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FAO REGIONAL CONFERENCE FOR LATIN AMERICA AND THE CARIBBEAN

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How to fight against food loss and waste through technological innovation

Executive Summary

Latin America and the Caribbean (LAC) faces significant challenges in eradicating hunger and malnutrition. Additionally, the cost of a healthy diet is higher than in other regions, contributing to food insecurity and nutritional challenges. Despite the progress in reducing stunting and micronutrient deficiencies, the region grapples with food insecurity due to economic shocks, conflicts, insecurity and extreme weather conditions. The socioeconomic conditions exacerbated by the COVID-19 pandemic and global uncertainties pose threats to the sustainability and resilience of agrifood systems in the region, potentially leading to increased hunger and malnutrition. In this context, food loss and waste (FLW) is a global concern with far-reaching economic, social and environmental consequences. Significant levels of FLW occur in the LAC region. The causes are multifaceted, including poor infrastructure, logistical challenges, market access issues and natural factors.

Reducing FLW is crucial for transforming agrifood systems in the region for increased efficiency, sustainability, resilience and inclusiveness, significantly contributing to food security and nutrition, economic development, and to mitigating the climate footprint of food production and consumption and achieving the Sustainable Development Goals (SDGs).

Context-specific technology innovations play a critical role in transforming agrifood systems and preventing FLW, but their effectiveness in reducing FLW hinges on broader holistic interventions to provide the essential infrastructure, develop evidence-based legal, policy, institutional and regulatory frameworks, raise awareness and strengthen capacities, and support partnerships and collaboration. Several challenges persist, such as limited access to electricity in rural areas and constraints in generating and updating regional data, among others.

Suggested action by the Regional Conference

The Regional Conference is invited to request FAO to:

(a) facilitate the incorporation, monitoring and evaluation of the Model Law for the Prevention and Reduction of Food Loss and Waste and the *Voluntary Code of Conduct for Food Loss and Waste Reduction*, through policy dialogue, exchange of experiences and the design and implementation of policy support;

(b) support countries in developing and sharing evidence, and building countries' capabilities to collect, generate and analyse data and information on the status of losses and waste in agrifood systems throughout the supply chain;

(c) support integrated solutions for FLW prevention and reduction, including policies and regulatory frameworks and other innovative solutions to bridge FLW action with multiple agendas, including improving nutrition and reducing the agrifood sector's impact on the climate; and

(d) support resource mobilization and partnership-building strategies to foster the development of regional, national and subnational FLW reduction initiatives.

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I. INTRODUCTION

1. This document delves into the critical issue of food loss and waste (FLW) within agrifood systems in the Latin America and the Caribbean (LAC) region. It emphasizes the economic, social and environmental implications of FLW, highlighting its impact on the Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger) and SDG 12 (Responsible Consumption and Production). The narrative stresses the urgency of transitioning towards sustainable agrifood systems, with responsible management of resources to mitigate greenhouse gas (GHG) emissions and climate change effects.

2. FLW is defined as the decrease in quantity or quality of food along the food supply chain. Food loss is the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain, excluding retail, food service providers and consumers. Food waste is the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food services and consumers.[1]

3. FLW carries economic, social and environmental implications, and it is connected to many of the sustainable development challenges facing LAC countries. FLW reduction can help accelerate progress towards achieving the SDGs in the region. Reducing FLW provides a means to achieve other objectives, generating triple-wins (economic, social and environmental) and contributing to SDG 2 and SDG 12, specifically target 12.3 which aims to halve global per capita food waste at the retail and consumer levels and reduce food losses in production and supply chains, including post-harvest losses.

4. Globally, the causes of FLW are multifaceted. Food losses occur due to inadequate practices applied at harvest and handling along the supply chain, natural factors like climatic conditions, challenges in marketing produce, and inadequate infrastructure, *inter alia*. The causes of food waste at the retail level are linked to limited shelf life, the need for food products to meet aesthetic standards in terms of colour, shape and size, and variability in demand. Consumer food waste is often caused by

[1] FAO. 2019. *The State of Food and Agriculture 2019. Moving forward on food loss and waste reduction*. Rome. Licence: CC BY-NC-SA 3.0 IGO. In: https://www.fao.org/3/ca6030en/ca6030en.pdf

poor purchase and meal planning, excess buying (influenced by over-large portioning and package sizes), confusion over date labels ("best before" and "use by") and poor in-home storing.[2]

5. In recent years, there have been several milestones globally and in the LAC region that can identify the importance of incorporating FLW reduction into actions to fight against hunger and respond to climate change. The *Voluntary Code of Conduct for Food Loss and Waste Reduction* was endorsed by the FAO Conference in June 2021, while 2018 saw the launch of *#SinDesperdicio*, the first regional platform on addressing FLW, which is coordinated by the Inter-American Development Bank (IDB). This Platform is engaged in the development of several technological innovation and awareness-raising actions. In 2020, the first International Day of Awareness of Food Loss and Waste was commemorated globally, and within the framework of the 2021 United Nations Food Systems Summit (UNFSS), the Food is Never Waste Coalition was established.

6. The LAC region faces critical challenges in eradicating hunger and malnutrition in all its forms. The percentage of people suffering from hunger decreased slightly from 7 percent in 2021 to 6.5 percent in 2022 but remains higher than the prevalence prior to the COVID-19 pandemic. Currently, 43.2 million people in LAC suffer from hunger. Even before the pandemic, the region was experiencing a rise in hunger and poverty, although subregional differences in trends of hunger have been observed.[3] The prevalence of moderate and severe food insecurity, measured by the Food Insecurity Experience Scale, has also decreased from 40.3 percent in 2021 to 37.5 percent in 2022 in the region; however, this figure is 7 percent higher than the global prevalence of 29.6 percent.[4]

7. The region also records the highest cost of a healthy diet, estimated at USD 4.08 per person per day, which means that about 133.4 million people cannot afford a healthy diet. This affects the nutrition and health of the most vulnerable populations, including children and women.[5] Persistently high costs of healthy diets and affordability constraints among low-income population groups affect both the quality and quantity of food intake.[6]

8. Moreover, the conflict in Ukraine further escalated international prices for food and fertilizers, impacting the internal markets of LAC countries. Even though the FAO Food Price Index has decreased since March 2022, it remains above pre-pandemic levels,[7] and inflation disproportionately affects the population living in poverty, as food constitutes two-thirds of their total inflation.[8]

9. On the other hand, extreme climate events like hurricanes, droughts and wildfires disrupt agrifood systems, leading to adverse consequences for food security and nutrition.[9] Globally,

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[2] FAO. 2019. *The State of Food and Agriculture 2019. Moving forward on food loss and waste reduction*. Rome. Licence: CC BY-NC-SA 3.0 IGO. In: https://www.fao.org/3/ca6030en/ca6030en.pdf

[3] Hunger increased in the Caribbean from 14.7 percent in 2021 to 16.3 percent in 2022 and currently affects 7.2 million people. The prevalence of hunger in Mesoamerica remained at similar levels, going from 5 percent in 2021 to 5.1 percent in 2022, and affects a total of 9.1 million people. In contrast, South America reversed this trend with a decrease from 7 percent in 2021 to 6.1 percent in 2022, which means that, currently, 3.5 million less people face hunger than the previous year.

[4] FAO, IFAD, UNICEF, WFP and WHO. 2023. *The State of Food Security and Nutrition in the World 2023 - Urbanization, agrifood systems transformation and healthy diets across the rural-urban continuum*. Rome, FAO. In: https://doi.org/10.4060/cc3017en

[5] FAO, IFAD, UNICEF, WFP and WHO. 2023. *The State of Food Security and Nutrition in the World 2023 - Urbanization, agrifood systems transformation and healthy diets across the rural-urban continuum*. Rome, FAO. In: https://doi.org/10.4060/cc3017en

[6] OECD-FAO. 2023. *Agricultural Outlook 2022–2031*. Rome. In: https://doi.org/10.1787/f1b0b29c-en

[7] FAOSTAT, 2023. In: https://www.fao.org/faostat/en/#data

[8] ECLAC, FAO, & WFP. 2022. *Towards sustainable food and nutritional security in Latin America and the Caribbean in response to the global food crisis.* Santiago, Chile, CEPAL. In: https://www.cepal.org/es/publicaciones/48531-seguridad-alimentaria-nutricional-sostenible-america-latina-caribe-respuesta-la

[9] IPCC. 2023. *AR6 Synthesis Report: Climate Change 2023*. In: https://www.ipcc.ch/report/ar6/syr/

LAC ranks as the second most prone region to natural disasters, directly impacting agricultural production and affecting people's livelihoods and food security in the region.[10]

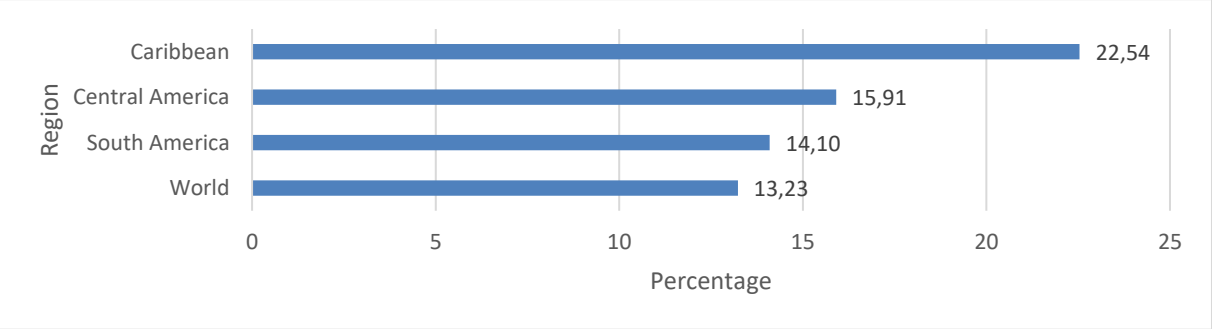
10. Furthermore, the socioeconomic conditions in LAC have faced severe shocks – particularly during the COVID-19 pandemic – higher mortality rates and lingering economic repercussions. Despite recovery efforts, almost 30 percent of the population in LAC still lives below the World Bank's highest poverty line.[11] The region also exhibits high levels of inequality, as reflected in disparities in land tenure and wealth, with a Gini index of 45.6, well above the global average.[12] While the region's total gross domestic product grew by 3.8 percent in 2022, 16 countries had not yet recovered to pre-pandemic levels, and a further slowdown is expected in 2023 that will affect LAC growth,[13] directly impacting food security.

11. Against this background, FLW prevention and reduction in LAC is anticipated to play a pivotal role in the transformation of the region's agrifood systems to make them more efficient, more resilient, more inclusive and more sustainable, thereby enhancing food security and mitigating the climate footprint of production and consumption.

II. STATUS OF FOOD LOSSES AND WASTE IN AGRIFOOD SYSTEMS IN THE REGION

12. Globally, approximately 13 percent of food production is lost from the post-harvest up to, but excluding, the retail stage. In LAC, the levels of losses range from 14.10 percent in South America to 15.91 percent in Central America and 22.54 percent in the Caribbean (Figure 1).[14]

Figure 1. Percentage food losses in Latin America and the Caribbean



Source: SDG data portal[15]

13. With respect to food waste, globally, 17 percent of food supply is wasted, and the primary contributors are households (11 percent), followed by food services (5 percent) and retailers (2 percent). Indicative of the levels of food waste in LAC, the annual household food waste reported

[10] OCHA. 2020. *Desastres Naturales en América Latina y el Caribe, 2000 – 2019.* World | ReliefWeb. In: https://reliefweb.int/report/world/desastres-naturales-en-am-rica-latina-y-el-caribe-2000-2019. [Cited 9 June 2023].
[11] Diaz-Bonilla, E. & Echeverria, R.G. 2021. *Duality, urbanization, and modernization of agrifood systems in Latin America and the Caribbean*. In: https://ebrary.ifpri.org/digital/collection/p15738coll2/id/134118
[12] World Bank. 2023. *World Development Indicators,* Data Bank. In: https://databank.worldbank.org/source/world-development-indicators
[13] Hunger increased in the Caribbean from 14.7 percent in 2021 to 16.3 percent in 2022 and currently affects 7.2 million people. The prevalence of hunger in Mesoamerica remained at similar levels, going from 5 percent in 2021 to 5.1 percent in 2022, and affects a total of 9.1 million people. In contrast, South America reversed this trend with a decrease from 7 percent in 2021 to 6.1 percent in 2022, which means that currently, 3.5 million less people face hunger than the previous year.
[14] See https://www.fao.org/sustainable-development-goals-data-portal/data/indicators/1231-global-food-losses/en.
[15] See https://www.fao.org/sustainable-development-goals-data-portal/data/indicators/1231-global-food-losses/en.

ranges from 53 kg/capita in Belize to 60 kg/capita in Brazil, 70 kg/capita in Colombia and 94 kg/capita in Mexico.[16]

14. Preventing FLW in LAC countries remains a challenge. Issues driving FLW in the region include: absence of or inadequate policies and strategies; lack of access to finance affecting mostly small producers and smallholders and limiting their access to key components for reducing FLW; the poor relationship and coordination among players in the supply chains; lack of evidence (data and information) to underpin actions; poor access to technologies; weak infrastructure (e.g. aggregation, storage, processing and preparation) at all points of the supply chain, as well as inadequacy of roads and other transportation networks, water supply and telecommunication infrastructures; and poor linkages to markets, especially for small producers.[17]

15. FLW in the region has an impact on food security and nutrition, on economy and on the environment. Regarding food security and nutrition, FLW occurs against a backdrop of food security and nutrition challenges as explained in Section I. Regarding the environment, it is estimated that FLW from LAC produces 300 million tonnes of carbon dioxide equivalent (CO2 e) (compared to the global figure of 3.3 Gtonnes) or about 500 kg CO2 e per capita annually, which is above the world average[18]. About 125 million hectares of land and around 17.5 km^3/year of water are used to produce food that is ultimately lost or wasted in LAC (FAO, 2013).[19] As indicated above, the region is one of the worst hit by climate change, which has significant impacts on FLW, for example in driving post-harvest pest infestations.

III. ADRESSING FOOD LOSS AND WASTE: PRIORITY NEEDS, CORE REQUIREMENTS AND REGIONAL INTERVENTIONS FOR TECHNOLOGICAL INNOVATIONS

16. FLW reduction should be regarded as an entry point for transforming agrifood systems to be more efficient, more inclusive, more resilient, and more sustainable. In designing interventions for FLW reduction, three dimensions need to be considered. Firstly, it is important to know as accurately as possible how much food is lost and wasted, as well as where in the food supply chain losses and waste are concentrated, and the reasons why they occur. Secondly, it is critical to be clear about the broad public objectives and underlying reasons for reducing FLW, for example, whether it is to promote food security and nutrition, foster economic efficiency or reduce damage to the environment. Thirdly, it is important to understand how FLW, as well as the measures to reduce it, affect the objectives being pursued.[20]

17. Technology innovations play a critical role in transforming agrifood systems and preventing and reducing food losses and waste.[21, 22] These include:

(a) technologies for preventing losses, adding value, extending shelf life and maintaining safety, nutritional value and quality during handling, storage, processing, packaging of food products and their distribution. In addition to the specific technologies applied at

[16] UNEP. 2021. *Food Waste Index Report 2021*. Nairobi. In: https://www.unep.org/resources/report/unep-food-waste-index-report-2021
[17] *Report of the technical consultation on the code of conduct for food loss and waste prevention and reduction*. 10 October 2019, Bogotá, Colombia. In: https://www.fao.org/3/cb0657en/cb0657en.pdf
[18] FAO. 2013. *Food wastage footprint: impact of natural resources. Summary Report* In: https://www.fao.org/3/i3347e/i3347e.pdf
[19] FAO. 2013. *Food wastage footprint: impact of natural resources. Summary Report* In: https://www.fao.org/3/i3347e/i3347e.pdf
[20] FAO. 2019. *The State of Food and Agriculture 2019. Moving forward on food loss and waste reduction. Rome.* Licence: CC BY-NC-SA 3.0 IGO. In: https://www.fao.org/3/ca6030en/ca6030en.pdf
[21] Konfo *et al.*, 2023. *Recent advances in the use of digital technologies in agri-food processing: A short Review*. In: https://doi.org/10.1016/j.afres.2023.100329
[22] See https://www.unep.org/news-and-stories/press-release/food-loss-and-waste-must-be-reduced-greater-food-security-and.

each of these stages, breakthroughs in information and communication technologies and digital innovations (for example block chain, Internet of Things, big data, and Artificial Intelligence) can be leveraged to prevent and reduce losses.

(b) technologies for the reduction of waste through recovery and redistribution of food; transforming food that would otherwise go to waste into other products; matching supply and demand of food; waste management in food services, retail and households; and, at the retail level, facilitating accurate food marketing management through product rotation planning. For example, recent technological innovations aim to enhance connections between producers, traders and consumers, enabling the recovery and distribution of minimally processed fruits, vegetables, cereals and tubers to social programmes through food banks or networks. At the retail level, technology facilitates accurate food marketing management through product rotation planning, thus reducing FLW.[23]

18. Technological innovations for FLW should build on and take into account local, traditional, ancestral, indigenous, popular and citizen knowledge, and take into consideration the needs of family farmers, Indigenous Peoples, small-scale producers and processors, and vulnerable and marginalized groups, including women and youth. In addition, environmentally sustainable technologies should be prioritized, such as resource-efficient, energy-efficient technologies that minimize exploitation of natural resources, environmental pollution and greenhouse gas emissions.[24]

19. One aspect of the transformation of agrifood systems that is called for is a shift from linear to more circular systems in which resources are used more efficiently and food waste streams are re--used, providing socioeconomic and environmental benefits. In applying a circular model, the priority is to prevent FLW from occurring in the first place, followed by the recovery and redistribution to food banks or similar institutions, or transformation into new food products; diversion into animal feed or transformation into non-food products; recycling through treatments such as composting and anaerobic digestion; incineration to generate energy; and disposal of the material by incineration or landfill.[25]

20. The effectiveness of technological innovations for reducing FLW hinges on broader interventions in the agrifood systems. This calls for measures to: raise awareness and build capacities; provide supporting infrastructure; gather data and information to provide the evidence base to guide interventions; strengthen the legal, policy, institutional and regulatory frameworks; and support partnerships and collaboration. As indicated above, FLW should be regarded as an entry point for agrifood systems transformation. As such, a holistic systems approach should be adopted to implement integrated solutions that take action in these intervention areas to ensure sustainability in the social, economic and environmental dimension while minimizing trade-offs in reaching the underlying objectives of the FLW reduction.

Awareness, education and capacity building

21. This area covers awareness-raising and education to stimulate behaviour change and actions to reduce FLW, targeting the general public, policy makers, legislators, school children, university students, etc. It also covers generating knowledge and strengthening the capacity of actors in the food supply chain and agrifood system to equip them with the technical, business management and entrepreneurial skills required to prevent and reduce FLW based on scientific principles.

22. The national programme *Valoremos los Alimentos* of the Ministry of Agriculture, Livestock and Fisheries of Argentina, offers information on FLW, materials and resources, and a series of videos with tips to avoid food waste. The programme is a pioneer in the establishment of capacity building

[23] GS1. 2020. *La serialización en la Trazabilidad de la Industria Alimentaria*.
In: http://www.gs1.org.ar/boletinesgs1/135/traza.html
[24] FAO. 2022. *Voluntary Code of Conduct for Food Loss and Waste Reduction*. Rome.
In: https://doi.org/10.4060/cb9433en
[25] FAO. 2022. *Voluntary Code of Conduct for Food Loss and Waste Reduction*. Rome.
In: https://doi.org/10.4060/cb9433en

mechanisms through a series of prevention guides for municipalities, universities, small and medium enterprises, markets and companies.

23. The LAC region has many examples of initiatives that have supported awareness raising; in recent years, innovation contests on zero waste have been held in Argentina, Colombia and Central America, as well as contests on best practices for the prevention of FLW in Brazil, Mexico, and Peru. These initiatives have been supported by the networks of FLW experts in the region and by agencies. Other examples contributing to education and capacity building are the technical innovation projects to improve post-harvest conditions in Cuba and Jamaica, and programmes to improve waste management in food services in Chile, Colombia, and Guatemala.

Infrastructure

24. An adequate public infrastructure base to support FLW reduction is critical. This includes infrastructure and supporting services, related roads and other transportation networks, potable water, electric power, and information and communication technology. Interventions should pay attention to managing and scaling up technologies for maintaining cold chains in perishable food supply chains, ensuring availability and affordability of nutritious foods while reducing waste. However, scaling-up these technologies requires improved access to electricity and drinkable water, especially in rural and vulnerable areas where farmers producing nutritious food are situated.[26,27]

Data and information

25. This area covers data and information to build the evidence base underpinning FLW reduction interventions. Support in this area covers not only producing data but also identifying the causes and solutions of FLW and building capacity of countries.

26. The Technical Platform on the Measurement and Reduction of Food Loss and Waste[28] database contains data and information from openly accessible databases, reports and studies measuring FLW across food products, stages of the value chain and geographical areas.

27. The national prevention and reduction strategy recently launched in Uruguay with the technical assistance of FAO, aims to be a planning tool to prevent, reduce and improve the management of FLW in the country, based on a comprehensive approach to identify the main causes that contribute to FLW generation along the production chain. Countries such as Peru have implemented a methodology for measuring the percentage of food loss, increasing the capacity of national statistical systems to collect data and produce estimates.

28. In Colombia, a measurement of food losses has been designed by FAO and the National Administrative Department of Statistics to obtain national data. For the first time, questionnaires with specific inquiries on quantification and cause of food losses are incorporated in national surveys to feed the national measurement and control of FLW system. Furthermore, the country has developed a food waste prevention and measurement model designed by FAO and the Colombian Family Welfare Institute (ICBF), to achieve decentralized measurement of food waste and monitoring at the municipal, departmental and national levels. This model has educational tools (infographics, cartoons, podcasts), and implementation tools (methodological guides, collection instruments and digital apps), but also it includes measurement components (quantitative and qualitative).

29. In Argentina, a food waste and sustainability dashboard has been developed to identify losses throughout the distribution and retail marketing chain in supermarkets. The dashboard is based on business intelligence using data provided by supermarket chains on critical points of food waste categories. It can provide territorial information and disaggregated data in tonnes, Argentine pesos and sales, that can identify opportunities for improvement.

[26] FAO, 2011. *Global food Losses and food waste. Extent, causes and prevention*.
In: https://www.fao.org/3/mb060e/mb060e.pdf
[27] FAO, 2017. *Food loss and waste in the food supply chain*. https://www.fao.org/3/bt300e/bt300e.pdf
[28] https://www.fao.org/platform-food-loss-waste/flw-data/en/

30. FAO has developed the FAO Food Loss Application (FLAPP), which employs science-based research and a proven new methodology based on the collection of measurement surveys to quickly assess food loss levels. By providing accessible information on food loss through video advisories, FLAPP empowers farmers, companies, producer associations and cooperatives to make informed decisions with evidence-based solutions. Utilizing crowd-sourced data from farmers, the app enhances FAO's ability to analyse where and why food loss occurs at the farm level, aiding in the design of targeted policies. Currently reporting on 10 countries (including Ecuador, Guatemala, Honduras and Peru in LAC) and seven commodities, this dynamic app with adaptive content is expected to expand its coverage, both in terms of countries and commodities.

31. Despite all these efforts, there are still challenges both in terms of traditional data collection and technological innovation to assess and quantify FLW and to prevent supply chain disruptions related to FLW generation. Efforts such as the electronic dashboard in Argentina are clear examples of the innovative opportunity in the region in this area.

Policy and regulatory frameworks, legislation and strategies

32. This area covers policies, policy-making (development of policies and parliamentary work), national and subnational legislation and strategies, and institutional and regulatory frameworks to address FLW.

33. The Voluntary Code of Conduct for Food Loss and Waste Reduction (CoC-FLW) provides a framework for designing the policies and strategies and institutions to reduce FLW while promoting more efficient, inclusive, resilient and sustainable agrifood systems and the achievement of the SDGs.[29] Policy coherence is critical and requires mainstreaming FLW in all policy frameworks that are related to agrifood systems (for example, trade, employment, social services and energy), and aligning and fostering coherence and coordination across the policies, institutions and legislation relevant to FLW reduction, including those for climate change.

34. The United Nations Food Systems Summit 2021 (UNFSS) raised the profile of FLW reduction as an effective means for agrifood systems transformation and progress on multiple SDGs, and many countries in LAC have internalized FLW in their national pathways that emerged from the Summit.

35. Policy and regulatory instruments can be used to incentivize the adoption and use of technological innovations or the adoption of adequate practices for FLW reduction. These include fiscal measures, such as low-interest financing and taxes on equipment; legal instruments, such as bans on disposing food in landfills; and principles and guidelines for various operations, such as food donation.

36. Latin America has developed the Model Law for Prevention and Reduction of FLW[30] drawing on the recommendations of the CoC-FLW. During 2020, multiple instances of dialogue and training were held with parliamentarians of the Latin American and Caribbean Parliament committees to share experiences, as well as the guiding principles of the CoC-FLW. Following these instances, the Model Law for the Prevention and Reduction of FLW was developed, which will serve as input for countries to legislate comprehensively on the subject, considering their own needs and particularities.[31] Furthermore, Colombia, Paraguay, Peru and Uruguay are developing legal frameworks around the CoC-FLW.

37. Argentina approved the National Plan for Reduction of Food Loss and Waste, which aims to coordinate, propose and implement public actions and policies, generating value in the agrifood system. Colombia approved the Decree 375, the Comprehensive Public Policy for the Reduction of FLW, which seeks to apply different measures from strengthening the technical capacities of

[29] FAO. 2022. *Voluntary Code of Conduct for Food Loss and Waste Reduction*. Rome. In: https://doi.org/10.4060/cb9433en

[30] FAO. 2022. Latin American and Caribbean Parliament adopts Model Law on the prevention and reduction of food loss and waste. In: https://www.fao.org/legal-services/news/news-detail/en/c/1505021/

[31] FAO. 2022. *Legislating to prevent and reduce food losses and waste. Legal brief for parliamentarians in Latin America and the Caribbean.* No. 10. FAO, Santiago. In: https://www.fao.org/3/cc0664en/cc0664en.pdf

producers and the implementation of technological innovations, to the implementation of good storage practices and the promotion of food donations.

38. Since 2015, the region has made progress in the development of national strategies and programmes for the prevention and reduction of FLW, as is the case of Argentina's *Valoremos los Alimentos*, a pioneer in the incorporation of various sectors through national networks. Countries such as Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Jamaica, Peru and Uruguay have coordination bodies such as national FLW commissions or subgroups dedicated to the subject within the framework of the intersectoral commissions on food security and nutrition.

39. Within LAC, regional strategies are being developed; four regional dialogues and two high-level summits have been held, the most recent in 2021, with the participation of ministers and organizations from 18 countries, which set out various key priorities for addressing FLW.

Associations, partnerships and collaboration

40. It is important to support inclusive coalitions and partnerships at national and regional levels. This is why it is essential to bring together Members and various private and civil society sectors to identify opportunities for technological, social and institutional innovation to improve the quality and management of food in supply chains. In LAC, the private actors partnering with FAO on FLW are IDB, the World Bank and the Global Alliance for Improved Nutrition (GAIN). National multi-stakeholder networks, such as in Costa Rica, integrated with members from the public sector, private sector, academia and citizens' initiatives, to contribute to research and coordination of actions to reduce FLW, are important.

41. Civil society bodies, such as the Social Gastronomy Movement, where chefs organize themselves to promote healthy food campaigns free of waste, have a key role to play.
At the global level, the Food Is Never Waste Coalition, set up within the framework of the UNFSS, provides an opportunity for partnership and collaboration.

IV. CONCLUSIONS AND RECOMMENDATIONS

42. This document has identified key areas for addressing FLW, such as creating spaces for policy dialogue, improving data collection, generation and analysis capabilities, and strengthening legal frameworks and policies. It has highlighted collaboration, innovation, and investment across various sectors as essential components in the fight against FLW. Finally, it underscored the interconnectedness of FLW reduction with broader sustainable development goals, emphasizing the importance of collective efforts in innovation at regional and national levels. Examples of interventions in these areas in LAC have been provided.

43. The most obvious and still the greatest, challenge is the development of integrated approaches. Improving the coordination of FLW in the context of more sustainable agrifood systems will enable the mobilization of comprehensive investments to improve conditions throughout the supply chain, with a special focus on smallholders and small- and medium-sized enterprises. These investments must be supported by virtuous alliances between innovation programmes, academia and the actors of the agrifood systems, considering the improvement of the capacities of market agents to prevent food for human consumption from being discarded, as well as the opportunity to take advantage of the surplus of processing as raw material. Specific areas for future interventions include:

(a) facilitating the incorporation, monitoring and evaluation of the Model Law for the Prevention and Reduction of Food Loss and Waste and the *Voluntary Code of Conduct for Food Loss and Waste Reduction*, through policy dialogue and exchange of experiences;

(b) developing evidence and countries’ capabilities to collect, analyse and generate data and information on the status of losses and waste throughout the supply chain in agrifood systems;

(c) putting into place integrated programmes for promoting technological innovation, strengthening the regulatory, institutional and policy framework, awareness, development and monitoring of initiatives aimed at reducing food losses and waste in agrifood systems along the supply chain; and

(d) designing resource mobilization and partnership building strategies to foster the development of regional, national and subnational initiatives that promote the reduction of FLW along the supply chain.