The MDG Hunger Target and the Contested Visions of Food Security

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Preface

This paper is one of a series of papers in a research project, *The Power of Numbers: A Critical Review of MDG Targets for Human Development and Human Rights (the “Project”)*. Motivated by a concern with the consequences of the Millennium Development Goals (MDGs) beyond the achievement of the 2015 targets, the Project seeks to explore their broader policy and programmatic implications. It focuses particularly on the reductionism inherent in the way in which these global goals were set and came to be used, as well as the potential for distorting priorities and marginalizing, or even displacing, important human development and human rights concerns inherent in such global goal-setting exercises. A total of 11 studies are included, each analyzing the normative and empirical consequences of a particular MDG goal/target, and considering what other targets and indicators might have been more appropriate. The Project aims to identify criteria for selecting indicators for setting targets that would be more consistent with Human Development and Human Rights priorities, amenable to monitoring impacts on inequality, accountability and consistency with human rights standards.

Although this paper is currently accessible as a free standing working paper, it should be read in conjunction with the synthesis and background papers of the Power of Numbers Project. These papers provide necessary information about the scope of the Power of Numbers Project, the historical framing of international agreements leading up to the MDGs, and the human rights and human development frameworks referenced in the paper. These working papers are expected to be compiled as a special issue of the *Journal of Human Development and Capabilities*.

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2 An independent research project coordinated by Sakiko Fukuda-Parr at The New School and Alicia Ely Yamin at Harvard School of Public Health. Support from the UN Office of High Commissioner for Human Rights, UN Development Programme, Frederick Ebert Stiftung, Dag Hammarskjöld Foundation, and the Rockefeller Foundation are gratefully acknowledged.
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Abstract

This paper explores the normative and empirical consequences of the MDG hunger target (1C), to halve the proportion of people who are undernourished, measured by the proportion of children under 5 who are underweight for their age, and the proportion of people who are ‘undernourished’. We argue that the influence has been more normative (reframing thinking and influencing strategies) rather than empirical (increasing investments and efforts). The MDG hunger target has had little effect in drawing attention to this priority and raising its profile. While food security currently commands attention as a top global political priority, it has long been a neglected goal. It was the 2008 ‘food crisis’ that led to the resurgence of attention. On the other hand, we conclude that the MDGs had more powerful and unintended normative effects. The hunger target was reductionist in casting the problem of food security as caloric consumption rather than security of access that depends on social, economic and political variables related to poverty. There has been a shift in food security strategies in international development debates. High profile and well-resourced global initiatives emphasize results orientation, nutrition, and technological solutions. This contrasts with the 1996 World Food Summit consensus on food security recognized it as a human right and a complex problem of access (rather than production). The Summit adopted a broad action plan that emphasized the inter-relationship between food security and other objectives (such as health and gender equality), and people’s empowerment and equality as strategic elements. The hunger target recast this narrative, reducing the problem to achieving the targets defined by outcomes based on caloric consumption, and marginalizing the need for long-term solutions requiring social and political change. The choice of indicators too contributed to this simplification, marginalizing issues of vulnerability and instability in access, nutritional quality, and the host of social and political constraints.

The authors gratefully acknowledge the individuals who generously gave their time for interviews, and comments from the project workshop held on February 28-March 1 in Geneva, notably from Carlo Calfieri. All errors and omissions are due to the authors. Comments welcome: fukudaps@newschool.edu and orra475@newschool.edu
Keywords: Millennium Development Goals, Hunger, Food Security, Human Rights, Human Development, Capabilities

Introduction

Two successes of the MDGs are widely acknowledged: they galvanized attention to poverty as a global priority and they achieved consensus in the international community on the overall objectives of development cooperation. However, these effects refer to the MDGs as a package, not to their constituent parts. Different goals have had different consequences. In the broad context of international agendas, food security - including agriculture and nutrition - have long been neglected issues, and by all accounts, the MDG hunger target has had little effect in drawing attention to this priority and raising its profile⁴. It was the 2008 ‘food crisis’ that led to a resurgence of attention. Since then, food security consistently figures among the topics addressed at the G-8 meetings and other consultations of global leaders, and has generated new commitments and initiatives. In the debates about post 2015 and sustainability goal setting, there is widespread support for ending hunger as its own goal.

What has been the role of the MDG hunger target in this evolution? This paper explores the normative and empirical consequences of this goal. We argue that the influence has been more normative than empirical. It did not create incentives to allocate more resources or to take action, but rather contributed to shaping thinking and framing the problem and solutions in a particular way. The chosen indicators focus attention on food supply rather than access, and on caloric consumption rather than on nutrition, while targeting favors solutions that lead to quick gains rather than those that seek long term solutions to the root causes. This is a field marked by contested visions and analyses, and this framework contrasts with the broad agenda adopted at the World Food Summit which highlighted food security as a problem of access and rights, and the issues of distribution, empowerment and participation and sustainability as important dimensions.

The paper starts with a review of definitions and divergent conceptualizations of food security. We then trace the origins of the MDG target in the 1990s conferences, and then explore the post

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⁴ This was the view voiced by the 20 individuals interviewed for this paper, without exception.
2000 shifts in resource allocation and strategies. The following section critically evaluates the MDG indicators for monitoring human development and human rights progress.

The research for this paper included documentary review, statistical analysis, and interviews with individuals from diverse stakeholder organizations.

**Background**

*What is hunger?*

The term ‘hunger’ is not a well-defined scientific concept; it refers to a human experience that is difficult to use in policy analysis. The Oxford English dictionary defines it as ‘a feeling of discomfort or weakness caused by lack of food, coupled with the desire to eat.’ When hunger is the term used in political statements or international policy documents it refers to ‘food security’ as the priority social goal. In this paper, we use the term food security as the relevant policy objective of the hunger target.

The definition of food security that is currently in use in international policy debates was adopted at the FAO World Food Summit (WFS) in 1996 - “Food 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” (FAO, 1996a). The 1996 consensus shifted the focus from supply to access, utilization and stability, and the unit of analysis from the country to the individual. The work of Amartya Sen was important in moving the conceptual thinking. His work on the political economy of hunger and famines (Sen, 1982) demonstrated that famines occur even when there is plentiful supply, but occurs because individuals and households lose access.

Food insecurity has short-term and long-term manifestations requiring different types of policy responses. Short-term insecurity is often caused by drought and other natural catastrophes that create supply shortages, or sharp rise in prices. But much of food insecurity in the world is long term, resulting from chronic or recurring difficulty to access appropriate food. Sen identifies three means of access – or entitlement – wage exchange, social transfers, and own production. This framework is useful in analyzing long-term individual and household food insecurity and
policy responses needed to address them that relate to wages and prices, social protection and small-scale farming.

This definition of food security overlaps considerably with the idea of the right to food, first recognized by the UN Declaration of Human Rights (1948), which included the right to food as a component of the right to an adequate standard of living in Article 25 (UN General Assembly Resolution 217 A, III). The right to food was then reaffirmed in 1966, by Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) (General Assembly Resolution 2200A, XXI), which noted the important elements of availability, accessibility, and utilization (Randolph & Hertel, 2013). This definition was elaborated upon in General Comment 12, issued by the Committee on Economic, Social and Cultural Rights (CESCR) in 1999. General Comment 12 clarified the normative content of the right to food and underscored, among other elements, the importance of cultural appropriateness, nutritional adequacy, and sustainability of access, and outlined the obligations of states and the international community in reinforcing the right to food. Today, the Special Rapporteur on the right to food relies on an updated definition that includes these elements of sustainability and cultural appropriateness. He also prominently states that the right to food “is not a right to a minimum ration of calories…or a right to be fed. It is about being guaranteed the right to feed oneself…” (De Schutter, 2012).

It is important to note that these interpretations of food security focus first and foremost on the individual. The four core dimensions of food security are often expressed differently but include:

5 Article 11 of the ICESCR states:
1. The States Parties to the present Covenant recognize the right of everyone 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. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international co-operation based on free consent.
2. The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international co-operation, the measures, including specific programmes, which are needed: (a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources; (b) Taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.

6 The UN Special Rapporteur, Olivier De Schutter, defines the right to food as “The right to have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensure a physical and mental, individual and collective, fulfilling and dignified life free of fear.”
(i) availability (supply of nutritionally adequate and culturally appropriate food through domestic agricultural production and imports); (ii) access (economic and physical related to wages, own production and social transfers); (iii) utilization (ability to achieve nutritional wellbeing through adequate diet as well as non-food inputs such as sanitation, clean water and healthcare); and (iv) stability of access (absence of vulnerability to shocks and sudden loss of access). No matter how they are expressed, all four dimensions need to be addressed in a human rights and human development oriented food security agenda.

_Institutional landscape_

The broad and multi-dimensional nature of food security has important implications for strategies to end hunger and ensure food security, creating a unique set of challenges in developing an international consensus and strategy. This requires a multi-sectoral approach and the involvement of diverse actors, encompassing: production and supply issues that are embedded in agriculture; the nutrition and utilization issues that are part of the health sector; and the access and vulnerability issues that are linked to poverty, and socio-economic constraints that are embedded in either economic policy analysis or in concerns for children and other population groups.

Each of these sectors has its own community of actors and constituencies. The key actors concerned with production issues include international agencies such as the FAO, national Ministries of Agriculture, food and agriculture civil society groups such as FIAN and Via Campesina, as well as farmers’ organizations and private businesses. The key actors concerned with nutrition issues are the international organizations such as the WHO, national ministries of health, health and humanitarian NGOs, and health and nutrition related professionals and businesses. The poverty and human development actors include multi-sectoral development agencies such as the World Bank and UNDP as well as those more focused on food and nutrition such as UNICEF and IFAD, national ministries of economy, planning, and social welfare, anti-poverty and development NGOs.

In order to achieve greater coordination, the UN has set up multi-stakeholder bodies, including the Standing Committee on Nutrition that brings together UN agencies, and the Committee on Food Security (CFS) that is an inter-governmental body, both created in the mid-1970s. The
CFS was restructured in 2009 to incorporate the participation of a broad range of stakeholders, including the main UN agencies as well as civil society groups, international research centers, financial institutions, philanthropic foundations, and the private sector. Following the food crisis in 2008, the UN Secretary General set up the High Level Task Force on Global Food Security. However, as we will discuss later in this paper, the multi-dimensional nature of the food security challenge has been a consistent source of fragmented effort.

**Origins of the hunger target**

International commitment to eradicate hunger has a lengthy history. The 1974 World Food Conference is commonly referenced today for its famous pledge to eradicate hunger within one decade. The World Food Conference established the UN World Food Council as the coordinating mechanism where country ministers would report to the UN Economic and Social Council (Shaw, 2010). However, by the 1990s, the estimated number of hungry people had grown in spite of the ambitious commitments made in 1974. Ironically, hunger persisted despite increases in global per capita food supply, which had grown by an average annual rate of 0.5% between 1969 and 1990 (FAO, 1996b p. 9).

*The UN Development Conferences of the 1990s*

During the 1990s, the UN organized a series of development conferences, each addressing a specific theme. These conferences aimed at building international consensus on priorities and setting an agenda for action, including setting numeric, time bound targets. The issue of food security was highlighted in the agendas adopted at several conferences as shown on Annex A. Two conferences specifically focused on food security, including the 1992 International Conference on Nutrition (ICN) and the 1996 World Food Conference (WFS). The core strategies/commitments from each conference are outlined in Table 1.
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>(i) Incorporating nutritional objectives, considerations and components into development policies and programmes</td>
<td>(i) Ensuring a political, social and economic environment for the eradication of poverty and for durable peace;</td>
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<tr>
<td>(ii) Improving household food security</td>
<td>(ii) Implementation of policies to eradicate poverty and inequality and to improve access to sufficient nutritionally adequate and safe food;</td>
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<tr>
<td>(iii) Protecting consumers through improved food quality and safety</td>
<td>(iii) Pursuance of participatory and sustainable food, agriculture, fisheries, forestry and rural development policies and practices;</td>
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<tr>
<td>(iv) Preventing and managing infectious diseases</td>
<td>(iv) Ensuring that food trade and trade policies in general foster food security for all;</td>
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<tr>
<td>(v) Promoting breast-feeding</td>
<td>(v) Prevention and preparedness for as well as reaction to emergencies in ways that encourage recovery and development;</td>
</tr>
<tr>
<td>(vi) Caring for the socio-economically deprived and nutritionally vulnerable</td>
<td>(vi) Promotion of optimal mobilisation and allocation of public and private investments for sustainable food, agriculture and rural development;</td>
</tr>
<tr>
<td>(vii) Preventing and controlling specific micronutrient deficiencies</td>
<td>(vii) Implementation and monitoring of the Plan of Action in cooperation with the international community.</td>
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<td>(viii) Promoting appropriate diets and healthy lifestyles</td>
<td></td>
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<tr>
<td>(ix) Assessing, analyzing and monitoring nutrition situations</td>
<td></td>
</tr>
</tbody>
</table>

Source: ICN and WFS Plans of Action (FAO & WHO, 1992) and (FAO, 1996a)

The 1992 International Conference on Nutrition was held in Rome, where participating governments adopted a Plan of Action that included a broad plan with nine strategic areas, 111 actions, and ambitious goals including some numeric targets (FAO & WHO, 1992). The ICN recognized that access to sufficient food was an individual human right and that nutritionally adequate and safe food should be considered a precondition for development (FAO & WHO, 1992). It supported the need for local governments to play a central role in the identification of the structural causes of hunger and malnutrition at the country level, develop their own benchmarks and indicators for monitoring progress towards alleviating such problems, and

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7 Underlying these nine strategies, the ICN agenda included 111 recommended actions to be taken at the national and international levels.
8 The WFS agenda outlined 27 strategic objectives and 182 recommended actions to carry out these nine commitments.
9 The ICN was signed by 159 member states and the European Community
improve data collection practices to improve knowledge of the local needs (Action 9a, 9b, 9c). One of the major outcomes of the ICN was its encouragement for local governments to produce National Plans of Action for Nutrition\textsuperscript{10} (Longhurst, 2010 p. 45, Jones et al., 2000). Governments were urged to support crop diversification programs and food production practices that would allow for greater self-sufficiency, increased nutritional value, and greater dietary diversity. Member States also committed to the eradication or reduction of micronutrient deficiencies – including those from low dietary intake of iodine, vitamin A, and iron – within the decade (Action 7b) and to increase education about nutritional wellbeing (Action 8d).

The UN Standing Committee on Nutrition (SCN) had been pursuing greater coordination on nutrition long before the ICN\textsuperscript{11}, but the 1990s nutrition agenda remained underrepresented by collective support from UN agencies and bilateral donors (Longhurst, 2010). Fragmentation and sometimes conflicting agendas among the UN agencies (notably the FAO, WHO, and UNICEF) did not help.\textsuperscript{12} In the end, WHO and FAO were assigned as co-hosts of the ICN, but the SCN struggled to galvanize a common constituency for nutrition and the lack of ownership has since been cited as a major barrier to progress (Jones et al., 2000).

The 1996 World Food Summit (“WFS”) took place in Rome, hosted by the FAO, and attracted a record attendance of 198 governments\textsuperscript{13}, who collectively supported the overarching conference goal to set the “political, conceptual, and technical blueprint for an ongoing effort to eradicate hunger in all countries with the target of reducing by half the number of undernourished people by no later than the year 2015” (FAO, 1996a). To accomplish this target, member states adopted a broad and ambitious plan of action that addressed political, economic, and social dimensions of hunger and food security. A total of seven commitments, twenty-seven specific objectives, and 182 proposed actions to be taken at the national and international level. The plan of action addressed systemic factors that are at the root of food insecurity and lack of access including household and gender inequality (objective 1.3), undernutrition (objective 2.2), unemployment

\textsuperscript{10} Seventy governments drafted National Plans of Action for Nutrition in the years following the ICN (Longhurst, 2010 p. 45).

\textsuperscript{11} The SCN was established in 1977 and intended to be a collaborative forum for UN member organizations to engage on the topic of nutrition. Members include the FAO, UNICEF, World Bank, WFC, WHO, and the WFP (Longhurst, 2010 p. 28).

\textsuperscript{12} Richard Jolly interview February xx.

\textsuperscript{13} The 1996 World Food Summit was attended by 185 countries and the European Community.
and unequal access to productive resources (objective 2.1), environmental constraints such as land degradation (objective 3.2), unequal trade, and various other social dimensions of food insecurity. The WFS represented a notable point in history for formalizing the definition of food security and began the multi-stakeholder effort coordinated by the UN High Commissioner for Human Rights, which aimed to clarify national responsibilities towards realizing the right to food. This process culminated with General Comment 12 on the right to food in 1999 (CESR, 1999). International agencies were urged to dedicate resources towards data collection about vulnerability to food insecurity (objective 7.2, action b) and report findings to the ECOSOC through the Administrative Committee on Coordination (ACC). This led to the establishment of the Inter-Agency Working Group on Food Insecurity Vulnerability Information and Mapping Systems (IAWG-FIVIMS) in December 1997, responsible for reviewing and improving upon existing indicators of food security and vulnerability, including improving the methodology of the prevalence of undernourishment indicator (FAO-CFS, 1998).

In short, the WFS and the ICN plans of action addressed the broad approach towards food and nutrition security, recognizing its ‘four pillars’ of availability, access, nutritional adequacy/utilization and stability (FAO-CFS, 2012). Although the two plans of action approach food security from different lenses, both explicitly relate to International Economic and Social Rights norms and standards and are premised on the human development approach focusing on individual and household food security as the objective, seeing food insecurity as a problem related to poverty and inequality, and identifying a broad range of inter-sectoral and systemic causes. The language included in conference plans of action underscore this commitment to a country-specific and participatory approach. Table 2 categorizes the recommended actions from each conference by topic and includes a tally of the number of times each topic was mentioned. Notably, both plans of action were concentrated on the human rights/human development principles such as accountability, participation, economic access, sustainable production, vulnerability, and the rights of disadvantaged groups.

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14 The ACC Network on Rural Development and Food Security was established in April 1997, and is jointly managed by FAO and IFAD. (http://www.rdfs.net/oldsite/en/home-e.htm).
15 Framework for evaluating outcomes and analyzing policies based on the idea of ‘development as capability expansion’ articulated by Amartya Sen and in the UNDP Human Development Reports. See Robeyns (2005)
Table 2: Thematic Review of the ICN and WFS Plans of Action*

<table>
<thead>
<tr>
<th>Topic</th>
<th>International Conference on Nutrition</th>
<th>World Food Summit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production/Availability</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Economic access</td>
<td>15</td>
<td>38</td>
</tr>
<tr>
<td>Physical access</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Utilization</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>Distribution/Access for disadvantaged groups</td>
<td>52</td>
<td>60</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>35</td>
<td>29</td>
</tr>
<tr>
<td>Participation/Accountability</td>
<td>42</td>
<td>70</td>
</tr>
<tr>
<td>Education/Capacity building</td>
<td>54</td>
<td>64</td>
</tr>
<tr>
<td>Sustainability</td>
<td>8</td>
<td>44</td>
</tr>
</tbody>
</table>

* Many proposed actions addressed multiple human rights/human development categories. As a result, the total number of references exceeds the number of proposed actions outlined in each conference. 

Source: WFS and ICN Plans of Action, Authors’ analysis

This human development approach to hunger was further reinforced with the agendas adopted at several other conferences on related themes, namely Children, Human Rights, Environment, Population, Women and Social Development. The UN conferences of the 1990s were uniquely participatory processes, where agendas built on multiple national and regional consultations that engaged civil society as well as governments, from both the North and the South (UN 2007).

The OECD DAC and the International Development Goals

During the mid-1990s, global goals came into prominence with the launch of the International Development Goals (IDGs) set by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD). In response to the declining political support for development aid and difficulty in maintaining budget allocations for this purpose, the DAC donors launched a new statement of purpose and set six quantitative goals, published in Shaping the 21st Century: The Contribution of Development Cooperation. The report acknowledged important contributions made by many of the former UN conferences, but did not mention many of the commitments to food and nutrition security that were gaining
recognition at the time.\(^{16}\) Instead, the OECD report commended international efforts towards increasing agricultural productivity as the major contributor to increased global caloric consumption and declines in malnutrition (OECD, 1996 p. 7). The IDGs relied upon the child mortality indicator as a gauge for health and nutrition (OECD, 1996 p. 10), but did not explicitly target hunger.

*The Millennium Declaration and the MDGs*

The 2000 Millennium Summit and Millennium Declaration stated “to halve, by the year 2015, the proportion of the world’s people whose income is less than one dollar a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking water” (UN, 2000). The following year, the Secretary General’s report to the General Assembly, the *Road map towards the implementation of the United Nations Millennium Declaration* (“2001 Road map”) listed 8 Millennium Development Goals, 18 Targets and 48 Indicators in the annex. The hunger target, “to halve the proportion of people suffering from hunger between 1990 and 2015” (then Target 2, now Target 1C), was altered from the prior WFS goal which was to halve the *number* – rather than the *proportion* - of people suffering from hunger. Two indicators were identified as effective metrics of progress: ‘the prevalence of underweight children less than five years of age’ and ‘the proportion of the population below minimum level of dietary energy consumption’.

Around the same time, the CFS convened for its twenty-seventh session to specifically address the hunger component of the Millennium Declaration. The CFS report, *Fostering the Political Will to Fight Hunger*, was used to guide the discussion about addressing the hunger component of the MDGs (FAO-CFS, 2001a). The report was critical of the lack of attention given to agricultural development and food security, both by the IDGs as well as G-7/8, and G-77 meetings (para 38). It also noted that hunger warrants explicit targeting in any poverty reduction agenda because it is as much a cause of poverty as it is an effect (para 45) and it also benefits

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\(^{16}\) The Shaping the 21st Century report was released in May of 1996 and the WFS occurred in November of the same year. The report did footnote that a food conference would take place, along with the conference on human settlements, later that year (OECD, 1996 p. 9)
from being “relatively easy to measure”\textsuperscript{17} (FAO-CFS 2001b). The CFS argued that the MDG indicators list should include the prevalence of undernourishment, in addition to underweight children, so that the situation of the overall population, not just children, would be reflected (FAO-CFS, 2001a).

For the diverse stakeholders in the food and nutrition community, the MDGs were not satisfactory. Hunger was embedded in the poverty goal and was not a goal in itself. The target adjusted the WFS goal downwards. Moreover, while they were mobilized around the implementation of the WFS agenda, the MDGs in some sense undermined that consensus. For example, the FAO’s work plan was geared to the implementation of the WFS agenda in its many dimensions and multi-faceted recommended actions from national and global actors. The MDGs were not intended to replace – but rather supplement – the WFS and other conference agendas. Yet in fact, the MDGs confused the momentum of the WFS process\textsuperscript{18}, in part because it brought in a different goal, but also because the MDGs and the Millennium Declaration had been set in New York without the participation of the Rome-based WFS constituency led by Jacques Diouf and the FAO. The MDGs involved a different process and a different set of stakeholders from the 1990s development conferences. The WFS constituency did not feel ownership of the MDGs, except rhetorically, and as a matter of institutional loyalty to the UN and the Secretary General.\textsuperscript{19}

It is curious that the MDGs adjusted the hunger target of the WFS. In principle, the Millennium Declaration was intended to build on the agendas adopted by governments at the 1990s UN conferences. They were intended to be a select set of the goals already agreed as part of these conferences referred to as Internationally Agreed Development Goals (IADGs). One possible motivation was a deliberate effort to make the goal more achievable; the trends over the 1990s were such that there was little likelihood of the goal being achieved\textsuperscript{20}. Another reason might

\textsuperscript{17} Para 50: “Hunger, unlike many other manifestations of poverty, is relatively easy to identify, to measure and to target. The solution - that of ensuring regular access to adequate, nutritious and safe food - is also seemingly simple. Unlike many health problems, eradicating hunger does not require many years of costly scientific research. This implies that a real option exists to address hunger.....” (FAO-CFS, 2001b).

\textsuperscript{18} Authors’ interviews with FAO staff members: Carlo Cafiero (1/13/2013), Eve Crowley (2/15/2013), Barbara Eckwell (1/31/2013) Florence Egal (1/25/2013), and Mark Smulders (1/25/2013).

\textsuperscript{19} Ibid.

\textsuperscript{20} See for example the UNDP Human Development Report 2003 estimates that between 1991 and 1999 the only country to achieve significant declines in the number of hungry people was China (UNDP, 2003 p. 88).
have been a simple oversight in the absence of FAO participation in the elaboration of the Millennium Declaration.

**Empirical and Normative Consequences of the MDGs**

What kind of incentives did the hunger target create? Did they result in more action and resources for hunger as a global and a national priority? How did they influence thinking about food security objectives and strategies? In this section, we examine shifts in resources and thinking since 2000.

**Hunger as a global priority**

Food security has been an important concern that has driven the work of the international organizations, government departments, NGOs and academics whose mission was focused on this challenge. However, what importance was attached to this issue as a global priority amongst many other competing issues by political leaders and the development community overall? How did it figure as an issue in G-7/8 or G-20 meetings? How did the MDGs draw attention to hunger and food security as neglected priorities?

Hunger – or more specifically its production dimension – was a major international priority in the 1960s and 1970s, as population growth rates began to surge and out-strip production in developing countries, the prospect of mass hunger in South Asia and Latin America loomed as not only a humanitarian concern but a political threat. Identified as a production problem, major efforts were launched to increase production of basic staple crops in the developing world. Agriculture became one of the top priorities for development aid during the 1960s and 70s. A major initiative led by the World Bank, USAID, UNDP and the Rockefeller Foundation was to create global research centers (CGIAR) to develop high yielding varieties of rice, wheat and maize. These varieties were then adapted by a national agricultural research centers (NARS) to suit local requirements and their diffusion to farmers was facilitated by national extension services, and supplies of credit and inputs. A coalition of donors supported both national and global investments. Productivity increases were registered and the ‘Green Revolution’ took hold. India, Thailand and other countries that were on the brink of a major food shortage soon became self-sufficient and produced surpluses for export. While hunger was the concern, in fact, the
problem was defined as a challenge of national food sufficiency rather than the prevalence of undernourishment.

Attention to ‘hunger’ waned in the 1980s and 1990s as food supplies stabilized and the demographic transition began to take its course in Asia and Africa, and as investments made during the ‘Green Revolution’ began to show increases in agricultural yields. Support to public agricultural investments waned, consistent with the liberalization agendas recommended at the time. Aid funding for agriculture dropped precipitously, particularly as the largest funders for the sector, the World Bank and USAID, shifted priorities out of agriculture to structural adjustment lending in the 1980s. Figure 1 shows the precipitous decline in development assistance to the agriculture sector - both in absolute monetary contributions as well as a percentage of total ODA. The decline in funding to agriculture was one of the key trends in aid allocations of the 1980s and 1990s (World Bank, 2007 p.41; UNDP, 2003 p. 92). Allocations in national budgets also declined (World Bank, 2007).

**Figure 1: ODA to Agriculture**

**Figure 1: ODA to Agriculture**

*Source: (OECD DAC, 2012)*

21 Data for the agriculture subsector is not available prior to 1995. The ‘Agriculture, Forestry and Fishing’ sector is used as a proxy to show the longer time period.

22 "All donors" represents ODA commitments from multilateral agencies and bilateral (DAC and non-DAC) donors.
During the 1990s and into the 2000’s, as ‘poverty’ became a top priority in the international community, issues of health and education were highlighted, food and nutrition were not. Even in the years following the 1996 World Food Summit, there was a continued neglect of problems of food insecurity from G-7/8 and the G-77, as noted in a report submitted to the 27th session of the CFS in 2001 (FAO-CFS, 2001b, para. 38). The shift in emphasis to poverty that occurred in the 1990s shed light on the essential need for support to smallholder agriculture as a poverty reduction strategy. However, this did not translate into increased donor funding. In fact, food and agriculture related ODA remained a low priority into the 2000s, as shown in Figure 2. Between 1995 and 2003, commitments to the agriculture sector declined by 57% when measured as a percentage of total ODA (over the same period, total ODA to agriculture declined by 14% in nominal terms). Funding for food security programs and rural development generally declined as a percentage of total ODA, while basic nutrition has remained a low priority since 1995. Emergency food aid was the only sector to increase as a proportion of total ODA, the largest jump occurring from 2001 to 2003. Development assistance to agriculture as a percentage of total ODA did not began to increase until 2006, as shown in Figure 2.

**Figure 2: ODA to Food & Nutrition Sectors (All Donors, % of Total ODA) (1995-2011)**

*Source: (OECD DAC, 2012)*
There were a few important initiatives that were launched in the 2000s that are emblematic of the increased priority to food and agriculture investment at this time. The 2003 Maputo Declaration established the Comprehensive Africa Agriculture Development Programme (CAADP), which called upon African nations to increase public investment in agriculture to 10% of national budgets and to increase the growth of agricultural GDP to 6% per year (CAADP, 2012). CAADP Pillar III, ‘food supply and hunger’ explicitly states its goal to meet the 2015 MDG target halving hunger by fulfilling the three objectives outlined in the Framework for African Food Security (FAFS) (CAADP, 2009). The Maputo Declaration and CAADP principles were supported by the G8, first at the 2005 Gleneagles Summit, where donor governments committed to increasing ODA to Africa\(^{23}\) and also to strengthen support for African governments’ commitment to invest in agriculture (G8 Information Centre, 2013).

The Alliance for Green Revolution in Africa (AGRA) was initiated in 2006 by Kofi Annan with funding from The Gates Foundation and The Rockefeller Foundation, with the vision that “Africa can feed itself and feed the world” (AGRA, 2011). AGRA’s approach involves much greater participation of the private sector and less emphasis on building national public institutional capacity (Patel, 2013). The Gates Foundation is AGRA’s primary funding source\(^{24}\) and as a result, AGRA’s investments tend to be in-line with the technology-driven approach that often characterizes Gates’ development efforts. Gates’ stated objectives for AGRA grants include increasing access to improved crop varieties, ‘more resilient’ and higher yielding seeds, and ‘locally appropriate’ fertilizers (Gates, 2013). Nearly half of AGRA’s cumulative commitments have been allocated to the seed research and development program\(^{25}\). AGRA’s policy and partnerships program is principally focused on relaxing government restrictions to allow for improved seed varieties, reducing transaction costs, facilitating open markets, and securing land and property rights (AGRA, 2013a). ‘Early success’ stories noted in AGRA’s

\(^{23}\) Gleneagles committed to (i) increase ODA by $50 billion for all developing countries a year by 2010, compared to 2004. Will start to rise immediately, and (ii) an extra $25 billion a year for Africa, more than doubling aid by 2010 (G8 Information Centre, 2013).

\(^{24}\) The Gates Foundation has provided AGRA with $382 million in ten grants between 2006 and 2013 (Bill and Melinda Gates Foundation, 2013). According to the most recent status report (2011), AGRA had committed $260 million in grants since 2006.

\(^{25}\) Seed improvement funding includes commitments of $97 million to the PASS program and $15 million to a seed investment fund, which combined accounts for 43% AGRA’s cumulative grant commitments. The remainder is divided between AGRA’s soil health program ($56m/22%), innovative financing ($42m/16%), market access ($24m/9%), policy improvement ($7m/3%) and other programs ($19m/7%) (AGRA, 2011).
policy program review included liberalization of seed policies in Ghana and Tanzania and the removal of the maize export ban in Malawi (AGRA, 2013a). Although these policy changes might increase profitability for certain segments of the population, they fail to address the multi-dimensional challenges of food insecurity. For this and other reasons, AGRA has received harsh and widespread criticism from advocates of food security (Patel, 2013).

Another important development was Brazil’s national Fome Zero (Zero Hunger) program. Fome Zero was based on a proposal submitted by the Brazilian Workers Party in 1991, then developed into a National Food Security Policy in 1993, but was not formerly instituted until President Lula was elected president in 2003 (Silva et al. 2011 p. 18). Between the mid-1990s and 2003, Brazil had already made significant progress towards addressing the problems of food insecurity at home. Although Brazil officially fulfilled the MDG hunger target in 2007, Fome Zero continued to address persistent challenges to all dimensions of food insecurity.

Fome Zero introduced a set of structural, specific, and local policies that could address the interrelated problems of hunger and poverty, urging that the hunger problem was predominantly driven by a lack of demand for food, caused by lack of purchasing power of the lowest income groups (Silva et al., 2011 pp. 20-22). Any long-term solutions to hunger would need to consider policies that address structural constraints to access, the economic and social factors that restrict or allow for sustainable access to food. More specific policies are then needed to address food insecurity among the most vulnerable segments of the population through social transfers, focusing first and foremost on the most vulnerable groups. Finally, local policies must address the different hunger profiles faced in different settings and must incorporate the work of local civil society groups to address localized challenges. Importantly, Fome Zero underscored the need for political accountability and non-partisan acceptance by the national & municipal governments and local civil society groups alike. It also highlighted that short-term solutions to increase food access, although necessary, must be mindful not to compromise the long-term institution building agenda that would ultimately yield sustainable food security (Silva et al., 2011 p. 155). The Fome Zero program has become widely recognized as one of the more comprehensive attempts towards instituting a food security program that incorporates all seven of the human rights principles (participation, accountability, non-discrimination, transparency, human dignity, empowerment, and respect for rule of law). As a result, in addition to meeting
the MDG hunger target in 2007, Brazil also stands up to broader metrics such as the Social and Economic Rights Fulfillment Index (SERF), which ranked Brazil 13th of 99 countries for the realization of the Right to Food in 2011.26

To summarize this evolution since 2000, we conclude that the MDGs did not succeed in mobilizing attention to hunger. Food security, including issues of small-scale farmer productivity, vulnerability and nutritional adequacy, was a neglected issue during much of the 2000s, continuing the trends of the preceding decades that experienced a precipitous decline in support to agricultural production and neglect of nutrition. Significant new initiatives were launched by national governments and multilateral actors during this period including Brazil’s Zero Hunger campaign and Africa’s CAADP and AGRA initiatives. However, it is doubtful if the MDGs were instrumental in motivating them. Although the MDGs were used as part of the language to justify action, they were never a critical factor in the initiation of such programs27.

The 2008 Food Price Crisis

The real turning point in putting food security as a top international priority came with the 2008 ‘food crisis’ that propelled political attention. It took the shape of a global social crisis as food riots and protests took place in a number of countries and attracted global recognition. Consumer prices rose in rich countries as well as in poor, causing much public disgruntlement if not riots. Such a ‘crisis’ compelled urgent short-term response on the part of all the international and national institutions involved in the governance of food provisioning, as well as reflection on the longer-term strategies to focus on food security as a challenge of itself requiring its own strategy, not a byproduct of reducing poverty or promoting economic growth.

In June 2008, the FAO organized the High Level Conference on Food Security: The Challenges of Climate Change and Bioenergy. The conference Declaration called upon donor governments to commit to a ‘two track approach’ of both short-term and medium/long-term measures needed to address the persistent challenges of food insecurity. The High Level Task Force on the Global Food Crisis, led by David Nabarro, would later formalize this approach as the Comprehensive Framework for Action (CFA), first publicized in 2008 and then updated in 2010. The CFS also

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26 The Social and Economic Rights Fulfillment Index scores can be accessed online at www.serfindex.org
27 This view was consistently expressed by all those interviewed.
went through a reform process in 2009 to become more participatory, to encourage broader representation from civil society, philanthropy and private sector. As part of the CFS reform, the High Level Panel of Experts on Food Security and Nutrition (HLPE) was established. The broad inclusion of different stakeholder groups in the CFS was likely driven by increased interest and urgency in the aftermath of the food crisis.

The July 2008 Hokkaido Toyako G8 Summit was the first to have a distinct statement concerning food security, and supported the HLTF and CFA agreed upon earlier that year. Donor governments committed to making food security central to their development agendas announcing the following year the L’Aquila Food Security Initiative (AFSI), where donor governments committed to the goal of “mobilizing $20 billion over three years through coordinated, comprehensive strategy focused on sustainable agricultural development” and to advance the Global Partnership for Agriculture and Food Security by the end of 2009 (G8 Information Centre, 2013). Subsequent G8 summits continued to support the commitments made at L’Aquila Initiative, first with the formation of the Global Agriculture and Food Security Program (GAFSP), a multilateral private-public initiative charged with addressing “the underfunding of country and regional agriculture and food security strategic investment plans … and to make aid contributions toward the achievement of MDG 1” (GAFSP, 2013). Then, at the 2012 Camp David Summit the New Alliance for Food Security and Nutrition was introduced as a mechanism to ensure progress towards the L’Aquila goals through five areas (partnerships, mobilization of private capital, innovation to scale, reduce/manage risk, and improvement of nutrition outcomes).

The food crisis also marked a major turning point for the World Bank. The 2008 World Development Report, “Agriculture for Development” was the first in 25 years with a distinct focus on agriculture (Wise & Murphy, 2012). The World Bank was also in charge of coordinating the GAFSP in addition to creating new internal programs such as the Agriculture Finance Support Facility (AgriFin) and Agriculture Price Risk Management (Wise & Murphy, 2012).
Growing Attention to Nutrition

With respect to Nutrition, awareness of this dimension of food security grew over the 1980s and 1990s as a result of advocacy by the nutrition community, the 1992 ICN and as UNICEF and Jim Grant championed it as a key priority for children. This highlighted the importance of micronutrient deficiency and utilization dimensions of hunger and the inadequacy of measuring and defining ‘hunger’ and ‘undernourishment’ based on caloric measures. Nonetheless, nutrition was not a major priority during the 1990s as noted earlier and the situation continued into the early 2000s. However, nutrition gained increasing attention in the late 2000s.

The World Bank began to pay more attention to nutrition in 2006 by releasing the publication, Repositioning Nutrition as Central to Development, but this report remained isolated among specialists and was not adopted broadly across departments in the bank\(^28\). The Lancet series on Maternal and Child Undernutrition, published in 2008, drew widespread attention to the importance of nutrition, particularly during the “golden period of intervention” between pregnancy and the child’s second birthday (WHO, 2012). The Lancet series prompted various institutions to engage in the global agenda.\(^29\)

The 2008 food crisis propelled nutrition to a high profile concern. In November 2009, government ministries, international agencies, and civil society groups convened to develop a comprehensive Global Action Plan for Scaling Up Nutrition. At this event, World Bank Managing Director, Graeme Wheeler, referred to nutrition as the “forgotten MDG” that was “often unrecognized, rarely acted upon, and grossly under-funded” (World Bank, 2009a p. 4). The subsequent report, Scaling up Nutrition: What will it Cost, estimated that it would take $10.3 billion of public funding to combat childhood malnutrition (World Bank, 2010).

The Scaling Up Nutrition (SUN) initiative was officially launched in 2010 as a multi-stakeholder effort with the goal of improving maternal and child nutrition, particularly in the early period during which time poor nutrition has “irreversible consequences such as stunted growth and

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\(^{28}\) Although the World Bank seemed to be an early champion for the nutrition agenda, the agricultural arm of the Bank was not involved in these efforts. In fact, nutrition was scarcely mentioned in the World Bank’s Agriculture Action Plan FY2010-11 (World Bank, 2009b). The broader dimensions of food security were also omitted from this report, which measured food security using only the prevalence of undernourishment indicator, leaving out the indicator for malnutrition in children under 5.

\(^{29}\) This view was expressed by a number of individuals interviewed.
impaired cognitive development” (World Bank, 2010). SUN is intended to be a mechanism for gathering core stakeholder groups (governments, civil society, business, donors, and international organizations) to share knowledge and assist one another in working towards comprehensive nutrition policies (SUN, 2012). National governments operate independently in drafting nutrition policy strategies and are ultimately responsible for the oversight of such strategies, but stakeholder networks meet regularly with the intention of helping achieve these nutritional goals (SUN, 2012).

Post-2008: Investment in Food Security or Commodities?

The food crisis clearly caused a shift in the agendas of bilateral and multilateral donors, and likely drew greater awareness to the interconnectedness between food security and poverty eradication. The impact of increased donor commitments to agriculture is still unknown and has drawn controversy. Civil society critics argue that many of the donor-driven initiatives are in fact motivated by profit interests rather than food security. Wise and Murphy (2012) question the intentions of agricultural investments from governments and private donors alike, noting that profit-driven land acquisitions and agricultural investment funds have “dwarfed” agricultural ODA in recent years (p. 17). GRAIN, an advocacy group for small-scale farmers, found that the large-scale African land purchases since 2008 have been used predominantly to produce export crops, leaving African farmers without land to grow food staples intended for domestic consumption (GRAIN, 2012). GRAIN further implicates the G8’s New Alliance for Food Security and Nutrition initiative for rationalizing land grabs under the auspices of the Principles for Responsible Agriculture Investment (PRAI) (GRAIN, 2013). According to GRAIN (2013) although the PRAI was drafted by the World Bank and supported by the G8 and G20, it was rejected by the CFS and widely criticized by many international civil society groups for being exploitative and largely in favor of profit interests rather than developmental objectives.

The 2008 food price crisis was likely the leading cause of the shift in donor interest in food security, but even this catalyst does not seem to have sufficiently galvanized attention towards broader food security objectives. Instead, donor governments at large are investing more in initiatives like AGRA and the New Alliance for Food Security and Nutrition, which prioritize private interests over broader food security objectives.
Why the MDGs Fell Short

There are a few possibilities of why the MDGs had little impact on drawing attention to food, nutrition, and agriculture. First, the food and agriculture community did not line up behind the MDGs and make use of the goals. There had been a momentum built around implementing the 1996 WFS commitments that engaged the FAO and the rest of the constituency. The MDGs came out of the left field, and there was persistent consternation at the downsizing of ambition in revising the target to halve the number of people undernourished to the proportion of people. When the MDGs were introduced in 2001, many NGOs, civil society, and organizations with food security agendas did not embrace them. However, they also did not actively reject them, and most of the community acknowledged and made best use of the MDGs. Some found the MDGs useful in advocating for more support for what they were already doing. For example, Kevin Cleaver, the Director of Agriculture of the World Bank at the time found the MDGs useful in arguing for more support to small-scale farmers as a poverty and hunger strategy within the institution, in an environment that was dominated by macroeconomic reform agendas and program lending.

Second, it has been argued that the hunger target did not receive visibility in global debates because it was incorporated into MDG 1, so was overshadowed by the income poverty goal. Much of the publicity on MDG progress does highlight the income goal, in part because it was achieved at the global level. In contrast, the hunger target is far from achieved at the global level, and results towards achieving the hunger target were much less favorable prior to the FAO’s introduction of the new methodology for calculating prevalence of undernourishment (SOFI, 2012). Moreover, the extreme divergence between hunger and poverty indicators raised questions about the value of the indicators themselves, and particularly the relationship between income poverty and hunger. Given the high proportion of incomes of the poor that are allocated to food, it seems that the two indicators should closely track one another, which was not the case in many regions, as shown in Figure 3.

30 Authors interviews with staff of FAO (23 January, 2013, 15 February 2013) and IFPRI (23 January 2013)
31 Authors telephone interview with Cleaver 15 February 2013
Third, it is argued that the MDGs did not create enough incentive to those who set global agendas to give greater priority to hunger and food security – the leaders of bilateral and international donors, foundations, NGOs, and influential national governments and civil society of the North and South. For each of these actors, there may be some entrenched constraint to prioritizing hunger – whether it is nutrition, agriculture, or rural poverty - amongst many other challenges. One possible obstacle might be the need to intervene in small-scale agriculture, a private sector production activity, as a component of a poverty reduction strategy that is otherwise built around social investments, social transfers and macroeconomic management. The 2008 food price crisis galvanized the donor community towards a new interest in promoting small-scale agriculture. However, donor commitments to date have not focused at all on the important social dimensions that were central to Brazil’s Fome Zero program and advocated by a human rights framework.

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Source: *World Bank, World Development Indicators, 2013*

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32 Poverty headcount and poverty gap data as of 2008. Regional aggregates include developing countries only.
Shifting priorities and strategies

If the MDGs did not drive attention to hunger as a priority, did it influence priorities within strategies for agriculture, poverty reduction, and nutrition? What is the process by which the MDG target could influence policy priorities and strategies? Global goals are policy instruments used by the international community to create incentives for doing more to achieve an important objective. They influence policy making through a ‘governance effect’ and a ‘knowledge effect’ (Fukuda-Parr 2012). Global goals are not planning targets and programming guidelines to be used by governments and development funders. While the UNDP has been promoting assistance to national governments to intensify efforts to achieve the MDGs, there is little evidence that donors have been using the hunger target to prioritize their resources. Global goals exert influence through other means. They set up performance standards and thus create incentives for positive action to achieve the set targets. They also influence through a knowledge effect; they create a framework for policy discourse or narrative that defines key objectives and identifies obstacles.

As explained in prior sections of this paper, the consensus emerging from the UN development conferences on nutrition (1992) and food (1996) promoted a broad, multi-dimensional approach towards food and nutrition security, recognizing its ‘four pillars’ of availability, access, utilization and stability (FAO-CFS, 2012). The plans of action explicitly relate to International Economic and Social Rights norms and standards. The 1990s conference agendas were premised on a Human Development Approach focusing on individual and household food security as the objective, seeing food insecurity as a problem related to poverty and inequality, and identifying a broad range of inter-sectoral and systemic causes, and recognizing people as agents of change as well as beneficiaries. The language included in conference plans of action underscore this commitment to a country-specific and participatory approach, as shown in Table 2.

What are the implications of the shift from multi-faceted nature of the ICN and WFS commitments to the MDGs inclusion of only one target, to reduce the proportion of people who are undernourished? The MDGs created performance standards focused on measurable

33 Framework for evaluating outcomes and analyzing policies based on the idea of ‘development as capability expansion’ articulated by Amartya Sen in the UNDP Human Development Reports. See Robeyns (2005)
outcomes. In contrast, the WFS and ICN agendas are heavy on qualitative outcomes such as the realization of the right to food, and qualitative processes such as participation, and to processes such as systemic obstacles related to global and national structures of economy and power. The MDGs create a framework for achieving food security that focuses on two hunger indicators – caloric supply and underweight children – and in the process does not suppress but render invisible the qualitative transformations in processes and outcomes that the WFS and ICN agendas incorporated.

The UN commissioned the Millennium Project’s Task Force on Hunger, to develop an action agenda following the logic of the MDGs. Its 2005 report, *Halving Hunger: It Can Be Done*, highlighted that past commitments, including the 1996 WFS and 2000 Millennium Summit, had largely failed in making any real progress toward eradicating hunger (Millennium Project, 2005b). The Task Force on Hunger recommended seven actions to be taken by national and international players (Millennium Project, 2005b). While many of the recommended actions include elements that overlap considerably with the WFS/ICN agendas, certain elements are absent, including nutrition and utilization factors that relate to broader health concerns, participation and accountability, education and capacity development. These process issues are not an explicit part of this MDG outcome driven framework.

Another notable difference is the results focus and the general tone of prioritizing based on which commitments were most economically efficient to undertake. For example, the 2004 Copenhagen Consensus was referenced, touting the idea that fighting child malnutrition was a “winner” in terms of cost-benefit analysis, “the economic benefits of reducing hunger consistently outweigh the costs” (Millennium Project, 2005b p. 31). UN and World Bank monitoring reports group countries by performance – into those that are ‘on track’, making progress but too slowly, and those that are stagnating.

The problem with these broad categorizations is that they encourage policies that rely on short-term solutions that achieve measurable results and the sidelining of issues that are deeply embedded and require long-term structural change. If actions are taken to fulfill the hunger target simply to prevent a country from falling into the “zero or negative progress” category, a possible consequence would be that governments would inadvertently encourage policies that fail to address the root of the problem in favor of finding short-term quick fix solutions. These quick fix
solutions often sacrifice human development considerations such as participation, accountability, and capacity building – all of which are necessary in facilitating long-term solutions that address the structural barriers to one’s entitlements to food and nutrition security. The Fome Zero approach exemplifies a strong commitment to the social dimensions necessary to achieve long-term sustainable food security, whereas the CAADP approach prioritizing agricultural GDP growth is much more likely to neglect the human development considerations in the process of achieving short-term measurable targets.

In effect, strategies for food security have evolved considerably since the 1990s. In agriculture, there is consensus on the need to improve the productivity of the small-scale family farms that are often the most food insecure households. But there is no consensus on the means to do so. Diverse strategies that are advocated by different stakeholders use distinct discourses, some of which contest others. One is food sovereignty, espoused by Via Campesina and other civil society groups that advocate a path away from reliance on corporate control of seed supply, technology, and marketing. Another is environmental sustainability that promotes sustainable technologies. International organizations such as FAO, IFAD, and the World Bank promote an environmentally sustainable approach to improving small farmer productivity, but also seek a strategy for integration into global markets and partnership with private sector actors involved in the global food chains. Yet another strand is the technology-driven approach advocated by AGRA and the Gates foundation that focus on the development of high yielding crop varieties and other technological solutions made famous by the ‘Green Revolution’. The food sovereignty groups are often critical of the technological approach, while development NGOs such as Oxfam are caught somewhere in the middle.

On the nutrition front, although the SUN initiative advocates local accountability and country participation, it is heavily geared towards identifying quick solutions that achieve short-term results. SUN proposes “specific nutrition interventions” such as fortification of foods and micronutrient supplementation, both of which may produce short-term solutions to acute malnutrition but are unlikely to address the structural causes of such conditions. Taking this into account, SUN appears very much on board with the Copenhagen Consensus mentality of achieving the greatest impact in the shortest possible time period. Indeed, the Copenhagen Consensus is cited in many SUN publications.
Critics argue that technologically driven simple fix solutions such as this are not the most effective way to improve diets and nutrition and that there are alternatives to improving diets, through better education and household choices, promotion of local diets, and reining in of corporate marketing of unhealthy foods.

These trends in international initiatives for global hunger reflect a broader trend in the aid environment in the 2000s and the emergence of new approaches to development promotion that was skeptical of old approaches that supported capacity building of government institutions. Just as the Washington Consensus pushed for market based economic reforms, thinking in the aid community also turned to greater involvement of the private sector and away from support to national public sector institutions, and the idea that development was a matter of ‘teaching people to fish’, not ‘giving people food’, and recognized that without national ownership and national systems, development interventions would not be sustainable. New actors that emerged, especially the Gates Foundation, and outspent public investment initiatives, introduced new approaches to project delivery involving the private sector, and methods such as social entrepreneurship and impact investing. The new thinking also emphasizes the important role of technological solutions that deliver visible results, fast.

Alongside these controversies, the program that has been most successful in delivering on food security, Brazil, followed a strategy that is aligned with the WFS/ICN strategy. The Brazil example is a horizontally integrated program that includes a broad range of initiatives across sectors – social protection, agricultural production, labor markets – and builds on local capacities. The new initiatives formulated in the logic of measurable outcomes are vertically organized, focused around achieving the defined objective.

Vandemoortele (2009) noted how the MDGs created a donor-centric view of how to solve very localized problems. When donor funding becomes the dominant source of capital for development projects, they begin to shift national policy agendas, which, facing the realities of budgeting priorities, begin to initiate projects specifically because they have a high potential of attracting donor funding. Donors, in turn, tend to be most interested in funding projects that can achieve the broadest and most efficient prospect of success, particularly since bilateral donors and international agencies came under pressure to ‘show results’ and to follow ‘results based management’ in a climate of skepticism about the effectiveness of and funding for aid.
Taking this vertical approach to solving the problem of hunger and malnutrition may fulfill the 2015 hunger target, but it will not likely address the structural causes of hunger. Even worse, without strong social support for the human rights principles of accountability and participation, and non-discrimination, the food security agenda is at risk of being co-opted by profit interests, notably the use of land to produce cash crops and benefit from the rapid rise in commodities market valuation. Although from a production standpoint, this sort of activity may appear as ‘fulfilling’ the hunger target, it would have serious and grave effects on the most vulnerable groups whose access to food may be severely inhibited by such motivations. Although it is impossible to tie the cause of this vertical approach specifically to the MDGs, evidence shows that these sorts of activities are currently underway, and often times using the MDG hunger target to mask what are likely to be profit interests.

The Choice of Targets and Indicators

How did the choice of the target drive new thinking? What are some alternatives that can frame an agenda that would be more consistent with the human development approach and human rights principles? The choice of these indicators has been controversial since they were set in 2001, and much debated in the context of the multiple consultations underway for the Post-2015 and Sustainable Development Goal (SDG) setting. Here we focus on the multiple dimensions of food security and the specific priorities of human development and human rights that are reflected in the WFS/INC agendas.

The MDG indicators - weaknesses

The process of narrowing the MDGs into a simple list of quantifiable targets and indicators requires compromises. For the hunger target, this selection process resulted in the global goal of halving the proportion of people suffering from hunger, as measured by two outcome indicators: the prevalence of underweight children under five years of age (“weight for age indicator”) and the proportion of the population below minimum level of dietary energy consumption (UN, 2001, p. 56). As outcome indicators go, both have been controversial.

The first indicator, underweight children, is used to assess dietary intake, but does not do much by way of measuring nutritional outcomes; weight can be increased with consumption of nutritionally poor and calorie-laden diets. The weight for age indicator also fails to distinguish
between short children of average body weight and tall, thin, and perhaps malnourished children (UN, 2003 p. 13). Therefore, the measure can be misleading in the context of rising obesity as a major challenge amongst income poor households. It could even create perverse incentives to promote overweight in early life, which creates predisposition to obesity in adulthood.

Another limitation is that the weight for age indicator only measures children. Although undernutrition in the early years is critical because it can constrain physical and mental development into adulthood, and an important gauge of food insecurity, it is still incomplete in that it does not measure undernutrition among adults. For the purposes of global monitoring, we need an indicator that provides information on the magnitude of the problem across the world, its trend and location.

The second indicator, the prevalence of undernourishment (PoU), is calculated using caloric supply at the aggregate national level (FAOs food balance sheets) and estimating the distribution of food across the national population. The methodology relies on a series of estimations, including the minimum dietary energy requirement (MDER), which is in turn based on an expectation of the physical activity level (PAL) needed. There is a large literature evaluating the PoU’s methodology (Naiken, 2007; Svedberg, 1998). Notably, the following issues have been raised. Frist, dietary energy supply is calculated based the FAO’s food balance sheet (national aggregate), which may underestimate the contribution of subsistence production to local food supply (Svedberg, 1998). Second, the minimum dietary energy requirement (MDER) is a highly sensitive parameter, particularly in areas where hunger is most prevalent and many people consume close to the minimum levels of dietary intake (Svedberg, 1998). Third, energy supply as a proxy for consumption leaves out important considerations about food waste and post-harvest loss (FAO-CFS, 2011). Fourth, the distribution of food is estimated on the basis of household survey results or extrapolating from nearby regions/countries when data is not available (FAO, 2012; SOFI, 2012; FAO-CFS, 2011). Fifth, being a calculation based only on available calories, it leaves out the important nutritional aspects of food adequacy. Finally, the 2011 updates to the methodology (SOFI, 2012) are criticized for lack of transparency, especially since they curiously adjusted inputs to the PoU in earlier years, and as a result, updated calculations show more favorable progress towards the 2015 goal.
Aside from the methodological issues in calculating the PoU indicator, the MDG hunger target’s proposition to halve the prevalence of undernourishment (% of the population) versus number of people undernourished, as proposed at the WFS, has been a source of ongoing controversy, as noted earlier. No matter what the impetus of this change may have been, it undoubtedly has an impact on the end result, particularly in the regions of South Asia and Sub-Saharan Africa where hunger is most severe. In both regions, the prevalence of undernourishment has decreased but the number of hungry people has risen, as shown in Figure 4.

**Figure 4: Measuring the Proportion versus the Number of Undernourished**

![Graphs showing the proportion versus the number of undernourished people in different regions](figures)

*Source: World Bank, World Development Indicators, 2013*

While acknowledging these weaknesses, the PoU remains the only measurement tool and dataset currently available that estimate the magnitude, trends and location of the global hunger

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34 Regions include developing countries only
problem. If food insecurity is multi-dimensional, no single indicator – unless a composite index – can adequately reflect its status and multiple indicators need to be used.

Multiple dimensions of food security

Recalling the definition adopted at the WFS and cited earlier, “Food 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” (FAO, 1996a). Food security includes several elements: economic access; physical access or availability; dietary quality for nutrition and cultural specificity; and stability or vulnerability to fluctuating supply and access. Table 3 shows the FAO’s set of available indicators for food security, divided into three categories: (i) determinants (availability, physical access, economic access, utilization); (ii) outcomes (inadequate access); and (iii) vulnerability (fluctuations in price, supply, access). The two MDG indicators focus on outcomes rather than determinants (conditions of economic and physical access and utilization) that are an essential aspect of the food security concept. Both focus on calorie-related outcomes and food supply. The two indicators together then leave out some essential aspects of food security: determinants of access related to quality of foods available, health related factors that affect utilization, price movements that determine economic access, and vulnerability due to fluctuations in price and supply. They leave out the nutritional outcomes of the population other than those under 5 years of age.
Table 3: Food Security Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Source</th>
<th>Time Series Coverage</th>
<th>Country Coverage</th>
<th>Data Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DETERMINANTS (INPUTS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AVAILABILITY</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Average Dietary Energy Supply Adequacy</td>
<td>FAO</td>
<td>1990–2012</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Average Value of Food Production</td>
<td>FAO</td>
<td>1990–2012</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Share of dietary energy supply derived from cereals, roots and tubers</td>
<td>FAO</td>
<td>1990–2012</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Average protein supply</td>
<td>FAO</td>
<td>1990–2012</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Average supply of protein of animal origin</td>
<td>FAO</td>
<td>1990–2012</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td><strong>PHYSICAL ACCESS</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Percent of paved roads over total roads</td>
<td>Intl Road Federation</td>
<td>1990–2009</td>
<td>Poor</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Rail-lines density</td>
<td>WB</td>
<td>1990–2010</td>
<td>Poor</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Road density</td>
<td>WB, Transport Division</td>
<td>1990–2009</td>
<td>Poor</td>
<td>National Aggregate</td>
</tr>
<tr>
<td><strong>ECONOMIC ACCESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Food Price Level Index</td>
<td>FAO/WB</td>
<td>1990-2010</td>
<td>Medium</td>
<td>National Aggregate</td>
</tr>
<tr>
<td><strong>UTILIZATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to improved water sources</td>
<td>WHO/UNICEF</td>
<td>1990-2010</td>
<td>Good</td>
<td>Household</td>
</tr>
<tr>
<td>Access to improved sanitation facilities</td>
<td>WHO/UNICEF</td>
<td>1990-2010</td>
<td>Good</td>
<td>Household</td>
</tr>
<tr>
<td><strong>OUTCOMES</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>INADEQUATE ACCESS TO FOOD</strong></td>
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</tr>
<tr>
<td>Prevalence of undernourishment</td>
<td>FAO</td>
<td>1990-2011</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Share of food expenditure of the poor</td>
<td>FAO</td>
<td>Partial</td>
<td>Poor</td>
<td>Household</td>
</tr>
<tr>
<td>Depth of the food deficit</td>
<td>FAO</td>
<td>1990-2011</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Prevalence of food inadequacy</td>
<td>FAO</td>
<td>1990-2011</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td><strong>UTILIZATION (food-related anthropometric failures)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of children under 5 years of age who are stunted</td>
<td>WHO/UNICEF</td>
<td>1966-2010</td>
<td>Poor</td>
<td>Individual</td>
</tr>
<tr>
<td>Percentage of children under 5 years of age affected by wasting</td>
<td>WHO/UNICEF</td>
<td>1966-2010</td>
<td>Poor</td>
<td>Individual</td>
</tr>
<tr>
<td><strong>Percentage of children under 5 years of age who are underweight</strong></td>
<td>WHO/UNICEF</td>
<td>1966-2010</td>
<td>Good</td>
<td>Individual</td>
</tr>
<tr>
<td>Percent of adults who are underweight</td>
<td>WHO</td>
<td>1974-2010</td>
<td>Poor</td>
<td>Individual</td>
</tr>
<tr>
<td><strong>VULNERABILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic food price level index volatility</td>
<td>FAO/ILO</td>
<td>1990-2010</td>
<td>Medium</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Per Capita food production variability</td>
<td>FAO</td>
<td>1980-2010</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Per Capita food supply variability</td>
<td>FAO</td>
<td>1980-2010</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Political stability and absence of violence/terrorism</td>
<td>WB WGI</td>
<td>1996-2010</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Value of food imports over total merchandise</td>
<td>FAO</td>
<td>1990-2009</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Percent of arable land equipped for irrigation</td>
<td>FAO</td>
<td>1990-2009</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
<tr>
<td>Cereal import dependency ratio</td>
<td>FAO</td>
<td>1990-2009</td>
<td>Good</td>
<td>National Aggregate</td>
</tr>
</tbody>
</table>

Source: FAO (2012); Authors’ analysis
This FAO’s categorization is useful because it raises some important questions about which measurements actually measure long-term solutions to hunger, and which merely explain short term, quick fix solutions while hiding existing structural barriers to food security. For example, looking regional results in Sub-Saharan Africa outlined in Table 4, all determinant/input indicators show favorable results (dietary supply increased, value of production per capita increased, food diversity improved as measured by greater supply of protein and fewer calories derived from cereals, roots, and tubers). Among outcome indicators, the PoU declined and food adequacy improved, but the anthropometric measures display mixed results, the weight for age indicator generally displays more favorable progress compared to stunting or wasting. Interestingly, the vulnerability/stability indicators are mostly negative, contrasting starkly with the determinant/input measures. To name a few, the region became more dependent on cereal imports, the percentage of arable land equipped for irrigation decreased, and heightened volatility of food prices, production, and supply likely caused significant uncertainty for producers and consumers alike. In the example of sub-Saharan Africa, while the region may be making progress (albeit slow) towards reducing the prevalence of undernourishment, the vulnerability metrics give reason to question whether policies implemented to fulfill such a goal are sustainable.
Table 4: Sub-Saharan Africa Highlights - Percentage Change from 1990 to 2012

<table>
<thead>
<tr>
<th>DETERMINANTS (INPUTS)</th>
<th>OUTCOMES</th>
<th>VULNERABILITY/STABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Availability, Physical &amp; Economic</td>
<td>Access to and Utilization of Food</td>
<td>(Food price variability, production &amp;</td>
</tr>
<tr>
<td>Access, Utilization)</td>
<td></td>
<td>supply variability, dependence on imports/cereal imports,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>production potential)</td>
</tr>
<tr>
<td>+ Average dietary energy supply &amp;</td>
<td>+ PoU declined</td>
<td>+ Food imports as a % of</td>
</tr>
<tr>
<td>value of production per capita</td>
<td>+ Food adequacy improved</td>
<td>merchandise exports declined</td>
</tr>
<tr>
<td>increased</td>
<td>+</td>
<td>+ Political stability improved</td>
</tr>
<tr>
<td>+ Food diversity improved (more protein</td>
<td>Weight for age:</td>
<td>moderately at the regional level.</td>
</tr>
<tr>
<td>&amp; fewer calories derived from cereals,</td>
<td>+ 36 countries improved</td>
<td></td>
</tr>
<tr>
<td>roots, &amp; tubers)</td>
<td>- 8 countries worsened</td>
<td></td>
</tr>
<tr>
<td>+ Increased access to water and</td>
<td>Height for age (stunting):</td>
<td></td>
</tr>
<tr>
<td>sanitation</td>
<td>+ 29 countries improved</td>
<td></td>
</tr>
<tr>
<td>o Decline in domestic food prices</td>
<td>- 12 countries worsened</td>
<td></td>
</tr>
<tr>
<td>(positive for consumers, negative</td>
<td>Weight for height (wasting):</td>
<td></td>
</tr>
<tr>
<td>for producers)</td>
<td>+ 26 countries improved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 17 worsened</td>
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</tbody>
</table>

Figure 5 exemplifies the wide range of results that can be derived when measuring hunger based on the four commonly used indicators: the prevalence of undernourishment, malnutrition using weight for age, height for age (stunting), and weight for height (wasting). East Asia & Pacific, Europe & Central Asia, and Latin America and the Caribbean have already surpassed the 2015 hunger target according to the weight for age measure for malnutrition. The height for age measure shows less positive progress across all regions. The data presented in Figure 5 is useful simply to emphasize that while hunger may be a difficult concept to define; it is even more difficult to measure. Measuring prevalence of undernourishment and malnutrition base on weight for age may leave out important parts of the story.
**Figure 5: Hunger Indicators by Region (% Change 1990-91 to 2011)**

![Graph showing Hunger Indicators by Region (% Change 1990-91 to 2011)](image)

*Source: World Bank, World Development Indicators, 2013*

**Human Development Priorities and Human Rights Norms**

The two MDG indicators are particularly weak with respect to human development and human rights priorities including: distribution and discrimination, the poorest and marginalized, vulnerability to risk, participation of people in decisions that affect their lives and the accountability of authorities, and empowerment of people. In addition, recent debates about the right to food and human development have emphasized the essential role of small-scale farmers, the globalization of food systems as determinants of diet (production, distribution and consumption), as well as environmental sustainability (FAO, 2013). Though there are severe limitations in measurement tools available to capture information relevant to these priorities, some indicators would be stronger than the two selected.

**Anthropometric outcomes, capabilities** – The anthropometric indicators are outcome measures that focus on the individual and capture the multidimensional aspects of food and nutrition security because they have the power to shed light on utilization issues that cannot be solved by increased supply or improved access. Among the anthropometric indicators, there is now consensus opinion on *height for age (stunting)* as the best indicator of chronic, long-term
undernourishment (FAO, 2013). Stunting is superior in addressing human development priorities including concern for the most vulnerable and the structural causes of poverty. It reflects severe and chronic undernutrition; while weight for age can respond rapidly to food intake, height for age does not. The consequences are also long term, undermining physical and mental development of the child, foreclosing life choices and capabilities. The causes of such outcomes are most often related to socio-economic structural determinants resulting in loss of entitlements, weather by exchange, own production or social transfers.

Wasting (weight for height) is also useful to gauge severe malnutrition, and can be easily calculated when data on both height and weight are collected. This indicator would identify those who are most vulnerable. Body Mass Index (BMI) is a good indicator of malnutrition in society, but data availability for this indicator is extremely poor. Only 28 developing countries have reported data for the prevalence of underweight adults between 1990 and 2012, and time series data is virtually non-existent (FAO, 2012).

Access through exchange, own production and social transfers - In order to assess food access the share of food expenditures in household budgets of low-income groups is a useful indicator. This measure is useful for evaluating the ability of an individual or household to exercise his or her ‘exchange entitlements’ and highlights the importance of the relative values of household economic endowments and food in the market. Figure 6 plots all 49 countries with data for the share of food expenditure and prevalence of undernourishment. The comparison of Egypt and Brazil is particularly telling. Although both countries have relatively low prevalence of undernourishment, poor Egyptians allocate 84 percent of expenditures to food while poor Brazilians spend only 44 percent of total expenditures on food. Although the analysis in Figure 6 must be qualified given the very poor data quality and availability, recent efforts have made promising headway in improving household expenditure surveys (Smith & Subandoro, 2007).

35 Nearly all of the nutrition experts interviewed implied that height for age was a superior measure compared to weight for age, a conclusion that was also confirmed by the Lancet nutrition series (2008) and as a result, height for age is used to gauge malnutrition in the SUN Framework.
36 The only developing countries to report time series data on the prevalence of underweight adults are Mongolia, Republic of Korea, and Iran – and even these countries only show 2-3 reporting periods.
37 It should be noted that the only available expenditure for Brazil is for 2009, while Egypt’s average food expenditure figure is as of 1997, so the country comparison needs to be qualified understanding the 12 year difference in reporting.
Other modalities of access can be monitored and analyzed, though it is not likely that one set of indicators would be appropriate universally. In countries with extensive food insecurity amongst farmers who are subsistence producers, tracking small farmer productivity in staple food production, particularly in fragile and marginal environments, would provide information on how these households are faring. With respect to social transfers, tracking the relative value of food baskets in relation to social transfers would provide information on the adequacy of the design of social transfers to provide safety nets.

**Distribution** – A central priority in human development and human rights is equitable development and equality of rights. As already noted, a major shortcoming of the PoU is that it cannot be disaggregated by population groups and used to identify discrepancies in food and nutrition security across geographic, demographic or ethnic lines. Several indicators of outcome and determinants are more amenable to disaggregation since they are based on surveys.

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38 Countries that reported a PoU of “less than five” were assigned a PoU value of 4% so that they could be accounted for on this numeric scatter plot.
Anthropometric outcome measures can be disaggregated across groups and used in analysis of inter-group inequality and institutionalized barriers. Moreover, because they focus on the individual as the unit of measure, it could reflect intra-household distribution.

Vulnerability – While the central concern of food security is stability in access – at all times – there is little attention paid to volatility indicators. Information about the volatility of food prices, variability of production and supply of food, is useful in assessing vulnerability to shocks – either due to exogenous or endogenous factors. Ideally, mechanisms to conduct an assessment of volatility/vulnerability to food insecurity would be able to be disaggregated by geographic regions, and by ethnic or demographic group. Current price and supply volatility data is calculated for tradable crops only (based on FAO’s food balance sheets) so information about local food staples, such as cassava, may follow quite different price trends. However, the national aggregate data can still provide valuable information. For example, Figures 7, 8 and 9 plot the prevalence of undernourishment measure against three different measures for volatility: per capita food production variability, per capita food supply variability, and cereal import dependency ratio for 128 developing countries with available data. Argentina is the most notable outlier in Figure 7 (food production variability). Although Argentina has maintained a very low prevalence of undernourishment (less than five percent), it ranks the highest compared to other developing countries as measured by the per capita food production variability index. Argentina contrasts significantly with Brazil and India, which have managed to have greater stability in food production as measured by the same index. Figure 8 plots per capita food supply against prevalence of undernourishment. The outliers in this case are Kazakhstan and Cuba, both of which have managed to maintain PoUs of less than 5%, but have witnessed extremely high variability in the supply of kilocalories per capita, per day. Lastly, Figure 9 plots the PoU against the cereal import dependency ratio. Unsurprisingly, many of the small states are highly dependent on cereal imports as a source of food supply, which draws attention to some of the important agreements made at the 1992 UNCED and the 1996 WFS conferences dealing with the vulnerability of small states. Although many 1990s conferences noted the need for international partnerships to help correct for extreme resource gaps, lackluster progress has been made to actually work towards achieving these commitments. These comparisons draw attention to what may be left out of the picture if only prevalence of undernourishment is used to gauge food security.
Figure 7: PoU versus Per Capita Food Production Variability (N = 128)\textsuperscript{39}

Source: FAO (2012)

Figure 8: PoU versus Per Capita Food Supply Variability (N = 128)\textsuperscript{40}

\textsuperscript{39} Ibid.
\textsuperscript{40} Ibid.
While empowerment of people as food producers and consumers in ensuring their own household food security is an important aspect of human development and human rights, this is extremely difficult to measure and often times, the necessary data and indicators are not available.

Conclusions

The MDGs have been consistently used by the food/agriculture/nutrition community to advocate for attention to a neglected cause. However, this did not succeed in raising the profile of hunger as an international priority as evidenced in resource allocations and in outcomes. Empirical trends over until 2008 show little increase in ODA allocations to agriculture and nutrition that contrast starkly with the sharp increase for health, education, water and global diseases. With respect to national governments, it is difficult to generalize from the diversity of national development priorities. But with the notable exceptions of Brazil and India, food insecurity has not been at the center of national poverty eradication programs. Outcomes have also been disappointing. Since 1990, the proportion of undernourished people in developing countries has

41 Ibid.
declined from 23 to 15 percent, ‘off track’ in achieving the 2015 target of halving the proportion of undernourished (FAO, 2012). The total number of undernourished people has declined from 980 million to 852 million, only a 13% reduction in the number of hungry people (FAO, 2012). Progress has been particularly slow in the least developed and low-income countries (FAO 2012).

With the 2008 food crisis, however, food security has surged to the ranks of the top issues commanding international political attention. The issue now regularly features in G-8 and G-20 meetings, and as a priority for the post-2015 development agenda. The UN Chief Executive Board established a High Level Task Force including all of the relevant UN agencies and programs to develop a coordinated program, the Comprehensive Framework for Action. Major initiatives have been launched including the increase in funding from the Gates Foundation and the Scale Up Nutrition Initiative.

We do not conclude from this that the MDG hunger target had neither relevance nor consequence. While the empirical consequence may not have been visible and the goal may not have created incentives to do more to accelerate progress, the MDGs were a factor in thinking about food security and in framing the debates and interventions.

One of the most striking aspects of debates about food security is its fragmentation and the contestation amongst the diverse stakeholders. There are sharp divides over the role of technology, corporations, sustainability and people. Stakeholders within and amongst national governments, local NGOs, international NGOs, donor agencies, foundations, academics and researchers are divided as they follow divergent visions. The WFS/ICN agendas of the 1990s promoted broad agendas with multiple commitments, and addressed the wide range of barriers to food and nutrition security as well as important investments and policy interventions to enhance small-scale farm production, nutrition improvement, environmental health, and global economic arrangements. While still reflected in the UN post-2008 strategy, this does not seem to provide a unifying vision. Other visions are dominating food security debates, and are contesting one another.

The first is the vision of ‘food sovereignty’ that promotes the rights of small-scale farmers with a core objective to defend the autonomy of small-scale farmers and producer communities to
control their livelihoods in the face of global trends that undermine this autonomy. These trends include the corporate control of the seed markets, the rise of supermarket chains in dominating retail markets as well as their supply chains, environmental change and the loss of biodiversity, and the recent pressures of ‘land grabs’. This vision defines the strategy of Via Campesina, the largest ‘international peasant movement’, but is also an important element of concerns of development NGOs, the UN Special Rapporteur for Human Rights, and a broad group of academics concerned with human rights and human development. At the other extreme is a vision that sees the problem of food insecurity in scientific terms and seeks technological solutions to such problems. Sustainability is perceived as a central concern, not only by protecting the environment but also the livelihoods of those who depend on agriculture. The third is the vision of technological solutions to problems of food production and nutrition. In agriculture it is highly contested as it follows the ‘Green Revolution approach’ of increasing productivity through high yielding varieties of crops, and in nutrition, the promotion of biofortified foods. Both are controversial particularly because of the dominant role of corporations in the development and supply of the goods under patent protection, but are also criticized for being too narrow in perspective and not recognizing the need for broader socio-economic changes to improve nutrition and to improve access, and ultimately not delivering a durable change.

Where do the MDGs fit in these visions? In principle, the hunger target (1c) could be embedded in any of these visions since the target only looks at outcomes. But in fact, it is most compatible with the framework that focuses on short-term results and outcomes, the technology-centric framework. The other visions frame the problem of food insecurity in other ways, as a complex set of constraints embedded in socio-economic structural constraints, as lack of voice in the economic system, or as its relationship with nature and society. None of these visions make the claim of quick gains and quick progress. On the other hand, the technology vision frames the problem of food insecurity as a technological problem and articulates solutions as those that deliver visible results. For example, the opening line on AGRA’s homepage states “AGRA works to achieve a food secure and prosperous Africa through the promotion of rapid, sustainable, agricultural growth based on small scale farmers’ (AGRA, 2013b). While these are caricatures of complex concepts, and there are overlaps and complementarities amongst them, these four visions divide the stakeholders, who are more often in adversarial than collaborative
relationships. By far the dominant vision that has garnered the most resources and funding is the technocratic vision to which much of the new funding has been allocated.

While the MDG hunger target appears to have had little impact on raising the profile of hunger as a priority, the MDGs reinforce a particular framing of the challenge. As Boas and McNeil point out, the power of framing is to create a hegemony of ideas about problems and solutions, keeping out radical ideas that are seemingly unthinkable. Framing is an exercise intended to ensure that problems are seen in a particular way, and “an effective ‘frame’ is one which makes favoured ideas seem like common sense, and unfavoured ideas as unthinkable” (Boas and McNeil, 2003 p.1). In this light, the MDG target and indicators frame the problem of food insecurity as a common sense issue of supply and production, favoring quick and measurable gains in supply and production as the key solution, and marginalizing the complex socio-economic determinants and the human development and human rights priorities of distribution, discrimination, inequitable access, and lack of voice and autonomy.
<table>
<thead>
<tr>
<th>Date</th>
<th>Conference/Event</th>
<th>Food and Nutrition Related Objectives and Targets (Quantitative Targets Iitalicized)</th>
</tr>
</thead>
</table>
- *Reduction in severe, as well as moderate malnutrition among under-5 children by half of 1990 levels;*  
- *Reduction of the rate of low birth weight (2.5 kg or less) to less than 10 percent;*  
- *Reduction of iron deficiency anemia in women by one-third of the 1990 levels;*  
- *Virtual elimination of iodine deficiency disorders;*  
- *Virtual elimination of vitamin A deficiency and its consequences, including blindness;*  
- *Empowerment of all women to breast-feed their children exclusively for four to six months and to continue breast-feeding, with complementary food, well into the second year;*  
- *Growth promotion and its regular monitoring to be institutionalized in all countries by the end of the 1990s;*  
- *Dissemination of knowledge and supporting services to increase food production to ensure household food security* |
- *Promoting sustainable agriculture and rural development (Chapter 14) by way 11 separate program areas and 29 objectives, as follows:*  
  - *By 1995, to review and, where appropriate, establish a programme to integrate environmental and sustainable development with policy analysis for the food and agriculture sector and relevant macroeconomic policy analysis, formulation and implementation;*  
  - *To maintain and develop, as appropriate, operational multisectoral plans, programmes and policy measures, including programmes and measures to enhance sustainable food production and food security within the framework of sustainable development, not later than 1998;*  
  - *To maintain and enhance the ability of developing countries, particularly the least developed ones, to themselves manage policy, programming and planning activities, not later than 2005.*  
  - *To promote greater public awareness of the role of people's participation and people's organizations, especially women's groups, youth, indigenous people, local communities and small farmers, in sustainable agriculture and rural development;*  
  - *To ensure equitable access of rural people, particularly women, small farmers, landless and indigenous people, to land, water and forest resources and to technologies, financing, marketing, processing and distribution;*  
  - *To strengthen and develop the management and the internal capacities of rural people's organizations and extension services and to decentralize decision-making to the lowest community level.*  
  - *To improve farm productivity in a sustainable manner, as well as to increase diversification, efficiency, food security and rural incomes, while ensuring that risks to the ecosystem are minimized;*  
  - *To enhance the self-reliance of farmers in developing and improving rural infrastructure, and to facilitate the transfer of environmentally sound technologies for integrated production and farming systems, including indigenous technologies and the sustainable use of biological and ecological processes, including agroforestry, sustainable wildlife conservation and management, aquaculture, inland fisheries and animal husbandry;* |
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- To create farm and non-farm employment opportunities, particularly among the poor and those living in marginal areas, taking into account the alternative livelihood proposal inter alia in dryland areas.
- To harmonize planning procedures, involve farmers in the planning process, collect land-resource data, design and establish databases, define land areas of similar capability, identify resource problems and values that need to be taken into account to establish mechanisms to encourage efficient and environmentally sound use of resources;
- To establish agricultural planning bodies at national and local levels to decide priorities, channel resources and implement programmes.
- By the year 2000, to review and initiate, as appropriate, national land-resource surveys, detailing the location, extent and severity of land degradation;
- To prepare and implement comprehensive policies and programmes leading to the reclamation of degraded lands and the conservation of areas at risk, as well as improve the general planning, management and utilization of land resources and preserve soil fertility for sustainable agricultural development.
- To complete the first regeneration and safe duplication of existing ex situ collections on a world-wide basis as soon as possible;
- To collect and study plants useful for increasing food production through joint activities, including training, within the framework of networks of collaborating institutions;
- Not later than the year 2000, to adopt policies and strengthen or establish programmes for in situ on-farm and ex situ conservation and sustainable use of plant genetic resources for food and agriculture, integrated into strategies and programmes for sustainable agriculture;
- To take appropriate measures for the fair and equitable sharing of benefits and results of research and development in plant breeding between the sources and users of plant genetic resources.
- To enumerate and describe all breeds of livestock used in animal agriculture in as broad a way as possible and begin a 10-year programme of action;
- To establish and implement action programmes to identify breeds at risk, together with the nature of the risk and appropriate preservation measures;
- To establish and implement development programmes for indigenous breeds in order to guarantee their survival, avoiding the risk of their being replaced by breed substitution or cross-breeding programmes.
- Not later than the year 2000, to improve and implement plant protection and animal health services, including mechanisms to control the distribution and use of pesticides, and to implement the International Code of Conduct on the Distribution and Use of Pesticides;
- To improve and implement programmes to put integrated pest-management practices within the reach of farmers through farmer networks, extension services and research institutions;
- Not later than the year 1998, to establish operational and interactive networks among farmers, researchers and extension services to promote and develop integrated pest management.
- Not later than the year 2000, to develop and maintain in all countries the integrated plant nutrition approach, and to optimize availability of fertilizer and other plant nutrient sources;
- Not later than the year 2000, to establish and maintain institutional and human infrastructure to enhance effective decision-making on soil productivity;
- To develop and make available national and international know-how to farmers, extension agents, planners and policy
<table>
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<tr>
<th>UNCED Agenda 21 (Continued)</th>
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<td>makers on environmentally sound new and existing technologies and soil-fertility management strategies for application in promoting sustainable agriculture.</td>
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<tr>
<td>- Not later than the year 2000, to initiate and encourage a process of environmentally sound energy transition in rural communities, from unsustainable energy sources, to structured and diversified energy sources by making available alternative new and renewable sources of energy;</td>
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<td>- To increase the energy inputs available for rural household and agro-industrial needs through planning and appropriate technology transfer and development;</td>
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<td>- To implement self-reliant rural programmes favouring sustainable development of renewable energy sources and improved energy efficiency.</td>
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<td>- Strengthening the role of farmers (Chapter 32) – Total of 6 objectives:</td>
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<td>- To encourage a decentralized decision-making process through the creation and strengthening of local and village organizations that would delegate power and responsibility to primary users of natural resources;</td>
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<td>- To support and enhance the legal capacity of women and vulnerable groups with regard to access, use and tenure of land;</td>
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<td>- To promote and encourage sustainable farming practices and technologies;</td>
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<td>- To introduce or strengthen policies that would encourage self-sufficiency in low-input and low-energy technologies, including indigenous practices, and pricing mechanisms that internalize environmental costs;</td>
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<td>- To develop a policy framework that provides incentives and motivation among farmers for sustainable and efficient farming practices;</td>
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<td>- To enhance the participation of farmers, men and women, in the design and implementation of policies directed towards these ends, through their representative organizations.</td>
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<td>- Financial Resources and Mechanisms (Chapter 33)</td>
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<td>- Developed countries reaffirm their commitments to reach the accepted United Nations target of 0.7 per cent of GNP for ODA and, to the extent that they have not yet achieved that target, agree to augment their aid programmes in order to reach that target as soon as possible and to ensure prompt and effective implementation of Agenda 21. Some countries have agreed to reach the target by the year 2000.</td>
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</table>
| December 1992 | International Conference on Nutrition (Rome)  
World Declaration and Plan of Action for Nutrition  
(159 governments + and the European Community) | • **Eliminate, before the year 2000:**  
• Famine and famine-related deaths;  
• Starvation and nutritional deficiency diseases in communities affected by natural and man-made disasters;  
• Iodine and vitamin A deficiencies.  
• **Reduce substantially, before the year 2000:**  
• Starvation and widespread chronic hunger;  
• Undernutrition, especially among children, women and the aged;  
• Other important micronutrient deficiencies, including iron;  
• Diet-related communicable and non-communicable diseases;  
• Social and other impediments to optimal breast-feeding; inadequate sanitation and poor hygiene, including unsafe drinking water.  
• Member states committed to achieve the four goals of the Fourth UN Development Decade:  
• To eliminate starvation and death caused by famine;  
• To reduce malnutrition and mortality among children substantially;  
• To reduce chronic hunger tangibly;  
• To eliminate major nutritional diseases.  
• Plan of Action proposed 9 strategies and 111 recommended actions to be taken at the national and international levels to solve the problems of food and nutrition insecurity. See Table 1 for a complete list of the 9 core strategies.  
• Member states committed to creating National Plans of Action for Nutrition before the end of 1994.  
• Member states committed to meet the goals outlined at the UNCED and the Children’s Summit (above).  
• Developed countries should strive to reach the United Nations goal of increasing official development assistance to 0.7% of GNP by the agreed upon date (date varies by country, but many countries aimed to reach the target by the year 2000). |

| September 1994 | International Conference on Population Development (ICPD) (Cairo)  
ICPD Program of Action  
(178 governments) | • Address changing food production and consumption patterns and adopt environmentally sustainable production methods (Chapter 3)  
• Address the severe problems of hunger and malnutrition among vulnerable groups, particularly children (Chapter 8)  
• Reaffirms commitments made at ICN, UNCED, and World Summit for Children. |

| March 1995 | World Summit for Social Development (Copenhagen)  
Copenhagen Declaration and Programme of Action  
(117 governments) | • Reaffirm, promote and strive to ensure the realization of the rights set out in relevant international instruments and declarations, such as the Universal Declaration of Human Rights, 6/ the Covenant on Economic, Social and Cultural Rights 7/ and the Declaration on the Right to Development, 8/ including those relating to education, food, shelter, employment, health and information, particularly in order to assist people living in poverty (Commitment 1, Action f)  
• Focus our efforts and policies to address the root causes of poverty and to provide for the basic needs of all. These efforts should include the elimination of hunger and malnutrition… (Commitment 2, action b)  
• Establish policies, objectives and goals that enhance the equality of status, welfare and opportunity of the girl child, especially in regard to health, nutrition, literacy and education, recognizing that gender discrimination starts at the earliest stages of life (Commitment 5, Action f) |
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<tr>
<th>September 1995</th>
<th>Fourth World Conference on Women (Beijing) Beijing Declaration and Platform for Action (189 governments)</th>
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<td><strong>WSSD (continued)</strong></td>
<td><em>Ensure that children, particularly girls, enjoy their rights and promote the exercise of those rights by making education, adequate nutrition and health care accessible to them, consistent with the Convention on the Rights of the Child, and recognizing the rights, duties and responsibilities of parents and other persons legally responsible for children (Commitment 6, Action c)</em>&lt;br&gt;<em>Support the domestic efforts of Africa and the least developed countries to implement economic reforms, programmes to increase food security, and commodity diversification efforts through international cooperation, including South-South cooperation and technical and financial assistance, as well as trade and partnership (Commitment 7, Action b)</em>&lt;br&gt;<em>Formulate and implement policies and programmes that enhance the access of women agricultural and fisheries producers (including subsistence farmers and producers, especially in rural areas) to financial, technical, extension and marketing services; provide access to and control of land, appropriate infrastructure and technology in order to increase women’s incomes and promote household food security, especially in rural areas and, where appropriate, encourage the development of producer-owned, market-based cooperatives (Strategic objective A.1, Action m)</em>&lt;br&gt;<em>Promote women’s central role in food and agricultural research, extension and education programmes (Strategic objective B.3, Action f)</em>&lt;br&gt;<em>Promote and ensure household and national food security, as appropriate, and implement programmes aimed at improving the nutritional status of all girls and women by implementing the commitments made in the Plan of Action of the ICN, including a reduction worldwide of severe and moderate malnutrition among children under the age of five by one half of 1990 levels by the year 2000, giving special attention to the gender gap in nutrition, and a reduction in iron deficiency anaemia in girls and women by one third of the 1990 levels by the year 2000; (Strategic objective C.1, Action w)</em>&lt;br&gt;<em>Create and modify programmes and policies that recognize and strengthen women’s vital role in food security and provide paid and unpaid women producers, especially those involved in food production, such as farming, fishing and aquaculture, as well as urban enterprises, with equal access to appropriate technologies, transportation, extension services, marketing and credit facilities at the local and community levels (Strategic objective F.2, Action e)</em>&lt;br&gt;<em>Provide public information on the removal of discriminatory practices against girls in food allocation, nutrition and access to health services (Strategic objective L.5, Action a)</em></td>
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| September 1996 | World Food Summit (Rome)  
Rome Declaration on World Food Security and WFS Plan of Action  
(185 governments + the European Community) | • Defined food security to exist “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”
• Clarify the content of the right to adequate food and the fundamental right of everyone to be free from hunger, as stated in the International Covenant on Economic, Social and Cultural Rights and other relevant international and regional instruments, and to give particular attention to implementation and full and progressive realization of this right as a means of achieving food security for all (Objective 7.4)
• Pledged to eradicate hunger in all countries, with an immediate view to reducing the number of undernourished people to half their present level no later than 2015, and a mid-term review to ascertain whether it is possible to achieve this target by 2010.
• By 2006, undertake, in the CFS and within available resources, a major broad-based progress assessment of the implementation of the World Food Summit Plan of Action and a mid-term review of achieving the target of reducing the number of undernourished people to half their present level no later than 2015.  
• Strengthen efforts towards the fulfillment of the agreed ODA target of 0.7% of GNP. In striving to promote sustainable food security, development partners should endeavour to mobilize, and optimize the use of technical and financial resources at the levels needed to contribute to this goal and should ensure that this flow of concessional funding is directed to economically and environmentally sustainable activities (Objective 6.2, Action e)
• Fulfill commitments made at prior conferences, including the ICN, ICPD, WSSD, World Summit for Children, Beijing Conference on Women, UN Convention on Biological Diversity, UNCED,  
• Plan of Action consisted of 7 commitments, 27 strategic objectives and 182 recommended actions which aimed to meet the overarching goal of reducing the number of hungry people by 2015. See Table 1 for a list of the 7 commitments. |
| September 2000 | Millennium Summit & Millennium Declaration | • “To halve, by the year 2015, the proportion of the world’s people whose income is less than one dollar a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking water.” (Millennium Declaration, para 19)
• To promote gender equality and the empowerment of women as effective ways to combat poverty, hunger and disease and to stimulate development that is truly sustainable. (para 20)
• Recognized environmental commitments made at UNCED (para 22), Convention on Biological Diversity, and the Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (para. 23)
| September 2001 | UN Roadmap | • Established MDG 1: Eradicate extreme poverty and hunger  
• Target 2 (now Target 1c): To halve, between 1990 and 2015, the proportion of people who suffer from hunger  
• Indicators:
  • Prevalence of underweight children (under five years of age)  
  • Proportion of people below minimum level of dietary energy consumption |
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<tr>
<th>June 2002</th>
<th>World Food Summit Five Years Later (Rome)</th>
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<td>(Governments and the States of the World)</td>
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<td></td>
<td>• Recalled the WFS plan of Action and commitments of governments to achieve food security for all, with an immediate goal of reducing the number of undernourished people to half their level no later than 2015.</td>
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<td></td>
<td>• Noted lack of progress towards achieving WFS goal.</td>
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<td>• Expressed concern in the current estimates and declining ODA towards agricultural and rural development</td>
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<td></td>
<td>• Urged developed countries to dedicate 0.7% of GNP as ODA to developing countries, and 0.15-0.20% of GNP to least developed countries.</td>
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</table>

*Source: Conference Plans of Action*
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