

A Comprehensive Look at Public Policies on Family Farming, Food Security, Nutrition, and Public Health in the Americas: Linking United Nations Work Agendas



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INTRODUCTION

Important economic, technical, and political issues underlie current agricultural, social, and health problems in the Americas. Modernization of the agricultural sector has come with an increased concentration of land in large farms that favor the production of a few commodities and single crops—such as wheat, soy, sugar, and corn—which lend themselves to large-scale, mechanized production of products that are easy to store and transport over long distances. This new scenario allowed the gross domestic product of the agro-exporting countries to grow, and led to the emergence and consolidation of the processed food industry, with significant profits for the domestic economic groups in whose hands this activity is concentrated. But this was accompanied by negative externalities, including the displacement of small and medium-sized farms, the loss of agricultural biodiversity, and the persistence and/or increase in various forms of malnutrition and diet-related non-communicable diseases such as obesity and diabetes. All of this requires a coherent and comprehensive response, making it necessary to link the agendas of family farming, food security, protection of our natural resources, and care for human health and nutrition. In this context, the United Nations General Assembly unanimously declared 2014 The International Year of Family Farming. The U.N. recognizes that family farms are key components for meeting challenges in food security, preventing diet-related non-communicable diseases, and preserving our natural resources, all of which is in line with achieving the Sustainable Development Goals.

NUTRITIONAL AND HEALTH SITUATION IN THE AMERICAS

The sub-region of Latin America and the Caribbean (LAC) has the capacity to feed all of its population and still be a net exporter of food. Despite this, 47 million people in LAC remain underfed (FAO, FIDA, WFP 2013), and approximately 7.1 million children under age five suffer chronic undernutrition (UNICEF, WHO, WB 2011). Furthermore, iron-deficiency anemia is the most prevalent nutritional problem, affecting 44.5% of children and 22.5% of women of reproductive age.

At the same time, excess weight and obesity have taken on epidemic proportions in the past quarter century, among all age groups and social strata. The current rate of these two conditions among children under age five is 7%; among school children it is between 25% and 30%; and in the adult population at least 50% are affected, while in three countries (U.S., Chile, and Mexico) the adult rate exceeds 70%. As is known, excess weight is directly associated with the emergence of chronic diseases such as diabetes, cardio-vascular diseases, and several cancers—which already constitute the main causes of illness and death in LAC.

Undernutrition and obesity are not direct opposites, despite the misconception that the former results from deprivation of food and the latter from gluttony. They share a common denominator which is malnutrition, and are characterized by monotonous diets of poor nutritional quality, that lack essential vitamins, minerals, and several bio-active substances that are important for human growth and health. Low-income families tend to consume sources of cheap calories because the relative cost of nutritional foods—both in money and preparation time—is generally greater than that of ready-to-eat snacks and all kinds of fast food.

Another way these two forms of malnutrition are related is that those who suffer undernutrition and growth deficiencies in the early stages—primarily from gestation until age two—are more likely to develop obesity and its complications as adults.

Nowadays we find that the diets of rural populations tend to be based on a few foods, such as tubers and a few grains, while in the cities hyper-caloric diets based on processed industrial products have begun to spread massively. And as various studies have noted, the typical urban diet's concentration on a few foods is influenced by the economic emphasis placed on large-scale industrial agricultural production of just a few crops (e.g. soybeans, corn, and wheat) (Colin, K. et al., 2014). This has negative consequences not only for health, but also for the sustainability of agricultural food systems.

FACTORY FARMING, ULTRA-PROCESSED FOODS, AND HEALTH

The industrialization of agriculture has caused significant changes in eating habits. The agricultural revolution 10,000 years ago was possible thanks to the domestication of several grains and cereals. This allowed an increase in the available calories, making it possible for the population to grow and for several civilizations to develop. However, from a nutritional standpoint, it was a setback in the quality of the human diet, which manifested in deficiencies of protein and several micronutrients. Archeological evidence has shown that this dietary drawback translated into a loss of several centimeters of height. Undoubtedly, a diet revolving around a few grains—compared to the hunter-gatherer diet which was much more diverse and rich in vegetable sources—had a lower ratio of nutrients to calories. Attention paid to nutritional deficiencies since the end of the 19th century, as well as the increased diversification of diet in some regions of the world, once again allowed human potential for growth, development, and performance of physical labor to increase (Ludwig DS, 2011).

But the re-emergence of diversity in eating patterns was short-lived from an evolutionary perspective. In the last half century we have witnessed the appearance of the so-called “Western diet” comprised of industrialized foods such as sugar and refined flour, oils, and red meats—products that are also used for the mass production of ready-to-eat packaged foods. We refer to these as *ultra-processed foods*, using the definition of the University of São Paulo's Center for Epidemiological Studies in Health and Nutrition (Monteiro C. et al, 2013).

Ultra-processed food products are ready (or almost ready) to eat. Their ingredients are refined substances from foods, various chemical additives, salt, sugar, and fats in carefully concocted combinations that give these products high palatability and a longer shelf-life than natural foods that are perishable. Ultra-processed foods also have relatively low prices, are ubiquitous, and are heavily marketed. Their growing presence is eroding away at the habit of cooking and the socialization that accompanies meals, and causing culinary traditions to be abandoned. In this process, the decision-making power of individuals and families regarding what to eat and how, is progressively ceded to the ultra-processed food industry (Petrini, 2009; Monteiro C. et al, 2010; Jacoby, 2012).

One of the favorite ingredients in ultra-processed foods is sugar. In less than a century sugar has attained levels of consumption that seriously threaten human health. It is known that sugar (table sugar, honey, and concentrated juices) is toxic when consumed at current levels of between 200 and 500 calories per person per day. These levels of consumption wreak havoc on our homeostatic system (which keeps the balance between the intake and expenditure of calories), disrupting the hunger and satiety mechanism and causing addiction (Garber and Lustig, 2011; Brownell and Gold, 2012) and produce obesity, hypertension and diabetes (WHO, 2003; Vartanian and Schwartz, 2007; Malik V, 2006).

Our cultural heritage, food quality, and culinary skills are other key aspects that determine eating patterns and food security. Like our health, they are also in danger. Many culinary cultures formed over centuries of harmony and interaction with agriculture, are also at risk of dying out or have already disappeared. In this process, the farmer and urban consumer have grown so far apart in the food chain that they virtually do not recognize each other. It is clear that growers have been relegated to the most basic farming activities, while all other facets of the agrarian economy have been virtually cornered by powerful intermediaries who impose their own conditions.

There is now a need to increase the production of whole natural foods and also to recover such parts of the agrarian economy as the basic processing, packaging, storage, transport, and sale of foods. The main feature of sustainable food systems is respect for the basic principle of ecological integrity which, among other things, entails protecting and restoring the integrity of eco-systems, with special concern for biodiversity, environmental protection, and the adoption of production, consumption, and reproduction patterns that safeguard the regenerative capacity of the land.¹ Eating a healthy diet based on local, seasonal production of agroecological foods should be encouraged, along with the promotion of short marketing circuits as an opportunity to enhance added value and forge closer ties between farmers, consumers, and the land and promote fair trade. All of these economic activities can and should be democratized.

ECONOMIC AGENTS AND MODERN EPIDEMICS

In order to make effective progress in public policy it is vital to identify and understand the driving forces behind changes in agriculture and the dietary and nutritional transition that we have just described. From a public health standpoint, recent studies have determined that the growing consumption of ultra-processed foods is promoted through expansion of the ultra-processed products market which increasingly dominates food markets throughout the world (De Vogli R, 2014), and particularly in the Americas (Crovetto and Uauy, 2012; Monteiro C. et al, 2010). Sales of ultra-processed products are growing faster in emerging markets, where they surpass sales in the developed economies. In emerging markets, sales of packaged foods are increasing at five times the rate found in developed countries, while sales of sweetened beverages are increasing at almost three times that rate. Similarly, sales of ultra-processed products in the developed economies such as the U.S. and Europe, have already reached saturation points (Monteiro C. et al.; 2013) (FIGURE 1).

It is precisely this global scale of production and marketing of ultra-processed products that is accelerating the "dietary-nutritional transition" and taking obesity rates to unprecedented levels in the developing world in a relatively short period of time.

In words of Dr. Margaret Chan, Director-General of the WHO: "Efforts to prevent noncommunicable disease go against the business interests of powerful economic operators. In my view, this is one of the biggest challenges facing health promotion. ... it is not just Big Tobacco

¹ See Earth Charter, The Hague, 29 June 2000.
<http://www.earthcharterinaction.org/invent/images/uploads/EI%20Lanzamiento%20de%20la%20Carta%20de%20la%20Tier%20ra.pdf>

anymore. Public health must also contend with Big Food, Big Soda, and Big Alcohol. All of these industries fear regulation, and protect themselves by using the same tactics.” (Chan; 2013).

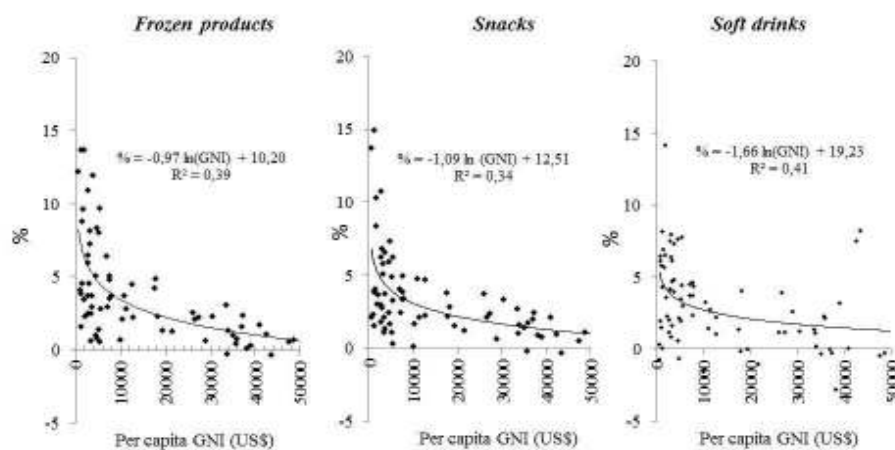
Without a doubt, children and adolescents are the most affected by these practices as they are bombarded with advertisements for ultra-processed foods. The lack of public information and protection from the harmful effects of these products collides with the fundamental human rights enshrined in various international agreements and conventions, including the International Covenant on Economic, Social and Cultural Rights,² the Convention on the Rights of the Child,³ the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Noncommunicable Diseases (approved in the 66th General Assembly of the United Nations), and the Report of the Special Rapporteur on the Right to Food, 19th Session of the Human Rights Council (Olivier De Schutter, 2011).

Based on the obligations emanating from these international instruments, which establish the State’s responsibility to protect the human right to health and food and to ensure the special care and protection of children, countries such as Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Peru, and Uruguay have passed laws and regulations aimed at curbing the rapid increase in the number of overweight or obese children. Also, during the last decade several states in the U.S. have successfully modernized the food environment in schools by eliminating sodas and ultra-processed products from vending machines and from daily menus. Legislation in the countries of Latin America and the Caribbean (LAC) have similar objectives, including: the introduction of easy to interpret front of package warning labels for packaged foods, restricting advertising aimed at children, and in the case of Mexico, introducing a new tax on sweetened beverages and high-calorie snacks.

The aforementioned legislative and regulatory initiatives have been possible thanks to the combined efforts of lawmakers, government ministers, attorneys, consumer advocates, and Presidents who have come to recognize the devastating consequences of ultra-processed foods. Also, public opinion certainly favored these initiatives. But despite the abundant scientific evidence and international recommendations, the interests of the processed products industry have uniformly challenged regulatory measures, and in some cases have successfully halted their implementation.

² General Comment No. 14 of the Committee on Economic, Social and Cultural Rights urges “State(s) to take all necessary measures to safeguard persons ... from infringements of the right to health by third parties,” so that they can effectively enjoy the right to health. It specifies that violations of this obligation include “the failure to protect consumers ... from practices detrimental to health, e.g. by ... manufacturers of ... food.” (Committee on Economic, Social and Cultural Rights).

³ Preamble to the Convention on the Rights of the Child, “the child, by reason of his physical and mental immaturity, needs special safeguards and care.”



Analyses performed on all Euromonitor countries except for Taiwan (the World Bank does not report GNI for this country). Also, Algeria, Cameroon, Nigeria, India, Pakistan and Uzbekistan are excluded from the frozen products analysis because they had zero values in 1998.

FIGURE 1. Average increase in annual sales (%) of ultra-processed products—along the vertical axis—associated with gross national income per capita of the countries (US Dollars). Reference: Monteiro CA et al, 2013.

FAMILY FARMING, SOCIAL DEVELOPMENT, AND SUSTAINABLE FOOD PRODUCTION

The problems caused by more than a century of factory farming, as was described above, are aggravated by significant events occurring simultaneously, including: a) a persistent global financial crisis, b) the volatility of food prices, c) widespread social unrest, and d) a growing certainty that the problems associated with climate change (such as water shortages, soil degradation, the loss of biodiversity, desertification, and the loss of services of ecosystems) are coming sooner than we had expected.

These events have created an impetus and a renewed political interest in family farming,⁴ given its potential to mitigate the aforementioned uncertainties. Countries such as Argentina, Brazil, Nicaragua, Bolivia, Ecuador, Guatemala, and El Salvador have clearly gone beyond rhetoric and have implemented important policies, which has left family farming well-positioned on the policymaking agenda.

⁴ In this document a Family Farm is understood to be a production unit (and family home) headed by either an independent farmer that does not hire permanent salaried workers, or by an agricultural employer who, including himself and his unpaid family members, has no more than five people working on his farm.

BOX I: Some successful family farming initiatives in LAC

Family Farming Food Procurement Program (PAA) and School Meal Program (PNAE) in Brazil

The PAA is one of the structural actions of the Zero Hunger Program in Brazil, whose purpose is to link local production with food consumption. One of its objectives is to provide minimal reserves of basic food basket items through the direct advance purchase of crops from family farms in the regions where they are consumed, and to distribute this food among the population at dietary risk. In June of 2009 the program had invested approximately US\$20.5 million to purchase from 97,000 farmers. The National School Meal Program (PNAE) has generated a lot of family farming activity since the law stipulates that at least 30% of the food supplied through the program must come from small farmers, for various reasons: to strengthen family farming and local economies; to increase the consumption and quality of local products; and to respect regional consumption patterns.

Promotion of safe fruit and vegetable crops in family and small farms in Central America

Among the success stories is the PAHO/WHO/FDA program in Central America for the production of safe fruits and vegetables by small growers, including indigenous women farmers and their families. For example, in El Salvador promotion of the use of WHO handbooks for the growing of safe fruits and vegetables in family farms has led to a reduction in the incidence of diarrheal diseases. This initiative offers the added benefits of promoting health through family farming, since these farms produce healthy and safe food, improve dietary diversity, protect the environment by not using pesticides, favor the rational use of water, and promote shifts in consumption toward locally produced fresh produce—all of which reduces the carbon footprint.

The greatest potential for family farming lies in providing healthy and nutritional food for the entire population, including the most vulnerable social groups. Family farming is a strategic sector within the region because it does more than contribute to food production, stimulate local economies, and play a role in the social dynamic. It also plays a key role in providing the population with healthy foods such as fruits and vegetables, legumes, whole grains, fish, meat, milk and dairy products, etc. The importance of family farming is apparent in the production of beans (67%), cassava (84%), corn (49%), and milk (52%) in Brazil; of corn and beans in Colombia (30%); and of potatoes (64%), onions (85%), corn (70%), and lamb (83%) in Ecuador. All of these foods are rich in nutrients (FAO; 2012) (BOX I).

Family farming systems may represent up to 80% of the economic production units and more than 60% of total natural food production in some LAC countries. They also employ more than 70% of the total agricultural work force, which in some countries is dominated by women. In the Andean countries of Peru, Bolivia, and Ecuador, women are the backbone of traditional farming systems. An example of family farming's contribution to feeding the population is provided by FIGURE 2, which shows the results of the 2006 Agricultural Census of Brazil.

Thus family farming plays an important role in supplying local and national markets, boosting local economies, and favoring the development of small producers. It is now essential to help make this form of agricultural production viable and sustainable. This will



FIGURE 2. Contribution of family farm output to food consumption in Brazil
Source: 2006 Agricultural Census - Ministry of Agricultural Development, Brazil
 [text in figure: Cassava / Beans / Corn / Coffee / Rice / Wheat / Soybean
 Milk / Poultry / Pork / Beef]

require public policies to support initiatives such as government food purchases, conditional transfer programs, and school meal programs. This would favor health and nutrition along with the economic and social development of farming families.

Moreover, family farming is an important way to preserve the environment because it tends to use mixed systems of production that can better withstand adverse climate conditions, are more labor intensive, and reduce risks through diversified production. This type of production is less vulnerable to economic and environmental shocks (ECLAC/FAO/IICA; 2014). Finally, family farming makes a significant contribution to the preservation and revival of traditional products that not only have an important cultural value for many native populations of the Americas, but also help strength food diversity for the whole population—particularly in places where ultra-processed products have been gaining ground.

The “quality” of food is important from both a nutritional and agricultural standpoint, and particularly in gastronomic terms. Historically, use of the word “quality” regarding food has been associated with its “flavor” and “traditional” means of production, which reveals a link between the land and the culinary value of the crop. This idea lives on with the famous “designation of origin” heavily used in the marketing of specific foods and beverages. The concept of quality should include both nutritional and gastronomic value, as well as the traditional and cultural value of the crops. Quality also designates desired characteristics that lend added value through, for example, production modality (organic agriculture whose production respects the environment), production zone (such as mountainous), and the traditions these involve. It is no coincidence that this new concept of “quality” is almost invariably associated with small or medium-scale production, given that the main purpose of this form of production is food for human consumption, rather than commodities produced for their commercial and economic value.

Interest in family farming now extends beyond the agricultural sector to warrant consideration in a report by the UN Special Rapporteur on the Right to Food (Olivier de Schutter, 2011). The report stresses that the United Nations should establish an agenda to address the problems of poverty, malnutrition, and environmental sustainability. More than 360 organizations coordinated by the World Rural Forum got the United Nations to unanimously declare 2014 the International Year of Family Farming. The declaration led the UN to recognize that family farmers are key figures in responding to two urgent situations facing the world today: a need for better food security and preservation of our natural resources. This can be handled in a way that is consistent with the Millennium Development Goals and the debate on the post 2015 development agenda, and the Zero Hunger Challenge (FAO 2013).

SUSTAINABLE FOOD SYSTEMS AND HEALTHY DIETS IN THE POST 2015 DEVELOPMENT AGENDA

Sustainable food systems and healthy diets have the potential to meet the nutritional requirements of the populations that consume them, without compromising future generations. This is only possible through the efficient and responsible use of natural resources, support for and fair treatment of farm workers, the reuse of waste, support for the production of nutritional foods, and their supply and availability primarily through local markets. The role of family farming in promoting healthy and sustainable food systems and diets is essential, since it can yield natural foods while using fewer inputs, can improve the supply of local and seasonal agroecological foods, and operate in short marketing circuits, which reduces transaction costs and increases farmers' profits.

These concepts were backed by the Madrid High Level Consultation on Hunger, Food Security and Nutrition held in 2013 (HLC 2013). The conference concluded that attaining food security and optimizing nutrition are critical to the world's post-2015 development agenda. It also noted that there is a strong link between the nutritional status of a population and its potential for economic and social growth, such that "nutrition interventions generate returns among the highest of 17 potential development investments" (World Bank 2006).

In this regard, governments must strengthen intersectoral policies, paying special attention to: (i) favoring food systems with policies that encourage the production of healthy foods to make them more accessible to the population (e.g. subsidies for the production of healthy foods) (Arias D. et al, 2014); (ii) support for family farming in the sustainable production of healthy foods that are safe for human consumption; (iii) promoting and protecting sustainable systems of production and traditional diets, while ensuring food and environmental safety and protecting natural resources and biodiversity; and (iv) using governmental regulation to protect consumers from fraudulent business practices, misinformation on health benefits, and the production and marketing of ultra-processed foods with little or no nutritional value, including taxing them (FAO 2004). These recommendations are consistent with the content of and the specific government obligations emanating from the human right to adequate food.⁵

⁵ See International Covenant on Economic, Social and Cultural Rights, Article 11.2; Committee on Economic, Social, and Cultural Rights, The Right to Adequate Food (Art. 11), (20th session, 1999), U.N. Doc. E/C.12/1999/5 (1999).

TOWARD A COMMON INTER-AGENCY AGENDA

Considering the close link between food and nutritional security, sustainable agriculture, nutrition, and health, the following recommendations are made for the establishment of an inter-agency agenda:

I) Improve the food environment and reverse the growing trend of obesity and related diseases.

Examples of how to promote access to high quality, sustainable food and diets include:

- Access to a healthy diet should be a constitutionally protected *right*;
- Governments should regulate the production, labeling, and marketing of harmful processed foods, including their pricing;
- Food and beverage advertising, particularly to children, should be regulated;
- The government's purchasing power should be tapped to procure natural foods from family farms, and national food programs should be supplied from this source (e.g. schools, military installations, hospitals, public agencies, community kitchens etc.).
- New local food markets should be created, along with related small-scale industries such as processing and freezing plants and restaurants, that add value to the food chain;
- Healthy food systems should be favored with policies to support healthy food production (e.g. subsidies on fruits and vegetables) to make them more accessible to the entire population;
- National and regional culinary traditions should be promoted through educational efforts that highlight their cultural value as well as their benefits for agriculture, the environment, and health;
- Food safety programs should be expanded to include the non-communicable diseases associated with the use of additives (salt, sugar), trans fats, contact materials such as BPA that affect the endocrine system, etc.

II) Support for family farming, agricultural development, and sustainable food systems

Examples of agriculture and development policies that support health include:

- Public policies and subsidies to support and develop sustainable family farming, including aquaculture and integrated food production systems;
- Creation of networks of metropolitan retail food markets to offer new opportunities to local farmers and consumers, bringing consumers closer to the farmers that produce their food;
- Promote the progressive elimination of antibiotics used to promote animal growth and the prudent use of antibiotics in agriculture;
- Assess the health implications of agricultural policies and plans to market foods that encourage family farming, healthy and sustainable foods and diets, and short circuit marketing;

- Meet food safety standards (for additives, hormones, pesticides, residues of veterinary drugs, labeling, health claims, etc.).
- Eliminate food waste during production, distribution, marketing and consumption.

III) Put an end to undernutrition and promote optimal feeding levels for children under age five and women

Examples of approaches based on health and nutrition outcomes include:

- Eradicate all forms of undernourishment and malnutrition in LAC.
- Increase the rate of children under six months old who receive breastfeeding exclusively, applying the recommendations of the WHO Code on the Marketing of Breast-milk Substitutes;
- Reduce anemia among children under five and women of childbearing age; and
- Reduce chronic undernutrition among children under age five.

The integration of these recommendations through effective and transparent partnerships is essential to move toward sustainable agricultural systems that promote health and guarantee food and nutritional security. This requires commitment from the countries and the consistent support of such United Nations agencies as ECLAC, FAO, PAHO/WHO, WFP, UNICEF, UNEP, WB, regional organizations such as IICA, and other interested parties.

TOWARDS MORE CONSISTENT POLICIES AND BETTER GOVERNANCE IN LATIN AMERICA AND THE CARIBBEAN

Although the region has made significant strides in reducing undernutrition and micronutrient deficits, the progress has been uneven and diet-related non-communicable diseases (e.g. obesity, diabetes, and heart disease) have increased to epidemic levels in LAC. Therefore, it is necessary to promote consistency between agrarian policies, food systems, and policies to promote healthy diets and eating habits. That is the purpose of this publication. We authors hope for a greater convergence of our institutional agendas, celebrate the good practices that exist in the region, and hope that they will translate into national and regional public policies.

There are concrete examples of progress in the Americas, several of which were mentioned above. For example, El Salvador, Brazil, and Ecuador have instituted various policies to support family farming. Similarly, about ten countries have passed laws and legislation to promote healthy diets for school children and protect them from the negative impacts of the marketing of ultra-processed foods. No less important has been the resurgence of and renewed appreciation for several foods that are native to the region, which merged with a growing interest in national and regional cuisine which is celebrated by natives and foreigners alike. Added to all of the above is the growing attention the WHO and UN system are placing on turning around the epidemic of non-communicable chronic diseases. All of these movements and actions share common roots in health and sustainable social and economic development.

In this context it is clear that a new paradigm is emerging, which proposes to make better use of the food system to improve nutrition and health. It has now shifted toward promoting healthy, sustainable, and culturally appropriate diets, which are based on food biodiversity and respect for the environment. This option is not opposed to international commercial agriculture, but seeks to create an important space for the production and consumption of natural foods and the social and economic prosperity that comes with them. Agricultural and food policies that include the sustainable consumption of foods and reduce their waste, should be incorporated into the post-2015 development agenda for Latin America and the Caribbean.

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