

INTERNATIONAL AGRICULTURAL PRAGMATICS: AN INQUIRY OF THE ORTHODOX ECONOMIC BREAKDOWNS AND AN EVALUATION OF SOLUTIONS WITH THE FOOD SOVEREIGNTY MOVEMENT

*Nathaniel Vargas Gallegos**

I.	Introduction.....	430
II.	History, Treaties, and Organizations	433
	A. The 1948 UDHR Forward.....	433
	B. The Bretton Woods System.....	436
	C. World Trade Organization	439
	D. FAO & IFAD	440
III.	Economics and the Issues	442
	A. IFAD's Limitation to Development	443
	B. The FAO's Limitation on Agricultural Reform	444
	C. The U.S. and Food Security's Limitations	445
	D. World Trade Organization's Limitations	446
	E. The World Bank's Limitation on Agrarian Reform.....	448
	F. The IMF's Limitation on Development	449
	G. The Economics of Commodity Dumping on Developing Nations.....	451
IV.	Alternatives to Food Sovereignty	453
	A. Introduction	453
	B. Food Sovereignty vs. Food Security	455
	C. Sustainable Agriculture	456
	D. Cooperation Model.....	458
V.	Conclusion	460

* Nathaniel Phillip Vargas Gallegos, 2012 LLM Candidate in Business and Corporate Law at the University of San Diego School of Law; 2010 Juris Doctorate from the University of Detroit Mercy School of Law; 2006 Master of Science in Agricultural Economics from New Mexico State University; and 2003 Bachelor of Science in Economics from the University of Utah. I would like to thank Dr. Rhonda Skaggs for igniting this interest in me for agricultural policy. I owe all to my family for their love and support. This article is dedicated to the loving memory of Anthony Phillip Gallegos. May his name always be remembered with peace and hope in this world.

“[T]here was only this perfect sympathy of movement, of turning this earth of theirs over and over to the sun, this earth which formed their home and fed their bodies and made their gods Land is one’s flesh and blood.”

-Pearl S. Buck¹

I. INTRODUCTION

Why does the developing world struggle to feed itself? The contention of this article is that agriculture is not an industry as comparable to steel, computer technology, or services, but rather, agriculture is humankind’s oldest, original industry. It has been every powerful nation’s vehicle to economic development. Only recently has the developed world become divorced from individual family agricultural production. Indeed, this divorce has allowed human capital liberation and specialization—ushering in development of other areas, which could not be achieved by any other method—but has this severance made us too specialized; too efficient? Some may view agricultural corporations as predators due to newly provided, unchecked power, given through international law, treaties, and government policy.

It is through trade policies that the poor are adversely affected. According to the Food and Agricultural Organization of the United Nations (FAO), seventy percent of the world is involved in the production of agriculture and, as of 2004, the number of undernourished people had increased to 840 million—a little less than one-sixth of the world’s population.² Furthermore, it is important to realize the pervasive effect agricultural exports from developed countries have on the rural poor in underdeveloped nations. Trade barriers on agricultural products can have incredible effects on imports and exports to any country.³ Take, for example, the following hypothetical: when a developed nation subsidizes cotton production, there is a market cue to increase cotton production—more than can be consumed in that country—therefore, excess production is exported abroad to developing markets at low prices, thus damaging developing countries’ cotton

1. PEARL S. BUCK, *THE GOOD EARTH* 22, 37 (Pocket Books 1958) (1931).

2. JEAN ZIEGLER, UNITED NATIONS, ECON. & SOC. COUNCIL, COMM. ON HUMAN RIGHTS, ECONOMIC, SOCIAL AND CULTURAL RIGHTS: THE RIGHT TO FOOD, REPORT SUBMITTED BY THE SPECIAL RAPPOREUR ON THE RIGHT TO FOOD, U.N. Doc. E/CN.4/2004/10,4 (Feb. 9, 2004), available at <http://righttofood.org/new/PDF/ECN4200410.pdf>; see also WILLIAM D. SCHANBACHER, *THE POLITICS OF FOOD: THE GLOBAL CONFLICT BETWEEN FOOD SECURITY AND FOOD SOVEREIGNTY* 28 (2010).

3. See Hans Binswager & Ernst Lutz, *Agricultural Trade Barriers, Trade Negotiations, and the Interests of Developing Countries*, 1–2 (Sept. 15, 2000) (unpublished paper presented at the Int’l Ass’n. of Agric. Economists meeting in Berlin 2000).

market. This example plays out in various other commodity markets with international multilateral organizations preserving this system and lobbying to enforcing it with law.⁴

There is a populist response to this issue and citizens of these affected countries have started to fight back against the current economic model—as in Mexico with the Zapatistas and Brazil with the Landless Movement.⁵ Food Sovereignty has become a recent addition to the fight for change and it has gained notable attention.⁶

Food Sovereignty, as it will be explained, is not based on an economic model of maximized output and consumption, but is based on the older agricultural-cultural practices of cooperation and market protection. Food is an expression of culture, land, and resources essential to life. Food Sovereignty is an alternative to the present traditional, capitalistic system. In fact, it is argued that Food Sovereignty is a pragmatic system, which combines the best of capitalism, socialism, and Marxism to work towards general efficiency.⁷ This is the economic school of thought called heterodox economics.⁸ This article explores the pragmatist models that are working and being sought by the world's poor in direct opposition to orthodox policies—regardless of whether they are socialist, heterodox, or Marxist.

The United States has its own unique cultural connection to agriculture. The Founders believed in a connection between democracy and agriculture.⁹ Thomas Jefferson was a strong proponent of this connection, believing a citizenry of “yeoman farmers,” who have power to hold land, would find the state necessary to protect individual interests.¹⁰ Alexander Hamilton believed in a centralist government—vesting power in the educated gentlemen of a country, as was done in England.¹¹ Jefferson feared such an elitist system would be prone to

4. *Id.*

5. See *Who is Zapata?*, ZAPATISTA REVOLUTION, <http://www.zapatistarevolution.com/who.html> (describing the Zapatista's demand for ‘terra y libertad’—translated: land and freedom) (last visited Mar. 12, 2012); see also *About Friends*, FRIENDS OF THE MST, <http://mstbrazil.org/?q=about> (last visited Mar. 12, 2012) (explaining that Brazil's Landless Workers Movement is an effort to carry out long-overdue land reform in a country mired by unjust land distribution).

6. See discussion *supra* note 5 and accompanying text.

7. See generally Joseph Dorfman, *Heterodox Economic Thinking and Public Policy*, 4 J. ECON. ISSUES 1, 1–4 (1970) (discussing the development of government intervention policy in eradicating the exploitation of human resources while preserving competition).

8. *Id.*

9. WILLIAM P. BROWN ET AL., SACRED COWS AND HOT POTATOES: AGRARIAN MYTHS IN AGRICULTURAL POLICY 8 (1992).

10. *Id.*

11. *Id.* at 7.

abuse of power—favoring business interests while farmers' rights would be ignored.¹² He believed the farmer to be a more reliable citizen because planters are tied to the land, which he thought would foster good stewardship and community.¹³ He also saw the farmer as virtuous—a concept further romanticized by the poetry of Thoreau and Emerson.¹⁴ This romanticism has become the backbone of American economic and cultural life, even though today's agrarian landscape is nothing like it was then.¹⁵

The United States takes great measures to protect the agricultural industry and farmers, arguably, for cultural reasons alone. Certain industries—such as the automobile or financial sector—have arguably become precious to the United States but, none compare to agriculture. The United States subsidizes agricultural production to ensure that farmers will continue to farm.¹⁶ Taking this view of classical economic theory, an industry left to survive *laissez-faire*—without government intervention—will find an efficient equilibrium of producers to match the demand; but when there is no equilibrium, the market will purge producers until the point of efficiency is reached.¹⁷ Subsidies impose signals to supply above market demand, which is inefficient since it creates oversupply. Also, where production exceeds demand, the price of that good will fall.¹⁸ So, to keep prices up, the excess supply must go somewhere. This then results in the export of these goods through trade.

Oversupply ushers in the destruction of international prices, which has caused revolutions and populist movements.¹⁹ This is a clash of sociology and history more so than law, economics, or politics. Food is more than just a commodity to all. Each rubric is a topic of thought in itself and this article is not meant to delve into anything other than a policy recommendation of including the Food Sovereignty tenets in international law. Much of this article will focus on explaining the problems with the current system of multilateral organizations,

12. *See id.* 8.

13. *Id.*

14. *Id.* at 8–9.

15. *Id.* at 11.

16. *See History of the Farm Bill, Overview of Subsidy Payments*, AM. FARMLAND TRUST, <http://www.farmland.org/programs/farm-bill/history/usfarmssubsidies.asp> (last visited Mar. 12, 2012).

17. ROBERT HEILBRONER & LESTER THUROW, *ECONOMICS EXPLAINED: EVERYTHING YOU NEED TO KNOW ABOUT HOW THE ECONOMY WORKS AND WHERE IT'S GOING* 24–25, 30 (3d ed. 1994).

18. *Id.* at 176–77.

19. John E. Peck, *You Are What You Eat: The Food Sovereignty Struggle Within the Global Justice Movement*, in *USES OF A WHIRLWIND: MOVEMENT, MOVEMENTS, AND CONTEMPORARY RADICAL CURRENTS IN THE UNITED STATES* 127–29 (Craig Hughes et al. eds., 2010).

food security, the Bretton Woods system, and developed countries' models of agricultural production because it is in these traditional, capitalistic models that throw cultural values out of place. Instead, the Food Sovereignty movement, it is argued, is the cry of the world's food producers for justice and economic protection of their own.

II. HISTORY, TREATIES, AND ORGANIZATIONS

Context is essential to understand the shortcomings of international law and it will hopefully provide the reader the context that is inspiring new food movements. To understand the current landscape, it is important to understand the history of treaties, organizations, and policy relating to agricultural trade and international law that has led us to our current market structures.

A. *The 1948 UDHR Forward*

In 1948, the Universal Declaration of Human Rights (UDHR) affirmed the right of everyone to an adequate standard of living and adequate access to food.²⁰ This declaration was adopted in Paris by the United Nations General Assembly on December 10, 1948.²¹ The Declaration arose directly from the experience of World War II and represented the first global expression of rights to which all human beings are entitled.²² It was in this document that the right to food was first recognized.²³

Key treaties, which memorialize the right to food subsequent to the UDHR, include: the 1965 International Convention on the Elimination of All Forms of Discrimination (ICERD), 1966 International Covenant on Civil and Political Rights (ICCPR), the 1966 International Covenant on Economic, Social, and Cultural Rights (ICESCR), the 1979 Convention on the Elimination of All

20. Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. 810 at 7, Art. 7 (Dec. 10, 1948), available at <http://www1.umn.edu/humanrts/instrree/bludhr.htm>.

21. *The Universal Declaration of Human Rights: History of the Document*, UNITED NATIONS, <http://www.un.org/en/documents/udhr/history.shtml> (last visited Mar. 12, 2012).

22. See generally LORENZO COTULA ET AL., FOOD & AGRIC. ORG. OF THE UNITED NATIONS, THE RIGHT TO FOOD AND ACCESS TO NATURAL RESOURCES: USING HUMAN RIGHTS ARGUMENTS AND MECHANISMS TO IMPROVE RESOURCE ACCESS FOR THE RURAL POOR (Lorenzo Cotula ed. 2009), available at http://www.fao.org/righttofood/publi09/natural_resources_en.pdf.

23. Universal Declaration of Human Rights, *supra* note 20 ("Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food . . .").

Forms of Discrimination Against Women (CEDAW), and the 1989 Convention on the Rights of the Child (CRC).²⁴

The most important of these treaties is the 1966 ICESCR, where the right to food was codified in Article 11 and went into effect in 1976.²⁵ The covenant has two basic provisions. The first is that everyone has the right “to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions.”²⁶ The second provision is a right to be free from hunger.²⁷

The UN body charged with monitoring this covenant—the Committee on Economic, Social, and Cultural Rights—was established in 1985.²⁸ General Comment 12—issued in 1999—contains the committee’s interpretation of the right to adequate food.²⁹ It provides that the right to adequate food is to be construed broadly to ensure that “every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement.”³⁰ The right entails “[t]he availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture”³¹ A right to adequate food is not measured by a minimum set of calories or nutrients, and ensures access and availability for future generations.³² Access to adequate food means that food must be both economically and physically accessible.³³ “Availa-

24. International Covenant on the Elimination of all Forms of Racial Discrimination, G.A. Res. 2106 (XX)A U.N. Doc. A/RES/2106A(XX), GAOR 20th Sess. (Dec. 21, 1965), *available at* [http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/2106\(XX\)](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/2106(XX)); International Covenant on Civil and Political Rights, G.A. Res. 2200[A–C](XXI), U.N. Doc. A/RES/2200(XXI)[A–C] (Dec. 16, 1966); International Covenant on Economic, Social and Cultural Rights, G.A. Res. 2200A (XXI) art. 11, U.N. Doc. A/Res/2200(XXI) A (Dec. 16, 1966); Convention on the Elimination of All Forms of Discrimination of Women, G.A. Res. 34/180, U.N. Doc. A/RES/34/180 (Dec. 18, 1979); Convention on the Rights of the Child, G.A. Res. 44/25, U.N. Doc. A/RES/44/25 (Nov. 20, 1989); *see also* COTULA ET AL. *supra* note 22.

25. International Covenant on Economic, Social, and Cultural Rights, *supra* note 24.

26. *Id.*

27. *Id.*

28. *See* U.N. Econ. & Social Council Resolution 1985/17, Review of the Composition, Organization and Administrative Arrangements of the Sessional Working Group of Governmental Experts on the Implementation of the International Covenant Economic, Social and Cultural Rights (May 28, 1985), *available at* ap.ohchr.org/documents/E/ECOSOC/resolutions/E-RES-1985-17.doc.

29. U.N. Comm. on Econ., Soc. & Cultural Rights, Apr. 26–May 14, 1999, Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: General Comment 12 The Right to Adequate Food, U.N. Doc. E/C.12/1999/5, Art. 11, 6 (May 12, 1999).

30. *Id.*

31. *Id.* at 8.

32. *Id.* at 7, 12.

33. *Id.* at 13.

bility” refers to people’s ability to feed themselves “directly from productive land or other natural resources or by way of well-functioning distribution, processing, and market systems.”³⁴ Any person or group denied the right to adequate food is entitled to both adequate reparation—in the “form of restitution, compensation, satisfaction, or a guarantee of non-repetition”—and access to effective judicial or other appropriate remedies at national and international levels.³⁵

The right to adequate food can be seen as a safeguard against food insecurity in a world of free trade. States must provide physical and economic access to food for all people, at all times.³⁶ When people are deprived of such access, states must offer compensation to those people so deprived.³⁷

General Comment 12 provides a three part criteria, which details how states can meet their obligations: states have a duty to respect, protect, and fulfill.³⁸ Respecting the obligation requires states to avoid taking actions that deny access to, and reduce the availability of, adequate food.³⁹ The obligation to protect requires that states act to ensure that other enterprises or individuals do not deprive individuals of their access to the availability of adequate food.⁴⁰ The obligation to fulfill combines both an obligation to facilitate and an obligation to provide food.⁴¹ The obligation to facilitate means the state must engage in activities to strengthen access to resources and the means to ensure their livelihood.⁴² The duty to provide requires that states fulfill the right to adequate food when people cannot do so themselves for reasons beyond their control.⁴³ States can violate the right to adequate food through actions or omissions but have a defense when a state is simply unable to comply.⁴⁴

This duty is outlined by the African Center on Human and People’s Rights’ (ACHPR) *Social & Economic Rights Action Center v. Nigeria* decision.⁴⁵ The case involved the destruction of crops by Nigerian security forces and the Nigerian government’s failure to protect its citizens from the negative effects of oil contamination—actions which violated the government’s obligation to respect

34. *Id.* at 12.

35. *Id.* at 32.

36. *Id.* at 13.

37. *Id.* at 32.

38. *Id.* at 15.

39. *Id.*

40. *Id.*

41. *Id.*

42. *Id.*

43. *Id.* at 17.

44. *Id.*

45. Soc. Econ. Rights Action Ctr. v. Nigeria (2001) Comm’n No. 155/96 ACHPR/COMM/A044/1, 65 (Soc. And Econ. Rights Action Ctr.), available at http://www.worldcourts.com/achpr/eng/decisions/2001.10_SERAC_v_Nigeria.htm.

and protect the right to food.⁴⁶ Through this decision, the Center declared that the right to food is implicit in the ACHPR.⁴⁷

Thus, treaties and conventions do establish, monitor, and enforce a right to food. Under the UDHR, the right to food is as much of a human right as freedom of thought, freedom of religion, freedom of peaceful assembly, freedom from being enslaved, freedom from being tortured, and the right to life.⁴⁸

B. *The Bretton Woods System*

Preparing for the rebuild of the international economic system with World War II still ongoing, 730 delegates from all forty-four Allied nations met at the Mount Washington Hotel in Bretton Woods, New Hampshire, for the United Nations Monetary and Financial Conference.⁴⁹ The delegates signed the Bretton Woods Agreements during the first three weeks of July 1944.⁵⁰

The Bretton Woods Agreements established the rules for commercial and financial relations among the world's major industrial states in the mid-twentieth century.⁵¹ The Bretton Woods system was the first example of a fully negotiated monetary order intended to govern monetary relations among independent nation-states.⁵² This system sets up rules, institutions, and procedures to regulate the international monetary system—establishing the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development, which today is the World Bank.⁵³ These organizations became operational in 1945 after a sufficient number of countries had ratified the agreement.⁵⁴

The Bretton Woods system requires that each country adopt a monetary policy, which maintains the exchange rate of its currency with a fixed value of gold and permits the IMF to bridge temporary imbalances of payments.⁵⁵ On August 15, 1971, the United States terminated convertibility of the dollar to

46. *Id.* at 66.

47. *Id.* at 64.

48. See Universal Declaration of Human Rights, *supra* note 22.

49. *Bretton Woods System*, N.Y. TIMES, http://topics.nytimes.com/top/reference/timestopics/subjects/b/bretton_woods_system/index.html (last visited Mar. 12, 2012).

50. *Old Bretton Woods Conference*, NEW BRETTON WOODS, <http://newbrettonwoods.com/old-bretton-woods-conference/> (last visited Mar. 12, 2012).

51. *Id.*

52. *Id.*

53. *Id.*

54. *About the IMF, History, Cooperation and Reconstruction (1944–71)*, INT'L MONETARY FUND, <http://www.imf.org/external/about/histcoop.htm> (last visited Mar. 12, 2012).

55. *Id.*

gold.⁵⁶ This action, referred to as the Nixon shock, eventually led to the U.S. Dollar being the sole backing of currencies as a reserve currency for the member states.⁵⁷ As can be expected, it is argued that tying of value to the dollar serves to exemplify the will and control over these organizations, by the United States.⁵⁸

The IMF is concerned with financial stability of countries.⁵⁹ The IMF outlines three foundational objectives: 1) surveillance; 2) financial assistance; and, 3) technical assistance.⁶⁰ The IMF monitors fiscal and monetary decisions of its 187 member countries.⁶¹ Surveillance involves expert assessment of global economic stability by monitoring the exchange of goods and capital market flows.⁶² Financial assistance involves the processes by which countries can request economic assistance—in the form of loans—to regulate their specific macro-economic climates.⁶³ Technical assistance, however, is offered to countries as advice on how to effectively manage their affairs.⁶⁴ Such assistance is focused on tax policies, revenue administration, fiscal policies, monetary policy, exchange rate systems, and—in the case of low-income economies—expanding their involvement in the global economy.⁶⁵ This involvement in the expansion of market presence is important in the context of trade. It results in encouragement to lower protections to agriculture in the form of tariffs and quotas, which in turn, can allow foreign exports to flood the market and deflate local prices.

56. *About the IMF, History, The End of the Bretton Woods System (1972–81)*, INT'L MONETARY FUND, <http://www.imf.org/external/about/histend.htm> (last visited Mar. 12, 2012); see also Nick Beams, *When the Bretton Woods System Collapsed*, WORLD SOCIALIST WEB SITE (Aug. 16, 2001) <http://www.wsws.org/articles/2001/aug2001/bw-a16.shtml>.

57. The Day Gold Died: Understanding the Nixon Shock, STAT SPOTTING, <http://statspotting.com/2011/05/the-day-gold-died-understanding-the-nixon-shock/> (last visited Mar. 12, 2012); see also Geir Lundestad, *Empire by Invitation? The United States and Western Europe, 1945–1952*, 23 J. OF PEACE RES. 263, 265 (1986).

58. See Kwan Choi, IOWA STATE, *Bretton Woods System*, available at <http://www2.eco.n.iastate.edu/classes/econ355/choi/bre.htm> (course notes—on Bretton Woods—for Econ. 355 at Iowa State University) (noting that as the Bretton Woods system evolved the dollar became increasingly more important with other countries holding the U.S. Dollar as the principal reserve asset).

59. *About the IMF, Factsheet: The IMF at a Glance*, INT'L MONETARY FUND (Sept. 15, 2011), <http://www.imf.org/external/np/exr/facts/glance.htm>.

60. *Id.*

61. *Id.*

62. *About the IMF, Factsheet: IMF Surveillance*, INT'L MONETARY FUND (Oct. 31, 2011), <http://www.imf.org/external/np/exr/facts/surv.htm>.

63. *About the IMF, Factsheet: IMF Lending*, INT'L MONETARY FUND (Aug. 22, 2011), <http://www.imf.org/external/np/exr/facts/howlend.htm>.

64. *About the IMF, Factsheet: Technical Assistance*, INT'L MONETARY FUND (Aug. 30, 2011), <http://www.imf.org/external/np/exr/facts/tech.htm>.

65. *Id.*

The World Bank has a different mission than the IMF. The World Bank seeks to promote global economic development and through increased economic integration.⁶⁶ The World Bank is a consortium of 187 countries, which serves to provide financial and technical assistance to developing countries through programs called Structural Adjustment Programs (SAPs).⁶⁷ The SAPs are meant to bring macro-economic conditions in line with national and international goals by harnessing the resources of that given region.⁶⁸ Typically, SAPs begin with stabilization measures, which include reducing the money supply to guard against inflation, raising interest rates to encourage savings, reducing government spending, and cutting wages.⁶⁹ This will result in a macro-economic contraction,⁷⁰ which is often very painful to economic systems. SAPs, with respect to agriculture, are focused on maximizing output to compete in the global market.⁷¹ This often means focusing on a single commodity as well as the overall market.⁷² The World Bank also pushes developing economies into capital-intensive agriculture by introducing output-maximizing mechanized systems of production—ranging from planting technology, right down to the seeds.⁷³ The seeds industry has its own perils, as will be explained later.

The most controversial policy encouraged by the World Bank is trade liberalization.⁷⁴ Essentially, trade liberalization occurs when a developing country lowers its economic defenses and allows the world to enter its market.⁷⁵ It follows that producers within such a country will then compete with producers throughout the world; not just producers within that the country or region. For example, due to the elimination of tariffs and quotas that protected the Mexican markets before NAFTA, a small corn farmer in rural Mexico will be forced to compete with large-scale agricultural producers in Nebraska, using genetically

66. *About Us: Boards of Directors—Member Countries*, THE WORLD BANK, <http://web.worldbank.org> (click “About” in banner across upper portion of page; scroll to bottom of “About Us” page; click “Read More” under “In Depth: Member Countries.”) (last visited Mar. 12, 2012) [hereinafter *About Us*].

67. SCHANBACHER, *supra* note 2, at 14; *see also About Us*, *supra* note 67.

68. *See* SCHANBACHER, *supra* note 2, at 14 (writing that SAPs influence agriculture by optimizing output, specialized crop production for market demand).

69. SCHANBACHER, *supra* note 2, at 14 (quoting WALDEN BELLO, DARK VICTORY: THE UNITED STATES AND GLOBAL POVERTY 36 (1994)).

70. *Id.*

71. *Id.*

72. *See id.* at 15 (renewed vision of productivity and competitiveness “staples to high value crops”).

73. *See id.*

74. *See id.* at 14 (the World Bank concedes that global integration and economic liberalization creates risks).

75. *Id.*

enhanced seeds, state of the art mechanical harvesting, and railroad logistics to transport to market.⁷⁶

A 2002 World Bank report highlights the desire to meet the Millennium Development Goal of the United Nations (U.N.) to cut extreme poverty in half by 2015.⁷⁷ Agriculture serves as a source of livelihood for 1.3 billion people.⁷⁸ As some have suggested, assisting the poor through agriculture will help curb poverty and protect the environment.⁷⁹ Hopefully, this goal may be accomplished by using agriculture as the basis for economic growth in countries that need a productivity revolution with smallholder farming.⁸⁰ In this new effort, the World Bank has tried to shift its focus from broad economic policies affecting nation states to that of focusing on the small-scale producers.⁸¹ It should be noted that, despite these shifts in Bank policy, there continues to be advantages and disadvantages to the World Bank's methods.

C. World Trade Organization

The WTO directly impacts agriculture because it deals with regulation of world trade. According to the WTO's mission statement, its main function "is to ensure that trade flows as smoothly, predictably and freely as possible" between nations."⁸²

The WTO started at the beginning of 1995 but is based on a system of trade that is approximately fifty years old.⁸³ It WTO was originally named the General Agreement on Tariffs and Trade (GATT), which provided the rules for the system of trade since 1948.⁸⁴ Over the years, GATT evolved through several rounds of negotiations with the final, largest GATT round, being the "Uruguay

76. A. A. Farhad Chowdhury & Albert J. Allen, *Impact of NAFTA on U.S. Corn Trade with Mexico*, 4 INT'L J. OF BUS. & ECON. 77, 77 (2005).

77. THE WORLD BANK, REACHING THE RURAL POOR: A RENEWED STRATEGY FOR RURAL DEVELOPMENT 9 (2003), available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2006/09/06/000112742_20060906121359/Rendered/PDF/267630REACHING0THEORURAL0POOR0.pdf.

78. SCHANBACHER, *supra* note 2, at 16.

79. *Id.*

80. THE WORLD BANK, WORLD DEVELOPMENT REPORT 2008: AGRICULTURE FOR DEVELOPMENT 1 (2008), available at http://siteresources.worldbank.org/INTWDR2008/Resources/WDR_00_book.pdf.

81. See THE WORLD BANK, *supra* note 80, at vi.

82. *About the WTO, What is the WTO?*, WORLD TRADE ORG., http://www.wto.org/english/thewto_e/whatis_e/whatis_e.htm (last visited Mar. 12, 2012).

83. WORLD TRADE ORG., UNDERSTANDING THE WTO, 10, available at http://www.wto.org/english/thewto_e/whatis_e/tif_e/utw_chap1_e.pdf.

84. *Id.*

Round, which lasted from 1986 to 1994 and led to the WTO's creation."⁸⁵ While GATT dealt mainly with the trade of goods, the WTO and its agreements are significantly broader—now covering “trade in services, and traded inventions, creations, and designs (intellectual property).”⁸⁶ The system of negotiation is intricate and irrelevant for this article, but the purpose and effects of WTO policies are.

During the 2001 Doha Round, the WTO affirmed its commitment to work under the Bretton Woods system for greater coherence in the global economy.⁸⁷ Despite this coordinated effort by the IMF, World Bank, member world governments, and the WTO, many disputes over agriculture continue to occur and many more rounds (Cancun in 2003, Singapore in 2003, Hong Kong in 2005) have failed to resolve disputes between member countries concerning trade liberalization.⁸⁸

The WTO seeks to limit trade-distorting subsidies and domestic supports, but the most powerful industrialized countries tend to ignore these policies.⁸⁹ This opening domestic markets to trade works in suggests that the WTO shares a core ideology of the FAO: that food security will be attained 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.⁹⁰ It is important to note that the WTO—and the organizations with which it works—has similar goals to the Bretton Woods system.⁹¹ Trade liberalization, through the opening of markets, however, is merely another avenue to integrate developing economies into the global economy.

D. FAO & IFAD

There are many commissions, subsidiaries, and related organizations within the U.N.—two of which concern that agriculture: the FAO and the International Fund for Agriculture and Development (IFAD).⁹² The FAO assists the

85. *Id.*

86. *See generally id.*

87. SCHANBACHER, *supra* note 2, at 11.

88. *Id.* at 10–13.

89. *Id.* at 11.

90. *See id.* at 13 (providing an FAO recommendation based on the 1996 World Food Summit's Plan of Action and definition for food insecurity). For further discussion on the FAO, see discussion *infra*, part I.D.

91. *Compare About the WTO, supra* note 82, with *Old Bretton Woods Conference, supra* note 50.

92. *Structure and Organization*, UNITED NATIONS, <http://www.un.org/en/aboutun/structure> (last visited Mar. 12, 2012).

international effort to defeat hunger.⁹³ It serves both developed and developing countries and acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy.⁹⁴ The FAO helps developing countries and countries in transition modernize and improve agriculture, forestry and fisheries practices and ensure good nutrition for all.⁹⁵ It was founded in 1943 when 44 governments met in Hot Springs, Virginia and committed themselves to building a permanent organization for food and agriculture.⁹⁶ In 1945, the first session of the FAO Conference established the FAO as a specialized U.N. agency.⁹⁷

In 2003, the U.N. Development Program devoted its thematic report to global poverty and announced its Millennium Development Goals (MDGs)—derived from the U.N. Millennium Declaration adopted in September of 2000, which aimed at cutting extreme global poverty in half by 2015.⁹⁸ The first goal one for the MDG is to eradicate extreme poverty and hunger.⁹⁹ In this report, the FAO concluded that the world produced enough food to feed everyone, but identified a problem with distribution.¹⁰⁰ The FAO saw hunger reduction as essential to reducing poverty, with agriculture playing an important role.¹⁰¹

The FAO also argues that trade liberalization is not the best way to achieve the goals of growth as it tends to destroy social safety nets within a country, quite a different philosophy than that of Bretton Woods and the WTO.¹⁰² The FAO wants to use policies to encourage pro-poor assistance in the form of social safety nets, health interventions, and food and nutrition programs.¹⁰³ Agricultural reforms, particularly, should aim “to bolster private investment” and “mak[e] trade work for the poor.”¹⁰⁴ For this to succeed, donor countries throughout the international community should “consign [0].7% of their gross national product to development assistance. . . .”¹⁰⁵

93. *About FAO*, FOOD & AGRIC. ORG. OF THE U.N., <http://www.fao.org/about/en/> (last updated Mar. 12, 2012).

94. *Id.*

95. *Id.*

96. *Id.*

97. *Id.*

98. UNITED NATIONS, HUMAN DEVELOPMENT REPORT: MILLENNIUM DEVELOPMENT GOALS: A COMPACT AMONG NATIONS TO END HUMAN POVERTY 1 (2003).

99. *Id.*

100. FOOD & AGRIC. ORG., THE STATE OF FOOD INSECURITY IN THE WORLD 2006, 4 (2006), available at <ftp://ftp.fao.org/docrep/fao/009/a0750e/a0750e00.pdf>.

101. *Id.* at 6.

102. *Id.* at 29.

103. *Id.* at 30.

104. SCHANBACHER, *supra* note 2, at 8.

105. *Id.* at 8–9.

IFAD is a specialized U.N. sub-agency, created as a result of the 1974 World Food Conference—which was “organized in response to the food crises of the early 1970s.”¹⁰⁶ There, participants resolved that, “an International Fund for Agricultural Development should be established immediately to finance agricultural development projects primarily for food production in the developing countries” because food insecurity was not a result of failures in food production or famine but, rather, arose from “structural problems relating to poverty.”¹⁰⁷ IFAD is this international organization, now focused on food and global poverty.¹⁰⁸

IFAD’s 2007–2010 Strategic Framework summary outlines an agenda to develop the poor’s access to land and natural resources, as well as access to a capital base.¹⁰⁹ IFAD has taken steps to accomplish this with “[m]icrofinance institutions . . . which provide the poor with loans, access to financial services, and the opportunity to establish local financial institutions.”¹¹⁰ These lending institutions are not charitable and struggle to remain profitable.¹¹¹ Supplying a capital base to the rural poor, however, empowers the poor to help themselves.¹¹²

III. ECONOMICS AND THE ISSUES

It is only appropriate to follow a description of the players in the policy of world agricultural trade with an explanation of the issues affecting these organizations. It is the Author’s opinion that the overall picture will expose the flaws in the capitalist, orthodox model and demonstrate that these flaws cannot be cured with traditional economic theory. One solution could be applied is a mixture of heterodox, Marxist, and socialist, but again, agriculture is a much different industry.

106. *About IFAD*, INT’L FUND FOR AGRIC., <http://www.ifad.org/governance/index.htm> (last visited Mar. 12, 2012).

107. *Id.* The economist Amartya Sen said, “Droughts may not be avoidable, but their effects can be.” AMARTYA SEN, *POVERTY AND FAMINES: AN ESSAY ON ENTITLEMENT AND DEPRIVATION* 123 (1981).

108. SCHANBACHER, *supra* note 2, at 4.

109. INT’L FUND FOR AGRIC. DEV., UNITED NATIONS, INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT’S STRATEGIC FRAMEWORK 2011–2015, at 5, *available at* http://www.ifad.org/sf/strategic_e.pdf. “Natural resources are considered a form of capital from which the rural poor derive the ability to produce.” SCHANBACHER, *supra* note 2, at 5.

110. *Id.* at 5–6.

111. *Id.* at 6.

112. *Id.*

A. IFAD's Limitation to Development

IFAD believes that food security for the rural poor will be reached by taking advantage of natural resource management, agricultural technology, improved rural infrastructure, and finance services.¹¹³ The problems with this system are in the details. The rural poor are often making “deals with the devil” just for access to capital. Institutions such as the Grameen Bank, which is known throughout the world for its microfinance model, created a partnership with Monsanto in 1998, which benefits Monsanto immensely.¹¹⁴ IFAD's focus on increased production increases dependence on companies such as Monsanto. The rural poor are induced into one-sided contract that seems unconscionable given their hunger and situation.¹¹⁵

Monsanto was founded in 1901 as a pharmaceutical company.¹¹⁶ Its early products included herbicide (DDT, and Agent Orange—used primarily during the Vietnam War as a defoliant agent, later proven to be highly carcinogenic, and eventually developed into Round-Up), NutraSweet, the bovine growth hormone (BGH), and polychlorinated biphenyls (PCBs).¹¹⁷

Monsanto scientists became the first to genetically modify a plant cell in 1982.¹¹⁸ Five years later, Monsanto conducted the first field tests of genetically engineered crops.¹¹⁹ Around 1997, Monsanto made a transition from chemical giant to biotech giant with a series of mergers.¹²⁰ Today, Monsanto is one of three companies that control forty-seven percent of seed markets throughout the world and is a true pioneer in Agriculture technology.¹²¹ It is also estimated that these three companies have even more control over the corn and soy seed mar-

113. *About IFAD*, *supra* note 106.

114. SCHANBACHER, *supra* note 2, at 28.

115. *Contra* SCHANBACHER, *supra* note 2, at 4–7.

116. *Company History*, MONSANTO, <http://www.monsanto.com/whoweare/pages/monsanto-history.aspx> (last visited Mar. 12, 2012).

117. Phil Shannon, *The Criminal Tale of Monsanto*, GREEN LEFT (Mar. 27, 2011), <http://www.greenleft.org.au/node/47171>.

118. *Company History*, *supra* note 116.

119. *Id.*

120. *Id.*

121. Christopher D. Cook, *Control Over Your Food: Why Monsanto's GM Seeds are Undemocratic*, THE CHRISTIAN SCIENCE MONITOR (Feb. 23, 2011), <http://www.csmonitor.com/Commentary/Opinion/2011/0223/Control-over-your-food-Why-Monsanto-s-GM-seeds-are-undemocratic>.

kets, controlling nearly sixty-five percent of corn seeds and more than fifty percent of soy seeds.¹²²

This market control came about after the 1980 United States Supreme Court case *Diamond v. Chakrabarty*, which first allowed genetically modified organisms—and life—(GMOs) to be patented.¹²³ Monsanto spent the 1990s patenting seeds that had been modified genetically to be immune to their Round-Up product¹²⁴—now holding over 11,000 patents for seeds, prosecute vigilantly for infringement, and cracking down on accidental cross-pollination.¹²⁵

This is very significant because, to purchase from Monsanto, a farmer must sign an agreement not to save genetically modified seed.¹²⁶ This is contrary the traditional practice of seed saving and reusing, which farmers have done for millennia.¹²⁷ This has attributed to desperation in India, with over 25,000 farmers since 1997, committing suicide amongst broad protest to the seeds.¹²⁸

B. *The FAO's Limitation on Agricultural Reform*

The FAO differs slightly from the IFAD on agricultural reform, but it has the same view of food security. It also defines food security as the ability of an individual to acquire sufficient food and the adequacy of food supplied, or supply and demand will be protected.¹²⁹ Orthodox economic tenets are essential to the FAO's policies and they are in line with the WTO's as well—seeking to eliminate protectionist subsidies that distort prices.¹³⁰ The FAO wants the rural poor to

122. *Who Owns Nature: Corporate Power in the Commodification of Life*, ETC GROUP COMMUNIQUÉ 12, Nov. 2008, at 12 (etc. Group, Ottawa, Ont., Can.), available at http://www.etcgroup.org/upload/publication/707/01/etc_won_report_final_color.pdf.

123. *Diamond v. Chakrabarty*, 477 U.S. 303, 306, 309 (1980).

124. *Company History*, *supra* note 116.

125. See CENTER FOR FOOD SAFETY, *MONSANTO V. U.S. FARMERS 4* (2005), available at <http://www.centerforfoodsafety.org/pubs/CFSMonsantovsFarmerReport1.13.05.pdf>; THE FUTURE OF FOOD: A DOCUMENTARY BY DEBORAH KOONS GARCIA (Lily Films 2009), available at <http://www.thefutureoffood.com/onlinevideo.html>.

126. Tempe Smith, *Going to Seed?: Using Monsanto as a Case Study to Examine the Patent and Antitrust Implications of the Sale and Use of Genetically Modified Seeds*, 61 ALA. L. REV. 629, 631–32 (2010).

127. See generally Michael Mascarenhas & Lawrence Busch, *Seeds of Change: Intellectual Property Rights, Genetically Modified Soybeans and Seed Saving in the United States*, 46 U.K. SOCIOLOGIA RURALIS 122 (2006) (explaining the history of seed saving and the impact of genetically modified organisms upon the practice).

128. Chad Heeter, *Rough Cut: Seeds of Suicide: India's Desperate Farmers*, PBS Frontline World (July 26, 2005), http://www.pbs.org/frontlineworld/rough/2005/07/seeds_of_suicid.html.

129. *Id.* at 28–29.

130. *Id.* at 30.

compete in the global market, but to do this, the rural poor must produce in response to demand throughout the world.¹³¹

The rural poor produce crops that are grown regionally. The crops that are grown within these regional areas are produced according to cultural traditions.¹³² Thus, how can the FAO expect regional, poor farmers to compete with large factory farms based in the United States? The time, pains, and ingenuity to establish a system to convey market knowledge to rural farmers and in turn have them send crops to the world market could be more efficiently spent.¹³³ The FAO must consider these effects in order to truly accomplish its goals.

C. *The U.S. and Food Security's Limitations*

The United States and the WTO conflict regarding trade liberalization and de-regulation, which is manifested by the United States occasionally ignoring WTO policy.¹³⁴ In the last decade, the United States refused to sign an international text for the human right to food at the 2002 World Food Summit in Rome.¹³⁵ The Bush administration's final statement at the 2002 summit explained:

The United States believes . . . that the issue of adequate food can only be viewed in the context of the right to a standard of living adequate for health and well-being as set forth in the Universal Declaration of Human Rights, which includes the opportunity to secure food, clothing, housing, medical care and necessary social services. Further, the United States believes that the attainment of the right to an adequate standard of living is a goal or aspiration to be realized progressively that does not give rise to any international obligation or any domestic legal entitlement and it does not diminish the responsibilities of national governments towards their citizens. . . . Additionally, the United States understands the right of access to food to mean the opportunity to secure food and not a guaranteed entitlement.¹³⁶

It is the scholarly contention that the world's poor need opportunities to become self-sufficient instead of an entitlement.¹³⁷ If this is the position of the United States, then it continually ignores even classical economic policies from the WTO—such as the reduction of regulation and farm subsidies that distort

131. *See About FAO, supra* note 93.

132. *See id.* at 28.

133. *Id.* at 6–7.

134. *See id.* at 31–35.

135. Peter Rosset, *U.S. Opposes Right to Food at World Summit*, MINDFULLY.ORG (June 30, 2002), <http://www.mindfully.org/Food/Right-To-Food30jun02.htm>.

136. REPORT OF THE WORLD FOOD SUMMIT: FIVE YEARS LATER, PART ONE 32 (June 10–13, 2002), available at <ftp://ftp.fao.org/docrep/fao/meeting/005/y7106e.pdf>.

137. *See id.* at 4.

prices.¹³⁸ During the early twentieth century, one quarter of the population of the United States lived on American farms while today only two percent of the population occupy and work rural farmland.¹³⁹ “The dramatic change in the composition of rural America inversely parallels the exponential growth of commercial farming enterprises. Approximately [eight percent] of the total number of American farms account for, in excess of, [seventy percent] of agricultural sales.”¹⁴⁰ The Farm Bill gives subsidies to both large and small agriculture, but it is mostly large corporate agriculture that cash in.¹⁴¹

Some even feel that food policies in the United States violate the right to food.¹⁴² Food stamps create dependence on processed foods because it is in the best interest of the purchaser to maximize his purchasing power by buying cheap food.¹⁴³ In some instances within the United States there is a failure to provide citizens access to healthy food in urban centers—as seen in Detroit, Michigan where a city of nearly one million people has only eight supermarkets.¹⁴⁴

Arguably, the United States employs a socialist, protectionist model with their agricultural subsidies, while encouraging the developing countries of the world to eliminate their barriers to trade, thereby, making its stance to global food security as “do as I say, not as I do.”

D. World Trade Organization's Limitations

The WTO plays an intricate role in agricultural trade. The WTO operates under the principal that the free market will alleviate global poverty and promote food security.¹⁴⁵ Food rights activist focus “their complaints on domestic price supports, export subsidies, and dumping.”¹⁴⁶ Dumping is defined as

138. Vance E. Hendrix, *The Farm Bill of 2002, the WTO, and Poor African Farmers: Can They Co-Exist?*, 12 TULSA J. COMP. & INTL. L. 227, 229 (2004).

139. *Id.* at 251.

140. *Id.*

141. Food, Conservation and Energy Act of 2008, Pub. L. No. 110-234, 122 Stat. 923, 1523 (codified as amended in scattered sections of 26 U.S.C.); see Hendrix, *supra* note 158, at 229.

142. J. M. Greene, *Localization: Implementing the Right to Food*, 14 DRAKE J. OF AGRIC. L. 377, 389 (2009).

143. *Id.* at 388.

144. *Id.* at 386.

145. See *About the WTO, A Statement by the Director-General, Mission Statement*, WORLD TRADE ORG., www.wto.org/english/thewto_e/whatis_e/wto_dg_stat_e.htm (last visited Mar. 12, 2012) (expressing that “[t]he WTO’s founding and guiding principles remain the pursuit of open borders, the guarantee of most-favoured-nation [sic] principle and non-discriminatory treatment by and among members, and a commitment to transparency in the conduct of its activities.”).

146. SCHANBACHER, *supra* note 2, at 36.

selling a product at a price that is below fair market value from the country of origin.¹⁴⁷ The WTO seeks to abolish all subsidies, including those that “maintain ‘legitimate environmental, economic, and rural development purposes,’”¹⁴⁸ meanwhile opening unregulated markets.¹⁴⁹

Certain agreements sponsored by the WTO are drawing criticism by some, however, including the Trade-Related Aspects of Intellectual Property Rights agreement (TRIPs) and Trade-Related Investment Measures agreement (TRIMs) signed during the Uruguay Round.¹⁵⁰ These agreements are intricate but essentially both open the door for corporate intellectual property to engage developing economies without regard to harming domestic markets.¹⁵¹

The TRIPs agreement has been criticized for granting control of the world seed supply to large companies by facilitating multinational recognition of patented seed technology. Currently, the top five seed companies control seventy-five percent of the global vegetable seed market, DuPont and Monsanto control seventy-three percent of the United States corn seed market, as few as four companies control half of the United States soy seed market, and the top ten companies control one-third of the total global seed market.¹⁵² TRIPs, in effect, give ownership of the traditional farming method of saving seed, other propriety techniques of irrigation or mechanized harvesting, and living organisms to large corporations.¹⁵³

While the effects of TRIPs and TRIMs have excellent advantages for software, music, and other copyright and patents the effects of these treaties on agriculture can be chilling for the poor.¹⁵⁴ It is argued that privatization places wealth and control in the hands of fewer actors and the cultural concerns of the rural poor without a voice will ultimately go unnoticed.

147. Rebecca A. Robbins, *The Ships Passed By: Can Anti-Dumping Laws Help Save Ocean Resources and Traditional Fisheries?*, 11 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 225, 228 (2005) (citing Agreement on Implementation of Article VI of the General Agreement On Tariffs and Trade 1994 art. 2.1 (Apr. 15, 1994) Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations General Agreement on Tariffs and Trade, Annex 1A, available at www.wto.org/english/docs_e/legal_e/19-2dp.pdf).

148. SCHANBACHER, *supra* note 2, at 36.

149. *Id.* at 35–38.

150. *Legal Texts—A Summary of the Final Act of the Uruguay Round*, THE WORLD TRADE ORG., http://www.wto.org/english/docs_e/legal_e/wsum_ehtm#WA Agreement (last visited Mar. 12, 2012).

151. *See id.*

152. *Id.* at 37–38.

153. *Id.* at 38.

154. Jeffrey Sachs, *Helping the World’s Poorest*, THE ECONOMIST, Aug. 12, 1999, <http://www.economist.com/node/231535>.

E. *The World Bank's Limitation on Agrarian Reform*

The World Bank influences food security by providing technical and financial support to developing countries and seeks food security through macro-economic policies of monetary and fiscal discipline, lowering trade barriers, and the increased exports.¹⁵⁵

Essentially, the critique of the World Bank is that its policies encourage privatization and this is detrimental to the world's rural poor.¹⁵⁶ The poor, in some countries, do not have secure private property rights and, without secure property rights, financial institutions are wary of investing within the economy—which then stalls local economic growth.¹⁵⁷ The policies of the World Bank redistribute land to the most efficient producers and these are the larger producers further consolidating farming and pushing the rural poor deeper in poverty in the denial of access to land and resources.¹⁵⁸

One result of World Bank policies is for a region to encourage comparative advantage, which can be achieved by a region producing a single commodity.¹⁵⁹ David Ricardo was a founding economist of classical economic theory.¹⁶⁰ His contribution to the field was in the principle of comparative advantage, which concerns foreign trade between countries.¹⁶¹ Simply put, comparative advantage refers to the ability of a party to produce a particular good at a lower opportunity cost than another party.¹⁶² It is the ability to produce a product with the highest relative efficiency given all the other products that could be produced.¹⁶³ For example, labor rich countries with little regulation have a comparative advantage over countries that are environmentally conscious. Each has an advantage over another in a certain resource on the supply side. Obviously each country or region could have produced nearly all of what it needed on its own, but specialization allows the good to be produced more cheaply. Furthermore, the price would be higher to those countries that were too resource poor to concentrate on that commodity.

155. SCHANBACHER, *supra* note 2, at 38–39.

156. *Id.* at 14–17.

157. *Id.* at 39.

158. *Id.* at 40.

159. *See generally* THE WORLD BANK, GLOBALIZATION, GROWTH, AND POVERTY: BUILDING AN INCLUSIVE WORLD ECONOMY 155 (2002).

160. *David Ricardo*, EH.NET, <http://eh.net/encyclopedia/article/stead.ricardo> (last visited Mar. 12, 2012).

161. *See id.*

162. *See generally* DAVID RICARDO, THE PRINCIPAL OF POLITICAL ECONOMY AND TAXATION, Chap. VII, 85–94 (Lloyd Reynolds & William Fellner eds., Richard D. Irwin, Inc. 1963) (1817) (explaining the theory of comparative advantage).

163. *See generally id.* (explaining the theory of comparative advantage)).

While comparative advantage has been proven to be efficient since Ricardo's time (in the 1800s) the rural poor of today are not generally on an equal ground because of their lack of property rights and limited voice within economies. To truly provide equal footing, the World Bank should establish voting with respect to Bank policies.¹⁶⁴ As it stands, the World Bank generally listens to the voices of trade and finance ministers of the most powerful nations, bending policy favoring their interests like trade liberalization and further privatization.¹⁶⁵ But how can they truly solve the food sovereignty problem without giving adequate weight to the voice of the world's poor? How can the fire department put out fires when it does not know that there is a fire to begin with? Overall, it is the Author's opinion that the World Bank's policies are not conducive to allowing the global poor to achieve self-sustainment. The poor need a louder voice in the process.

F. *The IMF's Limitation on Development*

As discussed, the main objectives of the IMF are surveillance, technical assistance, and financial assistance.¹⁶⁶ The IMF is only concerned with broad macro-economic policy—not specifically agricultural policy.¹⁶⁷ Their policies could be viewed as communicating that market efficiency is as a cure to poverty through a trickle-down model. In the 1980s and 1990s, the IMF pursued rapid privatization promotion policies to try and force efficiency and comparative advantage through trade liberalization and foreign investment.¹⁶⁸ In this model corporations are to enter a developing economy and contribute to the economy in taxes and jobs but, often, local businesses can be pushed out of the market.¹⁶⁹ This left large companies with unfettered control of the market—most notably, Monsanto.¹⁷⁰ These multinational agribusiness corporations hurt traditional agriculture practices, particularly in the area of seed saving, by flooding markets with patented varieties of seeds.

To reiterate, seed saving and cross breeding have been an agricultural practice for millennia.¹⁷¹ For example, in Mexico, corn is purposefully planted

164. SCHANBACHER, *supra* note 2, at 45.

165. *See id.*

166. *Our Work*, INT'L MONETARY FUND, <http://www.imf.org/external/about/ourwork.htm> (last visited Mar. 12, 2012).

167. *See generally Overview*, INT'L MONETARY FUND, <http://www.imf.org/external/about/overview.htm> (last visited Mar. 12, 2012).

168. SCHANBACHER, *supra* note 2, at 46.

169. *Id.*

170. *See id.*

171. *See Mascarenhas, supra* note 127, at 122.

near wild corn called *teocintle*, which cross-pollinates with domestic corn to provide a natural pesticide.¹⁷² The seeds from this process are saved from season to season to breed resilient crops naturally. Today, Monsanto sells patented seed variety but forbids the use of that seed from year-to-year.¹⁷³ In fact, Monsanto has worked on Gene Use Restriction Technology (GURT)—a suicide seed that will terminate germination after one harvest.¹⁷⁴ The company maintains that this product will not be put into production, but it is still alarming that this technology exists.¹⁷⁵

There is another ancient agricultural practice called landrace.¹⁷⁶ This process is specifically used to produce seeds or animals through evolution or adaptation.¹⁷⁷ Crops in specific regions—such as those in high altitudes, arid soils, and jungle nutrient depleted soil—have adapted.¹⁷⁸ Landraces are usually more genetically and physically diverse than formal, laboratory engineered breeds and, furthermore, most formal breeds originated from landraces.¹⁷⁹ A significant proportion of the world's farmers grow landraces.¹⁸⁰ Data collected for a study of the spread of cereal agriculture into Europe showed that landraces were mainly grown by European ancestors before plant breeders started to improve the varieties in the twentieth century.¹⁸¹

Some argue that there is a cyclical effect to policies that encourage privatization trade liberalization: it lowers prices, causes the rural poor to abandon the land and migrate to urban centers.¹⁸² Then, the urban poor enter multinational corporation factories and idle land is bought up by large producers further concentrating wealth.¹⁸³ With the diaspora of the rural poor to the cities, the rural

172. For an interesting scientific investigation into this subject see Anthony J. Struder, *The Genetic, Molecular, and Evolutionary Dissection of the Teosinte Branched1 Gene 28* (2011) (unpublished dissertation Ph.D, Genetics, Univ. of Wisconsin-Madison).

173. *Monsanto Co. v. McFarling*, 488 F.3d 973, 976, 979 (Fed. Cir. 2007).

174. *Is Monsanto Going to Develop or Sell "Terminator" Seeds?*, MONSANTO, <http://www.monsanto.com/newsviews/Pages/terminator-seeds.aspx> (last visited Mar. 12, 2012).

175. *Id.*

176. A. C. Zeven, *Landraces: A Review of Definitions and Classifications*, 104 *EUPHYTICA* 127, 128 (1998).

177. *Id.* at 128, 135.

178. *See id.* at 129.

179. *See id.* at 127–39.

180. *Id.* at 128.

181. Trygve Berg, *Landraces and Folk Varieties: A Conceptual Reappraisal of Terminology* 166 *EUPHYTICA* 423, 423–25 (2009).

182. *See* M. ANGELES VILLARREAL, CONG. RESEARCH SERV., *NAFTA AND THE MEXICAN ECONOMY 15* (2010), available at <http://www.fas.org/sgp/crs/row/RL34733.pdf>.

183. *See id.* Other economists argue, however, that rural migration is common as countries become industrialized. *Id.*

culture and practices are lost. This is arguably exacerbated because these impoverished people then lack the resources to produce their own food.

G. *The Economics of Commodity Dumping on Developing Nations*

International trade with open economies is among the more difficult applications for modern macro-economic models. There are multiple measures of national fiscal policy indicators, monetary policy indicators, and balance of trade for imports and exports, for any economy dealing with another. There are hundreds of possible influences, including oil shocks, inflation shocks, and climate shocks, which will have an enormous effect on an economy's optimal mix of policies that ensure positive growth. The details of a country's fiscal policies are beyond the scope of this article except for one: agricultural subsidies. Nothing in agriculture today has more impact on markets than developed countries' agricultural subsidies. Macro-economics is the best way to explain this impact.

Imagine the world's agricultural market as a small pond and each country as rocks to be thrown in. Obviously, the bigger the rock thrown, the bigger the ripples. It is the same with agriculture. For example: an outbreak of salmonella in American spinach leads to a decreased demand for American spinach and greater demand for Chilean spinach, hence a lower price in American spinach. Classic economic models suggest the lower the price, the fewer the producers in the market.¹⁸⁴ Therefore, American producers should wait out a season and plant a substitute crop, such as lettuce. To further help this industry, the United States government will impose graduated tariffs on Chilean spinach until domestic production, demand, and price is competitive again. It will then lower subsidies and raise tariffs. This is a simplistic example but it demonstrates a form of protection that occurs.

The effects of subsidizing production also gives the market cues to keep producing. United States corn receives an enormous subsidy, cuing United States producers to keep producing beyond normal demand because the Government is paying for it. The government will pay more by the bushel and, thus, there is incentive to plant as much land as possible in the most efficient way as possible. Entire industries are made to increase yield productivity.¹⁸⁵ Further, classical economics says, "for supply exceeding demand, the price will drop until equilibrium is reached," but the United States market never gets this message

184. See WALTER NICHOLSON, *MICROECONOMICS THEORY: BASIC PRINCIPLES AND EXTENSIONS* 454 (9th ed. 2005).

185. See KEITH O. FUGLIE ET. AL., *ECON. RESEARCH SERV, USDA, PRODUCTIVITY GROWTH IN U.S. AGRICULTURE 1* (2007), available at <http://www.ers.usda.gov/publications/EB9/eb9.pdf>.

because the government gets rid of the excess supply by funding new research in ethanol, substituting corn syrup for sugar, and most importantly, dumping excess supply into the global market.¹⁸⁶

To further this international corn scenario, one must imagine a developing country's market that is dependent on corn. For example, in 1994, when NAFTA was put into effect and trade barriers were therefore lowered, relatively cheap United States corn flooded Mexican markets and Mexican corn prices plummeted.¹⁸⁷ In 1997, Mexico put in its own corn price subsidy called, Progresas.¹⁸⁸ Progresas was a Mexican government price support program for tortillas—which are a Mexican dietary staple.¹⁸⁹ Mexico's state run maize industry was then broken up and two private companies seized the market.¹⁹⁰ Mexico based Meseca and United States based Cargill controlled the corn market.¹⁹¹ With United States made tortillas now flooding the Mexican market due to comparative advantage, the Mexican price support disappeared, tortilla prices jumped, tortilla demand dropped, Mexican corn farmers and processors left the industry, and Mexican quality of life deteriorated with United States made tortillas now flooding the market due to comparative advantage.¹⁹² Mexico is the birthplace of corn and tortillas but, in a matter of sixteen years, Mexico became dependent on a foreign nation for a crop belonging to its cultural and geographic heritage.¹⁹³

Corn is but one example. Export dumping in soy, wheat, rice, and sugar from developed countries like the European Union, Japan, and the United States distort prices all over the world.¹⁹⁴ Commodity export dumping is exacerbated with free-trade agreements like NAFTA, CAFTA (Central American Free Trade

186. See WALTER NICHOLSON, *INTERMEDIATE MICROECONOMICS AND ITS APPLICATION* 238 (8th ed. 2000) (showing how in a *short run or market period* when goods are sold without regard to price, the price will never reach *equilibrium prices*).

187. See Wenonah Hauter, *The Limits of International Human Rights Law and the Role of Food Sovereignty in Protecting People from Further Trade Liberalization Under the Doha Round Negotiations*, 40 VAND. J. TRANSNAT'L L. 1071, 1076 (2007).

188. *Policy-Oriented Research Impact Assessment (Poria) Case Study on the International Food Policy Research Institute (IFPRI) and the Mexican Progresas Anti-Poverty and Human Resource Investment Conditional Cash Transfer Program*, INT'L FOOD POLICY RESEARCH INST., <http://www.ifpri.org/sites/default/files/publications/iabrief01.pdf> (last visited Mar. 12, 2012).

189. See John Egan, *Mexico's Welfare Revolution*, BBC NEWS, Oct. 15, 1999, http://news.bbc.co.uk/2/hi/programmes/crossing_continents/412802.stm.

190. See Esther Vivas, *Causes, Consequences and Alternatives*, INT'L VIEWPOINT, <http://www.internationalviewpoint.org/spip.php?article1774> (last visited Mar. 12, 2012).

191. *Id.*

192. *Id.*

193. See Hauter, *supra* note 187, at 1076–77.

194. See generally PETER ATKINS & IAN BOWLER, *FOOD IN SOCIETY: ECONOMY, CULTURE, GEOGRAPHY* 139–53 (2001).

Agreement), SACU (South African Customs Union), amongst many others, having similar effects on an economy as Mexico experienced.¹⁹⁵

Classical economic principals support the policies of trade liberalization, privatization, and export dumping all with the goal of market efficiency. Food security for the world's poor is arguably not curable by the market. The Food Sovereignty Movement is counter to classical economics, which encourage WTO, IMF, and the World Bank policies.

IV. ALTERNATIVES TO FOOD SOVEREIGNTY

The previous section outlined policy flaws of multilateral organizations of the U.N., World Bank, WTO, and the IMF. It is argued that the true problem with any of these policies is their adherence to the traditional classical economic model. The IMF, World Bank, and the WTO specifically believe that traditional laissez-faire economics will allow markets to run efficiently—allowing equilibrium to be found in markets and poverty will be erased through a trickle down of the tax systems. This system is advocated by developed countries, but not followed by them. The United States uses the Farm Bill and the EU uses CAP (Common Agricultural Policy) to subsidize in the form of direct payments to farmers, price supports, export subsidies and import barriers in the form of quotas, tariffs, or regulations.¹⁹⁶ These policies favor large agribusiness and hurt the rural poor.

Agriculture is a unique industry and it should not be consumed with profit motivations. Farming is cultural and serves as a means for rural community and society. The land and resources are used to produce not only a means of income, but also a means for sustenance.

A. Introduction

Eighty percent of the world's population lives in rural areas.¹⁹⁷ The majority are small farmers who suffer from a lack of food.¹⁹⁸ Famine and hunger are arguably preventable so, when these strike, it is a violation of human rights.¹⁹⁹ Food Sovereignty, however, is not an international human right law as is the right

195. *See id.* at 42.

196. Food, Conservation and Energy Act of 2008, 7 U.S.C. § 8701 (2008); Council Regulation 73/2009, art. 1 O.J.(L 30) 23, 24 (EU) 2009; *see also* Cameron G. Thies & Schuyler Porche, *The Political Economy of Agricultural Protection*, 69 J. OF POL. 116, 120 (2007) (discussing subsidies with the United States and European Union).

197. Hauter, *supra* note 187, at 1073 (quoting Jean Ziegler, *supra* note 3).

198. *Id.*

199. *Id.*

to food.²⁰⁰ “Food Sovereignty” is a political term and not enforceable under any treaty, although aspects of it are involved with human rights law under the ICESCR.²⁰¹

Food Sovereignty began with La Via Campesina—or the International Peasant Movement—an international organization started in 1993 in Mons, Belgium, comprised of small and medium sized producers from seventy countries.²⁰² The purpose of the organization was to promote gender parity and social justice through fair economic relations in agricultural practices to preserve land, water, and other natural resources.²⁰³ The concept of Food Sovereignty was first introduced in 1996 at the World Food Summit in Rome.²⁰⁴ It “is the right of people[] to define their own food and [agricultural policies], to protect and regulate domestic agricultural production and trade in order to achieve sustainable development . . . and to determine the extent to which they want to be self-reliant [in food production].”²⁰⁵ It is not against trade but it is against foreign commodity export dumping premised on the importance for local and national markets being in priority to exporting goods.²⁰⁶ The emphasis is on the need for every country to be self-sufficient to achieve true food security.

Food Sovereignty’s main protest is with the WTO’s control of food and agricultural food-policy.²⁰⁷ Advocates want individual nations to have sovereignty over food-security policies. Food sovereignty is prepared to initiate claims for violations under the ICESCR for the harms of trade liberalization but there are no claims made as of yet.²⁰⁸

On February 27, 2007, more than 500 people from more than eighty counties gathered in the village of Nyéléni in Selingue, Mali to deepen food sovereignty efforts.²⁰⁹ An action agenda was devised to: 1) fight for alternative policies in developed countries that included production controls, supply management, and price that prevent dumping and promote family agriculture; 2) target

200. COTULA ET AL., *supra* note 22.

201. International Covenant on Economic, Social and Cultural Rights, *supra* note 24.

202. *What is La Via Campesina?*, LA VIA CAMPESINA.ORG., (Feb. 9, 2011), <http://viacampesina.org> (follow “Organisation”).

203. *Id.*

204. Paul-Florent Montfort, *Food Security: A Timely Political Issue*, MOMAGRI, http://www.momagri.org/UK/focus-on-issues/Food-Security-A-Timely-Political-Issue_471.html (last visited Mar. 12, 2012).

205. Our World is Not for Sale: Priority to Peoples’ Food Sovereignty: WTO Out of Food and Agriculture, PUB. CITIZEN (Nov. 2007), *available at* <http://www.citizen.org/documents/wtooutoffood.pdf>.

206. *See What is La Via Campesina?*, *supra* note 203.

207. *See id.*

208. *See Hauter, supra* note 187, at 1096–98.

209. *Id.* at 1096–97.

the WTO and regional and bilateral trade agreements to stop dumping and the inappropriate use of food aid; 3) pressure governments to implement international agreements that support Food Sovereignty and lobby to eliminate policies that undermine it; 4.) fight against the corporate control of the food chain by demanding that governments enact policies limiting control over food production and distribution; and 5) fight for comprehensive, genuine agrarian reform to ensure priority use of land, water, seeds and livestock breeds for food production and other local needs rather than production of exports.²¹⁰

Food Sovereignty is even advocated by the U.N. In 2004, the Right to Food's Special Rapporteur insinuated in his report that Food Sovereignty may be obligatory for ICESCR signatories stating that, because there is a right to adequate food:

governments are legally bound to . . . find the best way of ensuring food security for all their people . . . [.] it is now time to look at alternative means that could better ensure the right to food. Food Sovereignty offers an alternative vision that puts food security first and treats trade as a means to an end, rather than an end in itself.²¹¹

There would be more avenues for action and change against predatory trade regimes if Food Sovereignty were indeed made into a human right under the ICESCR.

B. *Food Sovereignty vs. Food Security*

The FAO defined food security as, "access by all people at all times to the food needed for a healthy and active life."²¹² Food security has become a loaded term in itself, however, and it is important to understand that it fits in the classical economic paradigm. Purely economic concepts apply to food security to achieve a globally integrated world composed of rational, self-interested individuals.²¹³ This is to be done through "competition, efficiency, profit-making and unfettered consumption."²¹⁴

Food Sovereignty can be distinguished from mere food security, because its primary emphasis on the interdependence of local production for local consumption.²¹⁵ A focus on local, community development in which the interests of

210. *Id.* (drawing from the NYÉLÉNI FORUM FOR FOOD SOVEREIGNTY, SYNTHESIS REPORT (2007)).

211. ZIEGLER, *supra* note 2, at 14.

212. *Special Programme for Food Security*, FAO, <http://www.fao.org/docrep/w9990e/w9990e09.htm> (last visited Mar. 12, 2012).

213. SCHANBACHER, *supra* note 2, at 55.

214. *Id.*

215. *Id.*

families, friends, and neighbors is embraced helps cooperation, efficient production at the community level, mutual well-being, and sustainable development.²¹⁶ These are vast departures from the tenets of classical economic theory and they echo the Special Rapporteur's call for trade not being an end in itself.

C. *Sustainable Agriculture*

Sustainable agriculture is the basic concept that agricultural uses should not be depleted faster than can be replenished.²¹⁷ Soil erosion should not exceed the capacity for soil renewal, irrigation should not empty aquifers faster than they can be replaced by rainfall, and practices of minimizing chemical use in soil, crops, and animals should be implemented.²¹⁸ In addition, social factors play a role in access to natural resources in formal and informal markets through a process of society ties, familial associations, inheritance, and state resource allocation.²¹⁹ There are customs and traditions with the world's agriculture beyond just access. Food Sovereignty strives to address this but a similar concept in agriculture proves to embody it.

Agroecology has emerged as a response to the failures of the Green Revolution and classical economic agricultural policies.²²⁰ Agroecology is a concept that centers on the preservation of ecological relationships and systems with as few inputs as possible.²²¹ The practice of agroecology can have a large impact on preserving the environment, as 370 million people live in areas that are resource poor and are prone to be damaged by soil erosion, deforestation, or nutrient depletion.²²² Agro-ecology seeks to utilize farming capabilities and output by employing processes such as:

- (1) "[R]ecycling biomass and balancing nutrient flow and availability;
- (2) securing favorable soil conditions for plant growth through enhanced organic matter and soil biotic activity;
- (3) minimizing losses of solar radiation, air, water, nutrients by way of microclimate management, water harvesting, and soil cover;
- (4) enhancing species and genetic diversification of the agroecosystem in time and space, and;
- (5) enhancing beneficial biological interactions and synergisms among agrobiodiversity components to stimulate key ecological process.²²³

216. *Id.*

217. See UC Sustainable Agric. Research & Educ. Program, *What is Sustainable Agriculture?*, UNIV. CAL., <http://www.sarep.ucdavis.edu/concept.htm> (last visited Mar. 12, 2012).

218. See BROWNE ET AL., *supra* note 9, at 54–60.

219. COTULA ET AL., *supra* note 22.

220. SCHANBACHER, *supra* note 2, at 57.

221. *Id.*

222. *Id.*

223. *Id.* at 57–58.

In essence, agro-ecology is not geared to high-yield mono-cropping agriculture, but it is focused on techniques that harness the resources in a local economy. It is only fair to note that some recent efforts of Monsanto further argroeological goals with genetically modified seed.²²⁴ Nonetheless, in Africa, the poor are at the receiving end of harm with any price fluctuation, supply shock, and commodity export dumping.²²⁵ Efforts have been made by researchers to produce crops that will grow in the soils, fit in with the cultural, diet and tastes, and can be still be profitable in markets.²²⁶ Maize, beans, and cassava have been sought to fill this role.²²⁷ Monsanto is aiding the Danforth Center of St. Louis in producing cassava and corn seeds richer in nutrition for Africa.²²⁸ This is an example of the major advantages to technology helping society. Just as with the arguments against socialized medicine, however, it can be argued that the economic incentives in agriculture are leading to the betterment of society on the whole. Again, the problem is not with the technology but with the policies that create inequity.²²⁹ This again, is proof of the tightrope policy objectives in international agriculture.

Seeds are a serious concern for the rural poor. Ten multi-national companies in the world control sixty-seven percent of the seed.²³⁰ This control has caused a loss in biodiversity.²³¹ Seeds are natural and now they are engineered on the cellular level. India once cultivated over 200,000 varieties of rice, and this has been reduced to thirty to fifty varieties.²³² China cultivated 10,000 varieties of wheat and now it is down to 1000, and, in the Philippines, ninety-eight percent of the rice breeds are genetic varieties.²³³

224. *See, supra* Part II.

225. *See* Hendrix, *supra* note 138.

226. *See generally* Finn Tarp et al. *The Robustness of Poverty Profiles Reconsidered*, 51.1 *ECON. DEV. & CULTURAL CHANGE* 77, 97–104 (2002) (discussing regional food bundles based on localized consumption patterns in food energy intake and cost of basic needs).

227. *See generally id.* at 81–104 (showing maize, beans, and cassava’s ability to fit within the cultural norms of Mozambique, while remaining profitable within the segregated economies).

228. Press Release, Monsanto, Monsanto Fund Provides Support to Danforth Plant Science Center (Sep. 5, 2006), *available at* <http://monsanto.mediaroom.com/index.php?s=43&item=380>.

229. *See generally* *Talk of the Nation: Can Biotech Fuels Feed the Developing World?*, NATIONAL PUBLIC RADIO (Mar. 12, 2010), <http://www.npr.org/templates/story/story.php?storyId=124618560> (transcript and audio recording available) (discussing Monsanto’s seed price increases).

230. SCHANBACHER, *supra* note 2, at 57.

231. *Id.* at 58–59.

232. *Id.* at 59 (citing VANDANA SHIVA, *STOLEN HARVEST: THE HIJACKING OF THE GLOBAL FOOD SUPPLY* 80, 84–85 (2007)).

233. SHIVA, *supra* note 232, at 80.

Further, the exchange and barter of seed is cultural and a vital part of rural community life in many countries.²³⁴ Food Sovereignty advocates the right for agricultural workers to “produce, preserve, and provide food” their own communities.²³⁵ Policies that destroy local markets are creating a dependence on multi-national seed companies, “processed foods, and junk foods”; if this practice is continued, it has the effect of homogenizing the world to a mono-culture.²³⁶ Food Sovereignty preserves local autonomy, local foods, local culture, dignity, freedom, and justice.²³⁷ A destruction of local seeds is destruction of culture, traditions, and communal identities.

The Food Sovereignty movement calls for food production and consumption according to the needs of local communities by giving priority to local resources and minimizing exogenous inputs.²³⁸ Focus is on sustenance and crops for local consumption and not the world’s markets. Agro-ecology is in tune with Food Sovereignty’s goals.

D. Cooperation Model

Food Sovereignty is a new concept, but it shares a lot of commonalities with previous movements and uprisings. Food Sovereignty wants to achieve human rights status and not an ideology to spawn revolution. The FAO and IFAD actually encourage and foster cooperation models, but it is still undermined by the pervasive policies of the other multinational entities. It is not so abstract, even in America. A very popular saying from northern New Mexico is, “*comimos frijoles y arroz en los dos tiempos buenos y malos*” (we ate beans and rice in both the good times and bad). Classical economics, however, has a counter axiom of maximizing utility in consumption and production, or an individual will be happiest by working as hard as he can and buying as much as he can.²³⁹ This is not the case in much of the world. The world’s rural poor work together in families and communities to prepare food. There is cooperation. There are three specific movements in the past twenty years that illustrate the ideals of Food Sovereignty the best.

234. SCHANBACHER, *supra* note 2, 59 (quoting Juana Curio, *Seed at the Center of Food Sovereignty*, SEED HERITAGE AND THE PEOPLE FOR THE GOOD OF HUMANITY 10, http://viacampesina.net/main_en/images/stories/pdf/seed_heritage_of_the_people_for_the_good_of_humanity.pdf (last updated May 21, 2008)).

235. *Id.*

236. *Id.*

237. *Id.* at 58–59.

238. *Id.* at 54–57.

239. *See* NICHOLSON, *supra* note 186, at 68–71.

First there is, Justicia, Tierra, Libertad (Justice, Land, Freedom), The Mexican Zapatistas Revolution started in a mountain region called the Chiapas on January 1, 1994, the day when the NAFTA came into effect.²⁴⁰ Their initial goal was to instigate a revolution in all of Mexico, call the world's attention to their movement to protest the signing of NAFTA, and demand regional autonomy over the natural resources that are extracted from Chiapas benefit the local economy.²⁴¹ The Zapatistas rejected watered-down agreements and created autonomous municipalities in the Chiapas—thus, partially implementing their demands without government support but with some funding from international organizations.²⁴² The movement is Marxist in its ideology—crying for equality amongst women, education, and wages—but also seeks sovereignty over its region.²⁴³ They are against foreign models influencing the land and resource decisions.²⁴⁴ It is an extreme example that illustrates how deep the cultural ties are to agricultural systems and why agriculture is not a typical industry.

The second movement is the El Movimiento Campesino a Campesino (MCAC), or the Farmer-to-Farmer Movement, emerged out of the land reforms in Central America during the 1960s.²⁴⁵ It is a farmer pedagogy program similar to our own state agricultural extension, land grant university system set up in the Morrill Acts of 1862 and 1890.²⁴⁶ In this movement, farmers gather and relate cultural wisdom, technological techniques, and secure community.²⁴⁷ MCAC's central tenet is that through the "love of nature, family, and community . . . a vision of campesino-led sustainable agri-cultural development" can be implemented.²⁴⁸ Classroom sessions are community events with poetry readings, jokes, alcohol, food, and friendships.²⁴⁹ This movement is a great departure from the top-down agriculture of the WTO, IMF, and World Bank.²⁵⁰ Food is maintained in its cultural role with MCAC and away from economic profit models.

240. GEORGE A. COLLIER, *BASTA! LAND AND THE ZAPATISTA REBELLION IN CHIAPAS* xiv, 55 (rev. ed. 1999).

241. *See id.* at 64–65, 89.

242. *See id.* at 148, 172.

243. *See id.* at 159.

244. *See id.* at 158–76.

245. SCHANBACHER, *supra* note 2, at 66–67.

246. *Id.* at 67; *see also* Robert J. Safransky, *Morrill Acts*, EDUC. L. (Jan. 1, 2011), <http://la.whighereducation.com/90-morrill-acts.html>.

247. SCHANBACHER, *supra* note 2, at 66–69.

248. *Id.* at 67 (quoting Eric Holt-Giménez, *The Campesino a Campesino Movement: Farmer-led Sustainable Agriculture in Central America and Mexico*, PARADOX OF PLENTY: HUNGER IN A BOUNTIFUL WORLD 297–314 (1999)).

249. *Id.* at 67–68 (quoting Holt-Giménez, *supra* note 248, at 89).

250. *Id.* at 68.

The third movement is Brazil's Landless Movement, Movimento dos Trabalhadores Rurais Sem Terra (MST).²⁵¹ "Since 1985, the MST has peacefully occupied unused land where they have established cooperative farms, constructed houses, schools for children and adults and clinics, promoted indigenous cultures and a healthy and sustainable environment"²⁵² The MST is the largest social movement in Latin America with 1.5 million landless members.²⁵³ "In Brazil, 1.6% of the landowners control roughly half (46.8%) of the land on which crops could be grown," and a further 3% of the population owns two-thirds of all arable lands for the country!²⁵⁴ The MST has won land titles for more than 350,000 families in 2000 settlements as a result of MST actions.²⁵⁵ Land occupations are rooted in Article 186 of the Brazilian Constitution, which says land that remains unproductive should be used for a "larger social function."²⁵⁶ The MST has brought attention to the rural poor of Brazil peacefully. It has also fought to establish communities, hospitals, and schools all against government and military threats, violence, persecution, and imprisonment.²⁵⁷

Cooperation is a feasible model for protecting the world's rural poor. It should be essential to preserve local communities and foods. Agriculture is not a typical industry where profit maximization, trade, and efficiency are central and the laws of supply and demand can work freely. Food is life to all in this world and it matters most to those who have the least.

V. CONCLUSION

The gaps of classical economic models could arguably be filled with Food Sovereignty. If the Nyéléni demands are truly heard and the ICESCR establishes an enforceable human right, then perhaps change for the better will begin. Poverty cannot be curbed with the system continuing status quo. It is the opinion of the Author that Bretton Woods has made the fat fatter and the poor poorer.

But it is important that the world realize that agricultural is a different industry. Even in America small scale farmers are supported by the government when the fact is that they produce only ten percent of the output, seemingly it is

251. *See Friends*, *supra* note 5.

252. *Id.*

253. *Id.*

254. *Id.*

255. *Id.*

256. *See id.*; CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 186 (Braz.).

257. SCHANBACHER, *supra* note 2, at 71–74.

because it is part of our collective culture to have small family farms.²⁵⁸ Agriculture is food, food is culture, culture is people, people are nations; these facets cannot be separated, amended, or orchestrated without due care and an educated understanding of every component. This is why blanket multilateral policies have harmed agriculture globally.

The world's poor have not the means to have a voice in the current system controlled by the elite and educated of the developed world. The developed world is divorced from the central role of agriculture within the developing world. Food Sovereignty seeks to draw attention to the problem before irreparable harm is done to the environment, to cultures, and to nations' sovereignty.²⁵⁹ Marxist revolutions in response to trade liberalization have already occurred in Mexico. How long before another region goes militant?

Agriculture is life. It is nationalism. It is culture. This point cannot be emphasized enough. It is more than just the production of food and fibers. International law, treaties, and summits must put this at the forefront if there will be change. The Food Sovereignty movement addresses many of the breakdowns of the orthodox economic model, but it is fighting against the deep pockets of multinational corporations lobbying efforts and the domination of the international policy making bodies of the developed world. Even the fear of supply shocks serves to entrench protectionism.²⁶⁰ Hopefully justice and acknowledgment will lead to an objective means of protection before the consequences become irreparable.

258. See generally Robert A. Hoppe & David E. Banker, Econ. Research Serv., USDA, *Structure and Finances of U.S. Farms: Family Farm Report, 2010 Edition* (July 2010), available at http://www.ers.usda.gov/Publications/EIB66/EIB66_ReportSummary.pdf.

259. See Melissa Moore, *Food Sovereignty: Global Rallying Cry of Farmer Movements*, FOOD FIRST (Dec. 3, 2003), <http://www.foodfirst.org/en/node/290> (last visited Mar. 12, 2012).

260. See Eleanor Beardsley, *Volatile Food Prices Grab G-20's Full Attention*, NAT'L PUB. RADIO, (June 22, 2011), <http://www.npr.org/2011/06/22/137324767/volatile-food-prices-grab-g-20s-full-attention> (audio commentary accompanies the article on the website).