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## **In the Name of Food Security: The Achievements and Failures of Developing Countries in the Bali Ministerial Conference**

### **Keywords**

Developing Countries, Food and Drug Law, International Trade, Subsidies, Social Welfare Law, World Trade Organization

# IN THE NAME OF FOOD SECURITY: THE ACHIEVEMENTS AND FAILURES OF DEVELOPING COUNTRIES IN THE BALI MINISTERIAL CONFERENCE

CHINGWEN HSUEH\*

## I. INTRODUCTION

According to the 2013 estimate of the Food and Agriculture Organization, 842 million people suffered from chronic hunger in 2011-2013.<sup>1</sup> In other words, approximately one out of every eight people in the world is undernourished. Developing countries account for most of these people, 827 million in total.<sup>2</sup> The international community is highly aware of the famine and numerous international organizations, including the World Trade Organization (“WTO”), exert efforts to solve the problem from their perspective. According to the preamble of the Marrakesh Agreement Establishing the World Trade Organization (“WTO Agreement”), trade is not an end in itself but rather a means of “raising standards of living.”<sup>3</sup> Furthermore, members of the WTO noted nontrade concerns in the preamble of the Agreement on Agriculture (“AoA”), including:

food security and the need to protect the environment; having regard to the agreement that special and differential treatment for developing countries is an integral element of the negotiations, and taking into account the possible negative effects of the implementation of the reform programme on least-developed and net food-importing developing countries.<sup>4</sup>

In addition, Article 20 of the AoA emphasizes that there is much to accomplish to complete the reform of agricultural trade, which considers food security.<sup>5</sup> These provisions show that the WTO considers food security essential in the trade legal system, especially in developing countries. Additional attention on food security in liberalizing the trade of foodstuffs can be assumed.

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1. U.N. FOOD & AGRIC. ORG. (“FAO”), *U.N. World Food Programme (“WFP”), & Int’l Fund for Agric. Dev. (“IFAD”), The State of Food Insecurity in the World 8* (FAO 2013), <http://www.fao.org/docrep/016/i3027e/i3027e.pdf>. Note that this was a projection, but a decrease from the number in 2008-10.

2. *Id.*

3. Marrakesh Agreement Establishing the World Trade Organization, Preamble, Apr. 15, 1994, 1867 U.N.T.S. 154 [hereinafter Marrakesh Agreement], [https://www.wto.org/english/res\\_e/booksp\\_e/agrmntseries1\\_wto\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/agrmntseries1_wto_e.pdf).

4. Marrakesh Agreement, Annex 1A: Multilateral Agreements on Trade in Goods—Agreement on Agriculture, Apr. 15, 1994, 1867 U.N.T.S. 410, [https://www.wto.org/english/docs\\_e/legal\\_e/14-ag.pdf](https://www.wto.org/english/docs_e/legal_e/14-ag.pdf) [hereinafter AoA].

5. *Id.* at art. 20.

The Doha Development Agenda (“DDA”) was established to provide a framework to avoid the negative effects of free trade on food security in developing countries.<sup>6</sup> However, fruitless and endless negotiations cause the objective of the DDA to seem more an illusion than a possibility. The setback of the “draft modalities”<sup>7</sup> in 2008 rendered the DDA even further from achieving its aim. In 2013, the opportunity to complete the DDA reemerged in the Bali Ministerial Conference. After five days of intensive discussions, the ministers of members adopted the decisions known as the “Bali Package,” which was a result of the United States trading food security proposals for the Agreement on Trade Facilitation.<sup>8</sup> The decisions concerning agriculture primarily followed the draft proposed by developing countries.<sup>9</sup> In other words, the Bali declaration and decisions concerning agriculture considered more needs of developing countries than those of developed countries.

This study assesses the extent of which the Bali Package can ensure food security in developing countries. Part II presents a discussion on the policy options for developing countries to ensure food security. The discussion focuses on the adverse effect on other developing countries and attempts to determine the policies that contribute to food security at the global level. Part III presents an analysis the implication of the WTO rules on food security and identifies the concerns of developing countries. Part IV presents an examination of the improvement that the Bali Package can contribute to the food security in developing countries and the world. A preliminary observation of whether developing countries have achieved food security in trade is provided in the conclusion.

## II. POLICY ORIENTATIONS FOR DEVELOPING COUNTRIES TO ACHIEVE FOOD SECURITY

Determining the needs of developing countries for achieving food security is difficult because of two reasons. First, the concept of food security has evolved constantly in previous decades, reflecting the changes in the considerations for food security, which involves more than mere famine.<sup>10</sup> An effective strategy for food security should solve numerous concerns such as those of hunger, economic

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6. See WTO, Ministerial Declaration of 14 November 2001, ¶13, WT/MIN(01)/DEC/1, 41 I.L.M. 746 (2002), [https://www.wto.org/english/thewto\\_e/minist\\_e/min01\\_e/mindecl\\_e.htm](https://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm).

7. WTO Committee on Agriculture, Special Session, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4 (Dec. 6, 2008), [https://www.wto.org/english/tratop\\_e/agric\\_e/agchairtxt\\_dec08\\_a\\_e.pdf](https://www.wto.org/english/tratop_e/agric_e/agchairtxt_dec08_a_e.pdf).

8. See Christian Häberli, *After Bali: WTO Rules Applying to Public Food Reserves* 7 (prepared for the Expert meeting on reserves/stocks and specifically their potential role in market/price stabilization from 30-31 Jan. 2014) (last visited Mar. 31, 2015), [http://www.wti.org/fileadmin/user\\_upload/wti.org/news/140130\\_Haerberli\\_Stockpiles\\_Final\\_for\\_FAO.pdf](http://www.wti.org/fileadmin/user_upload/wti.org/news/140130_Haerberli_Stockpiles_Final_for_FAO.pdf).

9. See *Briefing note: Agriculture negotiations—the bid to ‘harvest’ some ‘low hanging fruit’*, 9th WTO Ministerial Conference, BALI, 2013 (2013), [http://www.wto.org/english/thewto\\_e/minist\\_e/mc9\\_e/brief\\_agneg\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/mc9_e/brief_agneg_e.htm) (last visited Mar. 31, 2015).

10. See FAO COMMODITIES AND TRADE DIVISION, *TRADE REFORMS AND FOOD SECURITY: CONCEPTUALIZING THE LINKAGES* 25-26 (2003), <ftp://ftp.fao.org/docrep/fao/005/y4671e/y4671e00.pdf> [hereinafter FAO, *TRADE REFORMS*].

development, and the environment. Prioritizing all the various concerns of food security might be difficult for developing countries. Second, food security is not defined at a single level but can be defined at different levels such as the household, national, and global level.<sup>11</sup> Food security at one level does not guarantee it at another level. Moreover, the strategy for food security in one country might have a negative spillover effect in another. For instance, a country in a food crisis might impose an export restriction on a produce, causing the world price of that product to increase and putting poor countries that rely on imported food at risk. The conflicts of interests among developing countries regarding food security are not uncommon. In addition, a unilateral strategy might not be effective without the cooperation of other countries. For the common good, pursuing food security at both national and global levels instead of only at the national level is preferable.

#### A. *The definition of food security*

The term “food security” was first mentioned in the mid-1970s when the World Food Conference was held to discuss the global food crisis. The focus was on food supply and the price stability of foodstuffs at international and national levels.<sup>12</sup> The conference defined food security as the “availability at all times of adequate world supplies of basic food-stuffs . . . to sustain a steady expansion of food consumption in countries with low levels of *per capita* intake and to offset fluctuations in production and prices.”<sup>13</sup> In the 1980s, the Food and Agriculture Organization (“FAO”) emphasized the importance of access to food, which was defined in the following goal: “all people at all times have both physical and economic access to the basic food that they need.”<sup>14</sup> In 1986, the World Bank Report on Poverty and Hunger focused on the temporal dynamics of food security. The report differentiated chronic food insecurity from transitory food insecurity.<sup>15</sup> Chronic food insecurity is associated with the problem of continuing or structural poverty and low incomes; transitory food insecurity refers to situations of intensified pressure caused by natural disasters.<sup>16</sup> Food security in general was defined as an “access by all people at all times to enough food for an active and

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11. Panos Konandreas, *Trade and Food Security: Options for Developing Countries* 10.2.1, in FAO, MULTILATERAL TRADE NEGOTIATIONS ON AGRICULTURE: A RESOURCE MANUAL, Module 10 (2000), <http://www.fao.org/docrep/003/x7353e/x7353e10.htm> (last visited Mar. 31, 2015).

12. Edward Clay, *Food Security: Concepts and Measurement* 1 (2002) (paper for FAO Expert Consultation on Trade and Food Security: Conceptualizing the Linkages), [http://ieham.org/html/docs/food\\_security\\_concepts\\_and\\_measurement.pdf](http://ieham.org/html/docs/food_security_concepts_and_measurement.pdf).

13. World Food Conference, Rome, Italy, Nov. 5-16, 1974, Res. XVII, E/CONF.65/20 (1975).

14. FAO, Director General's Report, *World Food Security: a Reappraisal of the Concepts and Approaches* (1983).

15. WORLD BANK, POVERTY AND HUNGER: ISSUES AND OPTIONS FOR FOOD SECURITY IN DEVELOPING COUNTRIES 1 (July 31, 1986) [http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/1999/09/17/000178830\\_98101901455676/Rendered/PDF/multi\\_page.pdf](http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/1999/09/17/000178830_98101901455676/Rendered/PDF/multi_page.pdf).

16. *Id.*

healthy life.”<sup>17</sup>

The most widely accepted definition of food security was provided in the World Food Summit, 1996. According to the World Food Summit Plan of Action, “[f]ood security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”<sup>18</sup>

The concept of food security comprises four dimensions: food availability, access to food, utilization, and stability. Food availability refers to “[t]he availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports.”<sup>19</sup> Access to food refers to the “[a]ccess by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet.”<sup>20</sup> Stability exists when “population[s], household[s] or individual[s] . . . have access to adequate food at all times.”<sup>21</sup> The concept of stability overlaps with the concepts of food availability and access to food, except that stability focuses on the risks of losing food availability or access as the consequences of sudden crises or cyclical events. Utilization is defined as “[u]tilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met.”<sup>22</sup> According to this definition, nonfood aspects enhance the concept of food security, which aims for not only the survival of human beings but also for healthy lives.

#### *B. Increasing food availability*

Food availability concerns the quantities of foodstuffs, which are determined by supply and demand. Generally, food insecurity at the global level is caused more by the lack of access to food than by an insufficient supply of food.<sup>23</sup> Food insecurity regarding food quantities at the national level can be alleviated by trade or food aids. In other words, enough food is available for everyone, but not everyone can afford the price. However, the world is not guaranteed food availability because of the potential increase of food demand and the uncertainty of the food supply. The demand of food is expected to increase because of the population and income growth of developing countries.<sup>24</sup> The increased income will raise the per capita calorie demand in developing countries to higher than a

17. *Id.* at V.

18. World Food Summit, Rome, Italy, Nov. 13-17, 1996, *Rome Declaration on World Food Security and World Food Summit Plan of Action*, ¶ 1, WFS 96/REP (Nov. 17, 1996), <http://www.fao.org/docrep/003/w3613e/w3613e00.HTM>.

19. FAO, 2 POLICY BRIEF ON FOOD SECURITY 1, 1 (June 2006), [ftp://ftp.fao.org/es/ESA/policybriefs/pb\\_02.pdf](ftp://ftp.fao.org/es/ESA/policybriefs/pb_02.pdf) [hereinafter FAO POLICY BRIEF].

20. *Id.*

21. *Id.*

22. *Id.*

23. Amartya Sen, *Famines*, 8 WORLD DEVELOPMENT 613, 614 (1980).

24. Org. for Econ. Co-operation & Dev. (“OECD”), Trade & Agric. Directorate, *Global Food Security: Challenges for The Food and Agriculture System* ¶ 69, TAD/CA/APM/WP(2012) 18/FINAL (Apr. 23, 2013) [hereinafter OECD, *Global Food Security*].

healthy level.<sup>25</sup> According to these two factors, the global agricultural production should increase substantially, at least by sixty percent compared with 2005–2007.<sup>26</sup> However, increasing the food supply is challenging because of climate change. Although the negative effect of climate change on agriculture is difficult to estimate, the risk of increased food price is evident.<sup>27</sup>

To ensure food availability, developing countries should either limit the food demand or increase the food supply. Developing countries have lower productivity than that of developed countries. The yield gap can be closed by changing farm sizes, improving management capacity, increasing access to input and output markets, and increasing the effectiveness of input use.<sup>28</sup> Improving productivity requires national investment in agricultural research, technological development,<sup>29</sup> and agricultural education, which enables farmers to manage their farms and outputs efficiently. In addition, expanding the land for agricultural use sustainably can increase the supply of food. However, little or no room is found for the expansion of arable land.<sup>30</sup> Arable lands are also subject to nonagricultural uses, pollution, and erosion. Economic incentives are believed to resolve these problems to some extent.<sup>31</sup>

Much can be achieved toward reducing the excessive food demand, such as minimizing supply-chain losses, biofuel consumption, and consumer wastes. Developing countries have considerable food losses because of poor storage facilities, inadequate infrastructure, and weak technical ability.<sup>32</sup> Government and private sectors are suggested to invest in the general infrastructure, harvest techniques, and storage facilities.<sup>33</sup> Governments, especially those of developed countries, should remove the subsidies for biofuels, which are composed of raw

25. See FAO, WFP, & IFAD, *THE STATE OF FOOD INSECURITY IN THE WORLD 17* (FAO 2012), <http://www.fao.org/docrep/016/i3027e/i3027e.pdf>.

26. Sen, *supra* note 23.

27. See Gerlad Nelson et. al., *The Role of International Trade in Climate Change Adaptation*, ICTSD-IPC PLATFORM ON CLIMATE CHANGE, AGRICULTURE AND TRADE 8-9 (Dec. 2009), <http://www.agritrade.org/documents/IssueBrief4.pdf>.

28. Sen, *supra* note 23, at 27.

29. See Robert E. Evenson & Keith O. Fuglie, *Technology Capital: The Price of Admission to the Growth Club*, 33 J. PROD. ANAL. 173, 189 (2009).

30. See generally Nikos Alexandratos & Jelle Bruinsma, *World Agriculture Towards 2030/2050: The 2012 revision*, ESA Working Paper No. 12-03, FAO, AGRICULTURAL DEVELOPMENT ECONOMICS DIVISION (June 2012), [http://www.fao.org/fileadmin/templates/esa/Global\\_perspectives/world\\_ag\\_2030\\_50\\_2012\\_rev.pdf](http://www.fao.org/fileadmin/templates/esa/Global_perspectives/world_ag_2030_50_2012_rev.pdf); Günther Fischer, *World Food and Agriculture to 2030/50: How Do Climate Change and Bioenergy Alter the Long-term Outlook for Food, Agriculture and Resource Availability?* (presented at the FAO Expert Meeting on How to Feed the World in 2050, June 24-26, 2009), <ftp://ftp.fao.org/docrep/fao/012/ak972e/ak972e00.pdf>.

31. Sen, *supra* note 23, at 30.

32. See JENNY GUSTAVSSON ET AL., *GLOBAL FOOD LOSSES AND FOOD WASTE: EXTENT, CAUSES AND PREVENTION* 11 (2011), [http://www.fao.org/fileadmin/user\\_upload/sustainability/pdf/Global\\_Food\\_Losses\\_and\\_Food\\_Waste.pdf](http://www.fao.org/fileadmin/user_upload/sustainability/pdf/Global_Food_Losses_and_Food_Waste.pdf).

33. See GOV'T OFFICE FOR SCI., *THE FUTURE OF FOOD AND FARMING: CHALLENGES AND CHOICES FOR GLOBAL SUSTAINABILITY*, FINAL PROJECT REPORT 89 (London, 2011), [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/288329/11-546-future-of-food-and-farming-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/288329/11-546-future-of-food-and-farming-report.pdf).

materials competing with food.<sup>34</sup> Regarding consumer wastes, developed countries have a substantial responsibility to raise public awareness through campaigns and advertising.<sup>35</sup>

In brief, developing countries can contribute to food availability by investing in agricultural research and development ("R&D"), general infrastructure, education, and the preservation of arable lands.

### C. Ensuring access to food

Assuming that the quantities of food remain sufficient for the global demand, access to food is the primary cause of food insecurity.<sup>36</sup> Access to food is limited because of low income or high food prices, rather than an insufficient supply.<sup>37</sup> Food aids can provide access to food; however, dependence on the courtesy of the international community is not reliable in the long term. Two intuitive options exist for developing countries: (1) reduce food prices or (2) increase incomes. Suppressing food prices can secure access for consumers, but reducing producers' income limits their access to food and reduces their incentive to invest in production. A mutually beneficial strategy is to increase incomes in developing countries, particularly the incomes of people living in rural areas.

In numerous developing countries, the agricultural sector causes growth and developments in other sectors. Increasing the incomes in agricultural sectors might be the most feasible way to reduce poverty. To achieve this, the competitiveness of farmers must be improved; this requires investments that are specific to the agricultural sector for research, infrastructure, and human capital.<sup>38</sup> In addition, diversifying the sources of incomes of farm households is an effective coping strategy. The earnings outside the agricultural sector could be higher and more stable. Moreover, policies must create opportunities outside the agricultural sector for the farmers who cannot have a competitive future in this sector, and for those who can earn more in other sectors.<sup>39</sup> In addition to the reforms for economic, social protection can be provided to support access to food by protecting incomes and increasing food security in the short term.<sup>40</sup> Price support and input subsidies, although prevalent in numerous countries, are ineffective at raising incomes.<sup>41</sup>

Similar to improving food availability, investments in the agricultural sector can increase incomes and therefore ensure access to food. The social security net can support access to food in the short term.

34. Sen, *supra* note 24, at 33.

35. See GUSTAVSSON ET AL., *supra* note 33, at 14.

36. See FAO POLICY BRIEF, *supra* note 19, at 1.

37. See *id.* at 4.

38. See OECD, *Policy Framework for Investment in Agriculture* 1, 4 (Mar. 2013), [http://www.oecd.org/daf/inv/investment-policy/PFIA\\_April2013.pdf](http://www.oecd.org/daf/inv/investment-policy/PFIA_April2013.pdf).

39. See Sen, *supra* note 23, at 63-64.

40. See Jonathan Brooks, *Policy Coherence and Food Security: The Effects of OECD Countries' Agricultural Policies*, 44 FOOD POLICY 88, 93 (2014).

41. See OECD, MARKET EFFECTS OF CROP SUPPORT MEASURES 1, 32 (2001).



#### D. *Maintaining stability*

The concept of stability focuses on the temporal dimension of food security. The concerns with stability are the risks of losing food availability or access because of sudden crises or cyclical events. The policy orientations of developing countries are to increase the resilience to price volatility and the short-term shortage of food supply. Several options exist; the first is trade liberalization. Instability occurs mostly at the domestic level, and trade can be a stabilizing mechanism.<sup>42</sup> Compared with the agricultural output of individual countries, the world output is substantially less variable; therefore, international trade can maintain balance in global supply fluctuations. Some countries do not accept this perception and fear that relying on trade would expose the domestic market to the vagaries of the world market.<sup>43</sup> However, analysis revealed the opposite: small volumes of trade in agricultural products can cause increased price volatility at the global level, because a small variation in supply can have a substantial impact on the market as a result of a large share of world trade.<sup>44</sup> For example, a two percent decline in milled rice production constituted twenty-eight percent of the world trade of rice in 2010.<sup>45</sup> The impact on volatility would have been magnified if there were a concentration on market suppliers.<sup>46</sup> Furthermore, trade restriction can be ineffective at protecting the domestic price from the negative impacts of world price volatility and can only transfer the risk to others;<sup>47</sup> therefore, trade restriction is a typical beggar-thy-neighbor policy. To utilize trade for food security, reducing import barriers and trade-distorting domestic supports and prohibiting export subsidies are recommended.<sup>48</sup>

The second option for reducing price volatility is to provide transparency of market information. Information on the current and future market situations can substantially assist the market in functioning efficiently. Providing timely and accurate data on food production, consumption, and stocks is suggested.<sup>49</sup> The third option is that future markets provide instruments to transfer the risk of volatility and attract financial investors who are not in the agricultural commodities market. Although speculators can have a negative impact on

42. Phil Abbott, *Stabilisation Policies in Developing Countries after the 2007-08 Food Crisis*, in AGRICULTURAL POLICIES FOR POVERTY REDUCTION 109, 157 (Jonathan Brooks ed., 2012).

43. See FAO, TRADE REFORMS, *supra* note 110, at 128.

44. See Sen, *supra* note 23, at 48.

45. Jonathan Brooks & Alan Matthews, *Agricultural Trade and Food Security: Choosing Between Trade And Non-Trade Policy Instruments*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT 1, 22, [http://www.ictsd-symposium.org/wp-content/uploads/bsk-pdf-manager/31\\_Brooks-Matthews-Trade-Policy-and-Food-Security.pdf](http://www.ictsd-symposium.org/wp-content/uploads/bsk-pdf-manager/31_Brooks-Matthews-Trade-Policy-and-Food-Security.pdf).

46. *Id.*

47. See, e.g., Will Martin & Kym Anderson, *Export Restrictions and Price Insulation During Commodity Price Booms*, 94 (2) AM. J. AGR. ECON. 422, 426-27 (2012).

48. FAO et al., *Price Volatility in Food and Agricultural Markets: Policy Responses* 1, 26 (2011), [http://www.amis-outlook.org/fileadmin/templates/AMIS/documents/Interagency\\_Report\\_to\\_the\\_G20\\_on\\_Food\\_Price\\_Volatility.pdf](http://www.amis-outlook.org/fileadmin/templates/AMIS/documents/Interagency_Report_to_the_G20_on_Food_Price_Volatility.pdf).

49. See *id.* at 21.

stability, an appropriate regulatory scheme can ensure the function of future markets as intended in terms of hedging and price discovering.<sup>50</sup> The fourth option is to use food stocks as a buffer for the adverse effect of volatility. Food stocks are more prevalent in developing countries than developed countries despite the high expenditure caused by the cost of appropriate storage infrastructure and of purchasing foodstuffs.<sup>51</sup> Compared with public food stocks, private food stocks are believed to be more efficient.<sup>52</sup> To encourage the investment in private stocking in developing countries, providing credits for storage improvements by the private sector is recommended.<sup>53</sup> To encourage the investment in private stocking in developing countries, providing credits for storage improvements by the private sector is recommended.<sup>54</sup> Emergency reserves and social safety nets are both fair options for helping those who are most vulnerable to price volatility in the short term.<sup>55</sup>

Finally, risk management is the long-term option to cope with the volatility. Risk management primarily involves three types of activities, namely mitigation of the risk, transfer of the risk, and coping with the impact of the realized risk.<sup>56</sup> For instance, a drought risk can be avoided using drought-resistant seeds. Insurance and derivatives can assist farmers in transferring the risks to a third party. Disaster risk financing provides *ex ante* protection for those affected by the realized risks.<sup>57</sup> In developing countries, farmers with smaller businesses and even the governments might not have the knowledge, assets, technology, and financial instruments for risk management. Governments of developing countries and private sectors should be provided with assistance in facilitating commodity hedging, advisory services to strengthen in-country financial risk management capacity, disaster risk financing, and assistance in modernizing meteorological services.<sup>58</sup>

#### *E. Improving the utilization of food*

The utilization of food focuses on the "state of nutritional wellbeing."<sup>59</sup> This emphasizes the nutritional quality of diets and healthy food consumption. Increasing the food supply or incomes cannot guarantee the utilization of food. Cost-effective and efficient options are nutrition-specific interventions such as information and education programs, the provision of health care services, and clean water and sanitation infrastructures.<sup>60</sup>

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50. *See id.* at 22.

51. *See id.* at 28.

52. *See id.* at 29.

53. *See id.* at 29.

54. *See id.*

55. *See id.* at 30, 65.

56. *Id.* at 67.

57. *Id.*

58. *Id.* at 36.

59. FAO POLICY BRIEF, *supra* note 19, at 1.

60. *See* GOV'T OFFICE FOR SCI., *supra* note 33, at 116.

In summary, three policy orientations exist that can contribute to food security. First, poverty is the primary cause of food insecurity in developing countries. Increasing the incomes of individuals can substantially secure access to food. Second, regarding productivities, governments and the private sector are encouraged to invest in agricultural R&D, education, and the rural institutional environment. Third, additional resources should be deployed for the availability of risk management tools.

### III. THE IMPLICATIONS OF THE WTO RULES ON FOOD SECURITY IN DEVELOPING COUNTRIES

It is generally agreed that trade has a substantial impact, whether positive or negative, on food security at national and global levels. Ideal trade rules can increase the positive effects of trade and mitigate its negative effects on food security.<sup>61</sup> The bottom line is that trade rules are to not prevent countries from taking measures to ensure food security, such as the aforementioned strategies. Trade in agriculture is closely associated with food security, a concern with nontrade factors; therefore, trade in agriculture is different from the trade in other sectors. The AoA provides the legal framework of trade in agriculture, which aims to establish “a fair and market-oriented agricultural trading system.”<sup>62</sup> This objective is pursued through “substantial progressive reductions in agricultural support and protection.”<sup>63</sup> The AoA comprises three essentials, namely market access, reductions in domestic support, and reductions in export subsidies.<sup>64</sup> Supplementing the AoA, the Marrakesh Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries (“NFIDC decision”)<sup>65</sup> is part of the legal framework. Another relevant provision is Article XI: 2(a) of General Agreement on Tariffs and Trade (“GATT”), which established an exemption for the prohibition of export restrictions.<sup>66</sup> This section examines the implication of the WTO rules on food security in developing countries and their concerns.

#### A. Market access

The AoA requires members to convert all nontariff trade barriers (“NTBs”) into tariffs.<sup>67</sup> Furthermore, the tariffs, which converted from the NTBs, shall be

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61. FAO, *Food and International Trade*, ¶ 3.4, <http://www.fao.org/docrep/003/w2612e/w2612e12.htm> (last visited Apr. 20, 2015).

62. AoA, *supra* note 4, at pmbl.

63. *Id.*

64. *Id.* at arts. 3 and 4.

65. *Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries*, Apr. 15, 1994, Marrakesh Agreement, at 60 (entered into force Jan. 1, 1995) [hereinafter *Decision on Measures*].

66. GATT 1994, art. XI, para. 2(a), Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

67. AoA, *supra* note 4, at art. 4(2).

progressively reduced over the course of six years (1995–2000). The obligations of developed countries are to reduce the tariffs by an average of thirty-six percent and by fifteen percent for each tariff line,<sup>68</sup> whereas the minimum reduction rate for developing countries are an average of twenty-four percent and ten percent for each tariff line.<sup>69</sup> The amount of reductions is provided with precise percentages in the members' individual tariff schedules.<sup>70</sup> To prevent the high tariffs converted from the NTBs that might preserve or even further constrain the market access, members are required to maintain the current market access or to provide the minimum market access.<sup>71</sup> The current market opportunity must not be less than the average annual import quantities for 1986–1988.<sup>72</sup> Where there were no significant imports, minimum market access opportunity is provided by the tariff rate quotas ("TRQs"). The TRQs are applied to imports equivalent to five percent of the domestic consumption in the base period of 1986–1988.<sup>73</sup> Because the special safeguard provision does not require an "injury test," it provides members more flexibility compared with the safeguard in Article XIX of GATT.<sup>74</sup> The requirement for the special safeguards is the trigger amount of imports or the trigger price of imports and is less strict than that for ordinary safeguards.<sup>75</sup> However, the measures adopted under the special safeguard provision include no quantitative restrictions.

As mentioned in the previous section, open markets can contribute to food security in developing countries in two ways. First, importing products in demand increases the availability of foods. Second, exporting agricultural products increases incomes and therefore secures access to food. However, the AoA does not guarantee fully open domestic markets. Committed members open their domestic markets, but the extent of openness depends primarily on the willingness of the members. In reality, the implementations of market access are criticized to be disadvantageous for developing countries. Developing countries are provided with limited market access to developed countries because developed countries have adopted "dirty tariffication" that overestimate the tariff equivalences of NTBs.<sup>76</sup> In addition, the obligation of tariff reductions for developed countries are

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68. GATT Secretariat, *Modalities for The Establishment of Specific Binding Commitments under the Reform Programme*, ¶5, MTN.GNG/MA/W/24 (Dec. 20, 1993).

69. Paola Fortucci, *An Overview of the International Trade Policy Framework for Sugar*, FAO Cuba Conference (1999), <http://www.fao.org/3/a-x4988e/x4988e08.htm> (Last visited April 19, 2014).

70. Ian Sturgess, *The Liberalisation Process in International Agricultural Trade: Market Access and Export Subsidies*, in *NEGOTIATING THE FUTURE OF AGRICULTURAL POLICIES: AGRICULTURAL TRADE AND THE MILLENNIUM WTO ROUND 135*, 147 (Sanoussi Bilal & Pavlos Pezaros eds., 2000).

71. *Id.*

72. *Decision on Measures*, *supra* note 65, Annex 3, at 430.

73. Song Soo Lim & Ronald A. Babula, *How Much is it Worth to Protect Sensitive Products with Tariff-Rate Quotas – A Korean Case*, 35 J. RURAL DEV. 83, 87 (2012).

74. *Id.*

75. *Id.*

76. Marrakesh Agreement, *supra* note 4, at ¶¶ 19-20; Dale E. Hathaway & Merlinda D. Ingco, *Agricultural Liberalization and the Uruguay Round*, in *URUGUAY ROUND AND DEVELOPING ECONOMIES*, 307 WORLD BANK DISCUSSION PAPERS 15, 24 (Will Martin & L. Alan Winters eds., 1995).

set at an average of thirty-six percent, with a minimum fifteen percent reduction for each tariff line.<sup>77</sup> This modality enables the members to minimize the tariff reduction of their most valued products, which are likely those produced or consumed domestically in large amounts.<sup>78</sup> Moreover, there were and still are tariff escalations in several vital product chains;<sup>79</sup> which could cause the foods produced in developing countries to be less competitive in price, thereby impeding their development. Furthermore, the minimum market access is modest and does not require any imports. The members are not required to open their market to new entrants because they can use the existing agreement of commodities on concessionary terms, such as the agreements between the EU and ACP countries on sugar parchments, to satisfy the requirement of the minimum market.<sup>80</sup> Finally, some developed countries abuse the special safeguards by setting a trigger price higher than that provided in the AoA.<sup>81</sup> Most agricultural products in developed countries are subject to the special safeguard provision, which is easily abused.<sup>82</sup>

Compared with developed countries, developing countries have adopted an open attitude toward imports. The applied tariff rates are approximately fourfold lower than the bound rates.<sup>83</sup> Developing countries maintain this gap not merely because they are cautious about committing large tariff cuts. A more substantial reason is that they do not find maintaining high domestic food prices to be politically feasible because of a large poor population, or that foreign loans are conditional on low applied rates.<sup>84</sup> If developed countries remain parsimonious about the market access, developing countries would continue to be disadvantaged and thus lose the opportunity to increase incomes from exports.<sup>85</sup>

### B. Export subsidies

Export subsidies are proven to distort trade and are prohibited except for trade in agricultural products. The AoA prohibits the export subsidies, which are subject to a reduction obligation, but it did not exist during the base period (1986–1990).<sup>86</sup>

77. Joseph F. Francois et al., *Assessing the Uruguay Round, in* URUGUAY ROUND AND DEVELOPING ECONOMIES, 307 WORLD BANK DISCUSSION PAPERS 140, 150–51 (Will Martin & L. Alan Winters eds., 1995).

78. See *Paper No. 4: Issues at Stake Relating to Agricultural Development, Trade and Food Security*, ¶ 27 (Symposium on Agriculture, Trade and Food Security) (Sept. 1999), <http://www.fao.org/docrep/003/x4829e/x4829e04.htm#TopOfPage> [hereinafter *Paper No. 4*].

79. See *id.* at ¶ 28.

80. Joseph Francois et al., *supra* note 77, at 137.

81. AoA, *supra* note 4, art. 5.

82. See Carmen G. Gonzalez, *Institutionalizing Inequality: The WTO Agreement on Agriculture, Food Security, and Developing Countries*, 27 COLUM. J. ENVTL L. 433, 463 (2002).

83. See FAO Commodities & Trade Division, *Implementation of AoA and other WTO agreements, in* WTO AGREEMENT ON AGRICULTURE: THE IMPLEMENTATION EXPERIENCE—DEVELOPING COUNTRY CASE STUDIES, tbl. 3 (2003), <http://www.fao.org/docrep/005/y4632e/y4632e04.htm#bm04> [hereinafter FAO, *Implementation of AoA*].

84. See *id.* § 2.1.

85. See OECD, *Global Food Security*, *supra* note 24, at ¶ 55.

86. AoA, *supra* note 4, at art. 3(3).

Certain amounts of export subsidies are permissible. The AoA requires developed countries to reduce the expenditures for export subsidies by thirty-six percent of those expended in the base period, and to reduce the quantities of subsidized exports by twenty-one percent.<sup>87</sup> According to the special and different treatment, developing countries are provided with the leniency of reduction levels of twenty-four percent and fourteen percent, respectively. The implementation period is extended to ten years, which is four years longer than that allowed for developed countries.<sup>88</sup> In addition, reduction obligations are limited to six types of export subsidies.<sup>89</sup> Although members can adopt the export subsidies not listed in the AoA, they should be applied in a manner which results in, or which threatens to lead to, circumvention of reduction obligations. Neither should food aid be used to disguise export subsidies.<sup>90</sup>

The requirements for export subsidies are insufficient to mitigate the adverse effects of export subsidies. Export subsidies of any type are detrimental to food security in developing countries in several aspects. First, access to food might be limited as a result of low incomes. The import surges caused by the export subsidies reduce farmers' domestic market share. The increase of imports leads to a decrease in local production, which is provided mostly by smallholder farms.<sup>91</sup> Losses in domestic market share substantially reduce the incomes in rural regions; consequently, households in those areas might not afford the food bills. Although imports can produce downward pressure on agricultural products, this tendency does not necessarily compensate the loss of incomes. Furthermore, the developing countries that depend on their exports of agricultural products would suffer from the price reductions caused by export subsidies.<sup>92</sup> The increased food price would also benefit NFIDCs in the long term because substituting imports with domestic produce would be economical, thereby causing domestic production to increase.<sup>93</sup> Second, export subsidies enable the exporting countries, most of which are developed countries, to dump leftovers in developing countries.<sup>94</sup> The doubtful nutritional quality of imported food raises concerns for the utilization of food. The AoA provides little leverage if any, for developing countries to counter the problem of export subsidies. It cannot require the WTO to prohibit export subsidies because the export subsidies are permissible under a certain level. Nor can developing countries rely on their own export subsidies because they cannot afford the expenditures. Even if they could, the permissible amounts of export

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87. GATT Secretariat, *supra* note 68, at Annex 8, ¶ 5(a).

88. *Id.* ¶ 15.

89. AoA, *supra* note 4, at art. 9(1).

90. *Id.* at art. 10.

91. James Thuo Gathii, *Food Sovereignty for Poor Countries in the Global Trading System*, 57 LOY. L. REV. 509, 526-27 (2011).

92. Mark Ritchie & Kristin Dawkins, *WTO Food and Agricultural Rules: Sustainable Agriculture and the Human Right to Food*, 9 MINN. J. GLOBAL TRADE 9, 24 (2000).

93. See Tashi Kaul, *The Elimination of Export Subsidies and the Future of Net-Food Importing Developing Countries in the WTO*, 24 FORDHAM INT'L L.J. 383, 398 (2000).

94. Ritchie & Dawkins, *supra* note 94, at 16-17; OECD, *Global Food Security*, *supra* note 24, at 41.

subsidies would be modest because they have granted almost no subsidies during the base years,<sup>95</sup> and therefore the base for calculation is low or equal to zero.

Regarding the stability of food, the requirements of export subsidies are too strict for developing countries to manage public stockholding schemes. In the case of a high level of stock, governments prefer to sell the stocks to save the expenditures of keeping it.<sup>96</sup> However, they are unlikely to do so to avoid substantial price reductions in the domestic market that might lead to a decrease in production in the long term.<sup>97</sup> According to the AoA, they also cannot export the stocks at prices lower than the domestic level,<sup>98</sup> which might be higher than the international level because of public stockholding schemes. Some developing countries encounter difficulties in disposing the surplus of stocks.<sup>99</sup>

### C. Domestic supports

It is widely agreed that domestic support can distort trade. However, instead of prohibiting domestic supports, the AoA requires members to reduce domestic supports to a certain extent.<sup>100</sup> The amount of domestic supports is expressed as the aggregate measurement of supports (“AMS”), which is considered trade distorting and is called “amber box subsidies.”<sup>101</sup> A developed country is obliged to reduce twenty percent of its total AMS during the base period (1986–1988) over six years, whereas a developing country is obliged to reduce it by fourteen percent over ten years.<sup>102</sup> The precise amount of reduction is provided in the member’s schedule.<sup>103</sup>

Four types of domestic supports can be exempted from the AMS and thereby free from the obligation of reduction. The first type is exemptions particularly for developing countries. Developing countries are allowed to provide domestic support for agricultural and rural development, investment subsidies, input subsidies for poor producers, and diversification from growing illicit narcotic crops.<sup>104</sup> The second type is known as the “blue box,” which covers direct payment under production-limiting programs.<sup>105</sup> The third exemption is the *de minimis* threshold. For developing countries, the threshold for product-specific subsidies is five percent of the total value of the production of subsidized products.<sup>106</sup> In the case of non-product specific subsidies, the threshold is five

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95. FAO, *Implementation of AoA*, *supra* note 83, at § 2.3.

96. *Id.*

97. *Id.*

98. Tashi Kaul, *supra* note 93, at 397.

99. FAO, *Implementation of AoA*, *supra* note 83, at § 2.3.

100. AoA, *supra* note 4, at art. 6(1).

101. *Agriculture Negotiations: Background Fact Sheet*, WTO, [https://www.wto.org/english/tratop\\_e/agric\\_e/agboxes\\_e.htm](https://www.wto.org/english/tratop_e/agric_e/agboxes_e.htm) (last visited Mar.1, 2015) [hereinafter *Agriculture Negotiations*].

102. GATT Secretariat, *supra* note 68, ¶¶ 5, 8, 11, & 15.

103. AoA, *supra* note 4, at art. 1(h)(i).

104. *Id.* art. 6(2).

105. *Id.* art. 6(5); *Agriculture Negotiations*, *supra* note 101.

106. AoA, *supra* note 4, at art. 6(4)(a)(i).

percent of the value of the total agricultural production in the subsidizing country.<sup>107</sup> The threshold for developing countries is ten percent of the value of their individual total agricultural production.<sup>108</sup> The fourth type of reduction-free domestic support is enumerated in Annex 2 of the AoA, which is referred to as "green box" subsidies.<sup>109</sup>

Domestic supports are not always detrimental to food security. They could be as harmful as export subsidies are to the food security in developing countries if the subsidized product exports or the imports from developing countries must compete with those that are subsidized. By contrast, the domestic supports for agricultural R&D and rural development are beneficial to developing countries in food availability and food access.<sup>110</sup> From the perspective of developing countries, the AoA limits their policy space on subsidies but cannot efficiently reduce the subsidies in developed countries. First, the developed countries seemed to design the requirements of domestic support so that they can maintain existing subsidies to the maximum.<sup>111</sup> For instance, the blue box subsidies are used mostly by developed countries and they account for a large portion of the domestic supports.<sup>112</sup> Developing countries must still contend with problems caused by heavily subsidized products. Second, the domestic supports in the green box probably are not less trade distorting and neutral for production as they are required to be. In addition, numerous developing countries have limited financial ability to provide such supports, whereas developed countries avoid their reduction obligation through the green box. It might be desirable for developing countries to clarify, and perhaps tighten, the definition of supports in the green box.<sup>113</sup> Third, many developing countries cannot use *de minimis* threshold for the amber box subsidies, which are defined in Article 6 but do not fall within the blue or green box, because they did not claim domestic supports during the base period.<sup>114</sup> In other words, they cannot grant domestic supports in excess of the *de minimis* level.<sup>115</sup> Finally, the domestic supports of developing countries easily exceed the *de minimis* level because they have high inflation rate and the baseline AMS is calculated based on fixed prices during 1986–1988.<sup>116</sup> The depreciation of exchange rates further aggravates the problem.<sup>117</sup> From the perspective of developing countries, the AoA increases the negative aspects of domestic supports.

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107. *Id.*

108. *Id.* at art. 6(4)(b).

109. *Agriculture Negotiations*, *supra* note 101.

110. *See supra* Part II.

111. *See Gonzalez*, *supra* note 82, at 455.

112. *See id.* at 464.

113. *See Paper No. 4*, *supra* note 78, ¶ 18.

114. *See Panos Konandreas & Jim Greenfield, Policy Options for Developing Countries to Support Food Security in the Post-Uruguay Round Period*, 15 CANADIAN J. OF DEV. STUD. 141, 149 (1998).

115. *See Paper No. 4*, *supra* note 78, ¶ 14.

116. GATT Secretariat, *supra* note 68, ¶ 8.

117. *See Paper No. 4*, *supra* note 78, § 2.2.



#### D. Export restrictions

The GATT exempts the export restrictions “temporarily applied to prevent or relieve critical shortages of foodstuffs”<sup>118</sup> from the obligations of quantitative restrictions. Regarding shortage of foodstuffs at the domestic level, an intuitive solution is to restrict exports if the food production cannot satisfy the short-term demands. However, export restrictions cannot always help the domestic market to meet food demands. Export restrictions are effective only if the productions of the country with the restrictions can meet the demands, and if that country is a medium or large economy.<sup>119</sup> Furthermore, the export restrictions implemented by a large economy can cause a price surge that will affect other countries.<sup>120</sup> Studies have shown that export restrictions amplified the price increase in food crises.<sup>121</sup> To some extent, export restrictions are therefore responsible for the distrust in relying food availability on trade.<sup>122</sup>

Export restrictions are detrimental to food availability and increase price volatility in food crises. Export restrictions have substantial implication on food security in both developed and developing countries. The optimal option is to ban such restrictions. The shortage in food can be countered by direct and targeted supports for financially vulnerable people.<sup>123</sup>

#### E. NFIDC decision

In the Uruguay Round negotiations, the negotiators were concerned that the reform required by the AoA could have negative effects on least-developed countries and NFIDCs. They worried that the reform would increase the prices of basic foodstuffs and that the food aid would decrease simultaneously. In other words, the concern was the availability of basic foodstuffs from external resources on reasonable conditions and terms.<sup>124</sup> To respond to the concerns, the NFIDC decision provides four mechanisms: (1) food aid, (2) short-term financing of normal levels of commercial imports, (3) favorable terms for agricultural export credits, and (4) technical and financial assistance in improving agricultural productivity and infrastructure.<sup>125</sup> All these mechanisms can substantially contribute to food security. However, the NFIDC decision was not implemented satisfactorily.<sup>126</sup>

In summary, the WTO rules have positive and negative effects on food

118. GATT, art. XI (2)(a), Oct. 30, 1947, 61 Stat. 1-11, 55 U.N.T.S. 194.

119. Antoine Bouët & David Laborde Debucquet, *The Economics of Export Taxes in the Context of Food Crisis*, in ECONOMIC IMPACT OF EXPORT RESTRICTIONS ON RAW MATERIALS 59, 62-63 (OECD, 2010).

120. *Id.* at 65.

121. *Id.* at 67-72.

122. See *Price Volatility*, *supra* note 48, ¶ 25.

123. See *id.*

124. See Decision on Measures, *supra* note 65, ¶ 2.

125. Christine Kaufmann & Simone Heri, *Liberalizing Trade in Agriculture and Food Security—Mission Impossible?*, 40 VAND.J. TRANSNAT'L L. 1039, 1047 (2007).

126. *Id.* at 1048.

security as a result of compromises among members. The implementations of the market access are criticized to favor developed countries. Compared with developed countries, developing countries have adopted an open attitude toward imports. Developed countries should provide adequate market access. Otherwise, developing countries will continue to be disadvantaged and therefore lose the opportunity to increase incomes from exports. Export subsidies of any type are clearly detrimental to the food security in developing countries. Export subsidies should be prohibited in any event. Regarding the stability of food, the requirements of export subsidies should provide additional policy space for developing countries to manage public stockholding schemes. Domestic supports are not always detrimental to food security. From the perspective of developing countries, the AoA limits their subsidies but cannot efficiently reduce the subsidies in developed countries. The situation should be changed. Export restrictions are detrimental to food availability and increase the price volatility in food crises. Export restrictions should be banned. The NFIDC decision provides mechanisms that can substantially contribute to food security. Implementation of the decision should be improved.

#### IV. THE CONTRIBUTIONS OF THE BALI DECISIONS TO FOOD SECURITY IN DEVELOPING COUNTRIES

The rules for the trade in agriculture are incomplete and the negotiations must continue as instructed in Article 20 of AoA. The Doha Ministerial Declaration provided that the members commit themselves to improving market access, removing all forms of export subsidies, and reducing trade-distorting domestic support.<sup>127</sup> In addition, the members committed to provide developing countries special and different treatments that enable them to address the concerns of food security and rural development.<sup>128</sup> In the Hong Kong Ministerial Declaration, the members reiterated the goals of the Doha Ministerial Declaration and further clarified the approaches. Regarding domestic supports, the members agreed that members with higher levels of permitted support should have more reductions.<sup>129</sup> Regarding export subsidies, members committed to ensure the elimination of export subsidies by the end of 2013.<sup>130</sup> There were promises for tariff cuts. The developing countries were granted the "flexibility to self-designate an appropriate number of tariff lines as Special Products guided by indicators based on the criteria of food security, livelihood security and rural development."<sup>131</sup> They were promised to "have the right to have recourse to a Special Safeguard Mechanism based on import quantity and price triggers, with precise arrangements to be further defined."<sup>132</sup> Because the "draft modality" failed to be adopted in 2008, the

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127. See Haberli, *supra* note 8, at 4.

128. See *id.*

129. WTO, Ministerial Declaration of 18 December 2005, ¶5, WT/MIN(05)/DEC/1, (2005) [hereinafter Doha Work Programme].

130. *Id.* ¶ 6.

131. *Id.* ¶ 7.

132. *Id.*

progress for developing countries seemed to diminish.

Despite the setbacks, the developing countries continued to mention concerns in the negotiations on agriculture.<sup>133</sup> The developing countries are in groups and submitted the G-33 proposal<sup>134</sup> and G20 proposals,<sup>135</sup> which were the basis for discussion and were partially adopted in the Bali Package. The issues discussed are the tariff-rate quota ("TRQ") administration, green box exemptions, and further restrictions on export subsidies. The critical concern in this section is whether the Bali decisions can contribute to food security as expected by developing countries.

#### A. Market access

For food security, market access should be available to developing countries because the increase of exports can increase incomes, thereby ensuring access to food. No commitments were made to grant increased market access, except the soft appeal for improvement as provided in the Ministerial Decision on Duty-Free and Quota-Free Market Access for Least Developed Countries. Developed countries and some developing countries are not obliged but encouraged to provide duty-free and quota-free market access to least-developed countries, as they have committed, before the next Ministerial Conference.<sup>136</sup> Regarding agricultural products, the members did not commit to providing further tariff concession; instead, the focus was on the "fill rates" of tariff quota. When the tariff quota is under-filled with no apparent commercial reason, the members shall relocate the unused tariff quota to the holders who would actually import.<sup>137</sup> The Bali decisions have accomplished little in increasing market access. The problems of the implementation of the AoA remain unsolved.

#### B. Export subsidies

Export subsidies are detrimental to food security because the artificially low prices as a result of export subsidies decrease the incomes of farmers and discourage investments in agriculture. There was a proposed deadline for the elimination of export subsidies, which has been expired and for that the members showed some regrets.<sup>138</sup> The Declaration on Export Competition attempted to

133. See generally Biswajit Dhar & Roshan Kishore, *Prospects of the Bali Ministerial Conference* (working paper for Asia-Pacific Research and Training Network on Trade) (Nov. 2013), [http://www.ris.org.in/images/RIS\\_images/pdf/wp13613.pdf](http://www.ris.org.in/images/RIS_images/pdf/wp13613.pdf).

134. See generally Committee on Agricultural Special Session, G-33 Non-Paper, JOB/AG/25 (Oct. 3, 2013) [hereinafter G-33 Non-Paper].

135. See generally Committee on Agricultural Special Session, Ministerial Decision of 21 April 2013, JOB/AG/24, (2013), [http://www.onuperu.org/wto/wto/g20\\_2.pdf](http://www.onuperu.org/wto/wto/g20_2.pdf) [hereinafter Duty-Free and Quota-Free, April 2013]; Committee on Agricultural Special Session, Ministerial Decision of 7 December 2013, WT/MIN(13)/39, WT/L/914 (2013) [hereinafter Understanding on Tariff Quota Administration].

136. See WTO, Ministerial Decision of 7 December 2013, WT/MIN(13)/44, WT/L/919 (2013) [hereinafter Duty-Free and Quota-Free, December 2013].

137. Understanding on Tariff Rate Quota Administration, *supra* note 135, ¶ 9.

138. WTO, Ministerial Declaration of 7 December 2013, WT/MIN (13)/40, WT/L/915 ¶ 2 (2013) [hereinafter Export Competition].

recover the efforts by including the draft modalities for agriculture as an imperative basis for a final agreement.<sup>139</sup> Increased commitment was made as “we shall exercise utmost restraint with regard to any recourse to all forms of export subsidies and all export measures with equivalent effect.”<sup>140</sup> Hence, the members agreed to eliminate the export subsidies, to keep the level of subsidies lower than members’ commitments on export subsidies and to discipline use of all export measures with equivalent effect of export subsidies.<sup>141</sup> The members also committed to enhance transparency and monitor export subsidies. Furthermore, they agreed to discuss the concerns annually.<sup>142</sup>

Although some progress seems to have been made, the commitments are superficial rather than substantial. In the final paragraph of this decision, the members emphasized that the terms of this declaration do not affect members’ rights and obligations.<sup>143</sup> Nor shall they be used to interpret their rights and obligations. In other words, the constraints on export subsidies depend on the good will of the members; which might be impractical. The members could have inserted stronger obligation in the declaration if they had intended to reduce or eliminate export subsidies.

### C. Domestic supports: Green box exemptions

Domestic support has both positive and negative impacts on food security. The subsidies for R&D, rural development, and risk management mechanism can improve productivity, increase incomes, and increase stability, all of which contribute to food security at national and at global levels.<sup>144</sup> However, subsidies on products or price supports distort the market and are as harmful as export subsidies. The Bali Package contains two decisions concerning the green box exemptions, which are described as the triumph of developing countries for food security.<sup>145</sup> This observation is true according to the Ministerial Decision on General Services. The members clarified that the list of general service programs provided in paragraph two of Annex 2 in the AoA is only illustrative.<sup>146</sup> The list includes programs related to land reforms and rural livelihood security for rural development and poverty alleviation.<sup>147</sup> This decision could provide substantial flexibility for developing countries to fulfill the policy suggestions proposed by the FAO, which are known as the “twin-track approach”<sup>148</sup> for alleviating hunger

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139. *Id.* ¶ 3.

140. *Id.* ¶ 8.

141. *Id.*

142. *Id.* ¶¶ 10-1.

143. *Id.* ¶ 13

144. *See supra* Part II

145. *See, e.g., Historic WTO Deal on India's Terms, Food Security Stand Prevails*, NDTV, Dec. 7, 2013, <http://www.ndtv.com/india-news/historic-wto-deal-on-indias-terms-food-security-stand-prevails-543628>.

146. *See* WTO, Ministerial Decision of 7 December 2013, WT/MIN (13)/37, WT/L/912 (2013) [hereinafter General Service].

147. *See generally, id.*

148. The FAO explains the content of the two tracks: “[T]he first track addresses recovery

combined with sustainable agricultural and rural development with targeted programs for enhancing direct access to food for the most needy. This could also satisfy the measures for risk management tools used to increase the resilience to price volatility and the shortage of supply. If the term “rural livelihood security” could be interpreted to allow increased policy flexibility, the decision could substantially harmonize the potential conflicts between disciplines on domestic supports and the need for food security.

Optimism should not be excessive regarding the potential achievements of the Ministerial Decision on Public Stockholding for Food Security Purpose. This decision altered no existing rules provided in the AoA. The public food stockholding program for food security purposes are obligated to follow the criteria set forth in Annex 2 as well as its footnotes, particularly the procurement price at the current market price.<sup>149</sup> However, the advantages of the public food stockholding programs are derived from a higher and more predictable price than that available in the open market. By providing a higher price, farmers can obtain increased incomes and are therefore encouraged to invest in the improvement of production.<sup>150</sup> The implication of paragraph two would be that developing countries might exceed their AMS ceilings, which are low, as a result of the public food stockholding programs. The ministerial decision provides only the “peace clause,”<sup>151</sup> which provides developing countries a four-year time out, expiring on the eleventh ministerial conference, for exemption from the dispute settlement challenges.<sup>152</sup> A public food stocking program is eligible for the peace clause, if it is notified to the Committee of Agriculture with the required information, meets the requirements in Annex 2, and does not distort trade and adversely affect the food security of other members.<sup>153</sup>

Comparing this ministerial decision with the G-33 proposal, the peace clause seems to be agreeable for developing countries. The members agreed only to refrain from bringing the claim before the Dispute Settlement Body (“DSB”). If any member insists to raise a claim, the DSB has no choice but to commence the

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measures for establishing resilient food systems. Factors that affect food system resilience include the structure of the food economy as a whole, as well as its components such as agricultural production, technology, the diversification of food processing, markets and consumption. [The second track] assesses the options for providing support to vulnerable groups.” FAO, POLICY BRIEF, *supra* note 18, at 3.

149. WTO, Ministerial Decision of 7 December 2013, ¶ 2, WT/MIN (13)/38, WT/L/913 (2013) [hereinafter Public Stockholding for Food Security Purposes].

150. See Christophe Bellmann et al., *G-33 Proposal: Early Agreement on Elements of The Draft Doha Accord to Address Food Security*, ICTSD PROGRAMME ON AGRICULTURAL TRADE AND SUSTAINABLE DEVELOPMENT, INFORMATION NOTE, 1, 4 (Sept. 2013), <http://www.ictsd.org/themes/agriculture/research/g-33-proposal-early-agreement-on-elements-of-the-draft-doha-accord-to>.

151. G-33 Non-paper, *supra* note 136, at 2.

152. See FAO, POLICY BRIEF, *supra* note 18.

153. G-33 Non-paper, *supra* note 136; Public Stockholding for Food Security Purposes, *supra* note 149, ¶¶ 2-4.

procedures.<sup>154</sup> Furthermore, it might be difficult for the public stockholding programs to fulfill all the conditions for the peace clause. They have a large possibility of either distorting trade or affecting the food security of others in a free trade market.<sup>155</sup> A more constructive statement is the promise to commence a Working program that strives for a permanent solution for public stockholding. The implication of the public food stockholding on food security is still under debate, and further discussion is warranted.<sup>156</sup>

## V. CONCLUSION

Some policy orientations can increase food security in developing countries. Developing countries can contribute to the food availability by investing in agricultural R&D, general infrastructure, education, and the preservation of arable lands. Similar to the improvement of food availability, investments in the agricultural sector can increase incomes and therefore secure access to food. The social security net is a complement that can support access to food in the short term. To utilize trade for food security, recommendations include reducing import barriers and trade-distorting domestic supports and prohibiting all export subsidies. Regarding utilization of food, the cost-effective and efficiency options are nutrition-specific interventions such as information and education programs, the provision of health care services, and clean water and sanitation infrastructures.

The WTO rules have positive and negative effects on food security as result of compromises among the members. The implementations of the market access are criticized to favor developed countries. Compared with developed countries, developing countries have adopted an open attitude toward imports. Developed countries should provide adequate market access. Otherwise, developing countries will continue to be disadvantaged and therefore lose the opportunity to increase incomes from exports. Export subsidies of any type are clearly detrimental to the food security in developing countries. Export subsidies should be prohibited. Regarding the stability of food, the requirements of export subsidies should provide increased flexibility for developing countries to manage public stockholding schemes. Domestic supports are not always detrimental to food security. From the perspective of developing countries, the AoA limits their subsidies but cannot efficiently reduce the subsidies in developed countries. The situation should be changed. Export restrictions are detrimental to food availability and increase the price volatility in food crises. Export restrictions should be banned. The NFIDC decision provides mechanisms that could substantially contribute to food security. However, implementation of the decision should be improved.

The Bali decisions and declarations have made some but limited progress in regards to food security. The Bali decisions have accomplished little in increasing

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154. See FAO, *TRADE REFORM*, *supra* note 10, at 9.

155. See *Public Stockholding for Food Security Purposes*, *supra* note 149, at 6.

156. FAO, *The Bali Package—Implications for Trade and Food Security*, FAO Trade Policy Briefs No. 16, <http://www.fao.org/docrep/019/i3658e/i3658e.pdf>.

market access; therefore, no improvement of incomes can be expected in the rural areas of developing countries. The problems of the implementation of the AoA remain unsolved. Regarding export subsidies, there seems to be some progress, but the commitments are superficial rather than substantial. Regarding domestic supports, developing countries have obtained the advantage by extending the green box exemptions for rural development and poverty alleviation. Optimism should not be excessive regarding the potential achievements of the Ministerial Decision on Public Stockholding for Food Security Purpose, because the peace clause might not have substantial function. In summary, developing countries have gained progress but remain disadvantaged. In general, the Bali decisions and declaration regarding agriculture are repeating the past agreements and promises to work on for a balance between trade and food security. It seems too early for developing countries to feel safe about food security.

