or export-led policies, is affecting the livelihoods of family farmers and contributing to the persistence of social inequalities, not only in societies with a classic dual agrarian structure like in Latin America (where numerous smallholder farms coexist with a smaller number of large-scale farms) but also globally. This, combined with continued population growth and ecological stress,

especially in sub-Saharan Africa, is leading to declining land sizes and profitability, and ultimately to various patterns of migration.

Different types of family farming across the world are also affected by internal challenges, such as the ageing of households, the drudgery of agricultural activities associated with low use of technology, and the weight of patriarchal values over the aspirations of younger generations, notably girls.

Yet, it is increasingly agreed that the failure of the Green Revolution and dominant food systems to address the imperatives of generating jobs, producing safe and nutritious food, and protecting biodiversity requires a fundamental shift in the way food is produced, processed and marketed.

Family farming remains at the centre of many possible pathways towards the building of new agri-food systems, having a greater potential to adapt and promote transition towards sustainable food systems than other agricultural models. Yet, for this to happen, family farmers need an enabling institutional environment to help them overcome external and internal constraints. In this regard, public policies, collective action and territorial approaches provide the foundation for driving such transformation. Despite growing consensus on the contributions of family farming, a specific agenda for family farming at the global and national levels is still relatively new.

Building the international agenda on family farming:

As of the early 1990s, national farmer organizations from different regions, mainly made up of family farmers, began to exchange experiences and coordinate positions in regional umbrella organizations and international platforms. The main existing regional and international family farmer organizations were established during this period:

- › La Via Campesina, founded in 1993;
- › Confederación de Organizaciones de Productores Familiares del Mercosur (COPROFAM), founded in 1994;
- › Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest (ROPPA), founded in 2000; and
- › Asian Farmers Association for Sustainable Rural Development (AFA), founded in 2002.

One of the main drivers of this process was an effort to bring specific perspectives and positions to the attention of national governments in order to build family-farming-centred public policies, but a key aim was also to promote knowledge sharing among farmers and to develop capacities, both organizational and among members.

One of the first appearances of family farming on the international agenda was in the 1990s. Numerous international and bilateral rounds of trade negotiations took place during that decade and up until the early 2000s. In that period, most of the farmer organizations' advocacy efforts focused on what they considered as the adverse effects of trade agreements: tariff reductions, affecting the price of agricultural products and their livelihoods; and competition from new players, who benefited from comparative advantages in national markets.

Family farmer organizations, supported by other civil society groups, especially international non-governmental organizations, also dedicated efforts to understanding and formulating positions on the so-called “new issues” (investments, intellectual property and public procurement), considering their possible implications for existing national public policies and programmes.

By 2008, global trade negotiations were stalled, having foundered due to disagreement over agricultural subsidies and intellectual property rights, while some governments had increasingly turned to bilateral and regional free trade agreements to advance their trade and investment interests (McBride, 2018).

Throughout this period, the advocacy efforts of family farmer organizations started to resonate within governments. This process was not linear, being contingent on different national interests, but family farmer organizations and several governments started to look for answers regarding both how to reconcile market access and agricultural liberalization with the intention to protect family farmers, and the conditions in which export agriculture could bring employment and prosperity to the rural poor. At this stage, the inter-sectoral nexus between family farming and other policy areas was not yet fully established and the multidimensional contributions of family farmers to sustainable food systems was often not recognized beyond their role in agricultural production. However, the higher visibility of family farming in global trade negotiations created a space for greater dialogue and collaboration between family farmer organizations and governments to develop food security and nutrition policies at national level.

Almost concurrently, at the 1996 World Summit on Food Security, FAO Members reaffirmed the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger. This declaration was essential in launching the work on the right to food and the notion of food security that jumpstarted some years later at the 2002 World Food Summit. The involvement of civil society organizations – in particular from family farmer organizations – coordinating positions under

the International Planning Committee for Food Sovereignty (IPC),³ – proved to be invaluable to this process, as Members recognized that the technical information and the perspectives brought by representatives of rural people greatly improved the quality of work on the right to food. The importance of the right to food in the fight against hunger was recognized in the unanimous adoption of the *Right to Food Guidelines* by the FAO Council in November 2004 (FAO, 2014).

Throughout the 2000s, a significant number of countries started to place stronger emphasis on developing national strategies for food security and nutrition. Countries from different regions, backed by legal frameworks and inspired by the *Right to Food Guidelines*, created institutions, policies and programmes for food and nutritional security. Conditional cash transfer programmes for the poorest populations, support to family farming, improvements in the labour market, and school feeding programmes are some examples of the policies and programmes adopted in different countries as part of food and nutritional security strategies, demonstrating a richer set of policy interventions as compared to the Green Revolution’s traditional production-oriented approach.

The contribution of family farming in different policy areas started to gain recognition in various national food and nutritional security agendas. Some countries began to recognize family farming in their legal frameworks, defining criteria and collecting data to direct public policies towards family farmers (MERCOSUR, 2007). The specially designed policies for family farmers built upon existing agricultural policies and programmes, giving special conditions of access to family farmers, but also maximizing the contributions of family farmers in other policy areas. Some such examples include payments for ecosystem services to agrarian reform settlers in order to protect biodiversity; the use of food produced by family farmers in school feeding, public hospitals and social assistance programmes; and the prioritization of family farmers in certain types of public procurement. These experiences were being developed in parallel in different countries, as part of different national strategies, but had not yet been consolidated in the international agenda.

With the onset of the 2007/2008 world financial crisis, which entailed the worst food crisis since 1974, the world witnessed escalated social tensions in many countries across the globe as a result of the sharp rise in the price of basic food. Higher global market prices for food commodities (especially wheat, rice, soya

3 The International Planning Committee for Food Sovereignty (IPC) is an autonomous and self-organized global platform composed of small-scale food producers, rural worker organizations and grassroots/ community-based social movements to advance the food sovereignty agenda at the global and regional level. More than 6000 organizations and 300 million small-scale food producers self-organize themselves through the IPC. <https://www.foodsovereignty.org/about-us/>

and maize) sparked an unprecedented increase in the number of hungry people. The food crisis placed the fight against hunger on the international agenda (Golay, 2010) and highlighted the role of family farmers in national food and nutritional strategies in the search for new and alternative solutions.

The UN System was urged to provide answers. One of these was the 2009 reform of the Committee on World Food Security (CFS),⁴ which emphasized the need to promote policy convergence and coordination on food security and nutrition policies, and to support regional and country-led plans to eliminate hunger, based on right to food approaches.

A turning point for family farming in the global agenda came about in 2014. Led by FAO, 2014 was designated the United Nations' International Year of Family Farming (IYFF). The United Nations thereby repositioned family farming at the centre of agricultural, environmental and social policies in national agendas, and achieved a shift towards a more equal and balanced development agenda (Graziano, 2014). The IYFF fuelled a robust process of political dialogue among FAO's 197 Members, involving all relevant non-state actors. This process resulted in the formulation of national and regional policies, programmes, activities and institutional arrangements in support of family farming.⁵ Multi-actor platforms, including about 50 National Committees on Family Farming (NCFE), have since been created for policy dialogue, stimulating strong political commitment in favour of family farming.⁶

4 "In 2009, under the impression of the world food price crises 2007/2008, the CFS underwent a profound reform and became the foremost inclusive platform with a particular openness to the participation of civil society. The Committee reports to the UN General Assembly through the Economic and Social Council (ECOSOC) and to FAO Conference. The reform identified the following 6 roles for the CFS: Increase coordination at the global level to strengthen action among governments, regional organizations/agencies, CSOs, private sector and other stakeholders; Promote policy convergence and coordination through developing international strategies and voluntary guidelines on food security and nutrition policies, based on lessons learned from local experiences and input from national and regional levels; Provide support and advice on regional and country-led plans to eliminate hunger, based on applying right to food approaches that are founded on the principles of participation, transparency and accountability; Coordinate at national and regional levels through building and strengthening national and regional mechanisms and networks working on food security and nutrition issues; Promote accountability and share best practices through developing innovative monitoring mechanisms and common indicators to help countries monitor and report quantitatively on their progress on tackling hunger; Develop a global strategic framework for food security and nutrition in order to improve coordination and guide synchronized action by a wide range of stakeholders" (<http://www.csm4cfs.org/the-cfs/>).

5 Some significant examples include the Gambia's reformed seed policy (creation of a Seed Council, on which Civil Society Organizations have obtained three seats); and Decree 1030/2014 in Argentina (creation of a State Secretariat for Family Farming).

6 Among others: the 6th Berlin Agriculture Ministers' Summit (Germany, 18 January 2014) declaration signed at the Global Forum on Food and Agriculture (GFFA) by 65 ministers in support of family farming; the Declaration of the Heads of States and Governments of the Community of the Latin America and Caribbean States (CELAC) (Havana, Cuba, 28–29 January 2014); the Ministerial Conference for the IYFF for Asia and the Pacific (Chennai, India, 7 August 2014); the Declaration on Family Farming adopted by the Latin American Parliament (26 August 2014).

Healthy and sustainable food systems and the Sustainable Development Goals (SDGs)

It is increasingly evident that the multifaceted and complex challenges affecting food and agricultural systems require urgent action if we are to achieve the Sustainable Development Goals (SDGs), and in particular SDG 1, ending poverty, and SDG 2, achieving Zero Hunger.

By 2050, population growth and dietary changes will drive food needs up by 60 per cent, and agricultural production and livelihoods, already under pressure, will face the challenging task of meeting these needs. At the same time, hunger continues to rise while diet-related diseases and obesity become more frequent.

Other pressing challenges include climate change and weather-related hazards, which are increasingly perceived as a driver of potentially vast migratory flows; an already depleted natural resource base; high volumes of food loss and waste; greenhouse gas emissions; and environmental degradation.

This scenario calls for an urgent transition towards a new paradigm for food systems and rural development – aimed at environmental, social and economic sustainability – in order to ensure food and nutrition security for all, preserve the environment, and provide jobs and improved livelihoods for rural dwellers (FAO, 2017).

There is no doubt that significant changes are also taking place on the production side of food systems. New technologies and innovations are already shaping the way food is produced and consumed. These transformations have contributed to raising agricultural productivity and expanding the availability of low-cost food, as well as to increasing commercialization and profitability of agricultural production. However, these have not brought about the desired rapid improvements in global food security. In fact, global hunger is on the rise¹⁰ superscript as are different forms of malnutrition (FAO *et al.*, 2019),⁷ while environmental issues continue to be a major problem (FAO and IFAD, 2019a).

Furthermore, current structural transformation processes (FAO, 2017) in many developing countries are challenging old paradigms of sustainable growth and rural labour absorption. The narrative has been that, as the share of agriculture in gross domestic product (GDP) falls and agricultural productivity rises, non-agricultural growth will absorb the rural labour surplus at higher wages, while urbanization will offer welfare services and opportunities (Barrett *et al.*, 2015). This is not happening in many countries of the global South, which are experiencing jobless growth and

⁷ The estimated number of hungry people in the world has risen for the past three years, returning to levels of nearly a decade ago. The absolute number of undernourished people, i.e. those facing chronic food deprivation, increased to over 820 million in 2018.

an increasing share of informal, low-productivity and low-income jobs (Byerlee, De Janvry and Sadoulet, 2010).⁸

As shown, structural transformation does not automatically imply poverty reduction and food security: to reach this goal, different actors, and the public sector in particular, must assume their role in shaping transformation and making it inclusive, thus allowing the poor to rise out of poverty without being forced to migrate to urban areas.

The need for a broader policy space for rural development and rural poverty reduction is widely acknowledged. National and comparative analyses have shown that, faced with diverse demographic transitions and resource endowments, governmental strategies in developing countries have been crucial in launching – or undermining – structural transformation processes, and in defining the pace, magnitude and coverage of poverty reduction once implemented.

One relevant aspect that has been considered concerns the relative weight of different policies and investments in reducing rural poverty sustainably and over long periods. Several studies have highlighted the role of government spending on rural infrastructure, research and development, and education for its effectiveness in promoting agricultural and off-farm income and growth linkages in Asian countries. Others have pointed out the role of agricultural subsidies and social protection measures for the rural poor in advancing agricultural income and creating means for coping with the social and environmental hazards linked to price volatility and climate change (Fan, Shenggen and Brzeska, 2007).

In general, the complexity of the interconnected stress factors and drivers of change require moving beyond single measures that act exclusively on the production side or focus solely on the social implications of the ongoing transformations. Integrated strategies and interconnected policies and actions that concurrently address the environmental, social and economic challenges of our society are key to transforming food systems in an inclusive manner that significantly contribute to achieving the SDGs.

The United Nations Decade of Family Farming 2019–2028: the way forward

The UNDFE offers an extraordinary and timely opportunity: in concert with the SDGs, the UNDFE Global Action Plan (FAO and IFAD, 2019b) sets out a framework for transition towards a more sustainable, healthy and inclusive food system, while keeping the focus on family farmers. The UNDFE acknowledges and incorporates family

8 See also FAO, 2017, p. 8.

farmers' locally specific, although globally relevant, knowledge and experiences. In addition, it provides an opportunity to capitalize on the wide range of services that family farmers provide to their communities and to society in general.

The Decade calls on countries to review their national legislative frameworks and to develop public policies and investment strategies in order to better respond to the needs of family farmers and unleash their full potential. Actions are to be contextualized according to the specific geographical and socio-economic characteristics of family farmers and should build on locally available resources and capacities. To support this process, the Global Action Plan outlines a wide set of interventions to simultaneously address all dimensions of sustainability – economic growth, social inclusion and environmental protection. The seven mutually reinforcing pillars of work identified as building blocks for the implementation of the UNDF are, in this sense, fully consistent with the spirit and guiding principles of the SDG framework: the key for success is an approach that holistically addresses family farming in order to transform food systems into healthy and sustainable ones.

The work with family farmers, considering their multidimensional nature, can deliver significant results for a number of SDGs simultaneously. At the same time, interventions targeting specific SDGs can each meaningfully improve the life of family farmers (in the areas of exiting poverty; access to basic services or productive resources, etc.). Reinforcing the SDG “nexus approach”, the Global Action Plan provides support for countries in developing comprehensive plans, including well-tailored and well-targeted actions.

The seven mutually reinforcing pillars of work of the Global Action Plan on Family Farming

- 1 Develop an enabling policy environment to strengthen family farming
- 2 Support youth and ensure the generational sustainability of family farming
- 3 Promote gender equity in family farming and the leadership role of rural women
- 4 Strengthen family farmer organizations and capacities to generate knowledge, represent farmers, and provide inclusive services in the urban-rural continuum
- 5 Improve socio-economic inclusion, resilience and well-being of family farmers, rural households, and communities
- 6 Promote sustainability of family farming for climate resilient food systems
- 7 Strengthen the multi-dimensionality of family farming to promote social innovation contributing to territorial development and food systems that safeguard biodiversity, environment and culture.

Source: <http://www.fao.org/family-farming-decade/en/>

Accordingly, the Global Action Plan sets a target for the establishment of 100 National Action Plans by 2024. While this target is ambitious, it can definitely be achieved, considering the wide support received from Member States at the UN General Assembly when adopting the Resolution on the UNDF, as well as the 104 countries co-sponsoring the International Year of Family Farming “IYFF+10” campaign.

Hunger and malnutrition can be eradicated from our world within our lifetime, but that can only be achieved with the support of our most important allies – the men and women farmers, fisherfolk, herders, and the old and the young who produce the food we need to live happy, productive and healthy lives.

Family farming at FAO

FAO’s new Strategic Framework (FAO, 2016) and its Strategy for Partnerships with Civil Society Organizations (FAO, 2013), both approved in 2013, created an opportunity for FAO to strengthen and diversify its work on family farming through a multidimensional and integrated approach. Enhancing the capacities of governments, institutions, producer organizations and researchers to design and implement integrated family farming and rural development strategies became a priority.

A more complex set of objectives, including securing access to land and other natural resources, achieving gender equality, enhancing market opportunities, reducing costs and input dependency, guaranteeing universal social protection coverage, promoting strong organizations, increasing resilience from natural and economic shocks, and adapting to climate change were included as outcomes to be achieved by FAO’s Strategic Programme.

This brought about a greater focus on family farming within FAO. Based on the recommendations and results of IYFF 2014, FAO has been working with governments and family farmer organizations⁹ to shape pro-poor rural development policies, strategies, programmes and plans that target family farmers, promote their empowerment and increase their access to resources, services, social protection policies, technologies and markets.

Several successful experiences have been observed in countries from different regions. It is worth noting the expansion in the number of countries that recognize family farmers in their legal frameworks; have developed evidence-based and context-specific characterization; and have targeted family farmers with specific public policies. This recognition is not limited to traditional productive policy areas,

9 All 15 FAO Regional Initiatives deal with the root causes of family farmers’ vulnerability, while three initiatives directly address family farming as their main theme.

but also encompasses social protection for family farmers, biodiversity education, infrastructure initiatives, and nutrition policies, among others.

Examples from around the world

LEBANON

FAO is working with the Lebanese Government to strengthen the interconnections between agricultural and social policies to help rural communities and expand social protection coverage to farmers and fisherfolk. This is done through: supporting national dialogue on social protection to design and implement integrated and multisector social policies targeting rural areas in order to reduce poverty and improve living conditions; supporting coordination mechanisms between the Ministry of Agriculture and the Ministry of Social Affairs; creating a farmers' registry, and ensuring the inclusion of farmers and fisherfolk in the social security system. The registry was designed and developed as open-source software and has already been piloted and tested in five villages (in Akkar, North Lebanon, and Bekaa, East Lebanon) before being scaled up across the whole country.

CENTRAL AMERICA

Central American countries are establishing national strategies for identifying and registering family farmers. FAO has also assisted with similar schemes in Costa Rica, El Salvador and Guatemala. Both the registration and characterization of family farming will generate knowledge and facilitate the implementation of targeted public policies for family farmers. Pilot projects have been launched in the Dominican Republic, Honduras and Panama, where a definition of family farming has been agreed by governments and family farmer organizations.

MOZAMBIQUE AND OTHER PORTUGUESE-SPEAKING COUNTRIES

Characterizing family farming increases awareness and facilitates inclusive policies to combat poverty. Through triangular cooperation, FAO is promoting knowledge exchange and dialogue around public policies for family farming in the Community of Portuguese-Speaking Countries (CPLP) in Africa and is providing technical assistance to Member Nations to develop family farming characterization and implement national agricultural and food security policies, along with investment plans beneficial to family farmers.

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CHAPTER 10

Sustainable agriculture and food systems: Towards a Third Agricultural Revolution

Clayton Campagnolla, Ewald Rametsteiner and Diana Gutierrez

Background

In the post-war era, insufficient production of food was the major cause of food insecurity in the world. Not only was it considered urgent to increase available cropland, but increasing yields was also seen as a strategic priority. The intensification of crop production around the world began in earnest with the Green Revolution, often referred to as the Second Agricultural Revolution. Beginning in the 1950s and expanding through the 1960s, crop varieties and agricultural practices changed worldwide (Royal Society, 2009). The production model, which focused initially on the introduction of improved, higher-yielding varieties of wheat, rice and maize in high potential areas (Hazell, 2018 and Gollin *et al.*, 2005), relied upon and promoted homogeneity: genetically uniform varieties grown with high levels of complementary inputs, such as irrigation, fertilizers and pesticides, which often led to depletion of agroecological resilience and hence natural capital (FAO, 2011b). Fertilizers replaced soil quality management, while herbicides provided an alternative to crop rotations or other means of controlling weeds (Tilman, 1998). The high growth in food production in Asia during the Green Revolution was due largely to the intensive use of mineral fertilization, along with improved germplasm and irrigation. World production of mineral fertilizers increased almost 350 percent between 1961 and 2002, from 33 million tonnes to 146 million tonnes (World Bank, 2007).

The Green Revolution is credited, especially in Asia, with having jump-started economies and helped to avoid famines, despite the growth in world population. Between 1975 and 2000, cereal yields in South Asia increased by more than 50 percent, while poverty declined by 30 percent (World Bank, 2007). Over the past half-century, since the advent of the Green Revolution, world annual production of cereals, coarse grains, roots and tubers, pulses and oil crops has grown from 1.8

billion tonnes to 4.6 billion tonnes (FAO, 2011a). Growth in cereal yields and lower cereal prices significantly reduced food insecurity in the 1970s and 1980s, when the number of undernourished actually fell, despite relatively rapid population growth. Overall, the proportion of undernourished in the world population declined from 26 percent to 14 percent between 1969–1971 and 2000–2002 (FAO, 2009).

Almost 50 years later and looking at the challenges ahead for a food-secure world, the Green Revolution is unlikely to achieve the Zero Hunger goals or effectively help eradicate poverty for the world's most vulnerable groups. Its focus on high inputs and technologies to increase yields of a few staple crops (such as rice, maize and wheat) is also unable to effectively address the triple burden of malnutrition – undernourishment, micronutrient deficiency and obesity. Today, unhealthy diets pose a greater risk to morbidity and mortality than alcohol, drug and tobacco use combined (Willett, 2019). Moreover, one-third of today's produced and processed food is estimated to be lost or wasted.

Crop production oriented towards monoculture, high-yielding varieties, higher reliance on inputs, such as pesticides and fertilizers, and extensive livestock production systems have also contributed to natural resources depletion (deforestation, loss of biodiversity and ecosystem services, soil and water degradation, and decreasing fish stocks). Current agricultural production systems have increased greenhouse gas emissions and are also more susceptible to risks and disasters caused by climate change, including drought, flooding, temperature change and related consequences e.g. insect pest and disease outbreaks. In developing countries, agriculture is severely affected by natural hazards and disasters, representing about a quarter of all damage and losses caused. The direct and indirect costs associated to these damages and those to contain them are enormous and continue to grow.

Food and agricultural systems have to change substantively to eradicate hunger and meet the challenges of the 21st century. Over the next 30 years, agriculture will not only face sustainability issues created by current production models, but it will also need to fight an uphill battle to address an unprecedented confluence of pressures, including a 30 percent increase in global population, intensifying competition for increasingly scarce land, water and energy resources, and the threat of climate change. With a population projected to reach 9.3 billion by 2050, more urbanized societies and changing dietary patterns, it is estimated that food production will need to increase from the current 8.4 billion tonnes to almost 13.5 billion tonnes a year (FAO, 2014a). Achieving that level of production from an increasingly depleted natural resource base will be impossible without profound and transformative changes in our agricultural and food systems.

We need to expand and accelerate the transition to sustainable food and agriculture that ensures world food security and healthier diets, provides economic and social opportunities, and protects the ecosystem services on which agriculture depends within a context of increasing climate change impacts and risks. This requires addressing challenges that will determine the future of the planet, such as: how to increase food production without expanding agricultural land; how to protect and restore natural ecosystems in order to maintain the agroecological diversity and productivity needed for long-term sustainability; and how to produce food that is healthy, nutritious and safe.

However, sustainable food and agriculture cannot be considered in isolation but must be viewed within a broader context, as was the case in Brazil with the Fome Zero programme. Local production–consumption linkages, the role of social protection in agricultural production inclusion and improved livelihoods are all important to guarantee the right to access basic food, especially for the most vulnerable groups. Countries have been supported by FAO in developing policies and programmes for school meals and public procurement of local products so that sustainable, healthy and safe food is available to everyone and family farmers' income is guaranteed. The United Nations' Sustainable Development Goal 2 (SDG2) – end hunger, achieve food security and improved nutrition and promote sustainable agriculture – clearly shows the linkage between all the above issues and highlights the need for integration and coherence between public policies and the instruments to enable its implementation.

The knowledge and experience acquired in working towards sustainability in the different sub-sectors of agriculture and food production is essential in managing and accelerating a transition to address the many interlinkages, synergies and trade-offs that exist across agricultural sectors and along value chains. This requires a common vision of a more integrated approach to sustainability across agriculture, forestry and fisheries in the context of food systems, where consumers play an increasingly important role in defining the demands for production. A more unified perspective – valid across all agricultural sectors and taking into account social, economic and environmental considerations – will ensure more effective action on the ground to respond to the challenges and threats ahead, including water scarcity, soil depletion, biodiversity loss and climate change risks.

FAO's vision for sustainable food and agriculture

Many countries have recognized the seriousness and urgency of the situation that our societies face. This is why Agenda 2030 with its Sustainable Development Goals (SDGs) was universally agreed upon by the UN Member States in 2015, putting sustainability at the centre of the world's agenda and setting ambitious global targets. More than before, the SDGs explicitly recognize the central role and limits

of the biosphere as the basis for any social and economic development. There is no sustainable social or economic development in the absence of healthy natural resources. As agriculture is the most important interface between people and the environment, food and agriculture are at the centre of many of the transitions that Agenda 2030 calls for. Similarly, adequate food and nutrition touches on many of the human and quality of life dimensions of the SDGs. A transition towards sustainable food and agriculture is thus not only a question of achieving Zero Hunger, it is also about the well-being of society and the future of the planet.

In response to these challenges, FAO developed a vision for sustainable food and agriculture: “a world in which food is nutritious and accessible for everyone and natural resources are managed in a way that maintain ecosystem functions to support current as well as future human needs”. Farmers, pastoralists, fisherfolk, foresters and other rural dwellers should have the opportunity to actively participate in, and benefit from, economic development, decent employment conditions and fair incomes. Rural women, men, and communities should live in security, and have control over their livelihoods and equitable access to resources, which they use in an efficient way (FAO, 2014a).

Under the outstanding leadership of its Director-General (2012–2019), José Graziano da Silva, FAO has been at the forefront of working to transition towards sustainable agriculture in all sectors relevant to agriculture and natural resource management. FAO has taken the lead in and/or supported Members in applying approaches and frameworks for sub-sectors such as the Ecosystem Approach to Fisheries and Aquaculture, “Save and Grow” (a framework for sustainable crop production intensification), the Global Agenda for Sustainable Livestock, Sustainable Forest Management, the Global Soil Partnership, Climate-Smart Agriculture, and Coping with Water Scarcity (a global framework for action in a changing climate).

Moreover, the concept and practical implementation of agroecology and agroecological approaches have been widely promoted. Two international workshops, held in Rome in 2015 and 2018, counted with the participation of more than 1 000 representatives from academia, civil society, governments and the private sector. To facilitate and ensure uptake, a worldwide initiative to scale up agroecology in countries has been further developed by FAO in collaboration with other UN agencies – IFAD, WFP, UNDP, UN Environment and WHO – and the Convention on Biological Diversity.

During this period, with the support of its Director-General, FAO organized a successful 2nd International Conference on Nutrition at FAO’s headquarters in Rome in 2014, a high-level intergovernmental meeting focusing global attention on addressing malnutrition in all its forms; International and Regional Symposia on Biotechnologies in 2016–2017, which aimed to explore the application of

biotechnologies for the benefit of smallholder farmers in developing sustainable food systems and improving nutrition in the context of climate change; and an International Symposium on Innovation held in Rome in 2018, which promoted the exchange of knowledge, information and practices and reviewed enabling policies and platforms to unlock transformative change required in agriculture and rural development through agricultural innovation.

All these important events have raised awareness on diversified approaches and practices that countries can take to sustainably increase agricultural production and productivity. Agroecology, with its principles and practices, is a key approach that has been applied in many countries. It promotes a paradigm shift in food and agricultural production towards sustainability, encompassing three pillars: economic, social and environmental (see Box 10.1).

In essence, FAO's vision calls for a paradigm change through an approach that maintains and builds on ecosystem processes and biodiversity to produce healthy foods, such as diversification, soil organic matter, water cycle regulation, pollination, and biocontrol of insect pests and diseases. It also calls for putting people at the centre of agricultural production. Producers must see tangible advantages in terms of more secure and higher net incomes, reduced costs and sustainable livelihoods, including communities and vulnerable groups such as women and indigenous peoples. Consumers need to be able to afford diverse, healthy and safe food. For this to happen, policymakers need to provide guidance and align incentives, such as rewarding more sustainable management of agro-ecosystems, supporting research and innovation, and upscaling sustainable production and consumption models.

As agriculture depends largely on agro-ecosystems, sustainable agriculture must minimize negative impacts on the environment while optimizing production by protecting, conserving and enhancing natural resources and using them efficiently. It must also strike a balance between protecting agro-ecosystems and meeting society's growing needs by offering both more affordable healthy food and decent, resilient livelihoods for rural populations.

One of the key issues for security and quality of life on Earth is how effective countries are in reducing emissions and building resilience to climate impacts. While the historic climate agreement adopted in Paris in 2015 brings all countries together under a common global framework, a multitude of actions still need to be implemented to steer current trajectories towards more hospitable conditions on the planet. In many ways, the effectiveness of agricultural transformation towards more sustainable models will determine how quickly emissions can be reduced (e.g. by halting deforestation and the degradation

BOX 10.1 National Network of Municipalities and Communities promoting Agroecology (RENAMA) in Argentina

This network has been developed to address the many challenges faced due to extensive livestock and agriculture in the “pampas” ecosystem (natural grasslands), such as: increased production costs of agriculture, increased use of pesticides with consequent rise in herbicide-resistant weeds, loss of soil fertility and upsurge in floods and droughts.

The main objectives of RENAMA are to:

- › assist municipalities to promote public policies for the transition to agroecology;
- › encourage activities that contribute to the conservation of biodiversity and promote public health;
- › assist municipalities and producers in ecological matters including urban and peri-urban areas; and
- › strengthen local and regional markets for healthy foods, including developing capacities at production and value chain levels.

RENAMA has implemented activities to promote agroecology in 85 000 ha of 150 properties located in 14 municipalities, with emphasis on the following practices:

- › soil management to increase organic matter and protect microorganisms, for example using minimum tillage, cover crops, composting, ashes, earthworm humus, biofertilizers;
- › prevention and natural control of insect pests and diseases, saving reservoirs of beneficial natural enemies and using trap crops – plants that repel or attract pests;
- › nutrients cycling through crop rotation, association of cereals and legumes, agroforestry, intercropping, crop-livestock integration, multi-cropping; and
- › sustainable use of the landscape and biodiversity, including conservation and use of local genetic resources (seeds, seedlings and animal breeds).

An outstanding outcome of this initiative is from a 650 ha farm, where the gross margin of wheat was on average 20 percent higher than that of neighbouring farmers that use external inputs.

caused by livestock and crop production for feed, food and fuel) and how much carbon can be sequestered in a way that soil productivity improves benefits to communities (e.g. from restoration or integrated agro-silvo-pastoral production systems).

As part of disaster-risk reduction and resilience-building efforts, vulnerable people need to be able to anticipate, respond to and recover from shocks and crises (see Box 10.2). This means relaying information, e.g. through early warning and response systems, to ward off and cope with both rapid and slow-onset threats such

BOX 10.2 Linking climate change adaption and disaster-risk management in agriculture

The Lao People's Democratic Republic suffers from natural hazards, such as flood and drought that have caused – and continue to cause – great damage to agriculture and the livelihoods of rural people. The frequency and severity of these disasters is increasing. Up to 250 000 people are affected each year by agricultural disasters of various types, losing a significant part of their production and causing local food shortages. FAO assisted the Government of the Lao People's Democratic Republic in the preparation of a plan of action for disaster risk reduction and management (DRRM) in agriculture. The plan is organized around five priority areas:

- 1 Strengthening good governance, institutional and technical capacities for DRRM and climate-change adaptation in agriculture;
- 2 Assessing and monitoring climate risks and vulnerabilities and issuing early warnings for food and nutrition security and transboundary threats;
- 3 Improving knowledge management, awareness raising and education on DRRM, climate-change impacts and adaptation;
- 4 Reducing underlying risks and vulnerabilities by promoting technical options and community-based planning for DRRM/CCA in the agriculture sector; and
- 5 Enhancing capacities, facilities and procedures for effective disaster preparedness and response and integrating climate change adaptation in recovery initiatives.

Source: Government of Lao People's Democratic Republic, 2014.

as floods, tropical storms and droughts that can damage assets, destroy production or contaminate water sources for crops, animals and trees. Agricultural intensification strains the system, particularly where the resource base is small, as is the case with smallholder farmers. Conversely, the more elements are integrated into a farming system, the more resilient it becomes and the higher the provision of ecosystem services, including food. Integrated systems, which include mixed cropping, crop–livestock, agroforestry, tree–crop–livestock, as well as aquaculture, have demonstrated their ability to cope with climatic variability to ensure food and livelihood security.

Achieving sustainable agriculture requires developing strategies that foster informed decisions and choices that take into account synergies and trade-offs to reach these objectives. These can include environmental, economic and social synergies of integrated co-production from different sectors (see Box 10.3), or reducing production risk while enhancing productivity and resilience across sectors (see Box 10.4), to highlight a few. In order to address the coordination challenges, key stakeholders need to share a common understanding of what

BOX 10.3 Diversifying production with agroforestry in the Chiapas, Mexico

Agroforestry has been increasingly recognized and practiced as an agricultural system diversification option that can simultaneously contribute to income generation, food security and the conservation and sustainable use of biodiversity and ecosystem services – improving soil quality and biodiversity and reducing climate pressure. Agroforestry systems include both traditional and modern land-use systems where trees are managed together with crops and/or animal production systems in agricultural settings, resulting in more sustainable use of land (FAO, 2013).

In Chiapas, Mexico, coffee grown in agroforestry systems with heavy shade (60 to 80 percent) was 2 °C to 3 °C cooler than those under light shading (10 to 30 percent) and lost 41 percent less water through soil evaporation and 32 percent less through plant transpiration, thus reducing the water loss and consequently increasing soil resilience to drought. Crop yields in agroforestry systems are comparable with, and more stable than, those obtained with synthetic fertilizers and moreover release less greenhouse gas emissions.

Source: Adapted from FAO, 2018a.

sustainable food and agriculture means for them in practice, and agree on the most appropriate strategies and approaches for its implementation in different contexts and at different scales.

The principles of sustainable food and agriculture

A common vision and coordinated approach towards sustainable food and agriculture can be developed by countries together with key stakeholders on the basis of five key principles to balance the social, economic and environmental dimensions of sustainability:

1. Increase productivity, employment and value addition in food systems;
2. Protect and enhance natural ecosystems;
3. Improve livelihoods and foster inclusive economic growth;
4. Enhance the resilience of people, communities and ecosystems; and
5. Adapt governance to the new challenges.

These five principles provide a basis for developing national policies, strategies, programmes, regulations and incentives that will guide the transition to an agriculture that is highly productive, economically viable, environmentally sound, and based on the principles of equity and social justice. This is a step forward in accelerating

BOX 10.4 Climate-smart agriculture (CSA) for smallholder farmers in Kenya and the United Republic of Tanzania

FAO's Mitigation of Climate Change in Agriculture (MICCA) programme works to make agriculture more climate-smart. Farmers from Kenya and Tanzania (United Republic of) participated in several consultations to identify existing agricultural practices and their possible impacts and were then trained to facilitate the adoption and scaling-up. Capacity development of CSA practices is strongly connected to an extension approach and incentive mechanisms (dairy farmer groups in Kenya and Farmer Field Schools in Tanzania) to promote the uptake of the different practices.

Approximately 2 500 farmers in Tanzania and Kenya – 46 percent of whom were women, received training on climate-smart agricultural resulting in:

- › 300 energy-efficient cooking stoves to reduce deforestation;
- › 44 tree nurseries;
- › 134 381 seedlings in stock and more than 33 500 tree seedlings planted;
- › 235 terraces established to conserve soil and water; and
- › 2 biogas digesters to produce renewable energy from cow manure.

Institutions and socio-economic factors shape the relevance of different CSA practices for individual farmers. These include the availability of and access to labour and land, as well as up-front investment costs, climatic risks, gender roles, and physical conditions such as soil fertility and health, and access to water.

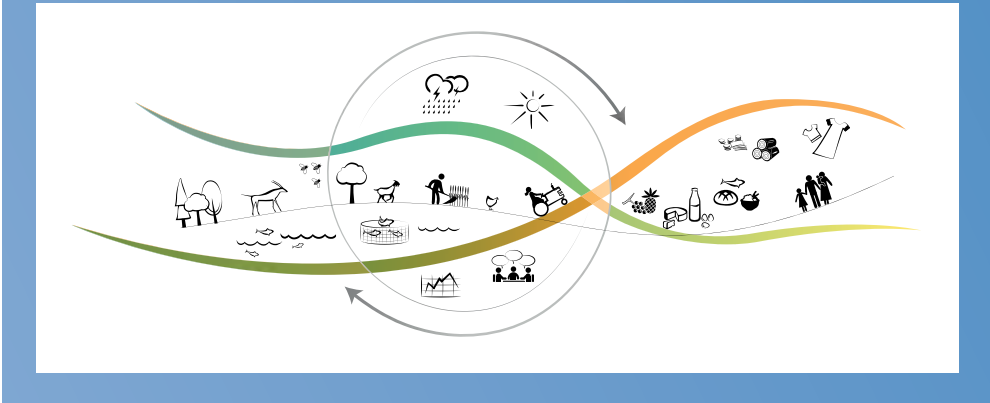
Source: FAO, 2014b

the transition to sustainable food and agriculture, ending hunger and poverty, and realizing FAO's ultimate objective envisioned in the SDGs – a Zero Hunger world.

To be sustainable and productive, agriculture will need to adopt a single, holistic vision that maximizes synergies, mitigates negative externalities and minimizes harmful competition between its sectors. The proposed approach, when properly localized, can help identify cross-sectoral synergies, negative externalities and actions that would minimize their impacts in the source sectors or mitigate them in the affected sectors (FAO, 2014a).

The five principles are complementary – Principle 2 directly supports the natural system, while Principle 3 directly supports the human system; Principles 1, 4 and 5 underpin both the natural and human systems. In order to ensure the application of the five principles, a range of actions should be taken to enhance sectoral as well as cross-sectoral productivity and sustainability.

FIGURE 10.1 A holistic vision for sustainable food and agriculture



These principles have supported the development of SDG indicator 2.4.1, defined as the “proportion of agricultural area under productive and sustainable agriculture”. It is one of the 21 SDG indicators for which FAO is the custodian UN agency. This indicator recognizes that sustainable agriculture not only encompasses environmental issues, but also includes economic and social dimensions that place producers at the centre, and captures the multidimensional nature of sustainable agriculture.

This indicator was developed through a multi-stakeholder process involving statisticians and technical experts from countries, international organizations, national statistical offices, civil society and the private sector. It brings together themes on land productivity, profitability, resilience, land and water, pesticide and fertilizer pollution risk, biodiversity, decent employment, food security, and land tenure in order to capture the multidimensional attributes of sustainable agriculture.

Twenty interconnected actions to guide decision makers in transforming food and agriculture

FAO has put together 20 interconnected actions that help address and implement the five principles of sustainable food and agriculture and offer countries a way forward to identify sustainability gaps and response options across agricultural and food production sectors, through an open dialogue between national governments and other key stakeholders (FAO, 2018a).

These actions embrace the 2030 Agenda’s vision of sustainable development in which agriculture and food systems, people’s livelihoods, and the management and conservation of natural resources are addressed not separately, but as one

inter-connected issue; a future where the focus is not solely on the end goal, but also on the means used to achieve it; and a setting where public and private actors participate in legitimizing, engage in shaping and work towards achieving development solutions. These are:

1. Facilitate access to productive resources, finance and services;
2. Connect smallholders to markets;
3. Encourage diversification of production and income;
4. Build producers' knowledge and develop their capacities;
5. Enhance soil health and restore land;
6. Protect water and manage scarcity;
7. Mainstream biodiversity conservation and protect ecosystem functions;
8. Reduce losses, encourage reuse and recycle, and promote sustainable consumption;
9. Empower people and fight inequalities;
10. Promote secure tenure rights;
11. Use social protection tools to enhance productivity and income;
12. Improve nutrition and promote balanced diets;
13. Prevent and protect against shocks: enhance resilience;
14. Prepare for and respond to shocks;
15. Address and adapt to climate change;
16. Strengthen ecosystem resilience;
17. Enhance policy dialogue and coordination;
18. Strengthen innovation systems;
19. Adapt and improve investment and finance; and
20. Strengthen the enabling environment and reform the institutional framework.

Four actions provide support to each of the five principles for sustainable food and agriculture. Actions 1–4 assist Principle 1; Actions 5–8, Principle 2; Actions 9–12, Principle 3; Actions 13–16, Principle 4; and Actions 17–20 support Principle 5. Context-specific but universally relevant, these actions are designed to support countries in selecting and prioritizing resources to accelerate progress. They build on synergies commonly found across sectors, which can catalyse the achievement of national objectives and deliver results across multiple goals and targets of the 2030 Agenda.

Changing governance to mobilize drivers of transformation, creating opportunities for innovation

Transforming food and agricultural systems towards a sustainable pathway will not happen on its own. It requires long-term political commitment and significant economy-wide and sectoral change. Radical shifts in policies, investments and partnerships, and the capacity to scale-up innovations are a must (FAO, 2018c).

Investment in agriculture and rural development will need to increase in quality, quantity and diversity, if they are to deliver on inclusive economic growth, new employment opportunities, climate change mitigation, the sustainable use of natural resources, healthy diets, strengthened resilience and, ultimately, on ending hunger and poverty.

There needs to be a careful review of the policies that impact food and agriculture, either directly or indirectly. Policy shifts will be needed in order to unlock the potential of producers, in particular family farmers, and provide them with opportunities to adopt more sustainable approaches that will in turn spur local and national economies. While these policies vary from place to place, they will typically concern sustainable production technologies, trade, marketing, labour, tenure regulations, decentralization and urban and rural development. Furthermore, subsidies and cross-sectoral coordination mechanisms will play a key role in the process.

To intervene effectively, it is necessary to look at the entire food system – from consumption and waste management to production – to improve efficiency and inclusiveness, and thus reduce food losses and waste. Solutions can be found along the entire value chain, and producers themselves can play an important role in providing better and healthier dietary opportunities to consumers, while the latter have an important role to play by adopting more sustainable consumption behaviour.

Effective transition towards sustainable development requires a common understanding and better dialogue within and across sectors. It also entails involving all key stakeholders, including the private sector, civil society, academia and research institutions, and developing partnerships at different levels. Achieving progress on the SDGs makes it necessary to align and enhance investments in agriculture, and to prioritize those actions that can achieve measurable results on the ground (see Box 10.5).

Opportunities for cost-effective synergies based on the co-production of products and services can be found in different combinations of crops and livestock, capture fisheries and aquaculture production systems, as well as trees or forests. While utilizing synergies between different production systems often requires more knowledge and experience, it can provide more diverse sources of income and more resilience, for both livelihoods and ecosystems.

For example, synergies between livestock and crop production are significant. Crops provide fodder, and feed and grasslands contribute to sequestration of some of the greenhouse gases emitted by livestock. In turn, livestock produces manure that contributes to the productivity of crops and, by reducing the need for mineral

BOX 10.5 Key elements of governance transformation to transition towards sustainable food and agriculture in the framework of the 2030 Agenda:

- 1 Country and local ownership and leadership.
- 2 Cross-sector, integrated approaches and policy coherence.
- 3 Multi-stakeholder engagement and partnerships for transformative change.
- 4 Mobilization and alignment of finance and investments, both public and private.
- 5 Improved knowledge management and sharing, efficient use of technology.
- 6 Focus on actions with measurable results.

fertilizer, improves sustainability (FAO, 2011b). Manure can also be used to produce bioenergy, which reduces the need for fossil fuels in crop and aquaculture systems. However, an enabling environment promoting policies and instruments, such as incentives and guarantees, is a critical element for the success of this integrated production system.

Addressing trade-offs in a given context and optimizing synergies in practice is not an easy task. It often requires political rather than pure economic decisions, and, at times, a focus on long-term economic sustainability rather than higher short-term gains. It requires innovative technologies and practices, interdisciplinary interventions, and institutions that are geared to capturing synergies rather than maximizing individual objectives. Farmers and producers also need an enabling environment that helps them manage the risks of transition from one production system to another.

To achieve a transition of agricultural and food systems in the multiple value chains, farmers, pastoralists, fisherfolk, foresters and agribusinesses need to be empowered to own and drive the appropriate changes. Those in the private sector who commit to sustainability, from semi-subsistent or micro-enterprises to larger companies, require and demand improvements in the environments within which they operate. This is a central role of governments in promoting a transition, and can take many forms. It can include multi-stakeholder initiatives focusing on delivering concrete progress in specific areas at local or national levels, such as access to finance, knowledge and experience exchange on more sustainable innovations, access to markets for newly developed products or services, etc. This “business case” for more sustainable agricultural and food production needs to be built, supported and expanded, including through more adequate legal frameworks, financial incentives, and innovation support institutions (see Box 10.6).

BOX 10.6 Mechanization through hire services in Kenya and Zambia

Mechanization spurs new opportunities for rural employment, such as equipment manufacturing, repair and provision of mechanization services, and it is an important element in the package of actions needed to transition to more sustainable agricultural models. In Kenya, a farmer used hire services during maize harvesting and this saved family labour time. It freed up his time for other farm work, to seek job opportunities elsewhere in addition to tending to family matters, like childcare. Women smallholder farmers who accessed power services could change their social perspective. They attached a social value to the technologies of services – not just to what the service could do. For example, services can provide for mobility, an opportunity for women to leave the farm, interact with others in addition to access to health and school services, etc.

In Zambia, an FAO project on scaling up conservation agriculture devised an electronic voucher system which registers family farmers as well as hire-service providers, in a database. Hire-service providers are credited with the value of the electronic voucher once they have completed work on the farmer's land. A clear advantage is that it acts as a 'brokerage' facility between demand and supply for productive services.

Source: FAO, 2018b

The way forward

For most people living in rural areas of developing countries, agriculture is the prime entry point for any strategy that aims to reduce poverty, generate income, create employment and boost resilience to shocks. The vision of FAO for sustainable food and agriculture, enshrined in the 2030 Agenda, requires a radical rethink of the *status quo*, including current agricultural and food policies. We have reached the limit of the paradigm of the Green Revolution. Agriculture and food systems worldwide will require major changes – shifting away from high-input and resource-intensive farming and food systems – to supply sustainable, safe and nutritious food. We need to change to a more holistic approach to sustainability, where agricultural and food systems are more economically, socially and environmentally sustainable. The choices we make today are vital for a food- and nutrition-secure future.

The transition to more sustainable agricultural and food systems while fighting hunger and malnutrition requires action that builds political alliances and coalitions with actors beyond food and agriculture, including legal frameworks that recognize and secure rights of access to land for smallholder family producers, and favourable policies that incentivize private-sector engagement in sustainable market activities (Campanhola and Pandey, 2018). Multi-stakeholder mechanisms and new forms of participatory governance structures will bolster policy ownership,

while helping to mobilize capacities, information, technologies and access to financial and production resources.

There is no “one-size-fits-all” set of recommendations for the most appropriate strategies, mechanisms and tools that promote transformational changes in agriculture and food systems to achieve sustainability. However, it is possible to identify the key features of policies, investments, innovative partnerships and institutional environment for this transition:

- › **Strengthening synergies for better alignment between national action plans and broader global goals and frameworks for development.** Enhancing policy coherence is a difficult challenge because it needs to be cross-cutting. It requires government commitment, and adapting institutional frameworks and national development action plans to align to global frameworks, such as the 2030 Agenda, the Rome Declaration on Nutrition and the Framework for Action, the Addis Ababa Action Agenda, the Paris Agreement, the Sendai Framework for Disaster Risk Reduction, etc. Once clear objectives have been identified, support should be provided in translating commitments to action, formulating relevant initiatives and agendas, and developing methodologies and mechanisms for reporting.
- › **Strengthening agricultural research and development (R&D) that responds to farmers’ needs and links it to policy and science-based agricultural innovations.** Today’s global agricultural and food systems must change to meet new development challenges, such as climate change adaptation and mitigation, efficient resource use, management and conservation of biodiversity and ecosystem services and production of healthy and safe food. The impact assessment of R&D should consider the three main pillars of sustainability – economic, environmental and social – and their synergies and trade-offs since the onset of projects and programmes. The research agenda needs to evolve from the supply of innovation and technology, to co-development with stakeholders, from farm to territory and food systems, and from a reductionist to a systemic and interdisciplinary approach. Integrated agricultural production systems (e.g. agroecology, agroforestry, crop–livestock, agrosilvopastoralism, and crop–fish) should be a priority in the R&D agenda, due to their positive contributions to the environment and resilience to climate change, and to the diversification of diets. Priority should also be given to the development and use of information and communication technologies (ICTs) for producers to ensure timely and affordable access to technologies, innovation, data and business opportunities for sustainable agricultural and food systems to improve decision-making, management and productivity.

- › **Strengthening policies and incentives that create an enabling environment which prioritizes the elimination of hunger, malnutrition, and poverty.** Tailored, cross-sectoral policy and programming responses which prioritize the elimination of hunger, malnutrition, and poverty should be jointly developed and implemented. This requires taking into consideration the benefits and negative externalities of agriculture and food systems. Policy coherence and integration requires structural changes in the process of formulation and implementation, with engagement of many stakeholders and inclusive of local communities. Innovative and coherent policies and incentives, such as regulations, taxes, subsidies, pro-poor social protection, payment for conservation of natural resources, land tenure rights, and access to market, among others that can increase net income and livelihoods of rural populations, should be a component of the development agenda. Special attention should be given to gender equality, youth employment, income diversification and decent jobs.

- › **Increasing investments and financing that support the transition to more productive and sustainable agricultural and food systems.** Farmers, pastoralists, foresters and fisherfolk are encouraged to produce more while using less in an economically, socially and environmentally sustainable way. Public funds need to be allocated specifically to research and development to improve the productivity and sustainability of agricultural and food systems through innovation. Together with public investments, appropriate strategies, mechanisms and incentives should be in place and conducive to private sector investments, particularly in rural infrastructure and in developing innovative markets. An inclusive approach should be adopted and aim to build the capacities of producer communities to access and use financial resources. Promoting the organization and strengthening of credit cooperatives may facilitate access to financing by smallholder producers, and the use of practices and technologies, energy and natural resources in an ecological manner.

- › **Building and enhancing governance and institutions for inclusive food systems and strengthening technical capacities.** The transition towards sustainability requires transformational changes in the governance of food and agriculture at both national and local levels, and an equitable distribution of the transition costs and benefits (FAO, 2012). Institutional capacity building will play a key role in facilitating and encouraging the dissemination of practices, approaches and technologies, and encourage their adoption by producers. Critical challenges must be matched with appropriate interventions that will have the greatest impact to upscale

good practices. However, review of the structure and functions of governmental institutions may be needed to foster collaboration between different ministries to promote cross-sectoral approaches and integration of instruments, tools and mechanisms for policy implementation. Furthermore, new structures and mechanisms may also be needed to promote a multi-stakeholder dialogue with non-traditional partners, such as private companies, consumers, non-governmental organizations, and producer associations and cooperatives to ensure the holistic and coherent formulation and implementation of public instruments and regulations. Territorial development programmes and investment processes need to be tailored to local realities, in order to ensure the interests of rural populations are recognized and addressed.

The above recommendations should be implemented in a systemic and integrated way to place sustainable food and agriculture at the centre of the 2030 Agenda. The key issues of all the agricultural sub-sectors – crops, livestock, fisheries, aquaculture and forestry – are interconnected, as are the thematic areas at the heart of the SDGs, including social protection and inclusive agricultural production, local and territorial development, adequate policy and governance structures, food security, food systems, the elimination of malnutrition, climate change adaptation, mitigation and resilience, gender equality, disaster risk reduction, migration, and peace building. Promoting these interlinkages is imperative to chart a path towards a Zero Hunger world – only in this way can the Third Agricultural Revolution trigger the transformational changes needed to achieve sustainable agricultural and food systems.

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Zero Hunger: From the Millennium Development Goals to the Sustainable Development Goals

Maya Takagi

Brazil's Fome Zero programme fit perfectly with the global effort that was set in motion with the Millennium Development Goals (MDGs), followed more recently by the Sustainable Development Goals (SDGs). The MDG agenda started to materialize as a global mechanism and platform to measure, monitor and support countries' progress in the mid-2000s, organized according to eight global goals, 18 targets and 48 indicators. The eradication of extreme poverty and hunger was set as the first goal, as well as being the basis for achieving the others, mainly related to health and education.

The MDGs took shape incrementally, and at the 2010 MDG Summit, a global action plan to accelerate progress through a number of initiatives to combat poverty, hunger and disease – with a special focus on women's and children's health – was announced. (Lomazzi *et al.*, 2014; UNDP, 2013).

Brazil was a reference already in the early years of the MDGs, with demonstrated progress in hunger and poverty reduction through the inclusive policies that had been implemented in the country, including the Fome Zero programme (Rondo, 2008).

The Fome Zero experience was analysed in terms of its relevance to other countries based on the MDG agenda as well as in terms of South–South cooperation (Chmielewska and Souza, 2011, Oxfam, 2010). Fraundorfer (2013) mentioned the international recognition of Brazil's successful inclusive strategy to fight hunger and poverty by organizations such as Action Aid, in 2009, and Oxfam, in 2010. Specifically, a South–South cooperation (SSC) project to support six African countries (Ghana, Guinea Bissau, Mozambique, Nigeria, South Africa and Zambia) to learn from Brazil's Bolsa Familia was launched in 2008, with the International Policy Centre for Inclusive Growth (IPC-IG)/United Nations Development

Programme (UNDP), the UK Department for International Development (DFID), and the Ministry of Social Development. Many other SSC initiatives were put in place in Latin America and Asia, with the BRICs (Brazil, China, India, Russian Federation and South Africa), and through other international platforms.

The need to include a broader concept of sustainability in the agenda and the consideration of a new framework, with an inter-sectoral approach and strong commitment by governments and donors, were the basis of the post-MDG agenda, which became known as the SDG Agenda (Lomazzi *et al.*, 2014).

The 2030 Agenda for Sustainable Development, including its Sustainable Development Goals (SDGs), was established in 2015 with ambitious objectives – including ending hunger rather than reducing it by half – in order to meet the urgent environmental, political and economic challenges facing our world.

Building on the lessons and results achieved with the MDGs, the 2030 Agenda proposed 17 goals, 169 targets and at least 232 indicators, making it much broader than the MDGs.

Apart from the scope, which takes a broader approach to economic and environmental sustainability, as well as aspiring towards peaceful and inclusive societies, it is also more ambitious, seeking to eliminate rather than reduce poverty. It includes more in-depth targets on health, education, and gender equality, and is more universal, applying to all countries and all people, with a major focus on leaving no one behind (UNDP, 2015).

With specific targets and indicators on how to measure success, the SDGs are also much more comprehensive and concrete in terms of what needs to be changed.

Similarly to the MDGs, poverty eradication and hunger eradication are the first two goals, framing the overall agenda. The difference lies in their separation into two goals. On the one hand, this brings more specificity to each of the issues regarding poverty, hunger and malnutrition. On the other hand, not treating these two complementary goals jointly could result in a more fragmented agenda.

Why hunger eradication and poverty eradication need to be the first global goals

Ending poverty is a necessary condition for a fair and equitable society. Although they cannot be considered synonyms, hunger is primarily related to the lack of capacity to buy food, meaning lack of income, a major – but not the only – cause of poverty. Access to quality food in a regular way can be a pre-condition of access to other rights, such as education, work, and health. Also, poverty eradication and

hunger eradication are the hardest goals to achieve. One element feeds the other, as undernourished children have greater difficulties in engaging in productive activities when they become adults and are thus more likely to continue to be caught up in the vicious cycle of poverty. Ensuring the right to food is a necessary first step to break this cycle.

This complementarity is evident in the targets of the first two SDGs. For instance, target 1.3: “Implement nationally-appropriate social protection systems and measures for all, including floors”, and “By 2030 achieve substantial coverage of the poor and the vulnerable” are key for poverty reduction but also, as the Brazilian model and other countries’ analyses show, contribute directly to food security and to fighting hunger.

A series of studies confirms the direct contribution of different social protection programmes to poverty reduction and food security and nutrition (FSN). The studies show a direct impact on calorie intake, food consumption and expenditure. The evidence also shows a contribution to the diversification of diets, with increased consumption of fruit, vegetables, meat and other animal products (FAO, 2015b, Spray, 2014, Davis *et. al*, 2016).

Hjelm (2016) analyses eight cash transfer programmes in Africa and confirms impacts on several different dimensions of food security: increase in expenditure on food, increase in the number of meals per day, increased consumption of nutrient-rich food items, as well as increased proportion of food-secure households.

Considering the key role of social protection in reducing hunger and poverty, recent data from the World Bank estimated that 36 percent of people who had risen out of absolute poverty had done so thanks to social transfers. In other words, in the absence of transfers, many more people would be living in absolute poverty (World Bank, 2018a).

According to the same report, conditional cash transfers represent the main coverage of the poorest quintile in the world, followed by unconditional cash transfers, with 23 percent coverage of the poorest quintile. School feeding also benefits the poorest, covering 37 percent of the poorest quintile.

The report reveals an increase in countries’ expenditure on social protection since the beginning of the 2000s. In the Latin America and Caribbean region, based on a sample of seven countries – Argentina, Brazil, Colombia, Ecuador, Mexico, Peru, and Uruguay – the average spending on social protection programmes as a percentage of gross domestic product (GDP) increased from 0.4 percent of GDP in 2000 to 1.26 percent of GDP in 2015. This occurred while regional GDP grew, which means

that social protection spending increased in relative and absolute terms. In Europe and Central Asia, the average spending increased from 1.2 to 1.8 percent of GDP from 2003 to 2009, and then fell slightly, to 1.6 percent in 2014. Social pensions also increased reasonably as of 2001, with 29 countries introducing or expanding it, mainly in Latin America.

However, in low-income countries, social protection programmes cover only 18 percent of the poorest quintile, and the average transfer accounts for only 13 percent of the lowest quintile's consumption.

When it comes to the challenge of stunting, which is one of the long-term effects of privation of food and micronutrients, a recent study from the World Bank concludes that income poverty, together with inequalities in access to basic services such as health, water, sanitation, and proper care and feeding practices in the initial stages of children's lives, is associated with delayed child growth (World Bank, 2018b).

This finding is based on the premise that the determinants of undernutrition are multisectoral and that the solution to undernutrition therefore requires multisectoral approaches. This calls for a more holistic view of the inequities and gaps in access to adequate levels of the underlying determinants (drivers) of nutrition, i.e. care, food security and health, as well as water, sanitation and hygiene (WASH) (World Bank, 2018b).

The complementarity of SDGs 1 and 2 are also reflected in targets 1.4 and 2.3. We cannot achieve 2.3 (by 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment), unless we achieve target 1.4 (by 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance) and target 1.5 (by 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters).

In rural areas, where the majority of extremely poor reside, factors that increase vulnerability include limited land ownership, lack of options for alternative livelihoods, lack of market access, degradation of natural resources, lack of access to energy and lack of basic sanitation (see De la O Campos *et al.*, 2018).

Climate change and climate shocks are an additional source of vulnerability for the poorest populations. In rural areas, this is related to a lack of assets to recover from climate shocks such as droughts, floods, hurricanes, as well as a high dependence on climate-sensitive sectors (agriculture, forestry, fishing, pastoralism) or on informal jobs with no protection in the case of employment disruptions. Other factors include scant alternative livelihood options, a lack of information and knowledge to be able to adapt, and the fact that people are less insured against shocks (Leichenko and Silva, 2014).

How Brazil's Fome Zero initiative can contribute to the SDGs – some lessons learned

Brazil's rapid results in the reduction of inequalities at national and regional level, and the eradication of hunger and extreme poverty within less than a decade and a half provide important lessons and insights for the SDGs, especially with regard to the aspiration to leave no one behind.

The design of the Fome Zero programme was comprehensive from its inception. First of all, the concept of inclusive growth was the major driver behind the poverty and hunger eradication strategy. Secondly, promoting a favourable investment environment for employment generation, increasing public spending on policies for the poor and vulnerable, and investing in universalizing access to public services such as health, education, energy and water, contributed to reducing inequalities and improving life conditions. Thirdly, it considered the interlinkages and interdependencies between hunger and extreme poverty and supported the development of integrated strategies that could address both objectives simultaneously.

Social protection and school feeding are examples that should feature on the priority list of interventions against hunger and poverty, particularly in marginal areas with higher levels of extreme poverty and malnutrition. Elements considered essential to increase the impact of social protection programmes on nutritional outcomes include targeting nutritionally vulnerable populations, incorporating explicit nutrition goals and indicators, and strengthening different nutrition-sensitive characteristics to improve the quality of household diets, care, sanitation, educational practices and access to health services (FAO, 2015a).

Other key policies include supporting production for family farmers, who can use part of their production for domestic consumption through subsidized credit, special insurance and support regarding price fluctuations and storage. Support for the diversification of production and labour is also important, including the promotion of employment in food chains and access to markets and organizations. The territorial development policies contributed to developing a bottom-up planning process within the communities, which increased the outreach of the public policies.

Other actions include the promotion of appropriate technologies, infrastructure development, microfinance and support for the training of producer organizations, and access to local or alternative markets.

People-centred budget allocation using a dynamic perspective

Setting broader goals for the eradication of hunger and poverty mobilized the entire nation and led to greater inter-sectoral collaboration. The budget allocation was defined by the President and ministries according to a principle of inclusiveness. High priority was given to ensuring the budget needed to promote access by the poorest to social protection, a minimum wage, education, health, energy, water and sanitation, i.e. putting people's needs at the centre.

According to this approach, the economic and financial benefits of GDP growth should be directed towards society's poorest, while benefiting the whole of society. One needs to analyse the distributional effects of economic growth to make it as inclusive as possible. And, in the case of economic downturns, to continue directing enough resources to maintain the livelihoods of the poorest.

This process requires a high level of buy-in from society. The budget allocation is the result of a tax-funded model. Ultimately, citizens' taxes pay for improving livelihoods across society. The election of a highly committed candidate helps, but ongoing consultation, transparency and accountability are necessary. People need to see the advantage of a hunger- and poverty-free society.

A fragmented agenda doesn't help

Another lesson learned is the need for a coordination mechanism. A highly committed president with an effective coordination role is not enough. The different ministries and institutions need to work in a coordinated fashion, avoiding overlaps and, most importantly, building synergies. Working towards the eradication of hunger requires an extremely efficient planning mechanism, with multiple ministries in strategic areas working towards the prioritization of poor communities and families. A mechanism to identify and reach the poorest was developed and served as the reference for all the other policies. At national government, state and municipal level, public institutions used the unified registry as this mechanism, as well as to monitor the progress of the policies and initiatives.

Coordinated efforts and goals across each ministry/sector with a platform to monitor progress and results are clearly needed. The Fome Zero programme, a shorter name for the Food Security and Nutrition Policy, was coordinated through a governance mechanism, the National Council for Food Security and Nutrition (CONSEA), involving 38 representatives from civil society organizations (two thirds of the members) and 19 ministries (one third). The government representatives

constituted the National Chamber for Food Security and Nutrition and coordinated and monitored the implementation of the FSN plan and budget. This mechanism was coordinated by the Ministry of Social Development and Fight against Hunger, with a mandate from the President of the Republic.

The ensuing *Brasil sem Miséria* (Brazil Without Extreme Poverty) plan, launched in 2010, was also coordinated by the Ministry of Social Development, involving the Ministries of Health, Education, Labour, Agrarian Development, Regional Integration, and Finance and Planning. The committee was led at the ministerial level and had strong decision-making power.

According to Campello *et al.* (2017), the result of 14 years of implementation of Fome Zero and the poverty eradication plan was that from 2002 to 2015, the income of the poorest 20 percent increased almost 4 times faster than that of the richest 20 percent. Also, the percentage of the poorest 5 percent of 15–17 year-olds enrolled in secondary school increased 3.6 times, while the average increase for the total population was 1.4 times. The probability of the poorest 5 percent entering university increased from 7 percent to 30 percent. Although everybody benefited directly, the rate at which the poorest 5 percent gained access to basic education, water, sanitation, energy and better housing was much higher.

Reaching the poorest

The targeting mechanism used for inclusive programmes has been key in increasing policy effectiveness and promoting inequality reduction. According to IFAD (2018), significant targeting of resources, policies and actions is essential to tackle hunger and extreme poverty, taking into account that the majority of the extremely poor live in rural areas. Some mechanisms to promote better targeting mentioned by IFAD are: geographic targeting, focusing on areas with a high concentration of poor people; self-targeting measures, where the intervention responds directly to the needs of the poor themselves, is designed with them, and addresses their specific livelihood constraints; survey-based means testing using statistical household analysis; and direct targeting, where services are channelled to individuals or households using eligibility criteria, led by communities.

The Graduation Model is a well-known approach applied in Asia, Latin America and Africa, which is built on targeting, consumption support, savings, skills training and regular coaching. It targets the ultra-poor (defined as people who spend 80 percent of their total expenditure on food), using a mix of the following: identification of poor communities through poverty maps; selection of the poorest households through community input and consensus building; verification through national surveys or use of poverty scorecards; and, finally, cross-verification through direct visits in selected households (Hashemi, S. and Montesquiou, A. de, 2011).

The need for a longer term view and strategy

Hunger is the result of long-term economic and political dysfunctionality that leads to inequality and the exclusion of a considerable proportion of a society. It needs to be placed at the centre of national policy, and any solution needs to take a long-term perspective, as part of a society's culture and identity. This is reflected in the Brazilian experience, as well as in other countries that have demonstrated long-term progress in poverty reduction. Some examples are summarized in this section, based on May *et al.* (2017), who were commissioned by FAO to analyse selected country experiences in addressing extreme poverty in rural areas.

China's example of poverty reduction is outstanding, due to its rapid and sustained pace, its scale, and its influence on global figures. According to the World Bank, the poverty headcount fell from about 878 million people, or 88 percent of its total population in 1981, to 25 million, or 1.85 percent of the population, by 2013 (Takagi and De la O Campos, 2017). In rural areas, the drop was from 95.6 percent to 3.4 percent. This result was a consequence of decades of proactive strategies and initiatives focused on poverty eradication, starting with the household responsibility system (HRS) of farming in 1981, which provided incentives for farmers to increase production and sell their surplus on the market.

Ethiopia is another country which showed consistent poverty reduction over the past decades of sustained economic growth. Other countries analysed in the study that showed good progress were Ghana, Kerala State in India, Rwanda, Senegal and Viet Nam, all showing a decline in poverty in both urban and rural areas over the last decades of inclusive growth and targeted policies. All of them showed good progress towards the MDGs, and especially target 1.

In Ethiopia, prior reforms, such as asset redistribution – the 1975 Land Proclamation of Ethiopia, which nationalized all rural land, provided all farmers with rights to use the land (usufruct) – promoted a more equal access to assets but at the same time were constrained by the availability of arable land.

In Ghana, a mix of social protection programmes, access to potable water, quality health facilities, improvement in farm income and, at a macro level, structural transformation, higher educational levels within the labour force and effective urbanization, have contributed to the reduction of poverty over the past decades (May *et al.*, 2017).

Some key elements identified in cases with positive impacts in rural areas included:

- › Asset building: providing access to land through resettlement, social protection and tackling communal development challenges such as land

degradation, water shortage, and lack of basic infrastructure, for example, the Ethiopia Productive Safety Net Programme (PSNP) and the Mahatma Gandhi National Rural Employment Guarantee (NREGS).

- › Catalyst agencies: of critical importance for poverty reduction, for example the Agricultural Transformation Agency (ATA) in Ethiopia and the many State Councils in China (including the State Council's Leading Group for Economic Development in Poverty Stricken Areas).
- › Social assistance: cash transfers of different kinds represented a critical strategy for the reduction of extreme poverty; when associated with productive incentives they were known as “cash plus” interventions, for example Ghana's Livelihood Empowerment Against Poverty (LEAP).
- › Growing the agrarian economy: examples include China's investment in family farming and processing industry in rural areas and Ethiopia's asset building programmes associated with agricultural advisory services for smallholder farmers.
- › Special attention to hard-to-reach groups and indigenous minorities: examples include Viet Nam's Socio-Economic Development Programme for specifically challenged Communes in Ethnic Minorities and Mountainous Regions, one of the largest programmes to support communities in mountainous, remote and isolated regions. The strategy was to train poor people in production, provide clean water, control diseases, develop rural markets and construct roads to inter-commune centres.

These are just some examples of developments over the past decades. In the case of Brazil, it took 12 years of clear direction and the allocation of resources and efforts to reach the desired result. The process of inclusion by reducing inequality needs to be progressive. On the other hand, deterioration in economic and social conditions or important setbacks in broader policies can lead to swift regression, as evidenced by the recent FAO data on the prevalence of undernourishment.

Monitoring of the SDGs and the challenges ahead

The SDGs were signed and committed to by 193 nations, and a broad and complex mechanism to monitor progress towards the 169 targets and 232 indicators was set.¹ A custodian system was established for the indicators, assigning UN agencies and

¹ For more information, see: Sustainable Development Goals, Monitoring and Progress platform, at: <https://www.un.org/sustainabledevelopment/monitoring-and-progress-hlpf/>, and the SGD Index & Dashboards Report, at: <https://www.sdgindex.org/>.

partners responsibility for developing the methodology and supporting nations in building them and monitoring their progress.

FAO is the custodian of many targets, starting with Goal 2 on eradicating hunger, and specifically indicators 2.1.1: Prevalence of undernourishment and 2.1.2: Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES). Those indicators are presented each year in the flagship report *The State of Food Security and Nutrition in the World*.²

Unfortunately, the 2018 report revealed a reversal of the progress achieved since 2005 for the third year in succession (FAO *et al.*, 2019). The report estimated that people suffering from hunger had increased to 821 million – around one in nine people globally. Global stunting continues to remain unacceptably high, with 151 million (or over 22 percent) children under five affected in 2018, and wasting affecting over 50 million children under five. Concomitantly, over 38 million children under five are overweight and adult obesity is worsening.

Through more in-depth analysis by region and subregion, the report concludes that exposure to more complex, frequent and intense climate extremes and events are contributing to this reversal of the gains made in ending hunger and malnutrition, as is the rise in conflict situations in some countries in Asia and sub-Saharan Africa. Africa remains the continent with the highest prevalence of undernourishment, affecting 21 percent of the population. The situation is worsening also in South America. Factors such as droughts, extreme climate events, rising food prices, a slowdown of real per capita gross domestic product (GDP) growth, and persisting low prices in major export commodities – particularly raw products – are aggravating the situation.

The achievement of the SDGs, including objectives 1 and 2, are at risk. Inclusive growth, associated with targeted interventions, urgent climate change mitigation and adaptation measures, and efforts in sustaining peace and conflict prevention, is needed.

Conscious of these developments and challenges, FAO is working to develop and implement frameworks such as: the *FAO Framework on Rural Extreme Poverty* (FAO, 2019a), *A Framework for Linking Responses to Rural Poverty and Climate Change* (FAO, forthcoming), *Framework to support sustainable peace in the context of Agenda 2030* (FAO, IFAD, UNICEF, WFP and WHO, 2018), *FAO Framework for the Urban Food Agenda* (FAO, 2019b) and *FAO Migration Framework* (FAO, 2019c). These frameworks seek to shed light on opportunities to work in an inter-sectoral and integrated way,

2 See <http://www.fao.org/state-of-food-security-nutrition/en/>.

strengthening the development response linked to humanitarian issues, climate response, migration and the urban agenda. As set out in the *FAO Extreme Poverty Framework*, there is a need to better link poverty reduction and food security with climate responses, and to incorporate recommended steps into broader development, humanitarian, and disaster risk reduction strategies, in order to align across the SDGs and the Paris Agreement and achieve results in a more efficient, effective and fair manner. This involves changes in policy fronts and institutions, whether these are primarily focused on development or on climate or both (FAO, 2019a).

The *Framework to support sustainable peace* represents a renewed corporate commitment to contribute to achieving and maintaining sustainable peace by broadening and deepening FAO's work on conflict prevention, mitigation, resolution and recovery (FAO, 2018). According to the framework, a quarter of FAO's total field programme delivery in the world's fifteen most fragile contexts in 2016 was in development assistance.

However, in the SDG agenda, countries are the drivers of their own destinies, and the first commitment needs to come from them, rather than from FAO or development partners.

The SDGs represent an important roadmap for reaching an inclusive and more equal society that is free from hunger and extreme poverty. Countries' progress over the past decades shows that a longer-term view and commitment at a higher level is needed. The SDG agenda can serve as a beacon to lay the path for broader inclusiveness and sustainability, but, rather than a complicated and detailed mechanism to monitor each of the targets and indicators, it is more important to establish a longer-term view for inclusive development, and ensure targeted interventions to reach and benefit the poorest using a rights-based approach.

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CHAPTER 12

Looking ahead: Zero Hunger as part of the food systems challenge

José Graziano da Silva

We are undergoing a revolution in food systems. Every day there are new evidence-based studies, reports and articles on how food affects so many aspects of people's lives. At the same time, there is also fervent debate about how to produce the food we need on a planet now under serious threat from the impacts of climate change. Clearly, we cannot continue by merely increasing production at a high cost to the environment. The way food is produced and consumed has far-reaching implications in shaping people's diets and the health of the planet. The nutrition–environment–development equation has never been so hard to solve. How we can address the challenge of promoting sustainable food systems that also offer healthy diets for all?

On the one hand, we need to consider food as essential to our subsistence. Food not only gives us energy, but also provides the nutrients that allow us to function and protect us against disease. Food can work as a remedy or as a tool to strengthen the human immunological system. At the same time, and quite rightly so, a growing number of people are interested in learning more about the origin and the nutritional proprieties of the food they eat.

On the other hand, the food we eat is not a mere quantity of proteins or vitamins. People do not eat only to prevent disease or to ensure a healthy life. Food is also part of our identity and our culture – it forms the basis of our civilizations. We must therefore take into account people's day-to-day practices and consumer preferences.

In addition, food systems serve different purposes: while societies depend on food production for access to products that correspond to their cultural preferences and dietary customs, farmers and others involved in the food chain also depend on it as their work and way of life.

As such, we carefully considered all these elements when we designed the Fome Zero programme in Brazil. Implemented in 2003 by the then president, Luiz Inácio Lula da Silva, the programme became a milestone for hunger and poverty eradication policies (Graziano *et al.*, 2013). It remains an inspiring policy experience for other regions and countries seeking to address these issues. Building on the Brazilian experience, the Zero Hunger Challenge launched by the then United Nations Secretary-General Ban Ki-moon, achieved the unprecedented feat of uniting nations around the common goal of eradicating hunger by 2030 (Zero Hunger Challenge, 2012).

The previous chapters of this publication, *From Fome Zero to Zero Hunger: A global perspective*, highlight how we were able to share the Brazilian experience with the rest of the world during my seven and a half years as FAO Director-General. After two terms in office, I have realized that achieving Zero Hunger no longer simply means ensuring food for all. The crux of the matter is, in fact, making sure that all people have access to safe and healthy food through sustainable food systems.

Food must be safe and it must also be healthy at the same time. Food safety and healthy food are two sides of the same coin. Yet, unfortunately, not all safe food is also healthy. That is why we have to improve and regulate our food systems: they need to be sustainable while providing people with access to safe *and* healthy food.

This chapter retraces the political and social experience of Fome Zero in Brazil, and how it became an international food security and nutrition policy reference point. It also examines some of the present and future challenges to food systems and suggests ways forward for the world to meet this urgent commitment.

From Brazil's Fome Zero to the UN's Zero Hunger commitment

President Lula used to say that ending hunger was not the same as sending a man to the moon, in the sense that no new technology was needed. In other words, we know what we need to do to eradicate hunger. Instead, he pointed out the need for political commitment and clear prioritization of the hunger agenda by governments.

Brazil's Zero Hunger programme built upon successful experiences already developed at the local level – such as low-budget restaurants, school meal programmes and food banks – and quickly scaled them up to national level in response to the context of economic and social crisis. But the international potential of the programme also soon became evident.

In 2009, Latin American governments met in Guatemala and signed a declaration – the Hunger Free Latin American and Caribbean Initiative – in which the countries of the region committed to eradicating hunger by 2025 (FAO, 2017). In 2012, the United Nations Conference for Sustainable Development – Rio+20 – hosted the first

international event on Zero Hunger, spearheaded by the UN Secretary-General Ban Ki-moon. That occasion also served to reiterate the contradiction between Zero Hunger and the first Millennium Development Goal, which aimed only to reduce hunger by half.

I say “reiterate” because this was not the first time that the contradiction had been pointed out. It is known that former Cuban President Fidel Castro refused to attend a press conference organized by FAO in 2004 after FAO’s Conference endorsed a resolution that aimed to cut the proportion of hungry people by half over the following 10 years. His justification: “What should I say to the other half?” Only in 2008 did FAO’s Conference agree on the goal to eradicate hunger.

The Zero Hunger vision crossed borders and went beyond Latin America: the Zero Hunger Initiatives in Africa embodied the African Union’s commitment to ending hunger and malnutrition by 2025. Several Brazilian experiences were replicated, including the school meals programme in Mozambique, the cisterns programme in the Sahel, and aquaculture in Ghana, to name just a few examples.

During the last months of my mandate, in 2019, I witnessed the Zero Hunger approach being applied in the Lao People’s Democratic Republic, with concrete results in the form of school meal programmes that used local and fresh food purchased from family farmers. Lao children who benefited from the addition of fish and locally produced vegetables to their traditional rice-based meals showed demonstrable improvements in health. This small, but impactful, change also positively affected learning and well-being (FAO, IFAD and WFP, 2019).

SDG 1 and SDG 2 as foundations of the 2030 Agenda

The inclusion of Zero Hunger – in the sense of full eradication of chronic undernutrition – as part of the Sustainable Development Goals (SDGs) and the global development agenda was a fundamental milestone. We want to believe that all countries are presently committed to eradicating hunger – at least by 2030. For those who do not believe that it is still possible, I will repeat that we did it in Brazil in less than the ten years we have ahead for achieving SDG 2.

One important idea that we need to drive home is that all of the 17 SDGs depend directly on the eradication of hunger and poverty, which are the first two SDGs. These two goals can be considered as the motors of the whole agenda; if we do not achieve them, the others will not progress either. Whether we really manage to eradicate hunger and poverty by 2030, given the increase in conflicts that we are currently facing, is a different question than whether we should or need to do so. I believe that today there is a consensus that we need to eradicate hunger and poverty, something that, as stated above, was not obvious before. In the recent past,

there was a tendency to accept that a “reasonable” number of people suffering from hunger and malnutrition was one of the expectations of developing countries.

We argued that poverty generated hunger and hunger created poverty, in the sense that it affected productivity at work or at school and thereby had long-term effects on development. Developed countries have greater means to engage in philanthropic projects through social organizations – not necessarily from the public sector – including churches, corporations and unions. In developing countries, it is more challenging to ensure a structured social network. We therefore need to insist upon creating strong and comprehensive public policies in developing countries to deal with specific food security challenges.

South–South cooperation is also an important tool for the implementation of the Fome Zero model in different contexts around the world. There is a huge learning potential involved in such a dynamic, at a very low cost. The solution to hunger and poverty lies within countries, but to unleash this potential, it is fundamental to promote experience and knowledge exchanges between them.

South–South cooperation also has an important role to play regarding the impacts of climate change, as it facilitates the adoption of innovations already developed by neighbouring countries. Moreover, geographical proximity and a shared spoken language can help overcome some of the obstacles of technological transfer initiatives. I see this as an area that is bound to grow, and as social organizations become stronger, farmer-to-farmer cooperation in particular has a huge growth potential.

Obesity, the key challenge for the future of food systems

Without doubt, poverty is a root cause of food insecurity and malnutrition in all its forms. In the same way as hunger is linked to a lack of access to food due to poverty, obesity is linked to people’s limited resources to buy fresh, and healthy food, which are mostly more expensive than ultraprocessed products.

In July 2019, the FAO-led report on *The State of Food Security and Nutrition in the World* (FAO *et al.*, 2019) introduced a second indicator for monitoring SDG target 2.1: the prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES). While severe food insecurity is associated with the concept of hunger, people experiencing moderate food insecurity face uncertainties about their ability to obtain food, and have been forced to compromise on the quality and/or quantity of the food they consume. The results presented show that almost 2 billion people in the world are food insecure, including over 820 million who suffer from hunger.

As shown in the report, since 2016 there have been more obese than undernourished people in the world, with figures standing at almost 830 million obese people in 2018 (FAO *et al.*, 2019). Obesity is emerging as a significant global challenge, and is rapidly increasing in all countries, low-, middle- and high-income alike.

At the same time, overweight and obesity continue to increase in all regions, particularly among school-age children and adults. In 2018, an estimated 40 million children under five were overweight. About a third of overweight adolescents and adults, and 44 percent of overweight children aged 5–9, were obese. In 2016 – the last year for which we have disaggregated data available – 131 million children aged 5–9, 207 million adolescents and 2 billion adults were overweight.

The consequences of obesity are far-reaching. It is a risk factor for non-communicable diseases such as diabetes, heart disease, osteoarthritis, certain forms of cancer and all-cause mortality. Excessive weight gains in childhood and adolescence are likely to contribute to earlier onset of chronic disorders including type 2 diabetes. Being overweight or obese during childhood also increases the risk of being overweight during adolescence as well as during adulthood, leading to lifelong health problems.

Providing the growing global population with healthy diets from sustainable food systems remains a big challenge. This is particularly true considering that environmental and economic factors, compounded in some cases by conflict, hamper many people's access to safe, nutritious and affordable foods required for sustainable healthy diets.

Food systems have also been altered by the easy access and affordability of highly processed foods, which are characterized by convenience, taste and attractive packaging but poor nutritional value. In high-income countries, portion sizes have increased and are linked to increased consumption patterns. The prices of high energy-dense foods have dropped compared with the prices of micronutrient-rich foods such as fruit and vegetables, contributing to an overconsumption of less nutritious foods.

If a reduction in the prevalence of obesity is to be achieved in the next decade and beyond, we need to lead a transformation in our food systems. Sustainable food systems have to ensure healthy diets for all. This will require substantial dietary shifts, including a reduction in global consumption of foods that are high in fat, sugar and/or salt and an increased consumption of foods such as nuts, fruit, vegetables and legumes.

There are no quick fixes when it comes to the prevention of obesity. Strategies for obesity prevention require a comprehensive portfolio of interventions at different levels of the food system. Siloed strategies may not contribute to significant impacts.

Obesity is a multisectoral and multidisciplinary challenge requiring collaborative and multifaceted actions from diverse actors, working together.

Although a number of countries globally have instituted regulatory interventions, e.g. nutrition labelling, sugar tax, food-based dietary guidelines and school food and nutrition education programmes, these measures alone are not sufficient to transform the current food environment. Ensuring and identifying win-win situations through the formation of diverse, multisectoral alliances and alignments, ranging from the public to the private sector and including small-scale family farmers, is critical for the success of future obesity prevention strategies.

Until now, the best means we have of addressing this issue involves reducing the consumption of ultraprocessed food and increasing the consumption of fresh products. Although it is likely that medical developments will bring to market a series of products that tackle the harmful effects of malnutrition, including obesity, the best way to prevent obesity basically remains a question of what we eat.

Conclusion

A key element in Brazil's Fome Zero programme consisted of promoting local production and consumption circuits. The main axis of this policy was to strengthen local production from family farming and ensure an increase in the supply and demand of fresh products.

If we were to design a programme today to fight obesity using the same rationale, according to the Fome Zero methodology we should draw inspiration from existing best practices. So which best practices do we already have? These include using front-of-pack labelling, preventing schools from selling artificial high-calorie food, increasing access to local markets for the purchase of fresh school meal products, and other initiatives such as the taxing of high-sugar and high-fat food products.

However, specific policies on food security and nutrition, such as the ones mentioned above, are losing ground. Why? First, because of humanitarian situations triggered by conflicts that have become the absolute world priority, as well as other emergencies and economic crises.

Some Latin American countries had for example created strong social networks, with income transfer programmes, that have been affected by recent political and economic crises. More critically, we have not managed to build a consensus around what would be the fundamental policies to address the new challenges of obesity and other forms of malnutrition. One example: when the Fome Zero programme was launched 20 years ago, cash transfers were considered an innovative programme, whereas today those policies are much more common. But there is not

a comprehensive policy menu to fight obesity, at least none that has been widely agreed upon and applied at country-level with successful results.

There are two complementary paths to address this.

First, we need to think of sustainable ways to produce more healthy food and ensure that it is affordable, widely accessible and valued on the markets. And we need to recognize and fight the real enemy: ultraprocessed food. We may not yet know the exact definition of healthy diets. But for this kind of artificial food – for which we may not even be able to identify the ingredients – we can unequivocally state that it is not healthy or sustainable. In this context, any new approach, such as the NOVA food classification elaborated by Professor Carlos Monteiro from the Nutrition Department of São Paulo University,¹ will attract unjustified criticism: that is the price to pay to be the first in proposing a new policy.

Second, information has a key role to play. If governments decide to alert populations to the harm that such foods can do to our health, and to price them accordingly, that is half the battle. I am referring to the taxation of low quality food, and clear and easily understandable front-of-pack nutrition labelling.

As previously said, there is no isolated solution or quick fix to address obesity. But there are some inspirations that can guide us in the right direction.

FAO'S Committee on Food Security (CFS) is working on a set of Voluntary Guidelines to regulate food systems. I am glad to see this gaining momentum, following the Second International Conference on Nutrition (ICN2) in 2014 (FAO and WHO, 2014).

But we need to go beyond simple guidelines. We need to work on a global convention for sustainable food systems that will ensure healthy diets for all, possibly according to a model inspired by the framework against tobacco. It is about time for governments to establish a binding set of rules and standards for the promotion of healthy and nutritious food. The adoption of technical recommendations for calories, salt and sugar intake, for example, as set by the World Health Organization (WHO), is an important measure, but is far from sufficient to contain the relentless advance of obesity and overweight.

Agreeing on a global regulation for healthy food would need to be implemented in several phases and requires careful coordination. Countries need to define their national standards for healthy diets, based on recommendations already provided jointly by FAO and WHO. There is also a local and regional dimension to healthy eating, which is partly cultural.

¹ <https://archive.wphna.org/wp-content/uploads/2016/01/WN-2016-7-1-3-28-38-Monteiro-Cannon-Levy-et-al-NOVA.pdf>

A new framework for healthy food and against obesity would build upon successful national initiatives to tackle our broken food systems. The challenge today is to improve food environments by making healthy diets more readily available and affordable, especially for vulnerable groups.

Food systems play an important role in all forms of malnutrition. However, the part they play in driving the overweight and obesity crisis may not yet be fully appreciated, especially in countries that have until recently been struggling to combat hunger and undernutrition.

The prevention of obesity requires multisectoral actions. Here are some examples of how governments are transforming their food systems:

- › Food taxation: Countries can apply taxes for the consumption of sugar and salt in the same way as for tobacco and alcoholic drinks. Mexico and some states in the United States of America (such as California) are working in this direction (LAO, 2018).
- › Food standards: In light of the epidemics of obesity and overweight, families and individuals require the support of national dietary standards set by governments. Standards for levels of sugar in soft drinks are being applied in Brazil and in Mexico, as mentioned above. Trans fats have been banned in Canada and Argentina.
- › Food labelling: Also linked to the regulation or standardization of unhealthy substances, food labelling policies have been successfully adopted in countries like Chile (Ministerio de Salud, 2019) and Uruguay. In these instances, products with high levels of sugar, salt or saturated oils are identified with different types of disclaimers. The front-of-pack warning is usually the best model as it clearly presents the substance to be restricted with a black stripe. The “traffic light” model (using red, yellow and green colours) often leads to a more subjective interpretation.
- › Food marketing: The advertisement of ultraprocessed products targeting children, such as cereals, chocolate, cookies, candies and other artificial products with excessive quantities of salt and sugar, is currently facing restriction discussions in several national parliaments and municipal chambers, and has already been implemented since February 2019 in the City of London. This builds upon successful experiences with toy guns and tobacco, where use was significantly reduced after regulating related advertising (Mayor of London Office, 2018).

- › Food in schools: Several countries have successfully adopted school meal programmes based on healthy produce, especially as purchased from local family farmers, such as in Brazil and Mozambique. Children provided with healthy school meals have considerably strengthened their capacity to prevent overweight and obesity (FAO, 2018).
- › Food governance: Countries can create interministerial and independent food agencies, with the participation of non-state actors (civil society, private sector, academia), that deal with the multidisciplinary aspects of food (health, labour, agriculture, development, economy and culture). Sweden and Canada provide good examples of how to build a national food agency.

The adoption of global healthy food standards could also pave the way for the regulation of food trade, which can be a major driver of obesity and overweight where countries are dependent on processed and prepackaged food products. Many nations do not produce enough food locally, due either to the absence or scarcity of natural resources or to the fact that they give other more profitable activities priority (such as the tourism sector in the Caribbean).

This type of regulation would help the World Trade Organization (WTO) to negotiate rules for the trade of healthy products. Although this is not its original mandate, WTO may be well placed to translate standards for healthy diets, as defined by countries with the support of FAO and WHO, into rules for the global trade of healthy products.

Although considerable progress has already been made towards eradicating hunger, there is much that remains to be done, and it can only be achieved if the international community pulls together. I hope that this book and the experiences shared within it can support all stakeholders in ensuring a world where everyone has access to the safe and nutritious food that they need.

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About the authors



JOSÉ GRAZIANO DA SILVA

has contributed for more than 30 years to academic, professional and political knowledge on issues related to food security, nutrition and rural development. In particular, as FAO Director-General from 2012 to 2019, he has implemented the experience garnered from the Fome Zero (Zero Hunger) programme in Brazil, which he conceptualized and later led while serving as Extraordinary Minister for Food Security and the Fight against Hunger during the first government of Luiz Inácio Lula da Silva.

In Brazil

In 2001, José Graziano da Silva coordinated the development of the Fome Zero programme – a central component of Lula’s campaign for the country’s presidency – and in January 2003 he was appointed to the cabinet with the mission to implement it.

The Fome Zero programme introduced a new development model focused on eradicating hunger and seeking social inclusion by connecting macroeconomic, social and industrial policies. This greatly accelerated progress in reducing hunger: between 2000–2002 and 2005–2007, chronic malnutrition in Brazil decreased from more than 10 percent to less than 5 percent, falling at a rate 2.5 times faster than in the previous decade. As a result, the country fulfilled the objectives of the World Food Summit and the first Millennium Development Goal. In 2014, Brazil was removed from FAO’s Hunger Map and was considered to have become the first developing nation to have eradicated hunger.

In FAO, as regional representative for Latin America and the Caribbean

Graziano da Silva joined FAO in 2006, when he was appointed Assistant Director-General for Latin America and the Caribbean. As FAO Regional Representative, Graziano da Silva called on governments to support the 2025 Latin America and the Caribbean Zero Hunger Initiative, which consolidated an important regional agenda focused on food security, sustainable rural development and family agriculture.

According to the 2014 report on *The State of Food Insecurity in the World*, Latin America and the Caribbean became the first region to reach the first Millennium Development Goal of halving hunger by 2015.

In FAO as Director General – first term (2012–2015)

At the helm of FAO, Graziano da Silva reinforced the commitment to transform the vision of a sustainable and food-secure world into reality. During his first term (2012–2015), he carried out transformative changes within the Organization by intensifying the focus of FAO’s work on five strategic objectives: (i) ensuring food security; ii) promoting more productive and sustainable agriculture; (iii) reducing rural poverty; iv) improving food systems; and v) strengthening resilience.

At the same time, he conducted an internal reform of the UN agency by reducing bureaucracy and administrative costs; developed partnerships with various stakeholders, including civil society, the private sector, academic and research institutions and foundations; and boosted FAO’s capacity to support South–South cooperation – the exchange of resources, technology, and knowledge between developing countries. Through these changes, Graziano da Silva helped to make FAO a knowledge organization with its “feet on the ground”, by reinforcing the technical capacity of its fieldwork.

Graziano da Silva was also instrumental in strengthening the confidence of FAO’s Member Nations by reinforcing the Organization’s “value-for-money” approach. This can be attested by the broad consensus reached in approving successive FAO budgets and programmes of work. He strengthened FAO’s global mandate by actively supporting the Committee on World Food Security, the United Nations High-Level Task Force on Combating the World Food Crisis – on which he served as Vice-President – and the UN Secretary-General’s Zero Hunger Challenge (2012–2015), which was inspired by the Brazilian Fome Zero programme. In addition, through his work with the African Union, he was instrumental as FAO Director-General in ensuring the political commitment of African leaders to the eradication of hunger by 2025.

In FAO as Director General – second term (2015–2019)

In 2015, as the only candidate for the post, Graziano da Silva was re-elected Director-General of FAO for a second four-year term (until 2019), with a historic turnout (177 votes for, one against). In that same year, in New York, the Brazilian Fome Zero approach became the model of one of the 17 United Nations Sustainable Development Goals (SDG 2) which calls for the eradication of hunger and all forms of malnutrition by 2030.

José Graziano da Silva subsequently consolidated many of the initiatives launched during his first term, in partnership with Member Nations and international organizations, UN agencies, academia, civil society and the private sector. Among the most notable achievements, Graziano da Silva shaped FAO's crucial contribution to most of the key development challenges, including:

- a) Reinforcing the recognition of rural poverty as a root cause of forced migration;
- b) Highlighting the close link between hunger and conflict, a vision adopted by the UN Security Council in 2018;
- c) Promoting a new approach to facilitate agricultural adaptation and strengthen resilience as a means of mitigating the impacts of climate change;
- d) Highlighting biodiversity loss as a very serious threat for global food and agriculture;
- e) Bringing the themes of two 2014 initiatives – the UN International Year of Farming and the Second FAO–WHO International Conference on Nutrition – to the top of the UN system agenda, as demonstrated by the declaration of the Decades of Nutrition (2016–2025) and Family Farming (2019–2028);
- f) Highlighting the role of food safety as a key concern for food security, and for trade;
- g) Reinforcing a global view of the obesity epidemic and the need to promote sustainable food systems that can foster healthy diets, as well as the necessity of a global regulation for food production and consumption.

Academic background

Graziano da Silva holds a degree in agronomy and a Master's degree in economics and rural sociology, both from the Universidade de São Paulo. He has a PhD in economics from the State University of Campinas (UNICAMP) and post-doctoral degrees from the University of London and the University of California, Santa Cruz. Before retiring as professor from the State University of Campinas (UNICAMP), Graziano da Silva taught for more than 30 years and published 25 books on rural development, food security and agricultural economics. He has acted as tutor to more than a hundred professionals dedicated to rural development and food security as well as postgraduate students.



**LUIZ CARLOS
BEDUSCHI FILHO**

is an agronomist. He holds a Master's degree and a PhD in environmental sciences from the Universidade de São Paulo, Brazil. In 2016, he became Policy Officer (Territorial Development) at FAO's Regional Office for Latin America and the Caribbean, where he is responsible for FAO's Strategic Programme for the Reduction of Rural Poverty and coordinates the priority area of Family Farming and Inclusive Food Systems for Sustainable Rural Development. Before joining FAO, he was professor and researcher at the School of Arts, Sciences and Humanities and the Institute of Energy and Environment of the Universidade de São Paulo, where he coordinated the doctoral programme in environmental sciences and led the Division of Environmental Science, Management and Technology.



**GUILHERME
BRADY**

is Chief of FAO's Unit on Family Farming and Partnerships with Civil Society Organizations, within the Partnerships Division. He holds a Master's in public policy and public administration as well as in environmental policy. He has 20 years of professional experience, with a focus on the design and implementation of inclusive rural development policies, South-South technical cooperation and capacity development for family farmers.

Before joining FAO, he worked in different positions for the Brazilian Government as well as for civil society networks and organizations.



**CLAYTON
CAMPAGNOLLA**

is the Strategic Programme Leader for Sustainable Agriculture at FAO and former Director of FAO's Plant Production and Protection Division. Prior to this, he worked as a researcher and was President of the Brazilian Agricultural Research Corporation (Embrapa) and as Director of the Brazilian Agency for Industrial Development (ABDI). He holds a Bachelor's degree in agronomy and a Master of Science in nuclear energy applied to agriculture, both obtained at the University of São Paulo (Brazil). He pursued his PhD in entomology at Texas A&M University (United States of America), and his post-doctorate in economic development and environment at the University of Campinas (Brazil).



**RODRIGO
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SEPÚLVEDA**

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SAULO CEOLIN

is a diplomat, currently serving as Deputy Consul-General of Brazil in Tokyo. He has worked at the Brazilian Mission to FAO, WFP and IFAD in Rome (2004–2008) and as an advisor to the Director-General of FAO (2015–2017). He was head of the Environment Division in Brazil's Ministry of Foreign Affairs (2013–2014) and has been a negotiator for Brazil at various multilateral fora on the environment and sustainable agriculture.



GALA DAHLET

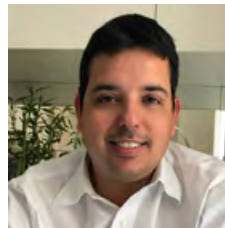
is an associate professional officer working for FAO's Strategic Programme to Reduce Rural Poverty, with a focus on rural poverty reduction and related social protection and multisectoral policies. Among other positions, Gala has worked as Executive Coordinator at the Instituto Lula, leading South–South cooperation projects in social protection and food security policies. She holds a Master's in international public management

(SciencesPo, Paris) and in social policy and development (LSE, London) where her dissertation on The Fight Against Hunger in Brazil and the challenges to its sustainability: a social urgency and a political imperative was awarded a Distinction by the jury.



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is a professor at the University of Brasilia. He has a PhD in economics (Universidade Estadual de Campinas) and a Master's in agricultural economics (Escola Superior de Agricultura Luiz de Queiroz). Mauro has extensive experience in research and public policy in the areas of food security, rural development and family farming, and has worked for an agronomy research institute, in the implementation of the Fome Zero programme, and as adviser to the Brazilian Presidency and Ministry of Agrarian Development.



PAULO DE LIMA

is a journalist with experience working for Brazilian media outlets, the Press Office of Brazil's Ministry of External Relations and Brazil's Permanent Mission in New York, where he led successful campaigns for Brazilian candidacies to major UN bodies. In 2014, he joined FAO's Office for Corporate Communication, before becoming Personal Assistant to FAO's Director-General (2015–2019).

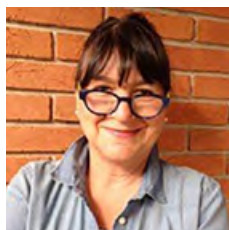
About the authors

In this role, he has handled the Director-General's personal communication and a portfolio covering the United Nations system and inter-agency affairs, inter-regional organizations and groups, and subjects such as peace and food security and food systems and nutrition. As of August 2019, he is FAO's Liaison Officer to the European Union.



**LARISSA
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HILAL ELVER

has served as the United Nations Special Rapporteur on the Right to Food since June 2014. She is an international law professor and Global Distinguished Fellow at the UCLA Law School Resnick Food Law and Policy Center; Co-director of the Climate Change, Human Security and Democracy project at the Orfalea Center, UC Santa Barbara; and former member of

the faculty of law at the University of Ankara. She is the author of *Headscarf controversy: secularism and freedom of religion* (Oxford University Press, 2012) and several publications on environmental law, climate change, food security, gender equality and human rights.



**DIANA
GUTIERREZ**

is the Communication Coordinator for FAO's Strategic Programme on Sustainable Food and Agriculture – a programme that ensures effectiveness of action on the ground through a common vision and integrated approach to sustainability across agriculture, forestry and fisheries. She also coordinates communication efforts for FAO's Agriculture and Consumer Protection Department. She holds a Master's in law and consumer protection from Roma Tre University, Rome, Italy and an MBA in marketing and management from Abilene Christian University, Abilene, TX, United States of America.



**HIROYUKI
KONUMA**

is former FAO Assistant Director-General and Regional Representative for Asia and the Pacific, a position he held from 2010 until his retirement in 2015, after 35 years in the UN system. He graduated from Meiji University, Japan, and holds an MSc and PhD

in agricultural science from the University of Tsukuba. He is currently Executive Director of the Association for the Promotion of Self-reliance in Asia (GIAPSA), a Japan-based non-profit organization that he founded in 2018, which aims to support poor rural communities in Asia. He has taught at Meiji University and Srinakharinwirot University in Thailand.



**FLORENCE
LASBENNES**

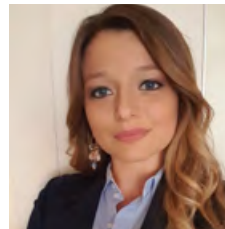
is an agronomist specialized in rural economics. She has worked in several African countries on rural land issues, food security and post-conflict economic reconstruction. She worked for the French Ministry of Foreign Affairs on food security issues before joining the United Nations where she managed multi-stakeholder and multi-sector initiatives on food and nutrition. She served as the chief of staff for David Nabarro when he was the UN Secretary-General's Special Representative on food security and nutrition. She is now managing director of 4SD (Skills, Systems and Synergies for Sustainable Development).



**LUIZ INÁCIO
LULA DA SILVA**

was born and raised in a poor area of the Northeast of Brazil, along with seven siblings. After early experiences as a factory worker and turner, among other jobs, he became a union leader and was the first representative

of the working class to be elected President of Brazil. He governed Brazil for two terms: 2003–2006 and 2007–2010. During his first year as Brazil's Head of State, he launched the Fome Zero programme, which was followed by several other significant social programmes. By the time Lula left office in 2010, he had vastly reduced extreme poverty and hunger in Brazil.



**CARMELA MARIKA
MORGILLO**

is a consultant working with FAO's Partnerships Division, where she focuses on enhancing collaboration with parliaments. Before joining FAO, she worked in the Directorate-General for External Policies of the European Parliament, on initiatives in the field of political affairs and social development.

She holds a Master's in political science and international relations and a postgraduate degree in marketing and communication.



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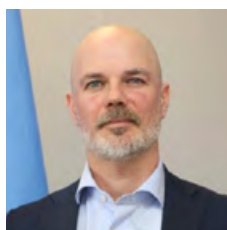
is Co-Director of the Imperial College Institute of Global Health Innovation (London). He supports systems leadership for sustainable development through his social enterprise 4SD, and is Advisor at the Global Commission on Adaptation in Rotterdam. He has worked in various capacities in over 50 countries, including for the British government as Head of Health and Population in

the 1990s. He has held leadership roles in the UN on disease outbreaks and health issues, food insecurity and nutrition, climate change and sustainable development (1999–2017). In October 2018, he and Lawrence Haddad received the World Food Prize for their leadership in raising the profile of undernutrition within the food security and development agenda.



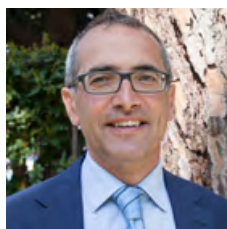
**CHIMIMBA
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**FRANCESCO
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**ANDRÉ
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has a law degree from the University of Coimbra, Portugal, and a Master's in development from the University of Bologna, Italy. His career began in 2006 at the International Organization for Migration in Chile. From 2009 to 2012, he lived and worked in El Salvador, coordinating a cooperation project of the Portuguese non-governmental organization Oikos. In 2013, he joined FAO's Regional Office for Latin America and the Caribbean as an international consultant in the area of rural poverty reduction. Here, he has lent close support to regional and national processes to reinforce public policies focusing on family farming and rural development.



**COUMBA
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Coumba D. Sow earned a Master's degree from the College of Food Industries of Montpellier, and a post-graduate degree in agricultural economics from the University of London. She joined FAO in 2006 as Policy Officer, where she contributed to coordinating FAO's support to the New Partnership for Africa's Development (NEPAD). In 2013, she joined the Office of the FAO Director-General, with a portfolio covering Africa and liaison with the departments of Technical Cooperation and Economic and Social Development. Since February 2017, Coumba has been the Regional Coordinator for Resilience for West Africa and the Sahel, covering 18 countries. She launched the FAO initiative "1 million cisterns for the Sahel".



MAYA TAKAGI

has over 20 years' experience in research and public policy in the area of food security and nutrition, rural development, social protection and smallholder farming. She has a PhD in economic development and has worked on implementation of the Fome Zero programme in Brazil. She has been advisor to Brazil's President (2005–2010), National Secretary for Food Security and Nutrition (2011–2012), and agricultural researcher for the Ministry of Agriculture (2013–2014). She has been Senior Social Protection Officer and Deputy Strategic Programme Leader for Reducing Rural Poverty at FAO (2015–2019) and is currently Regional Programme Leader in FAO's Regional Office for Latin America and the Caribbean.

From Fome Zero to Zero Hunger:

A global perspective

Hunger is on the rise again in the world after a decade of decline. Hunger not only cruelly affects the well-being of people, it also undermines national development prospects of any kind. It erodes human productivity and exists in direct contradiction to the human right to adequate food. But hunger is a scourge that can be eradicated. This publication discusses the international Zero Hunger agenda in light of the achievements of the Fome Zero programme in Brazil. It revisits successful initiatives and discusses current actions, while also critically assessing new and growing challenges to the global food security agenda: obesity and climate change.

Bringing together contributions from international experts, the book charts a path for translating political will into political action. The example of Brazil and the country's Fome Zero programme have shown that a comprehensive approach to hunger, based on a multisectoral social protection agenda and strong political leadership, is the key to success. Building on this experience, the Zero Hunger Challenge, launched by the UN in 2012, has mobilized an unprecedented global commitment to end hunger worldwide. Five of the 17 Sustainable Development Goals of the 2030 Agenda address this issue. Tackled together, these goals can end hunger, eliminate all forms of malnutrition and build inclusive and sustainable food systems.

Indeed, the goals will have to be met if countries are to eradicate poverty and pave the way to long-term sustainable growth. Time is passing and the current disturbing world hunger figures call for renewed efforts. Our present actions will be decisive in achieving a more equitable and sustainable world. This book provides an opportunity to recall the achievements realized so far and inspire our future efforts.

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