

ENDING RURAL HUNGER

2016 Update:
Progress Toward SDG 2

October 2016

www.endingruralhunger.org

Homi Kharas is a senior fellow and deputy director in the Global Economy and Development program at the Brookings Institution.

John McArthur is a senior fellow in the Global Economy and Development program at the Brookings Institution.

Geoffrey Gertz is a post-doctoral fellow in the Global Economy and Development program at the Brookings Institution.

Lorenz Noe is research analyst in the Global Economy and Development program at the Brookings Institution.

Author's Note:

The Brookings Institution is a nonprofit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars.

Brookings gratefully acknowledges the Bill & Melinda Gates Foundation's support of the Ending Rural Hunger project.

Brookings recognizes that the value it provides is in its absolute commitment to quality, independence, and impact. Activities supported by its donors reflect this commitment.

Introduction

A full year has passed since the Sustainable Development Goals (SDGs) were adopted by the members of the United Nations. The second of these goals calls for ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture in all countries—all by 2030. Given the ambition of these targets, it was clear when the SDGs were launched that business-as-usual would not be enough to meet the goals—we need to change course and significantly accelerate progress. Today, in late 2016, is there any evidence that such a transformation is under way? In brief the answer is no, based on the most recent available data.

This note provides an update of where the world stands on the path toward ending rural hunger by 2030. The upshot is that prevalence of undernourishment and malnutrition in the developing world is falling, but not nearly fast enough to achieve the hunger SDG targets. Though some countries have seen important increases in agricultural productivity, many others are being left behind, with cereal yields languishing below 2,000 kilograms per hectare (kg/ha) and little evidence of improvements. Meanwhile developed countries have not significantly reformed their own remaining agricultural trade and subsidy policies which distort global markets, nor have they delivered needed increases in development assistance: The total amount of aid for food and nutrition security (FNS) is flat. To be sure, there are a number of individual success stories at the country level, some of which are discussed below. These demonstrate that real transformations are possible.

Shortly after the SDGs were announced, in October 2015, we released the *Ending Rural Hunger* report and accompanying dataset, an analytic tool designed to help governments, firms, philanthropies, and other stakeholders identify priorities, efficiently allocate resources and ultimately track progress toward achieving the hunger SDG. We focus specifically on the issue of rural hunger in developing countries because approximately three quarters of the world's hungry people live in rural areas, a large share on smallholder family farms which depend on agriculture for their income. The constraints to ending hunger in developed countries and in urban areas, while also important areas of concern, are significantly different from the constraints to ending rural hunger in developing countries.

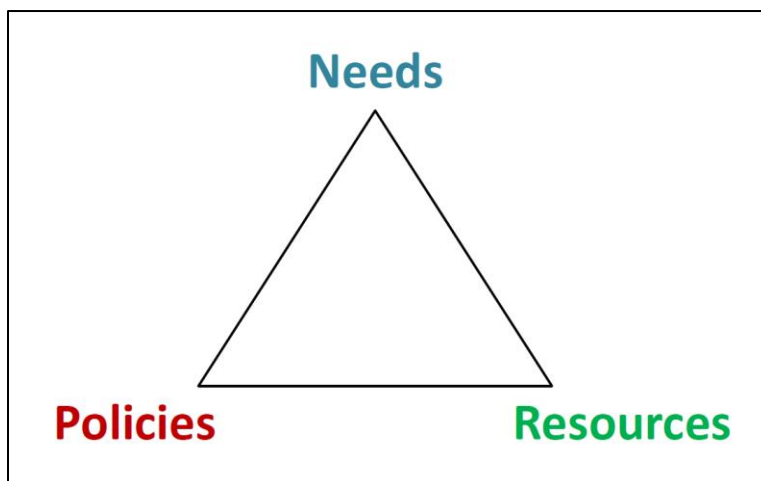
The revised, updated and expanded 2016 *Ending Rural Hunger* dataset is now available at endingruralhunger.org, where users can see for themselves the state of rural hunger across 153 developing countries as well as how the policies and resources of 29 developed countries rate toward ending rural hunger. Below we draw on newly released data for a subset of indicators included in the dataset in order to assess the latest evidence on advances and setbacks. Challenges in FNS data quality and lagged availability make it difficult to draw any decisive conclusions, especially when many indicators are so far only available as of 2014 (see Box 1 below). Nonetheless, available data suggest we are still not on track.

The pivotal question is how to change course—how to achieve the transformations that realize the ambition of the FNS goals. The next 12 months will be a critical period for governments to put in place the needed policies and resources. A series of multilateral financing rounds and summits related to FNS will take place in 2017, so the final section of this note suggests where to look for evidence that we are moving beyond business as usual.

Assessing the challenge: Mapping needs, policies, and resources for FNS

To achieve SDG 2, a crucial first step is to organize the evidence in a way that informs practical strategies. To this end, the *Ending Rural Hunger* project uses a simple framework for distilling the global challenge. Our framework focuses on three pillars: needs, policies, and resources (Figure 1). To maximize impact, international actions should focus on supporting countries where the needs are greatest, where the domestic policies and political commitment are strongest, and where resources are inadequate for success. Similarly, for developing countries themselves, an objective assessment of where they stand across these three dimensions can help local leaders inform the targeting of their own domestic efforts for progress.

Figure 1: Linking needs, policies, and resources for Ending Rural Hunger



We distill needs, policies, and resources as follows:

- **Needs:** The hunger SDG includes four distinct country-level targets: ending undernourishment, ending malnutrition, boosting agricultural productivity, and promoting resilient, sustainable agricultural systems.¹ We define countries with the greatest needs as those that are furthest away from reaching these targets.
- **Policies:** Domestic FNS policies include the market infrastructure to allow farmers to operate effectively, the national economic policies to encourage efficient investment, and the domestic political commitment to prioritize ending hunger. We assess countries in these realms based on performance relative to their peers.
- **Resources:** Financial resources for FNS come from a variety of sources, including domestic government spending, foreign direct investment, official development assistance, other official lending flows, and philanthropic and nongovernmental organizations (NGOs) spending. We add up all measurable sources to estimate investments per rural capita. (While domestic private investment is almost certainly the largest source of FNS resource, unfortunately there are no standardized cross-country data of this measure, making it impossible to track.)

For each of these three pillars, it is possible to both benchmark individual country performances and track global trends. Here we look at some of the larger regional and global trends reported over the past year, while digging deeper into a few national stories which are indicative of experiences at the country level. We aim to identify where needs are falling, policies are strengthening and resources are increasing fast enough to meet the SDG hunger targets.

¹ The fifth target, maintaining genetic diversity, is more relevant at the regional or global level than as a national target.

Box 1: Data Limitations to real time assessments of FNS Progress

The state of data quality for agriculture and FNS is poor. Many desirable data points, on crucial priorities such as the productivity of smallholder farms or the scale of domestic private investment, are simply not available on a comparable, cross-country basis. This makes it impossible to track relevant variables at the regional or global level. Moreover, even when data are available, they are often only published with a significant lag. Thus while this note relies primarily on indicators which were published during the last 12 months, many of the data points we report—for example on foreign assistance flows— actually refer to values from 2014, as the most recent year available. Finally, available data are often noisy and imprecise, and it is not always clear if differences from year to year represent real changes in the underlying variables of interest or simply measurement error.

All of these reasons make it very difficult to track the key indicators for measuring progress toward the SDGs on an annual basis. Indeed, while the spirit of this note is to provide an update on events in the year since the SDGs were announced, a lack of timely data mean in many instances the best we can do is report on status as of two years ago, i.e., the year *before* the SDGs were launched. Without substantial advances in the production and dissemination of high-quality data, it will remain extremely difficult to track progress toward the SDGs over the coming years. Such data are crucial for holding governments and other stakeholders to account.

There are a few signs that data may improve in the future. For example, in September 2016 the Global Open Data for Agriculture and Nutrition (GODAN) initiative held its first summit, billed as the largest ever event for open data in FNS. Similarly, the Agricultural Incentives Consortium – which brings together the Food and Agriculture Organization (FAO), the Inter-American Development Bank (IADB), the International Food Policy Research Institute (IFPRI) and the Organization for Economic Cooperation and Development (OECD) – is working to produce a new database which consolidates and harmonizes data on government policies that distort agricultural incentives. There is scope for similar multi-stakeholder alliances, for example around the specific needs of smallholder farmers, to advance the state of data in other priority issues for FNS. Ultimately, if national governments, donors and international institutions are serious about tracking progress toward the SDGs, they will need to invest more effort and resources in producing high quality, publicly available data.

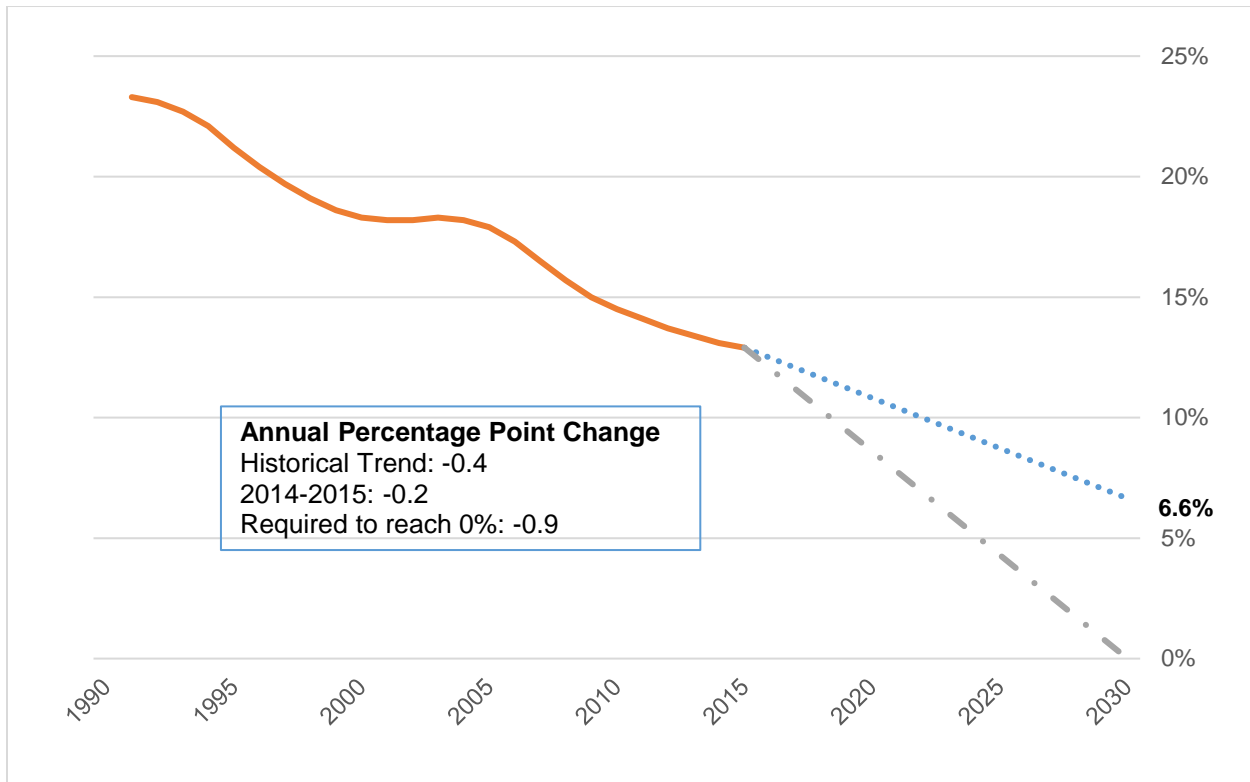
Needs

Overall, the most recent data available suggest FNS needs continue to fall in most developing countries, albeit at a relatively modest rate and with considerable cross-country variation. The Food and Agriculture Organization (FAO) estimates that as of 2015, 12.9 percent of the developing world's population was undernourished, down from 13.1 percent in 2014. This translates to only 3 million fewer undernourished people, not nearly fast enough progress to meet the SDG target. To achieve 0 percent undernourishment by 2030, this figure needs to fall by an average of 0.9 percentage points per year (Figure 2). Thus in order to meet the goal we will need to accelerate progress significantly from current trends.

At the country level, an analysis of recent trends in 135 developing countries shows that only 51 are on track to achieve the SDG undernourishment target by 2030, 53 are off track, and 31 lack sufficient data to allow for a meaningful projection.²

² McArthur and Rasmussen (forthcoming). Countries are considered on track to achieve the SDG target if they currently have a malnutrition rate below five percent or if the extrapolation of current trends of declining malnutrition suggests they will achieve 0 percent malnutrition by 2030.

Figure 2: Prevalence of undernourishment in the developing world

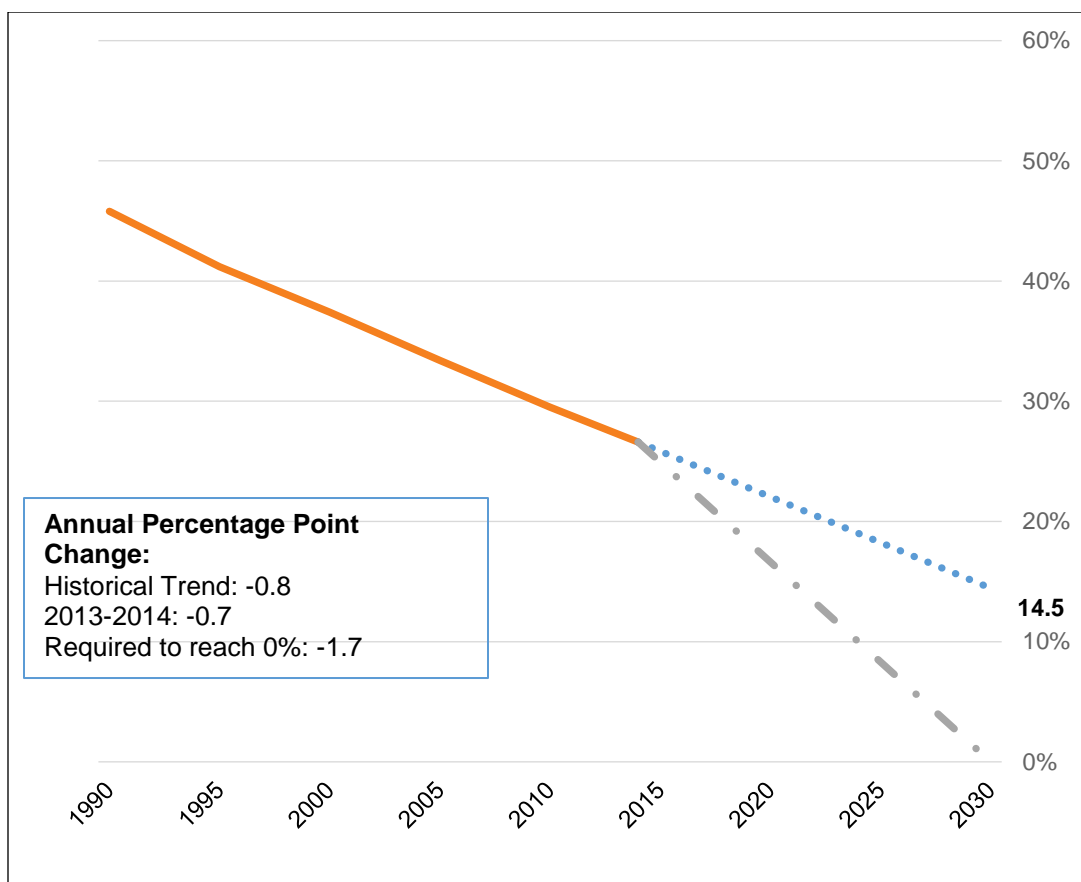


Source: FAO Food Security Indicators 2016

Looking at malnutrition we see a similar story. The World Health Organization (WHO) estimates that as of 2014, the prevalence of stunting in the developing world was 26.6 percent, down from 29.5 percent in 2010, the next most recent available estimate. This implies that stunting is falling on average by 0.7 percentage points a year. (A separate WHO publication estimates that for the entire world, malnutrition dropped to 23.2 percent in 2015 from 23.8 percent in 2014, a fall of 0.6 percentage points.³) Again, while this fall is to be welcomed, the rate of change is not fast enough. Achieving 0 percent stunting in developing countries by 2030 would demand an average annual decrease of 1.7 percentage points, more than twice the current rate of progress (Figure 2).

³ See WHO, *World Health Statistics 2016: Monitoring Health for the SDGs*, 2016.

Figure 3: Prevalence of stunting in the developing world (children under five)



Source: World Bank, World Development Indicators (2016) and own calculations
 Note: Low & Middle Income Countries Only

Trends in agricultural production and prices are also important for assessing progress. Yields are highly dependent on weather, among other factors, and tend to fluctuate from year to year. But the most recent country-level yield data are for 2014, and suggest that overall values were similar to what they were in 2013. The total cereal yield across all developing countries increased on average by about one percent, up to 3,470 kg/ha, while the median increase across developing countries was only 0.8 percent.⁴ Of the 48 developing countries that had cereal yields below 2,000 kg/ha in 2013, those that are most in need of transformative increases in agricultural productivity, about half (25 countries) saw higher yields in 2014 while the other half (23 countries) saw generally slightly lower yields.

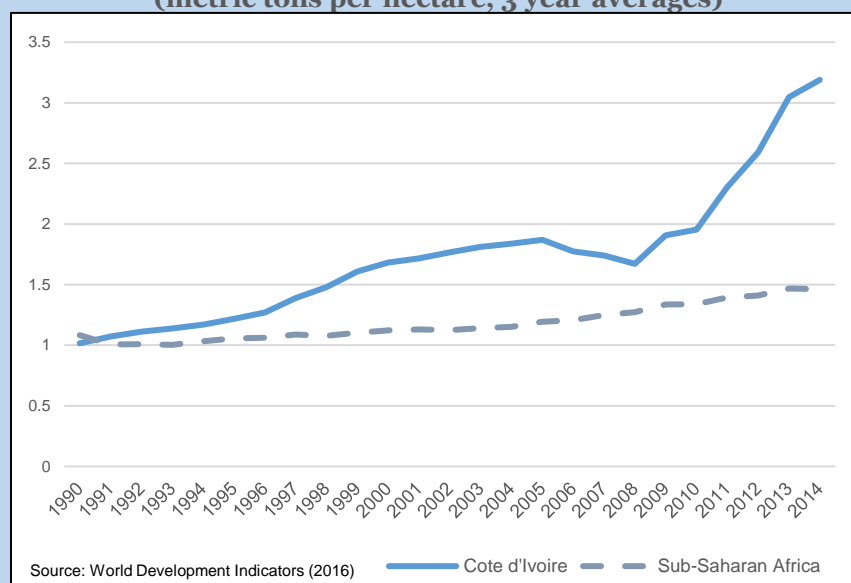
Advances and setbacks in agricultural production varied considerably by region and country, with some countries—including Cote d'Ivoire, discussed in Box 2 below—seeing positive trends extending into 2014. Looking forward toward 2030, the imperative is for such trends to expand and accelerate, particularly in those countries with very low productivity. As is the case for undernourishment and malnutrition, the latest data on cereal yields suggest a continuation of the status quo, business-as-usual scenario.

⁴ Weighted averages, based on data for all developing and emerging countries excluding those with populations of less than one million or a share of agriculture value added in GDP of less than three percent. Also excludes the United Arab Emirates due to extreme outlier values.

Box 2: Sustained progress in cereal yields in Cote d'Ivoire

One country on a positive, transformative trajectory in agricultural productivity is Cote d'Ivoire.⁵ Over the last seven years the reported national cereal yield has increased dramatically, from around 1,700 kg/ha in 2008 up to 3,100 kg/ha by 2013; the latest data suggest this trend is continuing, and as of 2014, average yields were estimated at 3,254 kg/ha—nearly double the 2008 level. This transformation occurred despite the setback of the civil conflict in 2011, which significantly disrupted the country's economy. Historically, most countries that have surpassed the 2,000 kg/ha threshold in cereal yields have gone on to enjoy sustained advances in agricultural productivity. While there is not necessarily an explicit causal relationship between crossing this threshold and sustained economic growth, the jump from yields of around 1,000 kg/ha to 2,000-3,000 kg/ha is typical of the trajectories of the early success stories from Asia's Green Revolution. As countries begin to see increased yields this can encourage further investment in agriculture, thereby kick-starting a virtuous cycle of investments, spurring productivity gains and further investment.

**Figure 4: Cereal yields in Cote d'Ivoire
(metric tons per hectare, 3 year averages)**



While a more in-depth analysis is required to pinpoint causes of Cote d'Ivoire's agricultural productivity increases, the boom in yields has coincided with a new government strategy prioritizing the role of agriculture in the domestic economy, known as the National Agricultural Investment Program. As part of this program the government has substantially increased spending on agriculture over several years, including a jump from \$156 million in 2013 to \$281 million in 2014, a 78 percent increase in real terms. As part of the new policy, the government is investing in much-needed infrastructure in rural areas as well as new training programs for farmers.

Of course each country has its own particular institutional, agro-climatic and economic context that shapes its agricultural development. For instance, cocoa is a key cash crop in Cote d'Ivoire, and the country devotes relatively little of its agricultural land to the production of cereals, so the relevant increase in yields only tells one part of a larger agricultural story in the country. The strategy that worked for Cote d'Ivoire might not easily replicate elsewhere. That said, its experience shows that sustained, transformative increases in cereal yields are possible, even for countries that have experienced major domestic challenges in recent years.

⁵ See John McArthur, "Seeds of a 'green revolution' in Africa?", Brookings Institution, May 4, 2015.

While comprehensive data on yields are not yet available for 2015 and 2016, weather patterns suggest that agricultural productivity growth may have slowed slightly, especially in countries affected by historic droughts. For instance, extremely dry conditions in Haiti led to a drop in agricultural production of nearly 50 percent between July and December 2015.⁶ In Brazil, farmers in São Paulo state reported they lost nearly a third of their crops due to a drought in February 2015.⁷ Similarly in Honduras, two consecutive years of severe drought cut bean and maize harvests by up to 90 percent in certain parts of the country.⁸ Thailand experienced one of its worst droughts in decades, with rice farmers hit particularly hard, while South Africa reported its worst drought since 1982.⁹ In India, the monsoon season was the driest it had been since 2009, damaging the country's primarily rain-fed agriculture.¹⁰

These widespread events were, at least in part, driven by El Niño, a naturally occurring weather pattern characterized by an abnormal warming of sea surface temperature in the central and eastern equatorial Pacific Ocean. El Niño is a regularly occurring phenomenon, but its direct effects are temporary. Looking forward, the greater long term concern is that climate change is already beginning to affect precipitation patterns; while it is not possible at this point to tie any particular drought to the effects of climate change, a greater frequency of extreme weather events is one of many risks associated with a warming planet.

While recent droughts led to localized price shocks in some countries and regions, in general global food prices have continued their steady descent from the peaks of 2008 and 2011. After adjusting for inflation, cereal prices are now back to roughly where they were in early 2007, before soaring prices sparked international concern over a global food crisis. The sustained downward price trend can be partially attributed to the strong U.S. dollar, as well as substantial cereal stocks accumulated during previous years. The extent to which such changes in global food prices are transmitted to local markets will vary considerably country to country, depending on how integrated local economies are in world markets and what share of local production and consumption are internationally traded.

Falling food prices have asymmetric impacts on FNS needs in developing countries. On the one hand, for poor households where food represents a substantial share of the household budget, lower prices mean food is more affordable. On the other hand, for those in rural areas whose income either directly or indirectly depends on agriculture, falling prices mean lower incomes, and therefore less ability to buy food. Independent of who benefits from high or low prices, however, nearly everyone is better off when prices are relatively stable, rather than seesawing up and down with unpredictable volatility. By this measure, cereal prices have been somewhat more stable over the past couple years than they were during the 2007-13 period.

⁶ FAO, "2015–2016 El Niño - Early action and response for agriculture, food security and nutrition." Update #5, January 25, 2016.

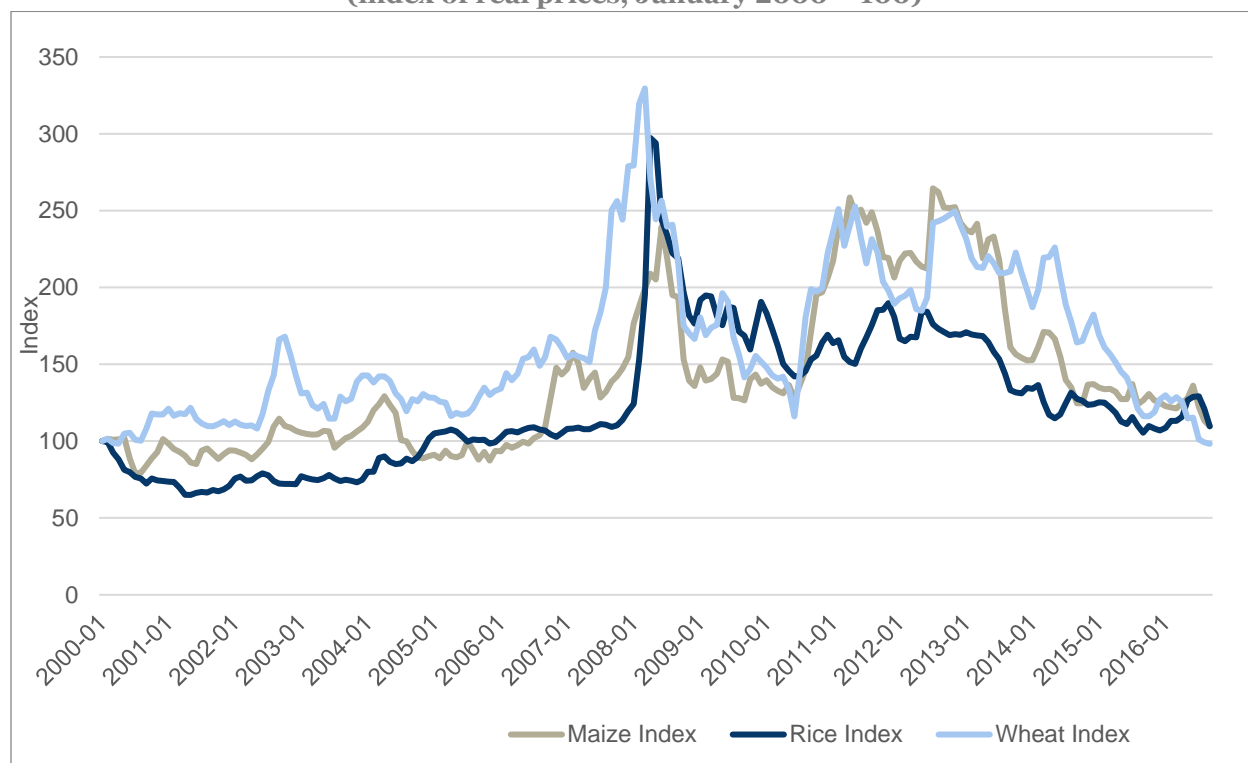
⁷ Rachel Glickhouse, "Brazil Update: Historic Drought Takes Toll on Agriculture", Americas Society - Council of the Americas (ASCOA), February 18, 2015.

⁸ Anastasia Moloney, "Drought-hit Honduras needs new approach to tackle extreme weather: U.N. envoy." Reuters, July 28, 2016.

⁹ Helen Regan, "Thailand is Suffering from The Worst Drought in Decades." Time, July 16, 2015; BBC News, "South Africa grapples with worst drought in 30 years." November 30, 2015.

¹⁰ Unni Krishnan and Vrishti Beniwal, "Climate Change Is Top Threat to India's Economy, Modi Aide Says." Bloomberg, November 1, 2015.

**Figure 5: Cereal price changes, January 2000 – September 2016
(index of real prices, January 2000 = 100)**



Source: World Bank Pink Sheet (October 2016) and own calculations

Policies

How have developing country policies for FNS and agricultural development evolved in the past year? At the aggregate level measuring trends in this realm is difficult, and one must be cautious not to over-interpret data based on year to year fluctuations. That said, one starting point for evaluating FNS policies used in the *Ending Rural Hunger* dataset are the rural sector performance assessments prepared by the International Fund for Agricultural Development (IFAD). The assessments published in 2016 include country scores for 2015 on issues such as the investment climate for rural businesses, access to land and water in rural areas, control of corruption in rural areas and the strength of the policy and legal framework for rural organizations. The new data suggest that overall policies have been relatively stable in most developing countries, with a slight improvement on average. Countries which have seen the largest increases in their rural sector performance assessments include Afghanistan, Bangladesh, Mozambique, Namibia, and the Philippines, while countries that experienced some backsliding include Azerbaijan, the Democratic Republic of the Congo, and Haiti.

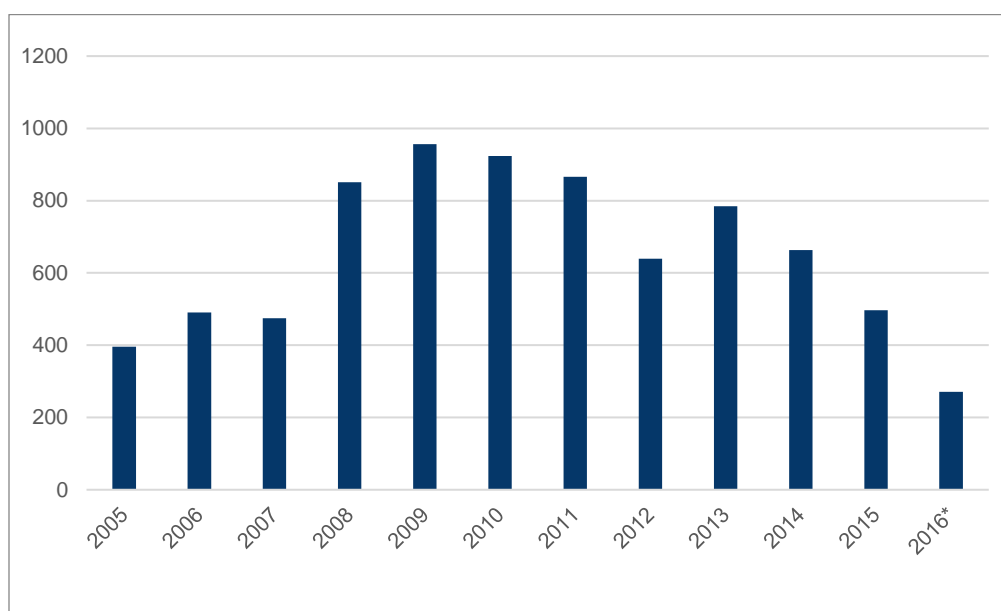
One issue where policies and outcomes appear to be improving rapidly is access to finance. World Bank data published last year indicate that the share of the rural population with an account at a bank, other financial institution or mobile money provider in developing countries increased by 13 percentage points between 2011 and 2014, from 33 percent to 46 percent.¹¹ A number of countries saw particularly large increases, including South Africa (from 44 percent to 70 percent), Uruguay (from 21 percent to 42 percent), and India (from 33 percent to 50 percent). Advances in access to finance partially reflect market forces and increased demand, but have also been supported by policy reforms; for example, India's progress is

¹¹ Data are from the World Bank's Findex database. Figure is the average for 98 developing countries with data available for both 2011 and 2014, weighted by the size of their rural populations.

partially attributable to the financial inclusion policy adopted by Prime Minister Narendra Modi in August 2014.

With respect to international trade policy, there is mixed evidence of progress. The simple average of developing countries' applied tariff rates for agricultural goods was 14 percent in 2014, unchanged from 2013. Yet there have been some gains on non-tariff barriers (NTBs), as the WTO reports that the total number of NTBs initiated by developing countries in the agricultural sector in 2015 was the lowest level since 2007, before the global food price crisis and Great Recession spurred a number of protectionist reactions. The data for 2016, though of course incomplete at this point, show this trend has continued into the current year.

Figure 6: Developing countries' agricultural non-tariff barriers initiated



Source: WTO

Note: To date, as of September 2016

On the other hand, a number of developing countries are increasingly mimicking the distorting agricultural subsidies OECD countries have long provided to their farmers. For example, in Indonesia producer support estimates (PSE) increased from 20 percent of gross farm receipts in 2013 to 29 percent in 2015. Similarly, in China PSE edged up to 21.3 percent in 2015 from 19.5 percent in 2014; this figure has increased significantly since the years before 2010, when it was typically below 10 percent. Given that both Indonesia and China are important players in global agricultural trade, these subsidies distort global markets and depress world prices, hurting farmers in other developing countries.

Resources

Developing countries' aggregate resources to support agriculture have stayed relatively flat compared to 2013. For countries with available data, we estimate that the average amount of total public resources available for FNS increased slightly, from \$869.4 million in 2013 to \$878.1 million in 2014; in inflation-adjusted terms; however, this represents a decrease of 0.02 percent.¹²

For the majority of developing countries, domestic government spending is a pivotal source of financing for FNS. Among the 23 developing countries with data available for 2014, 12 saw a real increase in government spending on FNS relative to the previous year, while 11 saw a decline. While there are a handful of countries

¹² Unweighted averages based on data for 23 countries with available data. Unfortunately, we do not have updated data on agricultural FDI for the year 2014, and thus private FDI is excluded from this analysis.

where spending has increased substantially—in addition to the example of Cote d'Ivoire discussed above, real FNS spending increased by at least 10 percent in El Salvador, Guatemala, Jordan, Madagascar, Montenegro, and Panama—these are the exception, rather than the rule. When combined with the fact that overall foreign aid for FNS was flat, as discussed further below, developing countries have not seen any significant increase in funding available.

Overall, the latest data on the FNS landscape in developing countries present a picture that is essentially the same as what we described a year ago: hunger and malnutrition are falling, but not nearly fast enough to meet the SDG targets; policy reforms to promote agricultural transformation are still needed in many countries; and resources for FNS remain insufficient given the scope of the challenge.

Developed Country Contributions to Ending Rural Hunger

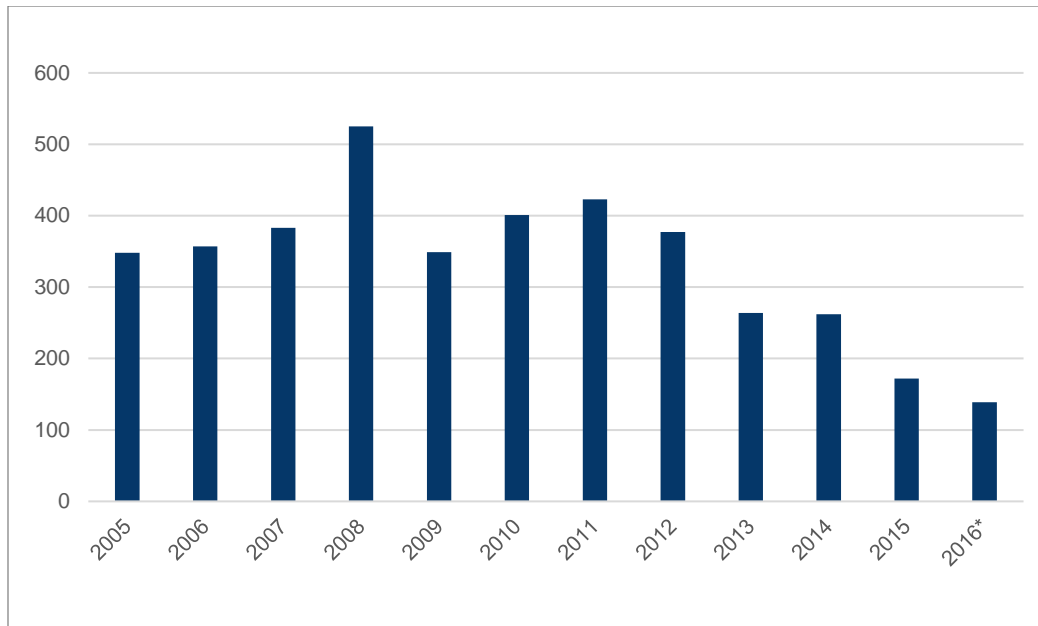
There are two broad dimensions on which developed countries contribute to, or detract from, international progress on ending hunger. First, developed countries protect their domestic agricultural industries with tariffs and subsidies, which distort global markets and make it difficult for developing country farmers to compete abroad. Second, developed countries provide foreign assistance for FNS, which varies in both quantity and quality. The *Ending Rural Hunger* database provides extensive data on both of these dimensions; here we update improvements and setbacks in these policies over the last year.

Domestic Policies: Trade and Subsidies

Agricultural trade policies among developed countries have improved somewhat over the last year. The simple average applied tariff decreased from 15.8 percent in 2013 to 14.9 percent in 2014. Developed countries initiated fewer non-tariff barriers in agriculture during 2015 than they have in any year since 1995; and preliminary data for 2016 suggest the figure may be even lower for this year.

Similarly, subsidies for agricultural production decreased slightly last year. The total PSE for all members of the OECD in 2015 was \$212 billion, down from \$248 billion in 2014, a 15.4 percent drop in real terms. When measured as a share of gross farm receipts—a more direct measure of the extent to which subsidies distort global markets—PSE was essentially unchanged at 17 percent. However, the size of many agricultural subsidy programs is at least partly determined by prices, which have generally been falling as discussed above, in addition to currency movements, so it would be premature to describe the decrease in subsidies as reflecting a favorable policy change.

Figure 7: Developed countries' agricultural non-tariff barriers initiated



Source: WTO

*To Date, as of September 2016

Nonetheless, there was one (potentially) important advance in subsidy policies: at the WTO Ministerial in Nairobi in December 2015, the members of the WTO agreed to eliminate agricultural export subsidies. This type of subsidy encourages production to be sold explicitly in foreign markets and is particularly distorting. As part of the Nairobi agreement, developed countries have committed to end export subsidies immediately, while developing countries have agreed to phase them out by the end of 2018.¹³ While it remains to be seen if countries fully follow through on their commitments, the global agreement certainly marks a positive step for international agricultural markets.

Foreign Assistance for FNS

Total official development assistance (ODA) for FNS in 2014, the most recent year for which data are available, equaled \$12.5 billion, exactly the same in real terms as it had been in 2013. Thus there is so far no evidence that developed countries are mobilizing new funds to help developing countries end hunger and malnutrition. As a share of total ODA, FNS ODA remained stable in 2014, at just over 7 percent of the total. We are unlikely to know the corresponding figures for 2016 until at least late 2017, which will be the first true test of whether the launch of the SDGs has affected budget commitments for implementation.

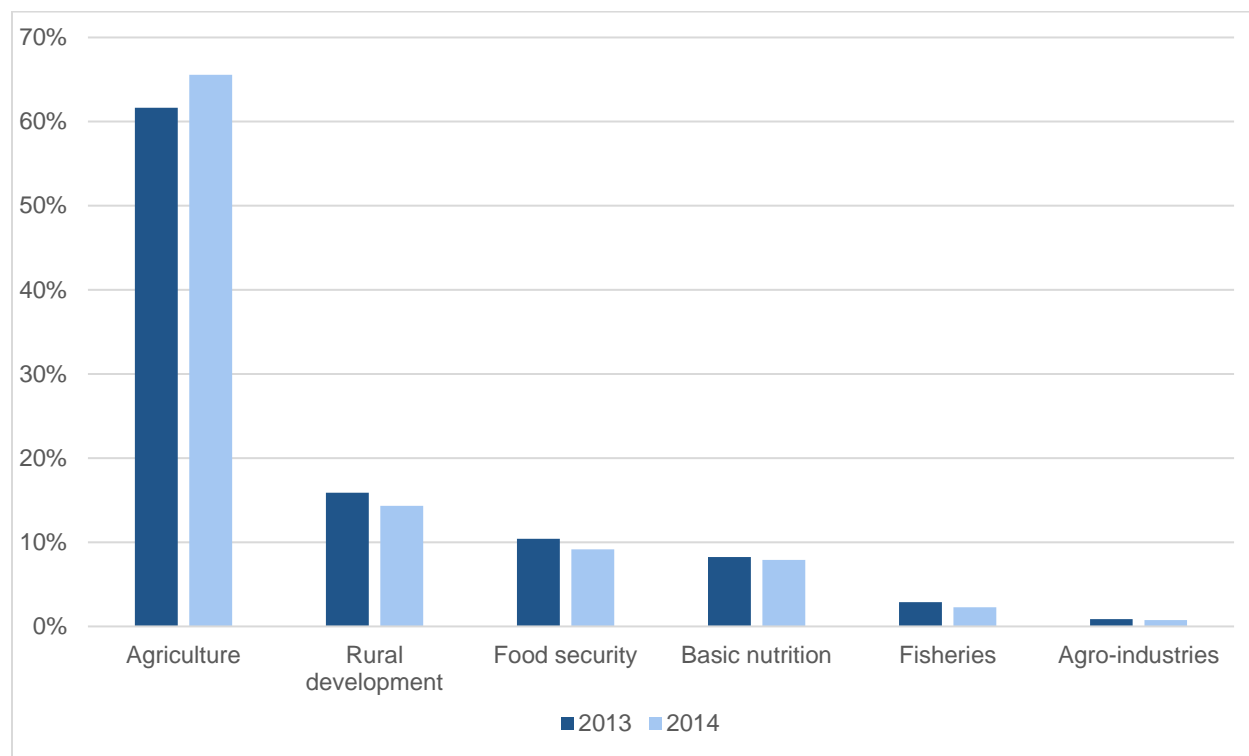
The stability of overall volumes masks significant volatility in FNS ODA for certain developing countries. Thirty-eight countries saw their FNS foreign assistance increase by at least 25 percent in real terms, while another 52 saw such funds decrease by at least 25 percent. These dramatic swings in support make it extremely difficult for developing countries to plan and implement long term strategies for boosting FNS—precisely the kind of strategy which is needed for the 15-year goal of achieving the SDGs.

Looking at the primary components of FNS ODA, support for agriculture increased slightly, while allocations to rural development, food security, basic nutrition, fisheries, and agro-industries decreased (see Figure 8). Notably, though many donors have stressed the importance of increasing support for nutrition, global ODA for nutrition interventions was just \$930 in 2014, unchanged from the year before. As the 2016 *Global*

¹³ There is however an exception for subsidies on dairy and pork products, which do not need to be phased out for another four years.

Nutrition Report notes, four of the five largest donors contributing to nutrition decreased their assistance in 2014: the United States, Canada, the United Kingdom, and Japan.

Figure 8: Sectoral allocation of FNS ODA



Source: OECD CRS

Targeting

One of the primary conclusions of our first *Ending Rural Hunger* report was to show how donors could do a better job of targeting their FNS aid toward the countries where it will have the greatest impact: those where needs are high, policies are strong, and resources are scarce. As we reassess the data one year later, there is not yet evidence to suggest that targeting has improved. Assessing the aid system as a whole, FNS assistance was no more likely to flow to countries with high needs, strong policies, and scarce resources in 2014 than in 2013.

Interestingly, individual donor countries showed greater variation in their year-to-year results. Perhaps most notably, two of the largest players in FNS aid moved in opposite directions: the U.S. significantly improved its targeting, while the European Union significantly worsened (see Box 3). Among 28 members of the OECD's Development Assistance Committee (DAC), eight donors improved their targeting scores by at least three points, five worsened by this same margin, while 15 saw no substantial change.¹⁴

¹⁴ Note that Greece is not included in this analysis, as no data are available.

Box 3: A tale of two donors: The United States and the European Union

The United States and European Union (EU) are two of the largest overall donors of FNS aid, and thus the targeting of their aid has important implications for the overall system. In 2014 the two donors moved in opposite directions.

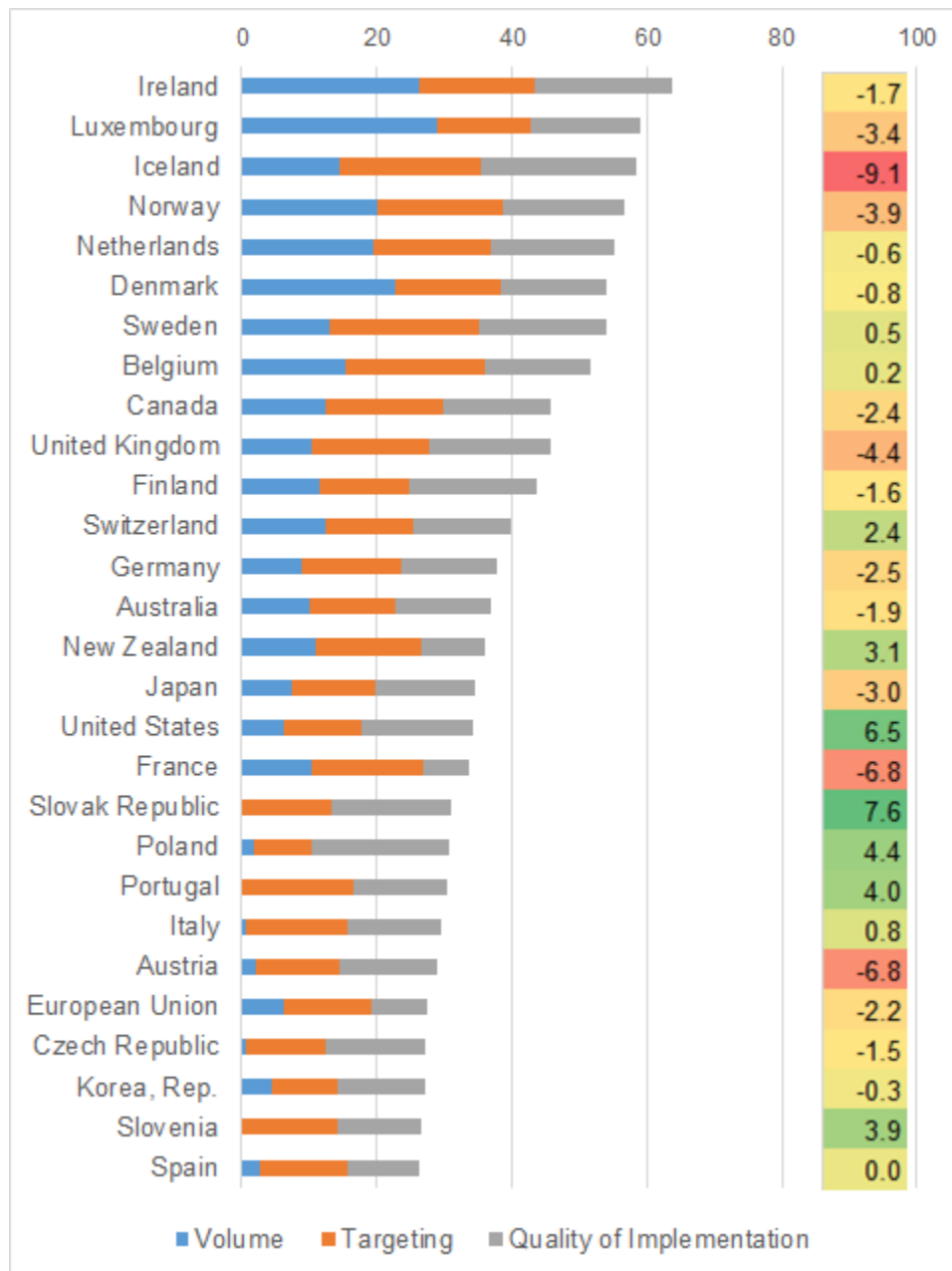
In 2014 the United States significantly improved its FNS aid targeting. Based on the *Ending Rural Hunger* index, which scores donors from 0 to 100 based on their FNS aid targeting, the U.S. improved from a score of 36 to 50, while its rank among 28 donors jumped from 22nd to 10th. In particular, the U.S. did a much better job targeting aid to countries with high needs and scarcer resources in 2014 than it had the previous year, while it did no worse targeting FNS aid to countries with strong policies. Most notably, in 2013 the largest recipient of U.S. FNS ODA was Morocco, which received \$180 million as part of a Millennium Challenge Corporation project. Relative to most developing countries Morocco has only moderate needs and relatively large resources available, which dragged down the U.S. targeting score for 2013. In 2014, on the other hand, the largest recipient of U.S. FNS ODA was Ethiopia, at \$164 million, twice what it received in 2013. Ethiopia has some of the world's highest FNS needs, and relatively strong policies compared to its level of development, boosting the U.S. targeting score. Other countries receiving large amounts of FNS ODA from the U.S. include Burkina Faso, Kenya, and Tanzania, all countries with high needs, relatively good policies, and limited resources.

The EU, on the other hand, saw its score on the targeting index drop from 34 to 25, while its overall rank among donors fell three places, from 24th to 27th. Relative to 2013, in 2014 the EU's FNS aid tended to go to countries with lower needs, worse policies, and more available resources. Much of this shift is explained by a major new project in Turkey worth \$187 million—14 percent of the EU's total FNS aid budget, and three times the FNS aid the EU invested in any other country. Relative to other recipient countries Turkey has fewer needs and much more available resources, bringing down the EU's targeting score. Similarly, the EU also disbursed large amounts of FNS aid to Morocco, as discussed above a country with only moderate needs and substantial resources, as well as Afghanistan, a country with significant needs but a particularly poor policy score. Notably, Europe has significant diplomatic interests in these three countries, suggesting the EU may be allocating some FNS aid more by foreign policy calculations than by investing where it is likely to achieve the greatest impact for ending hunger.

Figure 9 uses scores from the *Ending Rural Hunger* database to rank the 28 members of the DAC by three crucial dimensions of their FNS ODA policy: how much FNS ODA they give, measured as a share of GNI; how well they target their FNS aid; and how well they implement their FNS aid projects.¹⁵ Scores are presented based on data for the year 2014, while the column to the right shows how each donor's score changed from the previous year. As can be seen, six donors improved their FNS aid policy scores by at least three points, seven worsened by this same margin, while 15 saw no substantial change.

¹⁵ For further details on this methodology and how these scores are calculated, see endingruralhunger.org.

Figure 9: Ranking donor’s development assistance for Ending Rural Hunger



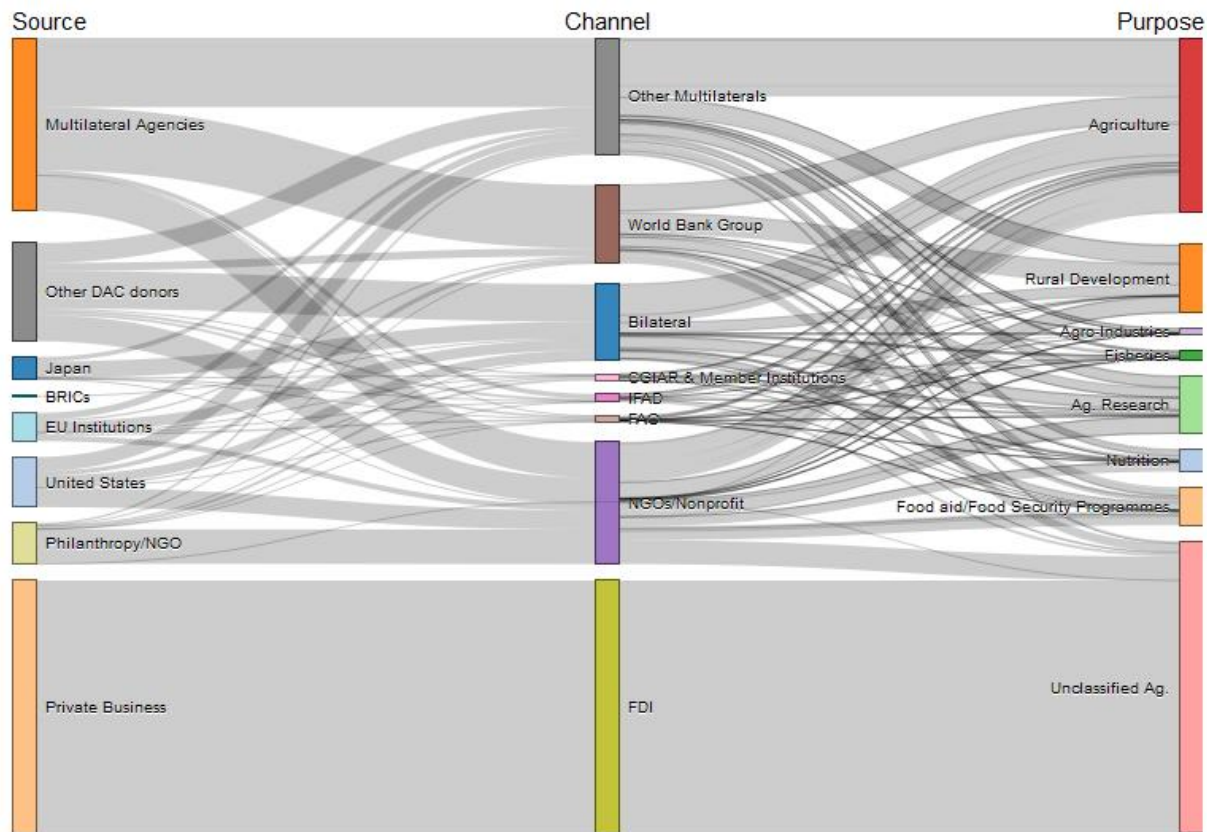
Source: *Endingruralhunger.org*

Mapping Global FNS Financing

Figure 10 presents a new contribution of our project this year: a graphical overview of the current landscape for international financing for FNS. On the left side of the figure are the primary sources of international financing: donor governments, private for-profit investors, and private NGOs and philanthropies. The middle column of the figure displays the implementing agencies and actors through which funds are channeled, including direct government-to-government bilateral transfers, multilateral institutions, and private domestic and international NGOs. Finally, the right side of the figure shows the purpose of financing according to OECD categories, such as agriculture, food aid, nutrition, research, and rural development.

Figure 10: FNS flows to developing countries

(Total flows equal \$28.6 billion [2010-2014 averages, measured in constant \$2013]. For scale, flows from United States equal \$2.2 billion.)



Source: endingruralhunger.org

The graph reveals that, while there is a dense funding landscape for FNS, there are still certain priority areas that receive limited financing. For example, only a small share is intended specifically for nutrition, and the majority of nutrition spending is channeled through nonprofits and multilateral institutions.

The figure suggests a need to improve the global FNS architecture considerably in order to ensure currently underfunded and overlooked priorities are better targeted. Yet caution is warranted before advocating for new institutions and partnerships to be added to this international architecture, as there are already many fragmented and overlapping initiatives in the global system. Any new efforts should only be considered to fill carefully identified needs, and organized around clear outcome-based accountability structures

Conclusion: Accountability and the path ahead

This *Ending Rural Hunger* update has found that international progress toward meeting SDG 2 has to date been limited. While data are scarce and often only available after a lag of several years, we do not find adequate evidence to claim that the world has escaped its longer-term 'business as usual' scenario. There have been modest decreases in undernourishment and malnutrition, but not nearly rapid enough to meet the ambitious SDG targets. Meanwhile the needed additional resources and policy reforms, in both developing and developed countries, have yet to materialize at scale.

This analysis begets a broader question for FNS advocates as well as all other stakeholders in the SDG process: where will accountability come from? In the run-up to 2015, stakeholders rightly focused their

attention on debating what should be included in the SDGs and how specific targets should be designed. Now, as we enter the implementation phase, the challenge is to identify and strengthen accountability mechanisms capable of driving the necessary reforms.

Indeed, the upcoming year will be crucial for strengthening accountability, and can set the stage for long term strategies for SDG 2. All stakeholders with an interest in holding governments accountable will need to pay close attention to a select number of processes and events.

One initial signal of countries' practical commitment to SDG 2 will be their contributions to four upcoming financing campaigns to replenish multilateral institutions that channel funds toward FNS: the Global Agriculture and Food Security Program (GAFSP), the International Fund for Agricultural Development (IFAD), the International Development Association (IDA), and a capital increase for the International Bank for Reconstruction and Development (IBRD), the lending arm of the World Bank. These institutions provide crucial financing to support developing countries in their national strategies for boosting sustainable agriculture and ending hunger. They need substantial new resources to do their job.

But even successful financing rounds for GAFSP, IFAD, IDA, and IBRD will be insufficient to fully close the financing gap that currently exists for ending rural hunger. Unless those institutions dramatically expand operations, most of the burden to increase funding will be shouldered by developing countries themselves, through more domestic resource mobilization or re-allocations of budgets toward FNS.

Given the likely shortage of public financial resources from donors, multilateral institutions must also ensure the greatest possible impact out of available financial resources. Better targeting of FNS aid, to the countries and the subsectors where it is most needed, is one means to maximize impact. Similarly, multilateral institutions can catalyze greater flows by leveraging their capital to borrow funds in public and private markets and on-lend to developing countries for sustainable agricultural investments. IFAD and IDA, for example, have received the authority from their members to borrow from public financial institutions (and from capital markets in the case of IDA). There is considerable scope for IFAD to use this authority to increase its non-concessional lending. Furthermore, multilateral institutions can do more to partner with other public and private actors to combine their efforts, including through coalitions to tackle specific FNS challenges, such as the particular needs of smallholder farmers and boosting nutrition interventions.

Governments will also signal their commitment to ending hunger through their actions and commitments at a series of major international events scheduled for 2017. In May, the G-7 will hold its annual summit in Italy, followed in July by a G-20 summit in Germany. In the past such summits have periodically served as catalysts for international FNS action. For instance, the last time Italy hosted the G-7/G-8 was the L'Aquila meeting in 2009, which produced the L'Aquila Food Security Initiative, where donors pledged \$20 billion toward achieving sustainable global food security over the following three years.¹⁶ The German G-20 summit is also an opportunity to build on the hunger theme that it emphasized when hosting the G-7 at Schloss Elmau in 2015. Last year's event included a commitment to help lift 500 million people out of hunger. Next year's G-20 will be an opportunity to make sure the practical elements of this commitment are fleshed out to align fully with the SDG to eliminate hunger among the nearly 800 million people who struggle with undernourishment today.

Of course, the original L'Aquila commitments took place against the backdrop of a global food price crisis. Over the coming year it will be crucial for the international community to demonstrate that collective resolve for ending hunger does not wane with falling food prices, and indeed for donors to underline that investments in FNS are not short-term remedies for price spirals but rather long term sustainable solutions. Strong commitments from the G-7 and G-20 summits could send such a message, and lock in political commitments from the world's largest economies on the need to escape the current business-as-usual approach in international support for FNS.

¹⁶ The figure was subsequently increased to \$22 billion.

In July, shortly after the G-20 event, the U.N. High Level Political Forum (HLPF) on Sustainable Development will meet in New York. This is the central annual forum for follow-up and review on the SDG agenda; the theme for the July 2017 meeting is “Eradicating poverty and promoting prosperity in a changing world”, and a review of progress on SDG2 will explicitly be on the agenda.

The HLPF is centered around voluntary national reviews, where countries present their strategies for contributing to the SDGs. In many instances the ambition of these national strategies will be affected by outcomes of the G-7 and G-20. But in any case, a top practical priority for each country will be to map out the domestic means through which it will fulfill its responsibilities under SDG 2. In putting together such strategies, we hope countries take advantage of the *Ending Rural Hunger* logic and database, alongside similar tools, to identify specific performance benchmarks across needs, policies, and resources. By publicly pre-committing to specific indicators, governments will make it easier to conduct peer reviews moving forward, to garner support from international actors, and to permit civil society to contribute to outcomes through their own channels. This will help ensure accountability toward SDG 2.

The SDGs represent a remarkable international consensus on the need for transformational change in global sustainable development. The scale of the ambition embodied in the goals has rightfully been lauded as essential, but we must emphasize the corollary that business as usual will not suffice. One year in to the SDG process, the world still needs much starker indications of breakthrough. For many people the SDG horizon still feels far away, but the path to 2030 is being set today.