

Sumario

Introduction;

PART I. A Global Perspective;

1. The Global Goals;
2. SDG #2 – Food Security and Sustainable Agriculture;
3. International Law as an Instrument of Change;

PART II. A Regional Perspective from The Americas;

4. Organization of American States;
5. Summits of the Americas;
6. Specialized Regional Agencies;
7. Change Instruments at the Regional Level;

PART III Reflections



Using International Law to Achieve the Sustainable Development Goals: Food Security and Sustainable Agriculture – An Overview

Jeannette Tramhel

“Agriculture has always been the interface between natural resources and human activity. Today it holds the key to solving the two greatest challenges facing humanity: eradicating poverty, and maintaining the stable climatic corridor in which civilization can thrive.”

José Graziano da Silva, FAO
Director-General

Introduction

The year 2015 was marked by two critically important events for future generations: adoption of the 2030 Agenda for Sustainable Development¹ and conclusion of the Paris Climate Change Agreement.² These two decisions by the international community constitute a road map for “*the future we want*”³ and to achieve these goals will require concerted efforts by every-

one - governments, businesses, organizations, and individuals – all working together in concert across many different disciplines. This paper explores how international law can be used towards these goals and, by way of illustration, identifies legal tools and principles from a range of specializations within the discipline that can be called upon as instruments for change to reach Sustainable Development Goal #2 “*to end hunger, achieve food security and improved nutrition and promote sustainable agriculture.*”⁴

Through the identification of existing legal instruments, some of which perhaps are underutilized or not well-known, it is expected that better and more effective use of these tools will be encouraged and that those areas of the law where further work is needed will also become evident. While the emphasis herein is on *law* as a vehicle for

change, this is not to suggest than other efforts and actions are not equally important as the challenge that lies ahead - to feed a growing global population in the face of climate change - can only be described as one of the gravest facing the global community.

The discussion in Part I takes a global perspective to consider relevant international legal instruments, which is followed in Part II by a review of regional initiatives with a few examples of legal instruments from the Americas.

Part I. A Global Perspective

1. The Global Goals

The Sustainable Development Goals [SDGs] are a set of 17 goals that constitute the core of the 2030 Agenda for Sustainable Development [Agenda 2030] adopted by the United Nations [UN] General Assembly in 2015.⁵ The SDGs are “integrated and indivisible”, “balance the three dimensions of sustainable development” and outline “action over the next 15 years in areas of critical importance for humanity and the planet.”⁶

Also referred to collectively as “*The Global Goals*”, for ease of reference and communication, each SDG has been encapsulated with two to four words and an iconic visual image.⁷ Each SDG has a set of associated targets for a total of 169 targets; each target has between one to three indicators for a total of 304 indicators.⁸ While recognizing that each State has primary responsibility for its own economic and social development, States have been encouraged to establish “*practical ambitious national responses*” for implementation that build on existing national development strategies.⁹

To encourage implementation and track progress, a framework for follow-up and review has been outlined that is operational at global, regional and national levels.¹⁰ To facilitate that follow-up and review process, the aforementioned *global* indicators are to be complemented by indicators at regional and national levels.¹¹ Also noteworthy in the context of this paper is the recognition that “*regional and sub-regional frameworks can facilitate the effective translation of sustainable development policies into action at the national level.*”¹²



The SDGs came into effect on January 1st, 2016.¹³ They are the successor to and build upon the Millennium Development Goals [MDGs]¹⁴ that were in place over the 2000-2015 period but with at least two important differences:

- unlike the MDGs, the SDGs are *universal* global goals that apply to developed and developing countries alike; they call for action by all states “*for the full benefit of all, for today’s generation and for future generations*” and thus are inclusive of everyone.¹⁵
- the SDGs specifically include recognition of the role - and the rule - of law. SDG#16, encapsulated as “Peace, Justice and Strong Institutions”, seeks to promote peaceful and inclusive societies, to provide access to justice for all, and to build effective, accountable and inclusive institutions.¹⁶ More specifically,

one of its targets is to “*promote the rule of law at the national and international levels and ensure equal access to justice for all.*”¹⁷ Thus, rule of law is in and of itself a goal of Agenda 2030 and at the same time serves as an instrument in the achievement of The Global Goals, as will be illustrated in this paper.

While recognizing that the SDGs are *integrated and indivisible* and that, accordingly, efforts towards achieving the SDGs require an interdisciplinary and holistic approach, this paper will focus on the second of these goals.

2. SDG #2 – Food Security and Sustainable Agriculture

SDG #2 seeks to “*end hunger, achieve food security and improved nutrition and promote sustainable agriculture.*”¹⁸ This envisions resolving a negative or undesirable

situation (i.e., “*the problem*”) in favor of a positive or desired outcome (i.e., “*the goal*”). Each of the terms used in the description of SDG#2 requires further examination to fully understand *the problem* to be addressed and *the goal* to be achieved, to appreciate the relevance of the associated targets and indicators, and thereby to better identify appropriate legal instruments for change.

2.1 “End Hunger...”

The *problem* is that millions of people in the world continue to go hungry. Not only does this affront moral consciousness, hunger contributes to political instability and conflict, erodes human potential and impedes economic development.¹⁹ Hunger encompasses both undernourishment and malnutrition. *Undernourishment* is described as insufficient dietary energy consumption.²⁰ It is estimated that one out of nine people in the world are undernourished (821 million).²¹ The first of the targets associated with SDG#2 addresses this specifically, as follows:²²

Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

The Prevalence of Undernutrition [PoU], which estimates the *proportion* of those undernourished within a population, indicates that after a prolonged period of decline, the global rate has begun to rise again for the past two years and is estimated to have reached 10.9% in 2017.²³

To complement information provided by the PoU, the Food Insecurity Experience Scale [FIES] measures the *severity* of the food insecurity situation in different cultural, linguistic and development contexts.²⁴ While the PoU primarily monitors hunger, the FIES monitors the proportion of the population facing serious constraints on their ability to obtain safe, nutritious and sufficient food.²⁵ Based on the FIES indicator, the prevalence of severe food insecurity has been increasing worldwide over the past three years, with the global rate at 10.2% for 2017.²⁶



These two indicators have been specified as the means to evaluate and monitor progress towards achievement of Target 2.1; indicator 2.1.1 tracks the PoU and indicator 2.1.2 tracks the FIES.²⁷

Hunger also comprises *malnutrition*, a condition caused by “*inadequate, unbalanced or excessive consumption of macronutrients.*”²⁸ Poor nutrition causes nearly half (45%) of deaths in children under five²⁹ and can lead to wasting or stunted growth.³⁰ The second of the targets associated with SDG#2 addresses this specifically, as follows:³¹

Target 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

“The problem is that millions of people in the world continue to go hungry. Not only does this affront moral consciousness, hunger contributes to political instability and conflict, erodes human potential and impedes economic development.”

As of 2017, although the proportion of children under five who are stunted continues to decline, the global rate is still high at 22.2% (one in five); the global rate of children suffering from wasting is at 7.5%.³²

These two indicators, prevalence of stunting among children under 5 and prevalence of malnutrition among children under 5, by type (wasting and overweight), have

been specified as the means to evaluate and monitor progress towards achievement of those aspects of Target 2.2.³³

While rates for hunger and food insecurity have recently started to rise again after a long downward trend, rates for adult obesity have been increasing at an accelerated pace during the last decade, with one out of eight adults now considered obese.³⁴ Although childhood stunting and wasting persist, overweight children are also a concern.³⁵ Hunger and obesity can be observed, often in the same countries or the same individuals, to result in the “hunger-obesity paradox” or the “double burden” of malnutrition.³⁶

“Hunger and obesity can be observed, often in the same countries or the same individuals, to result in the “hunger-obesity paradox” or the “double burden” of malnutrition.”

In summary, food insecurity can lead to different manifestations of malnutrition, “to nutritional outcomes as disparate as stunting in children and obesity in adults.”³⁷ What this illustrates is that simply having access to food, one of the pillars of food security discussed below, is not enough. All four pillars are required as an *integrated and indivisible* platform to end the problem of hunger. To understand the goal of food security, improved nutrition and sustainable agriculture, these terms must also be considered.

2.2 “Achieve Food Security”

Food security is achieved “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.”³⁸ Despite variations, this definition appears to be the most widely accepted and appropriate in the current context.³⁹ The phrase “all people at all times” warrants some examination. First, it reflects the concept of sustainable development;⁴⁰ food security for those alive today must be achieved in such a way so as not to preclude

food security for future generations. Secondly, as food security can be considered from different perspectives – at household, national, regional or global levels – it also suggests, for example, that policies for achieving food security on a national basis should not jeopardize food security on a global basis.⁴¹

four pillars of food security⁴²

- availability
- access
- utilization
- stability

Again, although there are variations, this deconstruction appears to be the most widely accepted and appropriate in the current context.

2.2.1 Pillar 1 - Availability

The first pillar, *availability*, refers to the physical availability of food and concerns the supply-side through *production, distribution* and exchange or *trade*.⁴³

Production is affected by both *biophysical* and *socio-economic* aspects. Biophysical aspects include factors such as climate, geography, rainfall and temperature, as well as changes in these factors due to climate change; agricultural practices and

soil management; crop and livestock selection and management. Socio-economic aspects include land ownership and tenure; land use designation; natural resource access and allocation; and access to financial resources (e.g., credit and insurance).

Distribution encompasses the full spectrum of the supply chain and includes storage, transport, processing, packaging, marketing and management.⁴⁴ As most agricultural commodities are produced at distances far from consumers, extensive physical and economic infrastructure is required not only to transport products to the consumer but also to transport inputs to producers. Inefficient infrastructure increases the cost of food and production inputs; it also contributes to waste generated during the distribution process.⁴⁵

Trade or exchange refers to the international trading system, which includes its institutions and special rules that have been developed for agriculture. In theory, by means of comparative advantage, trade should lead to lower prices and expand the range of foods available to consumers, but in practice, achieving free and fair trade within a sustainable global food system has its challenges.

2.2.2. Pillar 2 - Access

The second pillar, *access*, encompasses *physical, economic* and *social* access to food. Physical or direct access is to food that has been produced by oneself or one's family; economic or indirect access to food is determined by disposable income, food prices and social support. Access also takes into consideration social aspects, such as allocation of food within the economic unit or household and whether access is adequate for all members given that needs of women, children or elderly can often be marginalized. Access incorporates the element of human dignity and requires food access must be in socially acceptable ways, in other words, without resorting to begging, stealing or scavenging.⁴⁶

"Access incorporates the element of human dignity and requires food access must be in socially acceptable ways, in other words, without resorting to begging, stealing or scavenging."

2.2.3 Pillar 3 - Utilization

The third pillar, *utilization*, refers to the use and metabolism of food by the individual, which encompasses both food safety and food choice. In order for food to be utilized by the individual, it must have been safely produced, distributed, packaged and stored; it must have been safely prepared, cooked and served; and it must have been chosen, ingested and metabolized. Utilization encompasses malnutrition because of nutrient deficiencies and the need for fortification of certain foods, as well as poor metabolism due to allergies or health conditions. It also considers factors of household or individual choice in diet and selection of culturally appropriate foods.⁴⁷

2.2.4 Pillar 4 - Stability

The fourth pillar, *stability*, results from outcomes of the first three pillars over time. Chronic food insecurity means long-term and persistent lack of adequate food whereas transitory food insecurity can occur periodically because of environmental factors (floods or droughts), social instability (war

or political upheaval) or changes in economic circumstances (unemployment).⁴⁸

2.2.5 Agency

Agency refers to the policies, processes and institutions that can be engaged to address these four pillars and serve towards the achievement of food security. As this overview has illustrated, food security is complex with numerous aspects that extend to sectors beyond agriculture to include, among others, those of health, education, transport and trade policy; therefore, to be effective, agency requires an overarching and cross-sectoral approach.

Notwithstanding the above and the *integrated and indivisible* nature of the SDGs, targets 2.1 and 2.2, which were outlined above, are more closely aligned with ending hunger and improving nutrition. The following targets are more closely associated with achieving food security.⁴⁹

Target 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.

Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

Target 2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

Target 2.A: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.

Target 2.B: Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.

Target 2.C: Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

Several of these targets relate to specific pillars of food security. For example, Target 2.3 is concerned largely with pillar 1, availability, and its component of production, with a specific focus on the socio-economic aspects of access to land, financial services and other resources.

While Target 2.4 is also concerned with production, the focus is on its biophysical aspects, although “*sustainable food production systems*” and “*resilient agricultural practices*” is language that clearly includes socio-economic aspects such as access to knowledge, skills and education. Similarly, Target 2.5 is also concerned with production and its biophysical aspects, with a specific focus on genetic diversity; however, the socio-economic aspect is clearly referenced in “*access to fair and equitable sharing of benefits*” and “*traditional knowledge*.” Target 2.A addresses investment for improved production and distribution (pillar 1, components 1 and 2); Target 2.B addresses international agricultural trade (pillar 1, component 3); Target 2.1 seeks to, *inter alia*, “*ensure access*,” which is the subject of pillar 2; Target 2.2 seeks to “*end all forms of malnutrition*,” which is encapsulated under pillar 3, utilization; Target 2.4 seeks to implement “*resilient*” practices and strengthen capacity for “*adaptation*,” which addresses pillar 4 and the need to improve stability in the face of natural disasters, especially climate change; and Target 2.C which seeks to reduce

“*extreme food price volatility*,” will improve stability in the face of politico-economic changes, also considered under pillar 4.

As progress towards any of these targets will contribute towards the realization of SDG#2, it cannot be over-emphasized that to realize these integrated and *indivisible global* goals requires an interdisciplinary and holistic approach.

2.3 “Achieve Improved Nutrition”

Improved nutrition is achieved by addressing malnutrition. This aspect of the goal to end hunger is the focus of Target 2.2, in particular, and is also considered under the pillar of utilization; as such, it has been discussed already above.⁵⁰

2.4 “Promote Sustainable Agriculture”

Sustainable agriculture is another term that is subject to various interpretations.⁵¹ As defined by the Food and Agriculture Organization of the United Nations [FAO], it is “*the management and conservation of the natural resource base, and the orientation of technological*

and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Sustainable agriculture conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable."⁵²

Moreover, sustainable agriculture contribute[s] to all four pillars of food security – availability, access, utilization and stability.⁵³ It should be noted that the term “agriculture” as used by the FAO is understood as all activities related not only to crop and livestock production, but also to forestry, fisheries and aquaculture.⁵⁴ To promote sustainable agriculture is the primary focus of Target 2.4, although other targets also contribute towards this end.

The discussion above in Section 2 has outlined *the problem* that SDG#2 seeks to address, namely, to end hunger, and *the goals* of food security, improved nutrition and sustainable agriculture together with the targets that have been established to help achieve these goals. Section 3 will review international legal instruments that could

be used to help meet these targets and serve towards the actualization of SDG#2.

3. International Law as an Instrument of Change

3.1 Contextual Background

As recognized in Agenda 2030, each state has primary responsibility for its own economic and social development.⁵⁵ This does raise the question of the appropriate role of governments in the actualization of these goals.

Most readers of this article will be among those who experience abundance and variety of foods; in many supermarkets in cities across the globe it is possible to find almost any food product at any time of year. This is possible by means of a complex global food system⁵⁶ that is orchestrated with a myriad of actors and daily transactions as encapsulated very well by the economist, Charles Wheelan, with his provocative question, “Who Feeds Paris?” He points out that there are millions of people living in Paris who need to eat three times a day and that yet, despite very little government involvement (so says

Wheelan), “...somehow the right amount of fresh tuna makes its way from a fishing fleet in the south pacific to a restaurant on the Rue de Rivoli. A neighborhood fruit vendor has exactly what his customers want every morning - from coffee to fresh papayas - even though those products may come from ten and fifteen different countries”.⁵⁷ Yet at the same time, it seems that this global food system fails others; it fails millions of people in other parts of the world and even other parts of Paris. It also results in huge amounts of waste; roughly one-third of food produced for human consumption is lost or wasted.⁵⁸ It is no wonder that calls for improvements to our global food system abound.⁵⁹

What can be done? And by whom? At times government intervention can even provoke or exacerbate a crisis.⁶⁰ During the two prior years that led to the international food crisis of 2008, world prices of wheat, coarse grains, rice and oilseed crops had all nearly doubled.⁶¹ The causes were said to be “complex” and “due to a combination of mutually reinforcing factors.”⁶² The case of rice as documented by Ewing-Chow is illustrative in this regard: As prices rose, India’s

decision to ban (non-basmati) rice exports was quickly followed with similar decisions by Vietnam and other major rice exporting countries; this forced prices upward and led to stockpiling and panic purchases by major importing countries such as the Philippines, which added more upward pressure; sensing a crisis, speculators took advantage.⁶³ As a result of these high commodity prices during 2007-2008, the FAO estimated that another 115 million people were pushed into hunger.⁶⁴

“Roughly one-third of food produced for human consumption is lost or wasted. It is no wonder that calls for improvements to our global food system abound.”

3.2 Various Actors and Various Roles

Such accounts prompt questions not only over the appropriate role of governments, but also other actors in the global food system. The international organization, like others, has numerous roles and

functions; as an example, the FAO is the specialized agency of the UN that “*leads international efforts to defeat hunger*.”⁶⁵ In its different configurations, its conference or council may function as *legislator* in the development of conventions and agreements approved and submitted to Member States;⁶⁶ its commissions and committees may advise on formulation and implementation of policy; its secretariat may serve as *administrator* with the functions to “*collect, analyze, interpret and disseminate information*”; as *regulator* in the review, monitoring and evaluation of decisions; as *technical expert* in its work to “*promote and recommend international action*” and to “*furnish technical assistance*.”⁶⁷

As these activities result in the generation of different outcomes - policies, reports, documents and studies, etc. - it is important to bear in mind the distinction between different roles and functions of various entities within an international organization, such as the FAO, and the differences in the results that ensue; a treaty clearly differs from a set of recommended technical guidelines. Nonetheless, as all

of these instruments are valuable and important in their appropriate context, a quick overview on the sources of international law is relevant here.

3.3 Sources of International Law and the Continuum from Soft to Hard Law

Although the sources of international law have been clearly enumerated,⁶⁸ in subsequent decades a growing plethora of instruments has emerged, known as *soft law*⁶⁹, along with the recognition of certain advantages of these alternatives over more traditional instruments.⁷⁰ While conventions and treaties are easy to identify, many international legal instruments fall somewhere along a continuum between hard and soft law and at times it can be difficult to assess the weight or significance of any one instrument, perhaps not until some years after its conclusion.

The following discussions will include references to a variety of instruments, many of which can be considered *soft law*. It is not the intention of this paper to analyze the binding nature, weight or value of

any of these instruments or where they may fall along the continuum. Neither is it the intention to conduct a comprehensive legal analysis of any one of the areas mentioned. Instead, the purpose is to identify relevant legal instruments that could be considered as useful tools or change instruments in the necessary work to meet each of the targets and achieve the actualization of SDG #2. The objective is that thereby this brief overview might serve as an outline for future work and in-depth analysis; it might also provide the methodology for a similar exercise that could be conducted at the regional or nation-state level or for other SDGs.

3.4 Change Instruments to “End Hunger” and “Improve Nutrition”

In the effort to end hunger, improve nutrition and achieve targets 2.1 and 2.2, one of the first areas to explore is the field of human rights.

The *right to food* has been recognized in numerous international law instruments.⁷¹ Its articulation has evolved over time from the initial concept in the 1948 Univer-

sal Declaration of Human Rights, which recognizes the right to food as part of the right to an adequate standard of living.⁷² It was further elaborated in the 1966 International Covenant on Economic, Social and Cultural Rights, which recognizes the right to adequate food and more specifically, the right to be free from hunger.⁷³ Various state obligations regarding this right were later outlined in 1999 in General Comment No. 12.⁷⁴ Subsequently, in 2008 under the Optional Protocol to the aforementioned Covenant, the right to food became justiciable.⁷⁵

In the course of the progressive development of this right, in 2000 the UN Commission on Human Rights [UNHRC] established the mandate of the Special Rapporteur on the Right to Food in order “*to respond fully to the necessity for an integrated and coordinated approach in the promotion and protection of the right to food*.”⁷⁶ As part of that progression, the right to food has been clarified as “*the right to feed oneself in dignity*.”⁷⁷

This has implications for States which, as a consequence, have the

obligation to protect this right and ensure the possibility of its execution. Subsequently, in 2002 at the World Food Summit at which the right to food was reaffirmed, states requested practical guidelines for its implementation.⁷⁸ This resulted in the adoption of Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security.⁷⁹ Although voluntary, the objective of these Guidelines is to provide practical guidance that covers “*the full range of actions to be considered by governments at the national level in order to build an enabling environment for people to feed themselves in dignity and to establish appropriate safety nets for those who are unable to do so.*”⁸⁰

In this way, the right to food and the evolution of its interpretation has led to the development of a pragmatic instrument to guide states in steps that will help reach targets 2.1 and 2.2 and lead towards the actualization of SDG #2.

3.5 Change Instruments to “Achieve Food Security”

3.5.1 Pillar 1 – Availability

3.5.1 a) Production

i) Demands

The current global population of almost 8 billion is projected to increase by approximately 30% to reach 9.8 billion by 2050.⁸¹ This will require at least an equivalent increase in food production; in fact, it is estimated that annual production of 8.4 billion tonnes (2014 figures) will have to increase to almost 13.5 billion tonnes by 2050,⁸² an increase of over 60%. These projected increases must take into account not only growing populations, but also changes in diet; for example, global meat consumption *per capita* is on the rise as it generally accompanies improved economic development⁸³ and growing urbanization.⁸⁴

During the first so-called “*green revolution*”,⁸⁵ efforts were heavily concentrated on increased food production; today, it is recognized that not only must production increase, it is equally important to consider *how* such increases will be achieved. This

demand for greater production from the Earth’s resource base will require “profound changes in our food and agricultural systems.”⁸⁶ Thus, the first pillar of food security, availability, and its component of production, is integrated with the goal “*to promote sustainable agriculture*” as is clearly recognized in Target 2.4 namely, to “ensure sustainable food production systems...that increase productivity and production...”

ii) Biophysical Components

As to the role of governments concerning production, one possible starting point is with the responsibility to protect human rights. Apart from obligations that result from the responsibility to protect all other rights, governments have the responsibility to protect the right to food and to feed oneself, which encompasses responsibilities so that this right can be realized.⁸⁷ These obligations extend to both the biophysical and socio-economic components of production.

Climate: Several of the biophysical components can only be protected by governments within the international community as a whole and by means of collective action. The most

obvious of these is climate. The actual and potential impacts of global warming on agricultural production and on food security are serious.⁸⁸ In the absence of climate change, most regions are projected to see a decline in the number of people at risk of hunger by 2050; however, under various projections of climate change, millions more would be pushed into hunger.⁸⁹ Yet at the same time, the agricultural sector also contributes towards global emissions.⁹⁰ The challenge that lies ahead will be to reduce emissions and simultaneously increase food production.⁹¹

“During the first so-called “green revolution”, efforts were heavily concentrated on increased food production; today, it is recognized that not only must production increase, it is equally important to consider how such increases will be achieved.”

Under the UN Framework Convention on Climate Change [UNFCCC],⁹² efforts to reduce global carbon emissions culminated in the

Paris Agreement⁹³ in 2015; its aim is to maintain the increase in global average temperatures to “*well below 2°C above preindustrial levels*” with efforts to limit the increase to 1.5°C.⁹⁴ In the wake of the most report from the Intergovernmental Panel on Climate Change [IPCC] on the seriousness of the present situation,⁹⁵ states agreed in 2018 on certain measures to bring the Paris Agreement into practice.⁹⁶

Oceans: Another example by which States have taken collective action to protect common resources is the UN Convention on the Law of the Sea [UNCLOS].⁹⁷ Among many issues addressed by UNCLOS are conservation and management of the living resources of the high seas and recognition of the principle of the common heritage of mankind.⁹⁸ Moreover, under the UNCLOS framework, other agreements have been concluded that relate, for example, to management of fish stocks.⁹⁹

Biodiversity: States have also taken collective action through the Convention on Biological Diversity¹⁰⁰ and its supplementary protocols¹⁰¹ to conserve biological diversity, ensure its sustainable use and provide for fair and equitable sharing of ben-

efits arising from genetic resources. At its most recent COP and under the current Strategic Plan for Biodiversity (2011- 2020),¹⁰² several of the decisions taken are directly relevant to food security.¹⁰³ Not only does this Convention contribute significantly towards achieving Target 2.4, it specifically addresses the requirements to maintain genetic diversity and share benefits as articulated in Target 2.5. Thus, it serves as an example of a binding international legal instrument with the objective to meet specific targets that have been identified as necessary for the actualization of SDG#2.

Natural Resources: Efforts to constrain climate change, protect the oceans and conserve biodiversity clearly require collective action and international cooperation. Yet other aspects of natural resource protection that might be presumed to fall within the purview of State sovereignty are also the subject of international instruments. In the early stages of international environmental law, certain key instruments,¹⁰⁴ recognized that every State had sovereignty over its own territory and implicitly, exclusive right over the natural resources therein.¹⁰⁵ However, as has been noted by Beyerlin,

*“since the early 1970s an increasing number of international agreements and soft law documents have been established which commit any State on whose territory natural resources are situated—‘custodial State’—to ensure that these resources will be sustained and preserved from extinction. Accordingly, today the permanent sovereignty of any custodial State over its natural resources seems to be operationally restricted; it might even be considered a trustee acting in the name of all States or, at least, on behalf of future generations.”*¹⁰⁶

Soils: An illustrative example in this regard concerns land and soil degradation, which is addressed in the UN Convention to Combat Desertification.¹⁰⁷ Under its auspices are efforts that promote cooperation to combat desertification and mitigate effects of drought. One of the vehicles for its implementation is the use of national action programs and similar initiatives at the regional and sub-regional levels. Another initiative in this field is the World Soil Charter, a soft law instrument used to promote sustainable soil management.¹⁰⁸ As noted in its preamble, *“careful soil management is one essential element of sustainable agriculture and also provides a valuable lever for*

*climate regulation and a pathway for safeguarding ecosystem services and biodiversity.”*¹⁰⁹ The Charter recognizes that although soil management decisions are typically made at the local level, maintenance of global soil resources is essential *“if humanity’s overarching need for food, water and energy security is to be met in accordance with the sovereign rights of each state over their natural resources.”*¹¹⁰ The Global Soil Partnership, which was instrumental in developing the new Charter, has also developed Voluntary Guidelines for Sustainable Soil Management,¹¹¹ another soft law instrument that provides technical and policy recommendations on how sustainable soil management can be achieved.

“Efforts to constrain climate change, protect the oceans and conserve biodiversity clearly require collective action and international cooperation. Yet other aspects of natural resource protection that might be presumed to fall within the purview of State sovereignty are also the subject of international instruments.”

Water: Freshwater is a critical resource for agricultural production - which requires neither too little nor too much - and that frequently must compete with demands from other sectors. Groundwater and surface waters from rivers and lakes often cross state boundaries. Three issues have been identified as being of particular concern in an international context: allocation of water supply between upper and lower riparian states; protection of water quality; and, access to freshwater resources.¹¹² The Convention on the Non-Navigational Uses of International Watercourses¹¹³ has been described as “*the essential basis*” for international law on freshwater, which reflects, in part, customary international law.¹¹⁴ Concerning groundwater, the following non-binding instruments are noteworthy: the 1986 Seoul Rules on International Groundwaters,¹¹⁵ 2004 Berlin Rules on Water Resources,¹¹⁶ and work by the International Law Commission that resulted in Draft Articles for an International Framework Convention on Transboundary Aquifers.¹¹⁷ Despite growing concerns over water scarcity, instruments aimed at protecting scarce water resources are still limited at the international

level, although there are numerous examples of bilateral agreements.¹¹⁸

Land: Land use planning can be considered both from the biophysical and socio-economic perspective. When land is considered as a natural resource for food production and in relation to competing uses, land use planning can be viewed as a mechanism as resource management for the protection of arable land.¹¹⁹ However, land use planning also can be considered as a tool for the allocation of uses and access among different user groups. Whether through the biophysical or socio-economic lens, land use planning must be considered in conjunction with urbanization.

Urbanization: The year 2008 marked the first time in human history that the world’s urban population outnumbered those living in rural areas.¹²⁰ Despite this trend towards urbanization and its associated consequences - namely, that ever increasing numbers of urban dwellers are dependent on fewer rural producers for their food source and that pressures on infrastructure are mounting to transport food in to cities (and waste out) - at the same time, significant amounts

of food are actually produced within cities.¹²¹ Urban and peri-urban agriculture [UPA], defined as the growing of plants and the raising of animals within and around cities, is practiced by about 800 million people.¹²² Although UPA can make an important contribution to household food security, especially in times of crisis or food shortages, in many countries UPA goes unrecognized in agricultural policies and urban planning. Better strategic planning to strengthen linkages between urban, peri-urban and rural areas would lead to more resilient food systems and improved food security.

Two initiatives in this regard are worth noting. One is the New Urban Agenda that was adopted at Habitat III in Ecuador and endorsed by the UN General Assembly.¹²³ Therein states have agreed to “*support urban agriculture and farming...[to contribute to] sustainability and food security*” and to “*promote the integration of food security and the nutritional needs of urban residents, particularly the urban poor, in urban and territorial planning, in order to end hunger and malnutrition.*”¹²⁴ The New Urban Agenda has been said “*to place food security*

and nutrition at the center of urban sustainable development.”¹²⁵

As these issues have become the concern of cities everywhere, a second initiative to be noted is the Milan Urban Food Policy Pact [MUFPP]; it was signed in 2015 by mayors from 180 cities around the world and is stated to represent more than 450 million inhabitants.¹²⁶ By means of this pact mayors have committed “*to work to develop sustainable food systems*” and “*to seek coherence between municipal food-related policies and programs and relevant subnational, national, regional and international policies and processes.*”¹²⁷ The pact incorporates frameworks for action and monitoring, which include 44 indicators to measure progress on a range of topics.¹²⁸ Although not an instrument of international law, its influence as a *bottom-up* initiative is without doubt.

Both the New Urban Agenda and the Milan Pact have been recognized by the Committee on World Food Security [CFS] as part of the “*unprecedented shift towards de-constructing the rural-urban dichotomy, and reframing the policy environment around a more holis-*

*tic approach to integrated policies” while at the same time noting that “there is still an urgent demand from governments and other stakeholders for tools and support to develop and implement their own policies.”*¹²⁹

Several of the topics discussed above, such as preservation of biodiversity, soil and water management and land use planning, have been considered largely from the perspective of their importance to the biophysical component of production. However, all of these topics also include an important socio-economic component as it is impossible to address, for example, freshwater quality without considerations over secure and equal access, capacity-building for conservation methods, and so on. The *integrated and indivisible* nature of the biophysical and socio-economic components of production is also evident from the language used in the relevant targets; target 2.3 requires “*secure and equal access*” to land and other resources, particularly for women and indigenous groups; target 2.4 requires practices “*that strengthen capacity*”; target 2.A calls for increased investment in “*research and extension ser-*

vices.” Nevertheless, other topics are more specific to the socio-economic component of production.

iii) Socio-economic Components

Tenure and Access: Turning to the first of these, an important achievement is the instrument entitled the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security [VGGT].¹³⁰ Considered the first globally negotiated document on the subject, the VGGT has been described as “*an unprecedented agreement on internationally recognized principles and practices on the governance of tenure*” and that “*put tenure firmly in the context of poverty reduction and food security.*”¹³¹ Along a similar line are the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication [SSF].¹³² Also important here are instruments that aim to improve access to credit and other resources, however, as these are of value not only to producers but also to others along the supply chain, these instruments will be considered in relation to distribution, below.

Sustainability: Each of the topics that has been considered above is important to agricultural production and while it has been possible to mention only a few key instruments in relation to each one, many contain provisions that promote sustainability and thereby contribute towards the larger goal to promote sustainable agriculture, whether by encouraging better soil management practices or more equitable and secure access to land.

However, promotion of sustainable agriculture can be significantly encouraged within an overarching and comprehensive policy framework. In that regard, the recently developed Common Vision has been said to represent “*the first step in accelerating the transition to sustainable agriculture.*”¹³³ Aimed at policy makers, it sets out five principles to balance the social, economic and environmental dimensions of sustainability for agriculture with examples of key policies and practices.¹³⁴ Although not a binding instrument, it can serve as a guide to states in their efforts towards reaching Target 2.4; moreover, it can also work effectively in combination with several of the instruments mentioned above that

address specific aspects of the biophysical and socio-economic components of production.

Impact Assessment: Agriculture is unique in many respects; only is it impacted *by* the environment, it also has impacts *on* the environment. As was noted above, agriculture production contributes significantly to greenhouse gas emissions that must be curtailed if reduced global carbon targets are to be achieved. In that regard, the FAO has produced guidelines that can be used by states to evaluate the potential environmental impact of proposed agriculture projects.¹³⁵ Again, while not binding, this can serve to promote policy tools that can encourage a shift towards more sustainable agricultural production.

3.5.1 b) Distribution

Under the pillar of availability, after production, the second aspect is *distribution*. This requires effective and efficient infrastructure – not only physical infrastructure for the movement of goods from farm gate to consumer – but also economic infrastructure to enable the flow of goods and services throughout

the supply chain. This, in turn, requires the necessary legal framework to facilitate transactions by means of various documents such as contracts of sale, bills of lading, letters of credit and so forth. An effective legal framework facilitates distribution at the national level and also enables international trade and exchange.¹³⁶

These economic functions that are enabled by the domestic legal framework can be significantly enhanced with greater harmony in the laws among different states. Given recognition of the value of such harmonization in laws that govern commercial transactions, certain international entities were established for that purpose. For example, the United Nations Commission on International Trade Law [UNCITRAL] was created for “*the promotion of the progressive harmonization and unification of the law of international trade.*”¹³⁷ Another two international organizations heavily involved in similar work are the International Institute for the Unification of Private Law [UNIDROIT] and the Hague Conference on Private International Law.¹³⁸ Many of the work products of these organizations are in

areas of work that include international sale of goods; international transport of goods; electronic commerce; procurement and infrastructure development; international payments; security interests and alternative dispute settlement.¹³⁹

While in the past the focus was largely on the production of conventions, in more recent years the trend has shifted towards development of model laws, legislative guides and other soft law instruments.

Model laws that encourage states to “modernize” national laws for consistency with international standards have the potential to significantly improve local conditions for economic development at the national scale, even apart from their contribution towards international competitiveness. An example of this is in the area of secured lending. The UNCITRAL Model Law on Secured Transactions¹⁴⁰ and an earlier regional instrument, the Model Inter-American Law on Secured Transactions,¹⁴¹ both have as their objective to improve access to credit, particularly for medium, small and micro- enterprises [MSMEs]. Although these instruments

do not target the agricultural sector per se, improved access to credit to those without the traditional forms of collateral accepted by most lenders (i.e., land or large equipment), has significant impact across many sectors, including agriculture. Moreover, within that sector, improved access to credit is vital not only for smallholders and others engaged in production, but also for MSMEs throughout the supply chain. Additional work is underway that builds upon these existing instruments and that would focus on the agricultural sector in particular, by improved credit opportunities through the use of warehouse receipts financing.¹⁴²

In relation to distribution, valuable contributions also have been made by the International Chamber of Commerce [ICC], an international non-governmental organization.¹⁴³ Although its work products do not have the status of legally binding instruments, they do facilitate international trade and commerce; a well-known example is the set of rules known as the “INCOTERMS”,¹⁴⁴ which can be incorporated by reference into international contracts and sometimes by other international instruments.¹⁴⁵

3.5.1 c) Trade and Exchange

Under the pillar of availability, in addition to production and distribution, consideration must also be given to the mechanisms that will enable *trade and exchange*. One important mechanism in that regard is accurate market information. As was illustrated above, it was misinformation that had contributed in large measure to the food crisis of 2008. In the aftermath, one response by G20 Ministers of Agriculture was to launch the Agriculture Market Information System [AMIS]. This inter-agency platform has been established to assess global food supplies (with a focus on wheat, maize, rice and soybeans), enhance food market transparency and coordinate policy action in times of uncertainty.¹⁴⁶ The expectation is that perhaps with more accurate and timely market information, a future calamity similar to that of 2006-2008 can be averted. As such, it is an important step towards meeting Target 2C, which encourages measures “to ensure the proper functioning of food commodity markets...and facilitate timely access to market information.”

Agriculture has and continues to be one of the most challenging and politically sensitive topics in international trade negotiations. Since establishment of the World Trade Organization [WTO] in 1995, agricultural trade has been governed by the Agreement on Agriculture¹⁴⁷ and other related agreements that form part of the WTO Agreement.¹⁴⁸ However, among the unresolved issues remained was the difficult subject of agriculture. Consequently, a subsequent set of negotiations, referred to as the Doha Round, took place from 2001 to 2015 to culminate in the “Nairobi Package.”¹⁴⁹ Among the outcomes, three in particular are significant for agriculture.

First, states made what has been described as “*an historic*” decision to abolish agricultural export subsidies.¹⁵⁰ Over the past 50 years, such subsidies had contributed significantly towards surplus production and low world prices of many agricultural commodities.¹⁵¹ The harmful effects of such subsidies has been acknowledged and specifically recognized in Target 2.B, which seeks to “*correct and prevent trade restrictions and distortions in world agricultural markets*” specif-

ically through the elimination of agricultural export subsidies and all export measures with equivalent effect. Thus, this specific outcome of the Doha Round is a major step towards reaching Target 2.B and the actualization of SDG#2.

Secondly, states have committed themselves towards finding a permanent solution on the issue of public stockholding for food security purposes.¹⁵² As was illustrated above with the case of rice, at times governments of developing countries make food purchases to ensure sufficiency of public stockholdings. While food security is a legitimate policy objective of such programs, this can be considered to distort trade when purchases are made at prices fixed by the government, known as “supported” or “administered” prices.

Thirdly, states have agreed on the use of the Special Safeguard Mechanism [SSM] by developing countries; they will be allowed a temporary increase in tariffs on agricultural products where there is a surge in imports or a price decline.¹⁵³ This has been proposed by some as a trade remedy tool to mitigate against price volatility

and price distortions; on the other hand, it could pose a risk to market access reforms and compromise binding tariff commitments.¹⁵⁴

As has been illustrated, under pillar 1, availability, and the component of trade, there is already in place a comprehensive set of international legal instruments and a framework that has evolved over the past 50 or more years. It comprises not only the legal and institutional framework of the WTO but also includes an extensive dispute resolution mechanism and a vast body of jurisprudence at international levels based on principles that are largely reinforced at regional and domestic levels.

But has it served as a change instrument? Many would argue that the existing legal framework for international trade as represented by the WTO is what has contributed towards the emergence of the current, and as some would describe, dysfunctional, global food system. While those who favor trade liberalization maintain that “*more trade*” is the way to end hunger, others are concerned over its impact on human rights and the right to food, rural communities, cultur-

al landscapes and the environment, among other aspects.¹⁵⁵ In recent years, these discussions have become increasingly polarized, with one view described as “the trade as opportunity” narrative that relies largely on neoclassical economics and the concept of comparative advantage and the other “*trade as threat*” narrative based on the multifunctional nature of agriculture in society.¹⁵⁶ Both narratives have their strengths and weaknesses.¹⁵⁷

In a recent report by the FAO, an effort is made to reduce the polarization between these views on the impacts of agricultural trade on food security.¹⁵⁸ It is pointed out that trade affects each of the four pillars of food security and that both positive and negative effects are possible.¹⁵⁹ The report concludes that “*trade itself is neither an inherent threat to nor a panacea for improved food security and nutrition but it poses challenges and risks that need to be considered in policy decision-making.*”¹⁶⁰

3.5.2 Pillar 2 – Access

The second pillar is *access*, which can be either direct and physical access to food that one has produced

oneself or economic access to food that is purchased. One means for ensuring access is through the right to food and the right to feed oneself, concepts that have been discussed already above in relation to the topics of hunger and improved nutrition. This is relevant to the achievement of Targets 2.1 and 2.2, specifically the former, which aims to “ensure access by all people” in particular the poor and vulnerable.

3.5.3 Pillar 3 – Utilization

The third pillar is *utilization* and as noted above, this concerns phytosanitary production and transport of the product throughout the supply chain; safe and hygienic preparation and storage of food; and, conditions that affect metabolism by the individual. It also encompasses food choice.

Phytosanitary standards, also mentioned here, can also be considered under the pillars of production and distribution, indicative once again of the *integrated and indivisible* nature of many of these issues. When standards are considered through the lens of international trade, the importance of striking a balance becomes evident: on the one hand,

each State is justified in its requirements that imported agricultural and food products meet certain standards to protect consumer health and safety, but on the other hand, such standards should not be unreasonably strict so as to constitute what would amount, in effect, to trade restrictions.

The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) helps to achieve this balance.¹⁶¹ As part of the WTO Agreement, it sets out basic rules for food safety and animal and plant health standards.¹⁶² States are required to use international standards where these exist and may use their own higher standards, but only on the basis of science using an approach that is consistent and not arbitrary.¹⁶³ Under the SPS Agreement, *Codex Alimentarius* is referenced as the relevant standard-setting document for food safety¹⁶⁴ while the International Plant Protection Convention [IPPC] is referenced for phytosanitary measures and standards for plants.¹⁶⁵

Much of the work of the World Health Organization [WHO] is also directly relevant to utilization,

particularly in relation to maternal and childhood nutrition. Of special relevance in the context of this discussion is the *WHO Global Nutrition Review* of state policies, strategies and plans relevant to nutrition, which includes findings that help track progress towards the targets on nutrition.¹⁶⁶ Its work on dietary guides is also relevant to food choices.

3.5.4 Pillar 4 – Stability

The fourth pillar, *stability*, results largely from stability across the first three pillars. Lack thereof can either be chronic and long-term or transitory, due to specific events such as environmental or social instability. In both situations, immediate needs must be addressed, but as the underlying causes vary, the tools to prevent reoccurrences or alleviate long-term insecurity must also be tailored accordingly.

To address chronic food insecurity, the CFS has endorsed a framework for action with the objective “to improve the food security and nutrition of populations affected by, or at risk of, protracted crises”;¹⁶⁷ this is to be achieved by building resilience and adaption to specific challenges and

addressing underlying causes.¹⁶⁸ It has noted that protracted crisis situations require special attention and that responses differ from those required in the short-term.¹⁶⁹

To address transitory food insecurity that can arise in times of crisis, of primary consideration is international humanitarian law. The *Geneva Conventions and their Additional Protocols*¹⁷⁰ comprise the core of this field. Accordingly, attacks are prohibited against resources “such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies” and the civilian population cannot be left “with such inadequate food or water as to cause its starvation.”¹⁷¹ Moreover, occupying powers and third party States are obligated to allow entry and passage of relief goods for civilian populations.¹⁷²

Another instrument of relevance is the *Food Assistance Convention* with the objectives “to save lives, reduce hunger, improve food security, and improve the nutritional status of the most vulnerable populations.”¹⁷³ It provides a mechanism by which states agree to make a minimum annual commitment of food as-

sistance in response to emergency food situations. Under new provisions introduced in 2013, commitments are expressed in monetary value (as opposed to metric wheat tonne equivalent) and eligible activities and products include cash and vouchers rather than the traditional focus on in-kind food aid for direct consumption.¹⁷⁴ This change may help to address criticisms that food assistance delivered in kind merely *dumps* surplus from donor states and displaces local production with negative consequences for the development of local food systems.¹⁷⁵

The CFS, originally established as a committee of the FAO, was reformed in 2009 “to be the most inclusive international and inter-governmental platform for all stakeholders to work together in a coordinated way to ensure food security and nutrition for all.”¹⁷⁶ Accordingly, it now includes in addition to member states, broad representation from a range of participants and observers.¹⁷⁷ Several of the instruments that have been endorsed by the CFS have been discussed above.

At the national level, states have been encouraged by the CFS “to develop stable and long-term national food security and nutrition strategies...”¹⁷⁸ These strategies can and should address all four pillars of food security. Whether at the global, national¹⁷⁹ or household¹⁸⁰ level, numerous international legal instruments contribute towards the achievement of food security.

3.6 Change Instruments to Promote Sustainable Agriculture

One of the actors that has been missing so far in this discussion, as the astute reader might have noted, is *the private sector*. Defined

broadly as the sector of the economy that is not run by government, it comprises individuals, MSMEs and large commercial enterprises. Clearly the private sector is vital in agricultural and food production and must be engaged in the transitions that are needed for the actualization of SDG #2. But with such diversity of characters and no single role, perhaps it is not possible to identify any overarching principles.

Nonetheless, considerable debate surrounds the role of multinational agribusiness. In particular, concerns have been raised over the degree of control that is held by a relatively small number of companies.¹⁸¹ For example, only four agribusiness companies account for up to 90% of global grain trade.¹⁸² Not only are companies within the agribusiness sector highly consolidated, there is also considerable vertical integration along the supply-chain. For example, the main six global companies involved in the proprietary seed industry are related to or owned by the largest agrichemical corporations.¹⁸³ Similar examples of market domination and concentration can be found in other areas of the agribusiness sec-

tor, such as in the production of farm machinery, and in related sectors of shipping and transport, in commodity trading, and in distribution and retail.¹⁸⁴ Recent events indicate a trend towards even greater consolidation.¹⁸⁵

“Concerns have been raised over the degree of control that is held by a relatively small number of companies. For example, only four agribusiness companies account for up to 90% of global grain trade. Not only are companies within the agribusiness sector highly consolidated, there is also considerable vertical integration along the supply-chain.”

This raises concerns not only over the control of the production of a large portion of the world’s main food crops in the hands of a few, but also the associated direct or indirect control¹⁸⁶ over production *methods*, such as those that are typically heavily dependent on inputs from non-renewable resources and high levels of mechanization - so-

“To develop stable and long-term national food security and nutrition strategies.”

3.5.5 Agency

Food security and its four pillars can be considered at the international, national or household level; similarly, for the entities responsible for relevant policy and programming. At the international level, the FAO is the specialized UN agency that leads efforts to end hunger and achieve food security.

called *industrial agriculture* - considered by many to be unsustainable. There are certain factors in these production methods that act as *lock-ins* and that make the shift to more sustainable agriculture an even greater challenge.¹⁸⁷ However, coinciding with this trend is the reality of smallholder agriculture; an estimated 500 million smallholder farms in the developing world continue to support almost 2 billion people.¹⁸⁸

goal of SDG#2 “to promote sustainable agriculture.” By contrast, others maintain that it is only through *big ag* and its methods, which led to the large increases in agricultural production during the last century, that the needs of growing populations can be met.¹⁸⁹

Regardless of one’s point of view, it must be acknowledged that there is little in the way of international regulation of corporate concentration. At the national level, competition and anti-trust laws in several States have been in place for decades.¹⁹⁰ Their impacts in the agribusiness sector have been minimal; it is hard to argue against the evidence that *big ag* has provided consumers with more food at lower prices.¹⁹¹

Moreover, application of domestic laws to transnational situations has its own set of challenges, not the least of which is extraterritorial reach. Efforts towards an international solution in the 1970s and 80s resulted in non-binding principles on restrictive business practices.¹⁹² In the 1990s, initiatives were undertaken to develop a *universal* instrument;¹⁹³ and although that did not materialize,¹⁹⁴ calls have been

made once again to consider a possible treaty on competition.¹⁹⁵ The current trend, however, appears to be away from seeking harmonization, towards coordination and cooperation among competition authorities.¹⁹⁶

In the meantime, appeals are made to corporate social responsibility through available tools, such as private and public codes of conduct. At the global level, the *Guiding Principles on Business and Human Rights*, known as the “*Ruggie Principles*”¹⁹⁷ recognize that not only do states have existing obligations to respect, protect and fulfill human rights and fundamental freedoms, business enterprises are required to comply with the law and to respect human rights.¹⁹⁸ This has inspired several authors to explore these principles in relation to the right to food.¹⁹⁹

Of direct application to agri-business are the *Principles for Responsible Investment in Agriculture and Food Systems*.²⁰⁰ The objective of this instrument is to promote responsible investment so as to contribute to food security and nutrition and thereby support the

progressive realization of the right to adequate food in the context of national food security.²⁰¹

Other instruments have been developed for the agri-business sector with an even more specific focus. For example, the *Legal Guide on Contract Farming*, is intended “to promote more stable and balanced relationships and to assist parties in designing and implementing sound contracts, thereby generally contributing to building a conducive environment for contract farming”.²⁰² Although not intended to serve as a model, it provides information for policymakers on regulatory and legislative provisions that concern agricultural production contracts and can serve as a reference by “reflecting a minimum internationally accepted standard of practice in contract dealing.”²⁰³

Initiatives such as this also serve as reminders of the need to engage the private sector more effectively in the actualization of SDG #2. While public-private partnerships (PPPs) are commonly used in infrastructure construction projects, their use in the agribusiness sector is relatively new.²⁰⁴ Known as *agri-PPPs*, these arrangements offer a

“Regardless of one’s point of view, it must be acknowledged that there is little in the way of international regulation of corporate concentration.”

There is also concern over whether such trends towards greater market domination can coincide with Target 2.3, which seeks to expand secure and equal access to land and other resources to more participants; with Target 2.4, which seeks to ensure sustainable food production systems; with Target 2.5, which seeks to maintain genetic diversity and equitable sharing of its benefits; and with the overarching

mechanism to leverage knowledge from the private sector together with much-needed financing “to help modernize the agriculture sector and deliver multiple benefits that can contribute towards sustainable agricultural development that is inclusive of smallholder farmers.”²⁰⁵

“While public-private partnerships (PPPs) are commonly used in infrastructure construction projects, their use in the agribusiness sector is relatively new. Known as agri-PPPs, these arrangements offer a mechanism to leverage knowledge from the private sector together with much-needed financing.”

Key in the efforts to promote sustainable agriculture is an overarching and comprehensive policy framework. In this regard, the Common Vision discussed above can serve as an important tool for policy makers. It offers five principles together with illustrative policies and practices that can form the

basis for reaching Target 2.4 and an effective transition towards sustainable agriculture.

3.8 Over-Archiving Instruments for Change

In addition to the Common Vision policy guide, the Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security is another important policy tool.²⁰⁶ These two instruments together can be very helpful guides to states in the formulation of policies needed to reach the targets for SDG #2 and the ultimate goal to end hunger and achieve food security. With these guides for the overarching framework, there are many other international legal instruments, only a few of which have been mentioned above, that can be used towards these goals.

Part II. A Regional Perspective from the Americas

With Part I as a backdrop, the second part of this paper will consider efforts within the Inter-American system to end hunger and achieve

food security. In particular, two subject areas will be reviewed for examples of regional legal instruments for the actualization of SDG #2.

4. The Organization of American States

The SDGs were endorsed by the Organization of American States [OAS] at the General Assembly in 2016 at which Member States agreed to implement *Agenda 2030* in the Americas and reaffirmed their commitment to “eradicate hunger and poverty in all its forms and dimensions...”²⁰⁷ While recognizing the UN system as key in the implementation of the SDGs, OAS Member States celebrated the adoption of the *Inter-American Program for Sustainable Development [PIDS]*,²⁰⁸ which establishes strategic actions for the OAS General Secretariat “consistent with, and complementary to, those of other relevant regional and multilateral entities, particularly the United Nations.”²⁰⁹ This must also be considered within the context of other initiatives at the OAS and the Summit of the Americas process that had pre-dated the SDGs.

For example, food security and sovereignty were the central focus of the OAS General Assembly in 2012.²¹⁰ On that occasion, Member States agreed “to promote agricultural development with the goal of strengthening food security in the context of national, regional, and international development policies, taking into account the importance of modernization and technological innovation for increasing output and productivity as well as synergies between sustainable agriculture, conservation and sustainable use of biodiversity, food security, nutrition, and development policies, among others.”²¹¹ They also confirmed their commitment “to the goal of eradicating hunger and malnutrition in the Americas” and “their readiness to develop or strengthen comprehensive national strategies on food and nutrition security, as each member state deems appropriate.”²¹²

Member States also instructed the OAS General Secretariat to strengthen coordination with the *Inter-American Institute for Cooperation in Agriculture (IICA)*, the specialized agency of the Inter-American System that supports efforts of Member States to achieve agricultural development and ru-

ral well-being through international technical cooperation.²¹³ In advance of the session, IICA had prepared a report on the situation of food security in the Americas that provided an overview of food production and trade in the Hemisphere²¹⁴ and offered specific strategies to address the challenges that had been identified.²¹⁵

During that same assembly, it was acknowledged “*that excessive commodity price volatility has consequences for food security and sustainable development*”; Member States were invited to take active measures to reduce such volatility and agencies within the inter-American system were asked “*to contribute, within their areas of competence*” to such efforts.²¹⁶ Part of what had prompted the focus of the General Assembly on food security was the food crisis of 2008 described above in Part I. While recognizing that the extreme price increases for basic staples such as wheat, rice and corn were due to a number of *external* factors outside the control of any one national government, it was also noted that “*malnutrition and chronic hunger in the Americas persist due to the convergence of a variety of problems.*”²¹⁷

5. Summits of the Americas

Food security has also been included among the topics considered within the Summit of the Americas process. At the first Summit in 1994, regional heads of state and governments committed to a *Plan of Action* based on four pillars: enhancing democracy, promoting development, achieving economic integration and ensuring sustainable development.²¹⁸

In the Declaration made two years later at the *Special Summit for Sustainable Development*, in order to intensify efforts to reduce poverty and marginalization, regional heads required measures and programs in the aforementioned *Plan of Action* that would promote “*adequate levels of nutrition [and] a greater degree of food security.*”²¹⁹ They also adopted a *Plan of Action for the Sustainable Development of the Americas* that comprises 65 initiatives, a significant number of which are devoted to sustainable agriculture and forests.²²⁰ While recognizing that the primary responsibility for implementation falls to governments, the OAS was entrusted with the role of coordinating follow-up.²²¹ Entities of the UN system and of the Inter-American

system were requested to develop adequate mechanisms to collaborate and coordinate with the OAS in their respective areas of action and mandates to support national, regional and hemispheric efforts towards sustainable development.²²² The Plan also states that governments would “cooperate in the establishment of a hemispheric network of officials and experts in environmental law, enforcement, and compliance in coordination with the OAS to facilitate the sharing of knowledge and experiences and to provide a focal point, as appropriate, for carrying out cooperative efforts to strengthen laws, regulations, and implementation, as well as training in these areas for those states seeking such assistance, **taking into account the studies prepared by the Inter-American Juridical Committee**” [emphasis added].²²³

At the *Third Summit of the Americas*, regional heads committed themselves “*to promote programs for the improvement of agriculture and rural life and agrobusiness as an essential contribution to poverty reduction and integral development*”²²⁴ and called upon their Ministers of Agriculture to promote joint actions among stakeholders of the ag-

ricultural sector for that purpose.²²⁵ This resulted in the *Declaration of Bavaro for the Improvement of Agriculture and Rural Life in the Americas*²²⁶ and the subsequent *AGRO Plan of Action (2003-2015)*.²²⁷

“While recognizing that the primary responsibility for implementation falls to governments, the OAS was entrusted with the role of coordinating follow-up. Entities of the UN system and of the Inter-American system were requested to develop adequate mechanisms to collaborate and coordinate with the OAS in their respective areas of action and mandates to support national, regional and hemispheric efforts.”

6. Specialized Regional Agencies

Political support for these initiatives continued in several of the Summits²²⁸ and Ministerial meetings that followed.²²⁹ Many of the

statements make reference to follow-up by IICA, in collaboration with other regional entities. IICA is a specialized agency of the Inter-American system in accordance with the Charter of the OAS.²³⁰ Initially established as an agricultural research and training center, its scope has broadened “to encourage, promote and support the efforts of the Member States to achieve their agricultural development and rural welfare.”²³¹ It is engaged in many of the activities that support achievement of food security for the actualization of SDG #2.²³²

However, in regards to international (or regional) legal instruments, other entities within the inter-American system must be considered.

7. Change Instruments at the Regional Level

As illustrated in Part I, food security is complex, involves sectors beyond agriculture and raises a vast array of issues. Accordingly, there are a number of international legal instruments that contribute towards the actualization of SDG #2 by addressing one or more of these issues either directly or indirectly.

The UNCITRAL and OAS model laws on secured transactions were mentioned above as examples of legal instruments that have as their primary goal promotion of access to credit; this will, of course, also contribute towards improving access in the agricultural sector. In one of the two examples in the discussion that follows, the primary goal is the resolution of an issue that will directly contribute towards the actualization of SDG#2.

There are two examples to be addressed in the regional context. One is in relation to the goal to end hunger and the right to food; the second is in relation to achieving food security by strengthening pillar 1, production, by improving agricultural financing.

7.1 Inter-American Human Rights System and the Right to Food

The *American Declaration on the Rights and Duties of Man* states in Article XI that “Every person has the right to the preservation of his health through sanitary and social measures relating to food, clothing, housing and medical care, to the extent permitted by public and community resources.”²³³

In the *American Convention on Human Rights*, with respect to economic, social and cultural rights, states parties agreed to adopt measures, “both internally and through international cooperation... with a view to achieving progressively, by legislation or other appropriate means, the full realization of [such rights as set forth in the OAS Charter]” and it also provides for additional protocols “with a view to gradually including other rights and freedoms within its system of protection.”²³⁴ Such an instrument was subsequently adopted; the *Protocol of San Salvador* in its preamble acknowledges that aforementioned provision “for the purpose of gradually incorporating other rights” and explicitly enshrines the right to food. Article 12 states that “Everyone has the right to adequate nutrition which guarantees the possibility to enjoy the highest level of physical, emotional and intellectual development.”²³⁵ Additional provisions for children and elderly persons include their special needs in relation to food in articles 15 and 17, respectively.

Oversight of the promotion and protection of human rights in the region falls within the responsibility of the *Inter-American Commission on Human Rights* (IACHR)²³⁶

and the *Inter-American Court of Human Rights* (IACtHR).²³⁷ Recently, the Commission appointed its first rapporteur on economic, social, cultural and environmental rights.²³⁸

“Oversight of the promotion and protection of human rights in the region falls within the responsibility of the Inter-American Commission on Human Rights (IACHR) and the Inter-American Court of Human Rights (IACtHR). Recently, the Commission appointed its first rapporteur on economic, social, cultural and environmental rights.”

“Review of the jurisprudence indicates that the right to food has been considered before both the Commission and the Court.”

Review of the jurisprudence indicates that the right to food has been considered before both the

Commission and the Court. In *Yanomani v. Brazil*, the Commission found that, *inter alia*, the right to the preservation of health and well-being under Article XI of the *Declaration*, had been violated.²³⁹ In *Enxet-Lamenxay and Kayleyp-hapopyet (Riachito)*, the Commission authorized a settlement by which the indigenous communities were able to reclaim their ancestral lands and to obtain necessary assistance including foodstuffs until they could return.²⁴⁰ Similarly, in *Sawhoyamaxa Indigenous Community c. Paraguay*, the Court found that as a result of the government's refusal to recognize ancestral lands, community members had extremely limited access to food and required, among other measures, distribution of adequate food until such time as community members had full access to their lands.²⁴¹ The view has been expressed that, in the Americas, "*jurisprudence has had a positive impact on the realization of the right to food*, in particular for indigenous populations."²⁴² What these decisions also confirm is the interpretation of the right to food as the right to feed oneself, and accordingly, recognition of the *responsibility* on the part of govern-

ments to protect the means so that the right can be actualized, such as through access to lands.

The right to food has also been considered by various domestic courts in the region.²⁴³ Although not within the scope of this paper, an aspect for future consideration would be the influence of regional (and international) jurisprudence on judicial reasoning of domestic tribunals, and vice versa.

7.2 Inter-American Juridical Committee - Improving Agricultural Finance

As was noted above, the *Plan of Action for Sustainable Development* stipulated that in the cooperative efforts taken by governments to strengthen laws and regulations, they would take into account studies prepared by the *Inter-American Juridical Committee (IAJC)*.²⁴⁴ Under the *Charter of the OAS*, the IAJC serves the organization as the legal advisory body on juridical matters and, in addition to responding to mandates from the political organs, it may, on its own initiative, undertake such studies as it considers advisable.²⁴⁵ The following is one such example.

In 2012, out of concern over lack of available credit in the agricultural sector, the IAJC included onto its agenda the topic of electronic warehouse receipts for agricultural products.²⁴⁶ The issue had been studied and presented by a member who was subsequently appointed rapporteur for the topic. His report stated that "in many countries, the agricultural sector continues to be dominated by small-scale operations in which a majority of producers cultivate only a few hectares and lack ready access to financial credit. In such situations, producers are often forced to sell their fruits, vegetables and other crops immediately after harvest in order to get money to pay expenses and to buy supplies for the next planting."²⁴⁷ As a result, the flood of sales immediately after harvest can saturate the market and lead to low prices. However, many farmers have no choice other than to accept these low prices; viewed as high risk by commercial banks, most cannot get financing.

"In many countries, the agricultural sector continues to be dominated by small-scale operations in which a majority of producers cultivate only a few hectares and lack ready access to financial credit. In such situations, producers are often forced to sell their fruits, vegetables and other crops immediately after harvest in order to get money to pay expenses and to buy supplies for the next planting."

Improving the performance of the agricultural sector is critical for economic growth and poverty reduction in many economies. As explained by the rapporteur, "*a system is needed that enables farmers to store some of their grain after harvest and to use it as collateral for loans based on the market value of their commodities, thus generating funds to cover immediate expenses and to help prepare for the next harvest.*"²⁴⁸ Assured of financing, farmers are in a better position to wait for market prices to improve, to obtain higher average prices and receive increased annual

incomes. Warehouse receipt financing is a form of asset-based lending that allows farmers, producers, and traders of agricultural commodities to obtain bank loans by pledging their warehouse receipts issued against commodities deposited in warehouses. These receipts are issued by accredited warehouses to farmers and traders and serve to acknowledge the quantity and quality of the produce deposited with the warehouses. On the basis of these receipts, the farmers can raise money from banks willing to accept the receipts as collateral.²⁴⁹

Against that backdrop, several studies were undertaken by the rapporteur with assistance from the technical secretariat.²⁵⁰ In 2016, the IAJC approved the final report and recommended adoption of the accompanying *Draft Principles for Electronic Warehouse Receipts*.²⁵¹ This report was sent to the Permanent Council and considered by its Committee on Political and Juridical Affairs.²⁵² After taking into account observations of OAS Member States, in 2018 the General Assembly requested the IAJC to update the report on principles for electronic warehouse receipts for agricultural products “in light of new developments since those principles were adopted, in connection with access to credit in the agricultural sector.”²⁵³ At its most recent regular session, the IAJC appointed a new rapporteur (in order to further its work on this topic in fulfillment of the OAS General Assembly mandate.²⁵⁴

Although SDG #2 has not been referenced in this work of the IAJC, the development of principles or a similar instrument on warehouse receipts financing would be a significant regional legal instrument to meet Target 2.3 and for the actualization of SDG#2.

Availability of warehouse receipts financing specifically works towards the strengthening of pillar 1, production, and its socio-economic component by means of improved access to credit. As will be recalled from Part 1, Target 2.3 seeks to “double the agricultural productivity and incomes of small-scale food producers...including [inter alia] through financial services...”

The importance of warehouse receipts financing and the need for legislative support has been recognized by academics,²⁵⁵ by other international organizations whose earlier efforts were taken into consideration in the development of the OAS instrument,²⁵⁶ and is evident by the fact that other entities such as UNCITRAL are also currently considering work on the topic.²⁵⁷

Part III. Reflections

This overview has considered various international legal instruments that can be used towards the actualization of SDG #2. Examples have been drawn from different areas of the law, on topics ranging in diversity from soil management to ware-

house receipts financing. In some areas, such as international trade law, a substantial legal framework is already in place, although under scrutiny and subject to reforms; in other areas, such as competition, there is little or no international regulation.

“This overview has considered various international legal instruments that can be used towards the actualization of SDG #2. Examples have been drawn from different areas of the law.”

These examples have included *hard law*, such as those that affirm the right to food, and many *soft law* instruments, such as guidelines that have been developed to help states in the progressive realization of this right, as well as instruments developed by NGOs, such as the ICC INCOTERMS that can by reference gain the force of binding legal instruments.

They have also included instruments adopted by an unconventional forum, such as the Milan

“Warehouse receipt financing is a form of asset-based lending that allows farmers, producers, and traders of agricultural commodities to obtain bank loans by pledging their warehouse receipts issued against commodities deposited in warehouses. These receipts are issued by accredited warehouses to farmers and traders and serve to acknowledge the quantity and quality of the produce deposited with the warehouses.”

Pact signed by a group of mayors but that nonetheless has the support of many voices as well as established, conventional fora, such as the CFS, that expands participation to become more inclusive and in the process, to accept change in the nature of its instruments.

These examples have illustrated not only the range in the topics addressed and in the types of instruments available, but also advances and changes in the process by which international legal instruments are developed.

This overview has also demonstrated that while there are a number of instruments in place already, there is still more work to be done and several gaps to be filled, and has shown how efforts at the *regional* level can serve to reinforce and support the work and initiatives at the international level. Examples of this include the endorsement of the SDGs, the partnerships of specialized agencies that work in collaboration, the work products that build upon and endorse each other, such as in the area of access to credit or warehouse receipts finance.

At the level of the nation State, examples have shown that there is work to be done by states to bring laws into conformity with international standards, such as *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*.

For the individual lawyer or student seeking to use law as an instrument for change, sometimes the challenges are so daunting they seem insurmountable. At such times, a process such as this to outline the connections between the instruments, the targets and the ultimate goal can help to bring a new perspective.

With a fresh look at the bigger picture, one may find that indeed, much has already been accomplished. At other times, the one area of the law in which one is specialized may seem disconnected from or irrelevant to the grand vision statements and language of the SDGs writ large. At such times too, it may be helpful to see how one's area of the law can contribute towards and supplement the work being achieved in other areas, perhaps all with the same objective

– SDG #2. Sometimes we may be so focused on the trees that we lose sight of the forest. And yet, in whatever field of law we may find ourselves to be working, we each have a role in the important goal to end hunger, achieve food security and improved nutrition and promote sustainable agriculture.

“Law is a way to change things.”

Source unknown

“In whatever field of law we may find ourselves to be working, we each have a role in the important goal to end hunger, achieve food security and improved nutrition and promote sustainable agriculture.”

¹ United Nations General Assembly [UNGA]. *Transforming our world: the 2030 Agenda for Sustainable Development*. Doc A/RES/70/1. September 25, 2015. [Agenda 2030]

² United Nations Framework Convention on Climate Change [UNFCCC] COP Decision 1/CP.21, Annex, UN Doc FCCC/CP/2015/10/Add.1. [Paris Agreement]

³ UNGA. *The future we want*. UN Doc A/RES/66/288. July 27, 2012.

⁴ Agenda 2030, *supra* note 1, Goal 2 at page 14.

⁵ *Id.*, paras. 18 and 21.

⁶ *Id.*, perambulatory paras. 3 and 4.

⁷ For example, SDG #2 is encapsulated as “Zero Hunger” accompanied by a steaming dish. UN. *Sustainable Development Goals: Knowledge Platform*. <https://sustainabledevelopment.un.org/?menu=1300> (accessed 01/10/2019).

⁸ *Id.*

⁹ Agenda 2030, *supra* note 1, paras. 78 and 79.

¹⁰ *Id.*, paras. 47 and 74.

¹¹ *Id.*, para. 75.

¹² *Id.*, para. 21.

¹³ *Id.*

¹⁴ *Id.*, para 16.

¹⁵ *Id.*, paras. 5 and 18.

¹⁶ *Id.*, Goal 16, at page 25.

¹⁷ *Id.*, Goal 16, Target 16.3, at page 25.

¹⁸ Agenda 2030, *supra* note 1, Goal 2 at page 14.

¹⁹ For example, the food crisis of 2008 discussed below in section 3.1, is said to have contributed to the unrest that led to the so-called “Arab Spring” in North Africa and the Middle East. Lagi, M., *et al.*, *The Food Crisis and Political Instability in North Africa and the Middle East*, New England Complex Systems Institute (September 2011). http://necsi.edu/research/social/food_crises.pdf (accessed 01/10/2019).

²⁰ Undernutrition is defined as “the condition in which an individual’s habitual food consumption is insufficient to provide the amount of dietary energy required to maintain a normal, active, healthy life.” Food and Agriculture Organization of the United Nations [FAO], *et al.*, (2018) *The State of Food Security and Nutrition in the World: Building Climate Resilience for Food Security and Nutrition* [FAO 2018 Report], Glossary. <http://www.fao.org/3/I9553EN/i9553en.pdf> (accessed 01/10/2019).

²¹ *Id.* at page 2.

²² Agenda 2030, *supra* note 1. Goal 2, Target 2.1, at page 15.

²³ FAO 2018 Report, *supra* note 20, at page 2. Charts indicate that the global PoU of 14.5% in 2005 has fallen gradually to 10.6% in 2016 but thereafter shows an upward trend. Current PoU is 20.4% in Africa, 11.4% in Asia and 6.1% in Latin America and the Caribbean, although rates vary considerably within a region and from one country to another. See Table 1.

²⁴ *Id.* at page 7. Mild food insecurity is uncertainty regarding ability to obtain food; Moderate stage is compromising on food quality and variety, reducing food quantity and skipping meals; Severe stage is no food for a day or more. Page 8. There are other indicators to measure food security with each having a different purpose. See Box 4.

²⁵ *Id.* at page 7.

²⁶ *Id.* at page 9, Table 3. Severe food insecurity is higher in 2017 than in 2014 in every region except north America and Europe. See page 8.

²⁷ SDG #2, Targets and Indicators. UN *SDG Knowledge Platform*, *supra* note 7.

²⁸ FAO 2018 Report, *supra* note 20. Glossary. Malnutrition as defined therein “includes undernutrition and overnutrition as well as micronutrient deficiencies.”

²⁹ *Id.*

³⁰ *Stunting* is low height for age due to inadequate nutrition and repeated infections during the first 1000 days of a child’s life; largely irreversible, its effect includes diminished cognitive and physical development, poor health and increased risk of disease and therefore is considered to have long-term consequences not only for the individual but also for society. World Health Organization [WHO], *Global Nutrition Targets 2025: Stunting Policy Brief*. https://www.who.int/nutrition/topics/globaltargets_stunting_policybrief.pdf (accessed 01/10/2019)

Wasting is low body weight in relation to height due to acute malnutrition. When severe it leads to death and contributes to increased risk of death from infectious diseases; evidence also suggests that wasting undermines child growth and development. WHO, *Global Nutrition Targets 2025: Wasting Policy Brief*. https://www.who.int/nutrition/topics/globaltargets_wasting_policybrief.pdf (accessed 01/10/2019).

³¹ Agenda 2030, *supra* note 1. Goal 2, Target 2.2, at page 15.

³² *Id.* at page 13.

³³ SDG #2. Targets and Indicators. UN *SDG Knowledge Platform*, *supra* note 7.

³⁴ FAO 2018 Report, *supra* note 20, at page 26.

³⁵ The global rate for overweight children appears to be stagnant at 5.6%. *Id.* at page 13.

³⁶ *Id.* at page 27. Overweight and obese individuals can suffer from micronutrients deficiencies known as “hidden hunger”.

³⁷ *Id.* at page 27.

³⁸ Although this widely accepted definition is attributed to the 1996 World Food Summit, the language in paragraph 1 of the Plan of Action refers to “...physical and economic access..” FAO. *Rome Declaration on World Food Security and World Food Summit Plan of Action*, November 13, 1996. <http://www.fao.org/docrep/003/w3613e/w3613e00.htm> (accessed 01/10/2019). The concept of social access appears in subsequent documents. This evolution in the definition is described in FAO (2003). *Trade Reforms and Food Security: Conceptualizing the Linkages*. Section 2.2 Defining food security. <http://www.fao.org/3/a-y4671e.pdf> (accessed 01/10/2019).

³⁹ The concept of “food security” originated in the mid-1970s and comparison of the definitions that have evolved since then is a way to track “the considerable reconstruction of official thinking on food security that has occurred.” FAO 2003 *Trade Reforms and Food Security*, *id.*

⁴⁰ This is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Development and International Co-operation. *Environment - Report of the World Commission on Environment and Development*. UN Doc A/43/427, Annex, *Our Common Future*, August 4, 1987, at page 19.

⁴¹ Ewing-Chow, M., and Slade, M.V. (Eds.) (2016). *International Trade and Food Security: Exploring Collective Food Security in Asia*. NUS Centre for International Law, at page 5.

⁴² FAO and EU (2008). *An Introduction to the Basic Concepts of Food Security*. EC-FAO Food Security Programme, Rome. <http://www.fao.org/docrep/013/al936e/al936e00.pdf> (accessed 01/10/2019).

⁴³ Some analyses consider distribution under the second pillar, access.

⁴⁴ Although food waste volumes are also high in industrialized countries that enjoy modernized infrastructure, more waste tends to occur at the level of the consumer. See discussion below in section 3.1.

⁴⁵ United Nations Commission on Human Rights [UNHRC], *The right to food*. Report by the Special Rapporteur on the right to food, Mr. Jean Ziegler, UN Doc. E/CN.4/2001/53, February 7, 2001, at paragraph 14 and “the right to feed oneself with dignity”, paragraph 18.

⁴⁶ FAO 2008 *Basic Concepts*, *supra* note 44.

⁴⁷ *Id.*

⁴⁸ Agenda 2030, *supra* note 1. Goal 2, Targets 2.3- 2.C, at pages 15 and 16.

⁴⁹ Improved nutrition is also closely connected with SDG #3, Good Health and Well-being.

⁵⁰ For example, under legislation in the United States of America [USA], the term means “an integrated system of plant and animal production practices having a site-specific application that will over the long-term: (a) satisfy human food and fiber needs; (b) enhance environmental quality and the natural resource base upon which the agriculture economy depends; (c) make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls; (d) sustain the economic viability of farm operations; and, (e) enhance the quality of life for farmers and society as a whole.” U.S. Code, Title 7, Section 3103 (19).

⁵¹ See also, US Department of Agriculture [USDA], *Sustainable Agriculture: Definitions and Terms*. Special Reference Briefs Series No. SRB 99-02, Revised August 2007. <https://www.nal.usda.gov/afsic/sustainable-agriculture-definitions-and-terms>; Pretty, J. *Agricultural Sustainability: Concepts, principles and evidence*. July 2007. <https://doi.org/10.1098/rstb.2007.2163> (accessed 01/10/2019).

⁵² FAO. Report of the FAO Council, 94th Session, Rome, cited at page 12 in FAO (2014) *Building a Common Vision for Sustainable Food and Agriculture: Principles and Approaches*. Rome. <http://www.fao.org/3/a-i3940e.pdf> (accessed 01/10/2019) [Common Vision].

⁵³ *Id.* at page 12.

⁵⁴ FAO (2018). *Transforming Food and Agriculture to Achieve the SDGs: 20 interconnected actions to guide decision-makers*. Technical Reference Document. Rome. <http://www.fao.org/3/CA1647EN/ca1647en.pdf> (accessed 01/10/2019).

⁵⁵ Agenda 2030, *supra* note 1.

⁵⁶ A “food system” is defined as one that “encompasses ecosystems and all activities required for the production, processing, transportation and consumption of food, including inputs needed and outputs generated by each of these activities. Within this system, value chains are composed of the full range of farms, enterprises and their value-adding activities, which produce agricultural raw materials and transform them into food products sold to final consumers and disposed of after use.” FAO (2014). *Developing sustainable food value chains – guiding principles*. Rome. <http://www.fao.org/3/a-i3953e.pdf> (accessed 01/10/2019).

⁵⁷ Wheelan, C. (2002). *Naked Economics: Undressing the Dismal Science*. W.W. Norton & Company. See Chapter 1.

⁵⁸ FAO (2011). *Global food losses and food waste: Extent, causes and prevention*. Rome. <http://www.fao.org/docrep/014/mb060e/mb060e00.pdf> (accessed 01/10/2019). This figure takes into account the food that is lost or wasted throughout the supply chain, from initial agricultural production down to final household consumption. While in mid- to high-income countries significant waste occurs at the consumption stage, in low-income countries more loss occurs during the early to mid-stages of the supply chain. Executive Summary, page v.

⁵⁹ There are many criticisms of our global food system; one can hardly open a newspaper without finding articles and commentaries on the subject. Among highly credible sources is the International Panel of Experts on Sustainable Food Systems [IPES-Food], which brings together environmental scientists, development economists, nutritionists, agronomists, sociologists, and practitioners from civil society and social movements. IPES-Food self-describes that it is “fully independent, without financial financing or organizational ties to any corporation governments or intergovernmental agencies” and that it employs “a holistic food systems lens and focuses on the political economy of food systems.” <http://www.ipes-food.org/about/> (accessed 01/10/2019).

Given the interdependence of food production with patterns of food consumption, it has been recognized that the transition towards more sustainable production may also require a shift towards more sustainable diets. For example, it is generally recognized that a diet inclusive of animal products has greater environmental impacts than one that does not. The livestock sector contributes almost 15% to GHG emissions and requires considerable resources of land, livestock feed and water. FAO. *Livestock and the Environment*. <http://www.fao.org/livestock-environment/en/> (accessed 01/10/2019). Under a recently emerging definition, sustainable diets are “[those] with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources.” FAO

(2012). Sustainable Diets and Biodiversity: Directions and Solutions for Policy, Research and Action. Proceedings of the International Scientific Symposium, Biodiversity and Sustainable Diets United Against Hunger. November 2010. Definition was adopted at a plenary session of the symposium. Page 7. <http://www.fao.org/docrep/016/i3004e/i3004e.pdf>.

⁶⁰ “The experience of the 2007-2008 food crisis shows that in some cases, hastily taken decisions by governments to mitigate the impact of the crisis, have actually contributed to or exacerbated the crisis and aggravated its impact on food insecurity.” Richard China, Director of FAO’s Policy and Programme Development Support Division. FAO. *Policy guide for countries hit hard by high food prices*. <http://www.fao.org/news/story/en/item/49954/icode/> (accessed 01/10/2019).

⁶¹ Organization for Economic Co-operation and Development [OECD] (2008). *Rising Food Prices: Causes and Consequences*. <http://www.oecd.org/trade/agricultural-trade/40847088.pdf> (accessed 01/10/2019).

⁶² *Id.* at page 2. This was also a time of high oil prices and increased use of food crops for biofuels.

⁶³ Ewing-Chow, *supra* note 41.

⁶⁴ *Id.* at footnote 27, citing FAO (2009). *The State of Agricultural Commodity Markets*.

⁶⁵ *About FAO*. <http://www.fao.org/about/en/> (accessed 01/10/2019).

⁶⁶ Constitution, Article XIV, para. 1., in *Basic Texts of the Food and Agriculture Organization of the United Nations*. Volumes I and II 2017 edition. <http://www.fao.org/3/a-mp046e.pdf> (accessed 01/10/2019).

⁶⁷ *Id.*, FAO Constitution, Article I.

⁶⁸ Statute of the International Court of Justice, Article 38.

⁶⁹ “Soft law” has been described as “all those social rules generated by states or other subjects of international law which are not legally binding but which are nevertheless of special legal relevance.” Four intrinsic aspects have been identified as follows: 1) an expression of common expectations concerning the conduct of international relations; 2) created by subjects of international law interest; 3) rules that have not (yet) passed through all procedural stages of international law-making and lack binding force; 4) characterized by a certain proximity to the law and its capacity to produce legal effects. Thurer, D., *Soft Law*. *Max Planck Encyclopedia of Public International Law [MPEPIL]* 1469, March 2009. (accessed 01/10/2019).

⁷⁰ Abbott, K. & Snidal, D. (2000). *Hard and Soft Law in International Governance*. *International Organizations* 54 (3), 421-456. <https://doi.org/10.1162/002081800551280>. *Hard law* is considered “precise, legally binding obligations with appropriate third-party delegation”, while *softer forms* can be “various combinations of reduced precision, less stringent obligation, and weaker delegation.” Actors often prefer certain advantages of soft law because it is “easier to achieve, provides strategies for dealing with uncertainty, infringes less on sovereignty, and facilitates compromise among differentiated actors.”

⁷¹ General Comment No. 12 begins by stating that “*The human right to adequate food is recognized in several instruments under international law....*” UN Committee on Economic, Social, and Cultural Rights, *General Comment 12. The right to adequate food* (Article 11) UN Doc. E/C.12/1999/5. May 12, 1999.

⁷² “*Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, ...*” (emphasis added) (Article 25). UN. *Universal Declaration of Human Rights*, UN Doc A/RES/217(III) A (December 10, 1948) GAOR 3rd Session Part I 71.

⁷³ “the right of everyone to an adequate standard of living for himself and his family, including adequate food” (emphasis added) (Article 11.1) and “the fundamental right of everyone to be free from hunger” (Article 11.2). UN. *International Covenant on Economic, Social and Cultural Rights*. UN Doc A/RES/21/2200, 993UNTS 3 (December 16, 1966).

⁷⁴ General Comment No. 12, *supra* note 71.

⁷⁵ UN. *Optional Protocol to the International Covenant on Economic, Social and Cultural Rights*. UN Doc. A/RES/63/117, December 10, 2008. Under the Protocol, victims of human rights violations are ensured the right of access to justice. Nonetheless, a few states (USA, United Kingdom and Switzerland) do not consider the right enforceable. *US Explanation of Vote on the Right to Food*. A/HRC/34/L.21 Geneva, March 23, 2017. <https://geneva.usmission.gov/2017/03/24/u-s-explanation-of-vote-on-the-right-to-food/> (accessed 01/10/2019); FAO (2009). *The Right to Food and Access to Justice: Examples at the national, regional and international levels*, by Golay, C., Rome. ISBN 978-92-5-106384-2. <http://www.fao.org/3/a-k7286e.pdf>

⁷⁶ UNHRC. 56th Session, E/CN.4RES/2000/10, April 17, 2000. The original 3-year mandate has been periodically renewed, most recently in 2016. *Mandate of the Special Rapporteur on the Right to Food*. A/HRC/RES/32/8, June 30, 2016.

⁷⁷ FAO. *The Right to Food*. <http://www.fao.org/right-to-food/en/> (accessed 01/10/2019).

⁷⁸ FAO. *Declaration of the World Food Summit: Five Years Later*, paragraph 10. <http://www.fao.org/docrep/MEETING/005/Y7106E/Y7106E09.htm#TopOfPage> (accessed 01/10/2019).

⁷⁹ FAO. *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*, adopted by the 127th Session of the FAO Council, November 2004 [FAO VG Progressive Realization]. Published as ISBN 978-92-5-105336-2, <http://www.fao.org/3/a-y7937e.pdf>.

⁸⁰ *Id.* at page iii.

⁸¹ UN Department of Economic and Social Affairs (2017). *World Population Prospects: The 2017 Revision*. <https://www.un.org/development/desa/publications/world-population-prospects-the-2017-revision.html> (accessed 01/10/2019).

⁸² FAO Common Vision, *supra* note 52.

⁸³ OECD-FAO (2018). Agricultural Outlook 2018-2027. <http://www.agri-outlook.org/commodities/Agricultural-Outlook-2018-Meat.pdf>. Global meat production is projected to be 15% higher in 2027 compared with 2018 with developing countries expected to account for the vast majority of that increase. Annual per capita meat consumption is expected to increase to 35.4 kg by 2027, an increase of 1.1 kg. See page 151.

⁸⁴ Seto, K. & Ramankutty, N. *Hidden linkages between urbanization and food systems*. Science. Vol. 352. Issue 6288. May 20, 2016. With increased rates of urbanization, household preferences shift towards more meat-based and convenient foods.

⁸⁵ “Green revolution” is the term used to describe technological advances that lead to significant increases in agricultural production, particularly in the developing world, between 1950 to late 1960s. Increased yields were due to the introduction of high-yielding varieties (hybridized seeds) together with intensive use of chemical fertilizers and pesticides, irrigation and new methods of cultivation.

⁸⁶ FAO Common Vision, *supra* note 52.

⁸⁷ See section 7.1 for jurisprudence on the right to food and access to land.

⁸⁸ “Through its impacts on agriculture, livelihoods and infrastructure, climate change threatens all dimensions of food security. It will expose both urban and rural poor to higher and more volatile food prices. It will also affect food availability by reducing the productivity of crops, livestock and fisheries, and hinder access to food by disrupting the livelihoods of millions of rural people who depend on agriculture for their incomes.” FAO (2016). The State of Food And Agriculture. Climate Change, Agriculture and Food Security. page v. <http://www.fao.org/3/a-i6030e.pdf>.

⁸⁹ *Id.* at page 13.

⁹⁰ Agriculture accounts for at least one-fifth of total global emissions from livestock and crop production and from the conversion of forests to farmland. In order to keep the increase in global temperatures below 2 degrees Celsius, emissions will have to be reduced by 70% by 2050. *Id.* at page 5.

⁹¹ For shift in meat consumption see *supra* note 83.

⁹² 1771 UNTS 107, UN Reg No I-30822.

⁹³ Paris Agreement, *supra* note 2.

⁹⁴ *Id.*

⁹⁵ Intergovernmental Panel on Climate Change [IPCC] *Press Release*. October 8, 2018 https://www.ipcc.ch/site/assets/uploads/2018/11/pr_181008_P48_spm_en.pdf (accessed 01/10/2019). The IPCC announced that “(w)ith clear benefits to people and natural ecosystems, limiting global warming to 1.5°C compared to 2°C could go hand in hand with ensuring a more sustainable and equitable society” but that limiting global warming to 1.5 would require “rapid, far-reaching and unprecedented changes in all aspects of society.”

⁹⁶ Conference of the Parties [COP] to the UNFCCC. *Success of COP24 in Katowice*. <https://cop24.gov.pl/news/news-details/news/success-of-cop24-in-katowice-we-have-a-global-climate-agreement/> (accessed 01/10/2019). At COP24, states agreed on rules as to how states will measure, report on and verify emissions reductions.

⁹⁷ UN. *Convention on the Law of the Sea*. (10th December 1982) 1833 UNTS 3, UKTS 81 (1999), UN Doc A/Conf.62/122, UN Reg No I-31363.

⁹⁸ *Id.*, Article 136.

⁹⁹ Freestone, D., *High Seas Fisheries*. MPEPIL 1162, March 2009. (accessed 01/10/2019).

¹⁰⁰ UN. *Convention on Biological Diversity*. 5 June 1992. Entered into force 29 December 1993. 1760 UNTS 79.

¹⁰¹ UN. *Cartagena Protocol on Biosafety to the Convention on Biological Diversity*. 2226 UNTS 208, UN Reg No A-30619, 29 January 2000, entered into force 11 September 2003. It governs the movements of “living modified organisms” from one state to another. UN. *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*. UN Doc UNEP/CBD/COP/10/L.43/Rev.1, 29 October 2010 and entered into force 12 October 2014. It provides a legal framework for the implementation of the sharing of benefits.

¹⁰² COP to the Convention on Biological Diversity. *COP14 Report*, 17-29 November 2018. CBD/COP/DEC/14/1 <https://www.cbd.int/decisions/cop/?m=cop-14> (accessed 01/10/2019).

¹⁰³ For example, a decision was taken on the conservation and sustainable use of pollinators, recognizing their importance to agricultural and food systems and contribution towards achieving the SDGs. CBD/COP/14/6. 30 November 2018. <https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-06-en.pdf>

¹⁰⁴ These include, for example, *Stockholm Declaration*, *supra* note 40, *World Charter for Nature*, UN Doc A/RES/37/7, Annex (28 October 1982); and *Rio Declaration*, endorsed in *Dissemination of the Principles of the Rio Declaration on Environment and Development*. UN Doc A/RES/48/190, GAOR 48th Session Supp 49 Vol 1, 167, 21 December 1993.

¹⁰⁵ Beyerlin, U. & Holzer, V. *Conservation of Natural Resources*. MPEPIL 1569, October 2013. (accessed 01/10/2019).

¹⁰⁶ *Id.*

¹⁰⁷ UN. *Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa*. 1954 UNTS 3, UN Reg No I-33480.

¹⁰⁸ FAO. *New World Soil Charter endorsed by FAO Members*. <http://www.fao.org/soils-2015/news/news-detail/en/c/293552/> (accessed 01/10/2019). It is the successor to the first charter adopted in 1981.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ FAO. *Voluntary Guidelines for Sustainable Soil Management*. Adopted by the 4th Global Soil Partnership (GSP) Plenary Assembly, approved by the 25th session of the FAO Committee on Agriculture and endorsed by the 155th session of the FAO Council. 5 December 2016.

¹¹² Beyerlin, *supra* note 105.

¹¹³ UN. *Convention on the Law of the Non-Navigational Uses of International Watercourses*. UN Doc A/RES/51/869. May 21, 1997 entered into force August 17, 2014.

¹¹⁴ Beyerlin, *supra* note 105.

¹¹⁵ International Law Association [ILA], *Rules on International Groundwaters*. Seoul, 1988. Report of the Sixty-Second Conference, Seoul Conference Report, 1986, ILA Committee on International Water Resources. https://www.internationalwaterlaw.org/documents/intldocs/ILA/ILA-Seoul_Rules_on_International_Groundwaters-1986.pdf

¹¹⁶ ILA, *Berlin Rules on Water Resources*. Berlin, 2004. Report of the Seventy-First Conference, ILA, London, UK.

¹¹⁷ International Law Commission [ILC]. *Draft Articles on the Law of Transboundary Aquifers* adopted on second reading in 2008 (Final Outcome) UN Doc. A/CN.4/L.724, UN Doc A/63/10, 19.

¹¹⁸ For example, “The Boundary Waters Treaty” established principles and a mechanism for addressing transboundary water issues between Canada and the US. *Treaty between the [UK] and the [USA] concerning Boundary Waters and Questions Arising Along the Border between Canada and the USA*, entered into force May 5, 1910. <https://www.treaty-accord.gc.ca/text-texte.aspx?id=100420> (accessed 01/10/2019).

¹¹⁹ An FAO study shows that arable land per person declined by 40 percent, from 0.43 ha in 1961/63 to 0.26 ha in 1997/99. But it also points out that over this same period, world population nearly doubled while land in agricultural use increased by only 11% as yields per cropped area increased as did cropping intensity. FAO (2003) *World Agriculture: Towards 2015/2030 – An FAO Perspective*. Bruinsma, J. (Ed.). Earthscan Publications, at page 136. <http://www.fao.org/3/a-y4252e.pdf>. A more recent study explains that changes in arable land per person “will be the result of these countervailing forces (population / demand growth and increasing crop yields) with the exact outcome differing among countries.” FAO (2012). *World Agriculture Towards 2030/2050: The 2012 Revision*. Alexandratos, N. and Bruinsma, J. (Eds.) ESA Working Paper No. 12-03. June 2012, at page 108. <http://www.fao.org/docrep/016/ap106e/ap106e.pdf>. Thus, as the study concludes, it is difficult to determine with certainty the consequences of these declining ratios over time; arable land is not necessarily a “fixed” variable. Moreover, it varies considerably from one country to another. However, as bringing more land into production is often at the cost of forest cover, this raises concerns over climate change.

¹²⁰ FAO. *Food for the Cities*. <http://www.fao.org/tempref/docrep/fao/012/ak824e/ak824e00.pdf> (accessed 01/10/2019).

¹²¹ It is not happenstance that urbanization frequently coincides with some of the best arable lands; this is where many human settlements typically originated.

¹²² FAO. *Urban Agriculture*. <http://www.fao.org/urban-agriculture/en/> (accessed 01/10/2019).

¹²³ UN Conference on Housing and Sustainable Urban Development (Habitat III). *The New Urban Agenda. Quito Declaration on Sustainable Cities and Human Settlements for All*. adopted 20 October 2016. It was endorsed by the UNGA. *New Urban Agenda. A/Res/71/256*. 23 December 2016.

¹²⁴ *Id.* at paras 95 and 123. Para 123 continues as follows: “We will promote coordination of sustainable food security and agriculture policies across urban, peri-urban and rural areas to facilitate the production, storage, transport and marketing of food to con-

sumers in adequate and affordable ways in order to reduce food losses and prevent and reuse food waste. We will further promote the coordination of food policies with energy, water, health, transport and waste policies, maintain the genetic diversity of seeds and reduce the use of hazardous chemicals, and implement other policies in urban areas to maximize efficiencies and minimize waste.”

¹²⁵ FAO. *New Urban Agenda links urban and rural areas, acknowledges the centrality of food security and nutrition*. <http://www.fao.org/news/story/en/item/448875/icode/> (accessed 01/10/2019).

¹²⁶ *Milan Urban Food Policy Pact* [MUFPP]. <http://www.milanurbanfoodpolicypact.org/> (accessed 01/10/2019).

¹²⁷ *Id.* MUFPP Text. The text continues “to work to develop sustainable food systems that are inclusive, resilient, safe and diverse, that provide healthy and affordable food to all people in a human rights-based framework, that minimize waste and conserve biodiversity while adapting to and mitigating impacts of climate change” at para. 1.

¹²⁸ Topics include food governance, sustainable diets and nutrition, social and economic equity, food production, food supply and distribution and food waste. It was developed in collaboration with the FAO and presented at the fourth mayors summit held in 2018. FAO. *Food for the Cities Programme*. <http://www.fao.org/in-action/food-for-cities-programme/news/detail/en/c/1153585/> (accessed 01/10/2019).

¹²⁹ Committee on World Food Security [CFS]. *Making a Difference in Food Security and Nutrition*. Forty-fourth Session, July 2017. CFS 2017/44/6. <http://www.fao.org/3/a-mu135e.pdf>

¹³⁰ CFS. *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. Endorsed by the CFS at its 38th (Special) Session on 11 May 2012. <http://www.fao.org/docrep/016/i2801e/i2801e.pdf> [VGGT].

¹³¹ *Id.*

¹³² FAO. *Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication*. Endorsed by the FAO Committee on Fisheries at its 31st Session in June 2014. <http://www.fao.org/3/a-i4356en.pdf> [SSF]

¹³³ FAO Common Vision, *supra* note 52 at page 12. The principles are as follows: 1) Improving efficiency in the use of resources is crucial to sustainable agriculture; 2) Sustainability requires direct action to conserve, protect and enhance natural resources; 3) Agriculture that fails to protect and improve livelihoods, equity and social well-being is unsustainable; 4) Enhancing resilience of people, communities and ecosystems is key to sustainable agriculture; 5) Sustainable food and agriculture requires responsible and effective governance mechanisms.

¹³⁴ For example, under principle 1, for crops, the following five policies and practices are listed: 1) genetically diverse portfolio of varieties; 2) conservation agriculture 3) judicious use of organic and inorganic fertilizers, improved soil moisture management; 4) improved water productivity, precise irrigation, and 5) integrated pest management. FAO Common Vision, *supra* note 52 at page 21.

¹³⁵ FAO (2012). Environmental Impact Assessment: Guidelines for FAO Field Projects. <http://www.fao.org/docrep/016/i2802e/i2802e.pdf>

¹³⁶ It goes without saying that an effective and efficient legal system based on rule of law is invaluable to the achievement of the other pillars of food security as well as the realization not only of SDG #2 but all 17 of The Global Goals.

¹³⁷ UN. *Establishment of [UNCITRAL]*. GA 2205(XXI), 17 December 1966. <https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/005/08/IMG/NR000508.pdf?OpenElement>

¹³⁸ As provided in its Statute, Article 1, “*The purposes of the International Institute for the Unification of Private Law [UNIDROIT] are to examine ways of harmonising and coordinating the private law of States and of groups of States...*” <http://www.unidroit.org/about-unidroit/institutional-documents/statute> (accessed 01/10/2019); “*The purpose of the Hague Conference on Private International Law is to work for the progressive unification of the rules of private international law.*” Statute, Article 1. <https://www.hcch.net/en/instruments/conventions/full-text> (accessed 01/10/2019).

¹³⁹ UNCITRAL, *Texts and Status*. <https://uncitral.un.org/en/texts> (accessed 01/10/2019).

¹⁴⁰ UN. *UNCITRAL Model Law on Secured Transactions*. UN Doc. A/Res/71/136. 13 December 2016. https://uncitral.un.org/en/texts/securityinterests/modellaw/secured_transactions

¹⁴¹ OAS. *Model Inter-American Law on Secured Transactions*. OEA/Ser.K/XXI.6, CI-DIP-VI/RES.5/02, February 8, 2002. http://www.oas.org/en/sla/dil/docs/Model_Inter-American_Law_on_Secured_Transactions.pdf

¹⁴² See discussion below in section 7.2.

¹⁴³ ICC is a global network of over 6 million members in more than 100 countries and includes among its membership global companies, MSMEs, business associations, banks, law firms and local chambers of commerce. It works “to promote international trade, responsible business conduct and a global approach to regulation.” <https://iccwbo.org/about-us/> (accessed 01/10/2019).

¹⁴⁴ *Id.* INCOTERMS 2010. For example, “FOB” is the abbreviation of “Free on Board”, which refers to the point after which the seller is no longer responsible for the goods and is commonly used in shipping and transport.

¹⁴⁵ For example, the Treaty of Asunción that created MERCOSUR uses the terms FOB and CIF (Annex 2, General Regime of Origin, Articles 1 and 2). Although the Treaty does not define these terms, their meaning is sufficiently clear as common terms that have become institutionalized by the ICC. In this way, this international treaty offers formal recognition of the non-legislated source. This has been noted in the following: InterAmerican Juridical Committee, *Report of the Rapporteur and Draft Guide to the Law Applicable to International Commercial Contracts* (forthcoming in 2018, unpublished copy on file with author). *Treaty establishing a Common Market between the Argentine Republic, the Federal Republic of Brazil, the Republic of Paraguay and the Eastern Republic*

of Uruguay (Common Market of the South [MERCOSUR]) 2140 UNTS 257, UN Doc A/46/155, Annex 2. Text also available at: http://www.sice.oas.org/trade/mrcsr/treatyasun_e.asp.

¹⁴⁶ *Agricultural Market Information System [AMIS]*. <http://www.amis-outlook.org/amis-about/en/> (accessed 01/10/2019). AMIS includes the G20 members, plus Spain and seven additional major exporting and importing countries of agricultural commodities that represent about 80-90% of global production, consumption and trade volumes of the four targeted crops.

Also noteworthy in this regard is the International Grains Council [ICG], an inter-governmental organization that seeks “to further international cooperation in grains trade, promote expansion, openness and fairness in the grains sector, contribute to grain market stability and to enhance world food security.” It does so by means of the Grain Trade Convention of 1995, which covers grains, rice and oilseeds. See IGC. *About Us*. <http://www.igc.int/en/about/aboutus.aspx> (accessed 01/10/2019).

¹⁴⁷ WTO. *Agreement on Agriculture*. WTO Doc LT/UR/A-1A/2, 1867 UNTS 410.

¹⁴⁸ WTO. *Agreement establishing the WTO*. 1867 UNTS 3, 1867 UNTS 154, [1994] OJ L336/3. The WTO Agreement is the successor to the original *General Agreement on Tariffs and Trade [GATT 1947]* which is still in effect under the WTO framework with certain modifications. The purpose of GATT 1947, as stated in its preamble, was “substantial reduction of tariffs and other trade barriers and the elimination of preferences, on a reciprocal and mutually advantageous basis.” After conclusion of GATT 1947, there were series of rounds to negotiate further reductions in tariffs. However, this became increasingly difficult, especially for agricultural commodities. There were three fundamental principles on which GATT 1947 was founded: most-favored nation treatment (non-discrimination) Article I.1; national treatment (reciprocity) Article III.2; and preference of tariffs over quantitative measures Article XI. Although agricultural commodities were to be treated the same as other goods, certain exceptions were made. Some of those exceptions, it can be argued, contributed significantly to the subsequent market distortions in agriculture commodities in the decades that followed. Exemptions for agriculture enabled states to restrict imports while at the same time these states offered domestic support to their producers; this resulted in surplus production that was often “dumped” onto world markets, thereby resulting in further reduced world prices. For example, while the support price for raw sugar in the USA during the 1990s was approximately 22 cents per pound, the world price was 10 cents. (Notes on file with author.)

One of the actions that led to these circumstances is what became known as the “Section 22 waiver”, which granted the USA an exemption for provisions under that section of its Agricultural Adjustment Act of 1933 that enabled imposition of fees or quotas when imports threatened to “render ineffective or materially interfere with any agricultural program.” This “temporary” waiver was in place for almost 40 years and was used to restrict imports of sugar, peanuts and dairy products. With such exemptions available to the USA, the European Union was in a better position politically to defend similar pro-

grams under its Common Agricultural Policy. The eighth set of negotiations, known as the Uruguay Round (1986-1994), eventually culminated in the WTO Agreement, which entered into force January 1, 1995 and established the WTO Organization and the international legal framework for trade that is in place today.

¹⁴⁹ WTO. *Nairobi Ministerial Declaration*. WT/MIN(15)/DEC., 19 December 2015. https://www.wto.org/english/thewto_e/minist_e/mc10_e/mindecision_e.htm (accessed 01/10/2019).

¹⁵⁰ WTO. *Export Competition*, WT/MIN (15)/45 – WT/L/980., 19 December 2015. Although only a few countries still use export subsidies, when prices are low, there is a tendency to resort to this mechanism once again and “once one country does so, others quickly follow suit.” WTO. *Briefing Note: Agricultural Issues*. https://www.wto.org/english/thewto_e/minist_e/mc10_e/briefing_notes_e/brief_agriculture_e.htm (accessed 01/10/2019).

¹⁵¹ See *supra* note 148.

¹⁵² WTO. *Public Stockholding for Food Security Purposes*. WT/MIN(15)/44 – WT/L/979, 19 December 2015.

¹⁵³ WTO. *Special Safeguard Mechanism for Developing Country Members*. WT/MIN(15)/43 – WT/L/978, 19 December 2015.

¹⁵⁴ WTO *Briefing Note, supra* note 150.

¹⁵⁵ WTO. *UN Rapporteur and WTO Head debate the impact of trade on hunger*. May 11, 2009. https://www.wto.org/english/forums_e/debates_e/debate14_summary_e.htm (accessed 01/10/2019). Olivier de Shutter, the UN Rapporteur for the Right to Food at that time, identified the following four risks of trade liberalization : 1) Specialization: benefits of trade due to division of labor can result in the focus on a narrow range of goods instead of diversification and thereby impede development; 2) Dependency: countries that rely on a few export crops are vulnerable to price volatility; 3) Inequality: liberalization has resulted in concentrations of large farms owned by a few with billions of small farmers many of whom are hungry; 4) Excessive profits: small numbers of powerful companies in the agri-food supply chain widen the gap between retail and farm prices.

¹⁵⁶ It has been observed that the trade liberalization narrative is persuasive particularly because it is singular and unified: “more trade is better.” By contrast, opponents of trade liberalization offer many different reasons some of which are contradictory and thus, these many voices remain fragmented. Clapp, J. (2015). *Food security and international trade: unpacking disputed narratives*. Background paper prepared for and cited in FAO (2015). *The State of Agricultural Commodity Markets 2015–16*. <http://www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/> (accessed 01/10/2019)

¹⁵⁷ *Id.* at page 21. Clapp points out that under the theory of comparative advantage, efficiency gains through more trade results in increased and more affordable supply, but this builds on assumptions that do not hold in today’s global economy where movement of capital and labor are influenced largely by global value chains and transnational corporations, where food prices do not capture externalities including the environmental

impacts of specialized agriculture, and where efficiency gains are prioritized over other social goals. On the other hand, those who see liberalized trade as a threat to the right of states and communities to determine their own food systems and policies may fail to realize that self-sufficiency is not feasible for all countries, that trade protection can adversely affect food security of others, that small-scale agricultural production faces challenges in an increasingly urbanized world. See Table 4, at page 21.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* Key message 3. For example, in relation to the first pillar of availability, possible positive effects of trade include increases in both the quantity and variety of food available, specialization that leads to increased production through efficiency gains, and greater competition that may trigger improvements due to increased investment, research and development. Possible negative effects include, for net-exporters, higher international prices that divert production to the export market and reduce domestic availability and, for net-importers, domestic producers who are unable to compete with imports curtail local production. The study concludes that “the interaction of trade with these dimensions is complex and depends on a variety of underlying factors, producing great differences in country experiences and making it difficult to ascertain a generalizable relationship.”

¹⁶⁰ *Id.* at page 17.

¹⁶¹ WTO. *Agreement on the Application of Sanitary and Phytosanitary Measures*. 1867 UNTS 493, WTO Doc LT/UR/A-1A/12. [SPS Agreement].

¹⁶² WTO. *Understanding the WTO Agreement*. https://www.wto.org/english/tratop_e/sps_e/spsund_e.htm (accessed 01/10/2019). The basic rules are to protect human or animal life from risks arising from additives, contaminants, toxins or disease-causing organisms in their food; to protect human life from plant- or animal-carried diseases; to protect animal or plant life from pests, diseases, or disease-causing organisms; to prevent or limit other damage to a country from the entry, establishment or spread of pests.

¹⁶³ SPS Agreement *supra* note 161, Article 3.1.

¹⁶⁴ The Codex Alimentarius is a collection of international food safety standards that have been adopted by the Codex Alimentarius Commission (the “Codex”). <http://www.fao.org/fao-who-codexalimentarius/en/> (accessed 01/10/2019).

¹⁶⁵ FAO (2011). *International Plant Protection Convention* (1997). https://www.ippc.int/static/media/files/publications/en/2013/06/06/1329129099_ippc_2011-12-01_reformatted.pdf. The [IPPC] dates back to 1951 and has been updated twice, most recently in 1997; as outlined in Article 1, it has as its primary purpose to secure “common and effective action to prevent the spread and introduction of pests of plants and plant products.” <https://www.ippc.int/en/core-activities/governance/convention-text/> (accessed 01/10/2019).

¹⁶⁶ WHO (2018). *Global Nutrition Policy Review 2016-2017*. <http://apps.who.int/iris/bitstream/handle/10665/275990/9789241514873-eng.pdf?ua=1> (accessed 01/10/2019).

¹⁶⁷ CFS. *Framework for Action for Food Security and Nutrition in Protracted Crises*. Endorsed by the CFS 13 October, 2015. <http://www.fao.org/3/a-bc852e.pdf>

¹⁶⁸ *Id.*

¹⁶⁹ *Id.* at page 2. It was acknowledged there is no agreed definition on “protracted crisis.” Endnote 2.

¹⁷⁰ *Geneva Conventions I-IV* adopted 12 August 1949, entered into force 1950. 75 UNTS 31, 85, 135, 287. *Protocols I and II*, adopted June 8, 1977, entered into force December 7, 1978. 1125 UNTS 3, 609.

¹⁷¹ *Id.*, *Additional Protocol I*, Article 54 (2) and (3).

¹⁷² *Id.*, *Geneva Convention IV*, Article 59.

¹⁷³ *Food Assistance Convention*. <https://www.foodassistanceconvention.org/convention/FoodAssistance.pdf>

It entered into force in 2013 and is the successor to a series of such multilateral instruments that have been in operation since 1967. <https://www.foodassistanceconvention.org/en/about.aspx> (accessed 01/10/2019).

¹⁷⁴ *Id.*

¹⁷⁵ This would not limit such practices under bilateral assistance programs, which are not under consideration within this paper.

¹⁷⁶ CFS. *About Us*. <http://www.fao.org/cfs/home/about/structure/en/>. (accessed 01/10/2019). As originally established in 1975, the CFS was a committee of the FAO Conference and hence, its members were states. It was created in response to the food crisis of the early 1970s so that timely action could be taken by the international community to ensure “adequate cereal supplies for minimum world food security.” FAO. *Establishment of a Committee on World Food Security*. Resolution 21/75 of the Conference established the CFS as a Committee of the Council.

¹⁷⁷ *Id.* Today the CFS is comprised of Member States, Participants and Observers. Participants include five categories: 1) UN agencies and other UN bodies; 2) civil society and NGOs, particularly those representing smallholders, urban poor, and other marginalized groups; 3) international agricultural research institutions; 4) financial institutions such as the World Bank, etc. 5) private sector associations and philanthropic foundations. It reports to the UN General Assembly through the Economic and Social Council [ECOSOC] and to the FAO Conference. It is funded by and receives secretariat support from the three Rome agencies (FAO, International Fund for Agricultural Development [IFAD] and the World Food Programme [WFP]).

Another important component that was added during the 2009 reform is the High Level Panel of Experts on Food Security and Nutrition [HLPE] with the aim to facilitate and inform policy by providing “independent, comprehensive and evidence-based analysis and advice.” <http://www.fao.org/cfs/cfs-hlpe/en/> (accessed 01/10/2019).

¹⁷⁸ CFS. *Principles for Responsible Investment in Agriculture and Food Systems*. Endorsed by the CFS at its 41st session on October 15, 2014. <http://www.fao.org/3/a-au866e.pdf> [RIA Principles]. Principle 35.

¹⁷⁹ In many states and at various times, there may be lack of the *availability* of food, either because of insufficient *production* due to limitations in the biophysical or socioeconomic components of production, or because of inadequacies in *distribution*, or

restrictions in *trade and exchange*. Although food may be available, some parts of the population may have no direct or physical access while others may have no indirect or economic access. Even if food is available and accessible, it may be of little *utilization* due to its condition or the condition of the consumer. Some parts of the population may suffer from chronic food insecurity while for others, transitory periods of insecurity may occur due to a particular incident.

¹⁸⁰ These abstract concepts can also be considered from the perspective of the household or individual. As a thrifty law student, upon entry into the market I may see that *availability* of food is extensive; through *production, distribution* and *exchange*, almost anything is available for purchase. But as my limited budget constrains my *economic or indirect access*, I resort to sun-dried tomatoes and peanuts harvested from my community garden, to which I have *direct access*. Alas, upon discovery that I have an allergy to peanuts and failed to properly process and store the tomatoes, these foods are of no *utilization* for me. Although these circumstances do not constitute *stability*, my situation is one of temporary food insecurity. Even at the level of the individual, a number of the international legal instruments discussed above bear on one’s own food security.

¹⁸¹ An extensive report on this issue has been published by IPES-Food (2017). Too Big to Feed: Exploring the Impacts of Mega-mergers, Consolidation and Concentration of Power in the Agri-food Sector. http://www.ipes-food.org/_img/upload/files/Concentration_FullReport.pdf

¹⁸² *Id.* However, it should be noted that figures are difficult to obtain or verify, especially where companies are privately-held or information is proprietary.

¹⁸³ *Id.* at page 21. Syngenta (Switzerland), Bayer (Germany), BASF (Germany), DuPont (USA), Monsanto (USA), and Dow (USA), known as the ‘Big Six’, currently control both 60 % of the global seed market and 75% of the global pesticides market.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.* Three mergers since 2015 include the \$130 billion merger between US agro-chemical companies, Dow and DuPont, Bayer’s \$66 billion buyout of Monsanto, and ChemChina’s acquisition of Syngenta for \$43 billion. This will result in about 70% of the global agrochemical industry under the control of only three companies.

¹⁸⁶ Agricultural biotechnology companies engage in research and bio-engineering to produce a hybrid seed variety which is then patented. These high-yielding seeds are only productive for a single crop and must be purchased by the farmer for each growing season; the crop is often produced under contract that specifies conditions that usually include the use of agrochemicals. By contrast, farmers that grow traditional varieties usually save some seed from the harvested crop to plant the next season.

¹⁸⁷ IPES-Food (2016). From Uniformity to Diversity. A Paradigm Shift from Industrial Agriculture to diversified AgroEcological Systems. http://www.ipes-food.org/_img/upload/files/UniformityToDiversity_FULL.pdf

¹⁸⁸ Once again, data is difficult to confirm, however, it is estimated that smallholder farms produce about 80% of the food consumed in Asia and sub-Saharan Africa. HLPE (2013). Investing in smallholder agriculture for food security. A report by the High

Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-6_Investing_in_smallholder_agriculture.pdf

¹⁸⁹ Rayner, J., *Big Agriculture is the only option to stop the world going hungry*, in *The Guardian*. September 11, 2010. <https://www.theguardian.com/commentisfree/2010/sep/12/food-riots-farming> (accessed 01/10/2019).

¹⁹⁰ For example, in the USA, the framework of competition law is based largely around the following three statutes: *Sherman Antitrust Act 1890*, 15 USC ss. 1-7; *Clayton Antitrust Act 1914*, 15 USC ss. 12-27; and the *Federal Trade Commission Act 1914*; 15 USC ss. 41-58. In the European Union, it is the *Treaty on the Functioning of the [EU]*. [2008] OJ C115/47, [2010] OJ C83/47, [2012] OJ C326/47, Part III Union Policies and Internal Actions, Title VII Common Rules on Competition, Taxation and Approximation of Laws, Ch.1 Rules on Competition, Section 1 Rules Applying to Undertakings, Articles 101 and 102. Cited in IPES-Food, *Too Big*, *supra* note 181.

¹⁹¹ However, this paradox of anti-trust regulation, which permits economic concentration so long as it does not impede consumer welfare (i.e., price), is undergoing renewed scrutiny. In a recent article that has received considerable attention, it is noted that those who focus solely on price take only the short-term view whereas long-term interests are best promoted through a robust competitive process and open markets. Khan, L.M., *Amazon's Antitrust Paradox*. *The Yale Law Journal*. Vol. 126, No. 3. January 2017. <https://www.yalelawjournal.org/note/amazons-antitrust-paradox>. Many of the critiques therein of *Big Tech* are equally applicable to *Big Ag*.

¹⁹² Organisation for Economic Co-operation and Development [OECD]. *Declaration on International Investment and Multinational Enterprises*. OECD Doc C(76)99/FINAL; UN. *The Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices*. UN Doc TD/RBP/CONF/10/Rev.2.

¹⁹³ *Draft International Antitrust Code as a GATT-MTO-Plurilateral Trade Agreement*, published and released July 10, 1993, 64 *Antitrust & Trade Reg. Rep.* (BNA) No. 1628 (Aug. 19, 1993) (Special Supp.).

¹⁹⁴ Gifford, D.J., *The Draft International Antitrust Code Proposed at Munich: Good Intentions Gone Awry*, 6 *Minn. J. Global Trade* 1 (1996), available at: https://scholarship.law.umn.edu/faculty_articles/322.

¹⁹⁵ IPES-Food. *Too Big*, *supra* note 181. In this study it is suggested that a first step could involve a collaborative assessment of impacts in food systems wherein various intergovernmental bodies work together to monitor the impacts of increased concentration at various levels. This would be followed by “a second and more ambitious step” in the development of treaty on competition. The study also refers to recent work by the UN Conference on Trade and Development [UNCTAD] on a Model Law on Competition Policy and the Set of Multilaterally Agreed Equitable Control of Restrictive Business Practices and notes that “although these are only templates for governments, they could provide the basis for developing a global treaty.” However, it is recognized that it will be a challenge to accommodate competing interests and the process may take several years, although it could reinforce more transparent and integrated policy-making at the domestic level.

¹⁹⁶ Basedow, J. *International Antitrust or Competition Law*. MPEPIL 897, May 2014 (accessed 01/10/2019).

¹⁹⁷ UNHRC. *Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework*. A/HRC/17/31, endorsed by the UNHRC, resolution 17/4 of 16 June 2011.

¹⁹⁸ *Id.*

¹⁹⁹ Ganesh, A. R. *The Right to Food and Buyer Power*. 11 *German L.J.* 1190 (2010); Feunteun, T. *Cartels and the Right to Food: An Analysis of States' Duties and Options*, *J. of Int'l. Econ. L.*, Vol.18, Issue 2, 341-382 (June 2015); Narula, S. *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 *Colum. J. Transnat'l. L.* 691 (2006).

²⁰⁰ CFS *RIA Principles*, *supra* note 178, Principle 35.

²⁰¹ *Id.* Objectives, para. 10. “The Principles are based on [an extensive list of international instruments] as the foundation for responsible investment in agriculture and food systems.” (para. 19A).

²⁰² UNIDROIT, FAO and IFAD (2015). *Legal Guide on Contract Farming*. <http://www.fao.org/3/a-i4756e.pdf>. Contract farming generally refers to “a particular form of supply chain governance adopted by firms to secure access to agricultural products, raw materials and supplies meeting desired quality, quantity, location and timing specifications.” Page 1, para. 3. Its use has increased considerably in recent years, especially as a result of transformations in food and agricultural systems, rapid urbanization and changing consumer demands.

²⁰³ *Id.*, at page xv, para. 2.

²⁰⁴ FAO (2016). *Public-private partnerships for agribusiness development – A review of international experiences*. By Rankin, M., Gálvez Nogales, E., Santacoloma, P., Mhlanga, N. & Rizzo, C. Rome, Italy. <http://www.fao.org/3/a-i5699e.pdf>

²⁰⁵ *Id.* at page 3.

²⁰⁶ FAO Progressive Realization, *supra* note 79.

²⁰⁷ OAS. *Declaration on Institutional Strengthening for Sustainable Development in the Americas*. Adopted at the fourth plenary session held on June 15, 2016. AG/DEC. 81 (XLVI-O/16).

²⁰⁸ OAS. *Inter-American Program for Sustainable Development*. Adopted at the second plenary session, held on June 14, 2016. AG/RES. 2882 (XLVI-O/16). In the preamble, reference is made to prior resolutions and reports within the OAS system on sustainable development. See paras. 31 and 35.

²⁰⁹ *Id.* The PIDS supports actions in the following six strategic areas: 1) disaster risk management; 2) sustainable management of ecosystems; 3) integrated water resources management; 4) sustainable cities and communities; 5) sustainable energy management; 6) strengthening and capacity building for efficient, effective, accountable, and inclusive institutions for sustainable development.

²¹⁰ OAS. *Press Release: 42nd OAS General Assembly in Bolivia Set to Debate Food Security with Sovereignty in the Americas*, May 28, 2012. http://www.oas.org/en/media_center/press_release.asp?sCodigo=E-191/12 (accessed 01/10/2019).

²¹¹ OAS. *Declaration of Cochabamba on “Food Security with Sovereignty in the Americas.”* Adopted at the fourth plenary session, held on June 5, 2012. AG/RES. 69 (XLII-O/12). Several states disassociated themselves from the term “food sovereignty” as a concept on which there is no consensus (e.g., USA, Canada, Chile and Barbados) while other states indicated their recognition of food sovereignty as a right (e.g., Bolivia, Ecuador, Venezuela).

²¹² *Id.*

²¹³ IICA. *About IICA.* <http://www.iica.int/en/content/about-iica-0> (accessed 01/10/2019).

²¹⁴ IICA. *IICA Presents report on food security in the Americas to the OAS General Assembly.* <http://www.iica.int/es/prensa/noticias/iica-presents-report-food-security-america-oas-general-assembly> (accessed 01/10/2019).

²¹⁵ IICA (2012). *The Food Security Situation in the Americas* (document to facilitate the dialogue scheduled to take place at the 42nd General Assembly of the Organization of American States). San Jose, Costa Rica. ISBN13: 978-92-9248-391-3. <http://repiica.iica.int/docs/b2914i/b2914i.pdf> (accessed 01/10/2019). The report suggested adoption of comprehensive food security policies focused on achieving seven specific objectives: to increase investment in agriculture to develop scientific, research, innovation and extension capabilities; to develop efficient and transparent agricultural markets; to adopt policies and institutional arrangements that promote the integration of small- and medium-scaled agriculture into markets; to promote free trade in food; to provide access to food for vulnerable populations; to adapt agriculture to climate change and climate variability; and to reduce and mitigate the impact of agriculture on the environment and promote a food and nutritional security education program.

²¹⁶ OAS. *Excessive Volatility of Commodity Prices and its Consequences for Food Security and Sustainable Development in the Americas.* Agreed at the fourth plenary session held on June 5th, 2012. AG/RES. 2757 (XLII-O/12).

²¹⁷ OAS *Press Release 42nd General Assembly, supra* note 210. Cited external factors included increased fuel prices, prolonged droughts in grain-producing countries, increased food demand in China and India, and the use of corn for the production of bio-fuels.

²¹⁸ First Summit of the Americas. *Summit of the Americas Plan of Action.* Miami, Florida December 9-11, 1994. <http://www.summit-america.org/miamiplan.htm#III>. (accessed 01/10/2019).

²¹⁹ Special Summit for Sustainable Development. *Declaration of Santa Cruz de la Sierra.* Bolivia, December 7-8, 1996. http://www.summit-america.org/summit_sd/summit_sd_dec_en.pdf. para. 10b. The Declaration also included provisions for strengthening the legal framework and to “promote the reform and modernization of national laws... to reflect sustainable development concepts,” at para. 10g.

²²⁰ Special Summit for Sustainable Development. *Plan of Action for the Sustainable Development of the Americas.* http://www.summit-america.org/summit_sd/summit_sd_poa_en.pdf. Section II. includes initiatives 7 through 31.

²²¹ *Id.*, Section III.1, para. 1.

²²² *Id.*, Section III.1, paras. 2-3.

²²³ *Id.*, Section III.1, para. 5. See discussion below in section 7.2.

²²⁴ Third Summit of the Americas. *Declaration of Quebec City.* Quebec City, Canada, April 20-22, 2001.

http://www.summit-america.org/iii_summit/iii_summit_dec_en.pdf

²²⁵ Third Summit of the Americas. *Plan of Action.* Section 10.

<http://www.summit-america.org/Documents%20for%20Quebec%20City%20Summit/Quebec/plan-e.pdf>.

²²⁶ Meeting of Ministers of Agriculture of the Americas 2001. *Declaration of Bavaro for the Improvement of Agriculture and Rural Life in the Americas.* Dominican Republic, 2001, in IICA (2010). *Hemispheric Ministerial Agreements: AGRO 2003-2015: Plan of Action for Agriculture and Rural Life in the Americas and Declaration of Bavaro.* IICA, San Jose, C.R. <http://repiica.iica.int/docs/B1665i/B1665i.pdf>. Ministers of agriculture stated that agriculture and food security should be considered strategic topics.

²²⁷ *AGRO Plan of Action (2003-2015)*, adopted at the Second Ministerial Meeting on Agriculture and Rural Life, held in Panama in November 2003, in IICA *Hemispheric Ministerial Agreements, id.*

²²⁸ IICA (2008). *Hemispheric Ministerial Process: In pursuit of a renewed institutional framework for agriculture and rural life in the Americas.* Report of the Secretariat on the 2006-2007 Ministerial Process “Agriculture and Rural Life in the Americas” and the Fourth Ministerial Meeting, Guatemala, 2007.

At the Special Summit in 2004, regional heads committed “to improve living conditions for inhabitants of rural areas, by promoting investment and creating a favorable environment to achieve sustainable improvements in agriculture that will contribute to social development, rural prosperity, and food security.” Special Summit of the Americas. *Declaration of Nuevo Leon.* Monterrey, Mexico, January 13, 2004. http://www.summit-america.org/sp_summit/sp_summit_dec_en.pdf

At the Fourth Summit, they committed “to promote.. the elimination of hunger and the attainment of food security” (Declaration, para. 2); they also agreed to support the implementation of AGRO (2003-2015) and to request IICA and ECLAC for follow-up (Plan of Action, paras. 35 and 43). Fourth Summit of the Americas. *Declaration: “Creating Jobs to Fight Poverty and Strengthen Democratic Governance.”* Mar del Plata, Argentina, November 5, 2005. http://www.summit-america.org/iv_summit/iv_summit_dec_en.pdf; *Plan of Action.* http://www.summit-america.org/iv_summit/iv_summit_poa_en.pdf

At the Fifth Summit, regional heads expressed renewed commitment to strengthen inter-American cooperation and, “with the support of the institutions of the United Nations, the inter-American system and other relevant regional institutions,... to promote adequate and sustainable access to energy, food and water;...” (para. 4); “..to develop and implement comprehensive policies and programmes to confront the challenges of food security..” (para. 23); “to combat chronic malnutrition and to promote adequate nutritional policies for our populations....support the promotion of investment in agriculture..”(para. 24); “...support the repositioning of agriculture and rural issues as priorities

in our national strategies... with the support of [IICA] and other relevant organisations (para. 25).” Fifth Summit of the Americas. *Declaration of Commitment of Port of Spain. Securing our Citizens’ Future by Promoting Human Prosperity, Energy Security and Environmental Sustainability*. April 19, 2009. OEA/Ser. E CA-V/DEC.1/09 19 April 2009. April 17-19, 2009, Port of Spain, Trinidad and Tobago. http://www.summit-americas.org/V_Summit/decl_comm_pos_en.pdf

At the Sixth Summit, regional heads resolved “to promote greater investment in, and access to, research, technological innovation, and capacity-building in order to strengthen and ensure a sustainable, comprehensive, inclusive, and competitive agro-food sector that would contribute to food security and the reduction of poverty and inequity, particularly in marginalized rural and urban areas.” (para. 9). Sixth Summit of the Americas. *Mandates arising from the Sixth Summit of the Americas*. OEA/Ser.E, CA-VI/doc.6/12 Rev. 2 23 May 2012, April 14-15. 2012, Cartagena de Indias, Colombia.

At the Seventh Summit, regional heads agreed “to encourage sustainable and productive agriculture, optimizing the use of natural resources, particularly water and soil, in order to achieve prosperity with equity in rural areas.” (para. 3); “to encourage the joint efforts of the public and private sectors, civil society, and other social stakeholders to strengthen strategies for food and nutrition, specifically child nutrition, as an integral element of health in fighting poverty, hunger, and inequality.” (para. 7). Seventh Summit of the Americas. *Prosperity with Equity: The Challenge of Cooperation in the Americas*. Mandates for Action. OEA/Ser.E CA-VII/INF.4/15 17 April 2015. April 10-11, 2015 Panama City, Panama.

At the Eighth Summit, no specific mention is made of food or agriculture, however, the declaration does recognize “the importance in following up on and implementing the mandates and initiatives stemming from the VIII Summit of the Americas and prior Summits...” Eighth Summit of the Americas, *Lima Commitment “Democratic Governance Against Corruption”*. Lima, Peru. April 14, 2018. OEA/Ser. E CA-VIII/doc.1/18 rev.1 14 April 2018.

²²⁹ Meeting of Ministers of Agriculture of the Americas 2013. *Declaration “Water to Feed the Land.”* September 25-26, 2013. Buenos Aires, Argentina. In OAS (2015). Official Documents of the Summits of the Americas Process: From Cartagena de Indias (2012) to Panama City (2015). Meeting of Ministers of Agriculture of the Americas 2015, *Declaration “Grow better, produce more, feed everyone.”* October 20-22, 2015. Mexico.

http://www.iica.int/sites/default/files/events/presentations/2015-11/declaration_of_ministers_en_final_0.pdf

²³⁰ *Charter of the OAS*, Chapter XVIII.

²³¹ *Convention on IICA*. No. 48 of the Series on Treaties and OAS Official Documents, OAS/Ser.A/25(SEPF) of the General Secretariat of the OAS, 1979. Article 3. Entry into force on December 8, 1980. *Convention and Basic Rules of Procedure of IICA*. <http://repositorio.iica.int/bitstream/11324/2620/2/BVE17038700i.pdf>

²³² Examples of work activities by IICA in relation to the first pillar of food security, availability: Production - *Animal Disease Recognition and Response Workshop* <http://iica.int/en/events/animal-disease-recognition-and-response-workshop>; Distribution - *Studies demonstrate that improvements in port infrastructure will foster trade flow of food products*. <http://iica.int/en/press/news/infrastructural-gaps-stumbling-blocks-development-caribbean-countries>; Exchange - *WTO and IICA train professionals in sanitary measures for agrifood trade* <http://iica.int/en/press/news/wto-and-iica-train-professionals-11-countries-americas-application-sanitary-measures> (accessed 01/10/2019).

²³³ OAS. *American Declaration of the Rights and Duties of Man*, adopted by the Ninth International Conference of American States. OAS Res XXX (1948), in OEA/Ser.L/V/II.23 doc.21 rev.6 at 5 (1979), OEA/Ser.L.V/II.82 doc.6 rev.1 at 17 (1992).

²³⁴ *Id.*, Articles and 77.

²³⁵ OAS. *Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights “Protocol of San Salvador.”* OASTS No 69, OAS Doc AG/Res 907 (XVIII-O/88).

²³⁶ *Charter of the OAS*, Article 106.

²³⁷ *Statute of the Inter-American Court of Human Rights*, OAS Res 448 (IX-0/79), AG/RES 448 (IX-0/79). Article 1 provides that the court “is an autonomous judicial institution whose purpose is the application and interpretation of the American Convention on Human Rights.”

²³⁸ *IACHR Chooses Special Rapporteur on ESCE Rights*. 5 July 2017. http://www.oas.org/en/iachr/media_center/PReleases/2017/090.asp (accessed 01/10/2019).

²³⁹ *Yanomani Indians v. Brazil*, IACHR Case No 7615, Res No. 12/85, OEA/Ser.L/V/II.66 doc.10 rev.1, 5th March 1985. The Commission found that Brazil had failed to take the necessary measures to protect the Yanomani community and was in breach of several rights protected under the Declaration including the right to food.

²⁴⁰ *Enxet-Lamenxay and Kayleyphapopyet (Riachito) Indigenous Communities v. Paraguay*, IACHR, Case No. 11.713 Report 90/99, 1999.

²⁴¹ *Sawboyamaxa Indigenous Community v. Paraguay*, IACtHR Series C No. 146, 29 March 2006.

²⁴² Right to Food Examples, *supra* note 75, at page 41.

²⁴³ Argentina, Supreme Court, *Defensor del Pueblo de la Nación c. Estado Nacional y otra*, Judgement of September 18, 2007; Colombia, Constitutional Court, *Acción de tutela instaurada por Abel Antonio Jaramillo y otros contra la Red de Solidaridad Social y otros*, Sentencia T-025/2004. In these two cases, both courts protected the right to be free from hunger and that minimum requirements should always be observed even if compliance on the part of government is difficult. Cited in FAO Right to Food Examples, *id.*

²⁴⁴ See text accompanying note 223.

²⁴⁵ *Charter of the OAS*, Articles 99 and 100.

²⁴⁶ CJI/RES. 196 (LXXXXXI-O/12); cited in *Electronic Warehouse Receipts for Agricultural Products* CJI/doc. 427/13, in IAJC (2013). Annual Report of the IAJC to the General Assembly. OEA/Ser.Q CJI/doc.443/13 at page 105.

²⁴⁷ CJI/doc. 427/13, *id.*

²⁴⁸ *Id.*

²⁴⁹ *Id.*

²⁵⁰ IAJC. *Proposed Principles for Electronic Warehouse Receipts*. CJI/doc.437/13, July 15, 2013; *Electronic Warehouse Receipts*. CJI/doc. 452/14, February 26, 2014; *Electronic Warehouse Receipts for Agricultural Products*, CJI/doc. 475/15, March 11, 2015; *Electronic Warehouse Receipts for Agricultural Products*, CJI/doc. 483/15, July 8, 2015; *Electronic Warehouse Receipts for Agricultural Products*, CJI/doc. 497/16, March 17, 2016.

²⁵¹ IAJC. *Electronic Warehouse Receipts for Agricultural Products*. CJI/doc. 505/16 rev. 2. September 27, 2016.

²⁵² OAS. *Order of Business*. OEA/Ser. G CP/CAJP-3448/17 13 November 2017.

²⁵³ OAS. *International Law*, adopted at the fourth plenary session held on June 5, 2018. AG/RES. 2926 (XLVIII-O/18), Section I.i., para. 1.

²⁵⁴ The second (and final term) of the first rapporteur had expired.

²⁵⁵ Gabriel, H. D. *Warehouse Receipts and Securitization in Agricultural Finance*. *Uniform Law Review* (2012) Vol. 17, 369-376; Dubovec, M. and Elias, E., *A Proposal for UNCITRAL to develop a Model Law on Warehouse Receipts*. *Uniform Law Review* (2017) Vol. 22, 716-730.

²⁵⁶ FAO and ERBD (2014). *Designing Warehouse Receipt Legislation: Regulatory Options and Recent Trends*; World Bank Group (2016). *A Guide to Warehouse Receipt Financing Reform: Legislative Reform*.

²⁵⁷ UNCITRAL. *Report of Working Group VI (Security Interests) on the work of its thirty-third session*. A/CN.9/938. At this session the Working Group took note of a proposal “that work should be undertaken to prepare a substantive text on warehouse receipts, which would provide a modern and predictable legal framework...in cooperation with other international and regional organizations that have been involved on the topic.” Para. 92.

Sobre la autora

Jeannette Tramhel



Jeannette Tramhel es oficial jurídico principal del Departamento de Derecho Internacional de la Secretaría de Asuntos Jurídicos de la OEA, donde se especializa en temas de derecho internacional privado, brindado apoyo a los cuerpos políticos y órganos de la Organización. Ha desarrollado proyectos de cooperación técnica en los Estados Miembros, principalmente relacionados con reforma legal e implementación de legislación.

Previamente se desempeñó como oficial jurídico en la secretaría de la Comisión de Naciones Unidas sobre Derecho Mercantil Internacional (CNUDMI - UNCITRAL), ejerció la abogacía en una prestigiosa firma de abogados en su natal

Canadá, trabajó con el Gobierno de Canadá y dictó clases de derecho mercantil y corporativo.

La Dra. Tramhel obtuvo su maestría en diseño ambiental y bachillerato en ciencias agrícolas, lo que le permitió trabajar como profesional en desarrollo internacional, abordando temas como agricultura urbana, salud materna e infantil, y evaluación de proyectos.

Jeannette Tramhel es abogada (Queen's University, Canadá), con maestría en derecho internacional y comparado con distinción (Georgetown University). Es miembro de las barras de abogados de Nueva York y Ontario (Canadá).