

Food aid and assistance programs and the next Farm Bill
August 2017 revised draft¹

Erin C Lentz, Stephanie Mercier, and Christopher B. Barrett

¹ We thank Joe Glauber, Danielle Mutone-Smith, Ryan Nabil, Marilyn Shapley, participants at March 2017 workshop on the upcoming farm bill hosted by the American Enterprise Institute, and especially Vince Smith for valuable comments and suggestions.

I. Introduction

Food aid is a scarce but important resource. The United States is, by far, the world's largest food aid donor. In recent years, it has contributed more than 40 percent of global food aid that helps feed the hungry (World Food Programme, 2013).

Over the last sixty plus years, United States (US) food aid programs have helped save or improve the lives of billions of people. The size and design of these programs matter to intended recipient populations. The farm bill shapes the design of the largest of these programs, so what is done in that legislation matters fundamentally for the scope and efficiency of global food assistance programming.

Since 2014, total US Government (USG) spending on international food assistance (IFA) has averaged roughly \$2.4 billion a year (Schnepf 2016). Nonetheless, in inflation-adjusted terms, annual average expenditures on USG IFA programs authorized through the regular farm bill² process fell by 76 percent from the 1960s to 2010-14 (Schnepf 2016). However, the global need for aid continues to be substantial. The United Nations (UN) Food and Agriculture Organization (FAO) estimates that roughly 800 million people are undernourished – and billions more suffer from micronutrient deficiencies.

Simple arithmetic indicates that USG IFA expenditures are woefully insufficient to significantly reduce global food insecurity in aggregate terms. These limited resources need to be targeted strategically to obtain the largest effects on hunger and malnutrition. The biggest impacts come from relief operations in response to conflict and natural disasters, which occur with great frequency and annually cost an estimated 42 million human life years, mostly in low- and middle-income countries (UNISDR 2015).

The number of refugees and displaced persons worldwide is now the highest on record. And for the first time ever, in 2017 the United Nations (UN) declared four nations – Nigeria, Somalia, South Sudan and Yemen – to be in famine or near famine conditions and proclaimed it “the largest humanitarian crisis” since the UN’s creation in 1945. Yet, the UN’s World Food Programme (WFP), the world’s largest operational food assistance agency, is chronically underfunded relative to the emergency needs that it is charged with addressing. Thus, in recent years, WFP has often had to reduce food rations provided to refugees in multiple countries (UNHCR 2015).

Over the past two decades, the USG has appropriately focused IFA increasingly on addressing humanitarian emergencies and child nutrition, where the impacts are greatest (Barrett and

² Titles I, III and V of Public Law 480 (PL 480), Food for Progress and the McGovern-Dole International Food for Education and Child Nutrition (IFECN) program, all run by the United States Department of Agriculture (USDA) Foreign Agricultural Service (FAS), and PL 480 Title II, which is run by the United States Agency for International Development (USAID).

Maxwell 2005). The statutory justification for IFA was narrowed in the 2008 farm bill, focusing more tightly on humanitarian response and abandoning the surplus disposal and trade promotion objectives that defined US food aid for much of the second half of the 20th century.

Until 1990, a majority of IFA consisted of shipments under Title I PL480, which delivered food commodities to foreign governments under concessional lending arrangements to support non-emergency programs. Since 2000, however, shipments under Title I have been negligible (less than 5 percent of total USG aid), and the program has not received new funding since fiscal year 2006 (Schnepf 2016).

Title II PL480 shipments are provided as outright grants of US-sourced commodities to non-governmental organizations (NGOs) and multilateral organizations (primarily WFP) to support both emergency and longer-term development programs. Historically, Title II programming accounted for approximately one-third of the value of total USG food aid shipments (Barrett and Maxwell 2005). Title II's share increased to more than three-quarters of US food aid shipments between 2000 and 2010, and has remained at or above two-thirds in recent years.

At the same time, USAID's Emergency Food Security Program (EFSP) – a cash-based program funded through a different appropriations process unconnected to the farm bill – has expanded dramatically to offer food assistance in forms other than commodities procured in and shipped from the US (Schnepf 2016).

The upcoming 2018 farm bill offers an opportunity to reinforce the positive changes that have enhanced the humanitarian impact of ever-scarcer resources for USG IFA in recent years. These opportunities can be informed by a growing body of research on food aid that is extraordinarily clear in its broad conclusions about how to stretch IFA budgets to reach more people. Current statutory restrictions imposed on US international food aid programs waste taxpayer money at great human cost. For example, Nikulkov et al. (2016) estimate that eliminating major constraints on US food aid policy, including cargo preference and domestic procurement requirements, could reduce child mortality in northern Kenya by 16 percent during severe drought episodes.

Relative to the reformed food assistance programs operated by other countries and by NGO's, the costs of US food aid are excessive, delivery of assistance is slow, and the programs have not kept pace with global emergency needs. And there is no measurable evidence that American agriculture, maritime employment or military readiness benefit in any appreciable way from these statutory restrictions. No debate remains among serious scholars who have studied the issue: significant US food aid reform is long overdue (Barrett and Maxwell 2005; Bageant et al. 2010; Elliot and McKittrick 2013; Lentz and Barrett 2014; Mercier and Smith 2015; Thomas and Ferris 2015; Nikulkov et al. 2016).

The 2014 farm bill continued a pattern of slow progress in relaxing these constraints that impede the effectiveness of the USG's increasingly limited IFA programs. Three main opportunities still exist to make further advances in program efficiency and impact: (i)

relaxation of cargo preference requirements on shipments of agricultural commodities procured in the US for food aid purposes, (ii) expanded access to cash-based instruments rather than commodities so that programs need not rely solely on delivery of food to targeted beneficiaries, and (iii) relaxing procurement requirements that compel commodity purchase in the US.

We focus on those three areas in the discussion that follows. Meanwhile, the core funding for IFA is under continued threat. The Trump Administration's first budget, proposed in May 2017, sought steep cuts for fiscal year 2018, including complete elimination of the McGovern-Dole International Food for Education program and the Title II 'Food for Peace' program. These proposals suggest that the challenges facing IFA are not solely structural reform in the farm bill authorization process, but equally preservation in the appropriations process. One of the lessons of the 2014 farm bill was that Congress might not fund structural improvements ushered in with the farm bill, making apparent gains illusory.

II. Cargo Preference Rules

Program Overview and Assessment

The US' first formal, international food aid program was established under the Agricultural Trade Development and Assistance Act (PL 480) in July 1954. Less than two months later, PL 480 was encumbered by a requirement that at least 50 percent of all USG food aid shipments be carried to their overseas destinations by US-flagged vessels. The same requirement was then applied to other US food aid programs as soon as they were instituted--the Food for Progress program in 1986, and the McGovern-Dole International Food for Education and Child Nutrition program in 2002. The requirement was increased to 75 percent under a provision of the Food Security Act of 1985, and lowered back to 50 percent under a provision of a 2012 omnibus surface transportation bill, as part of a budgetary offset.

Although these programs are authorized by the House and Senate Agriculture Committees through the farm bill process, the statutes governing cargo preference requirements fall under a different set of Congressional Committees, the Commerce Committee in the Senate and the Transportation and Infrastructure Committee in the House. This jurisdictional complication would make it more difficult to amend this provision as part of the upcoming farm bill. Nonetheless, such modifications have appeared in past legislation crafted by the House and Senate Agriculture Committees, such as language exempting agricultural commodity export transactions assisted through U.S. export credit guarantee programs from cargo preference law, which was included in the Agricultural Trade Act of 1978 (P.L. 95-501).

The stated goal of this policy, which has become known as the cargo preference rule, is to ensure that US-flagged vessels continue to carry goods procured by USG agencies. The reasoning is that as a result of this preferential treatment, owners of US-flagged vessels stay in business, and, in the event of an extended overseas US military engagement, the US-flagged ships and their trained crews are available to carry military cargo. This policy applies to US food

aid, and also to shipments of US military material such as tanks and ammunition, as well as to goods procured for international use through transactions assisted by other US agencies such as the Export-Import Bank and the Overseas Private Investment Corporation. According to 2011 data compiled by the US Maritime Administration (MARAD), which oversees enforcement of cargo preference, about 86 percent of all cargo shipped under this requirement (by volume) was military equipment, about 11 percent was food aid, and about 3 percent was cargo 'impelled' by other civilian agencies (Fritelli 2015).

These mandates have not been able to stem the long-term decline of the US-flagged civilian fleet, which, due to a variety of factors, is no longer cost competitive with commercial shipping capacity available elsewhere in the world. According to a MARAD survey conducted in 2011 of the daily operating costs of US-flagged vessels versus foreign-flagged ships, the costs of US ships averaged 270 percent more than their foreign counterparts (US Maritime Administration 2011).³ In general, US-flagged ships are older, smaller, and utilize less modern technology than foreign competitors, as the needs of commercial shippers continue to diverge from those of the military. In 1955, US-flagged ships carried 25 percent of US foreign trade; today, that share has plummeted to one percent. The size of the fleet in terms of vessels has also declined substantially over the same period, from 1,075 vessels in 1955 to 175 in December 2016 (US Maritime Administration 2016).

The food aid component of cargo preference has been particularly ineffective in meeting the policy's stated objectives because in recent years the majority of shipments has been moved on vessels deemed by the USG not to be 'militarily useful'. Even more striking, the additional costs associated with adhering to cargo preference rules, stemming from higher freight rates charged by US-flagged vessels, now falls entirely on US food aid program recipients. This is a relatively new development. Two provisions requiring MARAD to reimburse separate aspects of the higher costs to the agencies operating the food aid programs were repealed by Congress in 2012 and 2015 (US Congress 2012; US Congress 2015a).

Relevant Programs

Cargo preference as a formal US policy began in 1904, when the requirement was applied to all supplies carried overseas by the various branches of the U.S. military under the Military Cargo Preference Act of 1904. Shipments of material (including food) provided as international assistance made under the Marshall Plan to Western Europe in the aftermath of World War II, were not formally subjected to statutory cargo preference rules. However, the Foreign Assistance Act of 1948, which authorized the Plan, did require that 50 percent of gross tonnage be shipped on US-flagged vessels "to the extent that such vessels are available at market rates" (US Congress 1948). Subsequently, the Cargo Preference Act of 1954, an amendment to the Merchant Marine Act of 1936, made it clear that shipments made under any U.S. food aid programs be considered 'government-impelled cargo' for the purposes of this requirement.

³ Note these cost estimates were based on unaudited information from shipping companies.

Regulations governing cargo preference for international shipments include restrictions on what vessels may qualify for preference cargo. For the purposes of carrying US food aid, a vessel must have been registered under the US flag for at least three years, be owned by a US-based company, and must employ crew members who are all US citizens. There is no requirement that the ship be built in a US shipyard.

The Merchant Marine Act of 1920, also known as the Jones Act, governs water-borne shipment of goods within the United States. Unlike cargo preference, it requires that any vessels carrying goods between US states and territories (including Alaska and Hawaii) not only be US-flagged but also must have been built in US shipyards. As of 2016, there were more than an estimated 32,000 vessels in the Jones Act fleet, most of them barges and tugs operating on inland or coastal waterways such as rivers and canals (Schlubach 2016). Only 97 ocean-going ships qualify both for Jones Act and cargo preference shipments, about 55 percent of the private US-flagged fleet as reported in MARAD statistics (MARAD 2016).

In addition to cargo preference rules, under the Maritime Security Program (MSP), the US government also provides specific subsidies for up to 60 U.S.-flagged vessels, which are determined to be militarily useful.⁴ In fiscal year 2017, each ship on the MSP registry will receive a payment of just under \$5 million to offset the higher cost of operating U.S.-flagged ships. Note that the MSP annual payment has increased from \$3.1 million at the end of 2015 (US Congress 2015(b)). As of December 1, 2016, the owners of 58 ships were receiving MSP payments. (US Maritime Administration ND(a)).

The MSP fleet is the third option for carrying US military cargo in the event of a military surge. First, the US Department of Defense (DOD) currently owns 14 ships capable of carrying munitions and dry cargo under the Military Sealift Command (MSC) program.⁵ These vessels are berthed at US ports and must be maintained so that they can be fully operational and crewed within 5-10 days if activated. The second option consists of 46 vessels owned by the US Department of Transportation in the Ready Reserve Fleet (RRF). Both groups of ships are maintained and manned under contract with civilian maritime operators.

The consensus of three studies on cargo preference published during 2015, from the US Government Accountability Office (GAO), a team from the Center for Public Service at George Mason University (Thomas and Ferris 2015), and the American Enterprise Institute, is that the limited number of ships of the US-flagged fleet are not the source of potential bottlenecks in a military surge scenario. Instead, the issue is the number of trained U.S. mariners available to be deployed to crew the MSC and RRF vessels that might be called upon (US GAO 2015; Thomas and Ferris 2015; Mercier and Smith 2015).

⁴ US Maritime Security Act, established in 1996 (46 App. USC 1101 et seq.) was reauthorized initially as part of the National Defense Authorization Act of 2003 for 10 years. The authority was extended as part of the National Defense Authorization Act of 2013 through the year 2025.

⁵ The Military Sealift Command also maintains several other types of ships, including fleet oilers, special mission, prepositioning, and expeditionary fast transport classes.

In addition, the evidence indicates that the food aid component of cargo preference does relatively little to buttress the viability of the civilian US-flagged vessels from the point of view of the US military (MSP ships), or in sustaining the supply of trained US mariners. As shown by Thomas and Ferris (2015), MSP ships carried only 18 percent of all food aid preference cargo between 2011-2013. Most of the remainder was carried by non-MSP ships, which are US-flagged vessels not deemed to be militarily useful because of their age, or size, or vessel type.

The recent GAO (2015) report estimated that in 2014 the number of qualified US mariners available for a surge fleet was nearly 55,000, based on information they received from the US Coast Guard. With respect to impacts on US mariners, Frank Kendall, at the time the Under Secretary of Defense for Acquisition, Technology, and Logistics, asserted in a 2013 letter sent to Rep. Edward Royce (R, CA), chairman of the House Foreign Affairs Committee, that reforms to food aid programs that might result in a reduction in food aid shipments might affect only 8-11 US-flagged vessels, employing between 360 and 495 mariners (Kendall 2013). Consequently, less than one percent of the total pool of 55,000 mariners would even potentially be affected by a reduction in food aid shipments subject to cargo preference restrictions, either because commodity food aid shipments sourced from the United States declined overall or due to relaxation of the cargo preference requirement.

The minimal military benefit associated with food aid cargo preference comes at a significant cost. Several studies have estimated the financial impact of the cargo preference requirement on the operation of US food aid programs. The studies were conducted over periods of time when different cargo preference rules were in effect (i.e., 75 percent versus 50 percent cargo preference) or, in the 2015 GAO study, the authors excluded bulk shipments from their analysis. Thus, the studies have consistent but not identical results. They demonstrate that cargo preference restricts competition, increasing the market power of the owners of US-flagged vessels. As a result, the USG pays consistently higher freight rates on those shipments relative to comparable shipments carried on foreign-flagged ships that are not constrained by cargo preference.

Estimates of the annual impact of this pricing power ranged from \$140 million using 2006 data (with the 75 percent cargo preference requirement in effect) to about \$50 million annually using data from 2012-2015 (most of these data were collected under the 50 percent cargo preference regime) (Bageant et al. 2010; Mercier and Smith 2015; GAO 2015).⁶ Over the last few years, the entirety of this additional cost has been borne by the food aid programs themselves. The compelling implication is that US food aid programs feed at least 1.8 million fewer hungry people than would be the case if contracts for shipping U.S. food aid were instead awarded on a competitive basis.⁷

⁶ The 2015 GAO analysis that excluded bulk shipments yielded an estimate of about \$31 million annually.

⁷ Estimate calculated using the \$50 million annual cost of cargo preference from Mercier and Smith (2015) and an average of \$27 cost per beneficiary from Elliott and McKittrick (2013).

Recommendations, Opportunities, and Challenges

Ending cargo preference requirements for food aid would make the increasingly scarce funds for food aid programs go further. In addition, ending these mandates would have minimal adverse impact on the component of the US-flagged ocean-going fleet that might actually be called upon during an extended US military deployment overseas.

It is worth noting that even during the peak 2003 period, when many US military units were dispatched to Iraq while other units were still engaged in combat in Afghanistan, cargo volume only necessitated activating 35 RRF vessels. None of the civilian US-flagged ships, either MSP or non-MSP, were pulled off of their regular routes (US GAO 2015). Only during a Stage III deployment, which occurs when the US-military has to fight in more than one major theater war at the same time or is forced to operate in a larger crisis, would calling in ships from US-flagged civilian fleet be required (US GAO 2013). The non-MSP ships, which have carried the majority of food aid shipments in recent years, would be the very last vessels called upon in such a situation (Herberger et al. 2015). They have never been mobilized in this way in the 60-plus years since the cargo preference law took effect.

Supporters of cargo preference increasingly cite an alternative rationale for the retention of cargo preference for food aid. Supporters maintain that cargo preferences ensure employment for trained mariners who might be needed to serve in a military surge. The deployment of MSC or RRF vessels to carry military cargo does require civilian mariners to operate these vessels.

When the RRF ships were taken out of mothballs during the beginning of the Second Gulf War in early 2003, the GAO report indicated that 1,024 civilian mariners were assigned to operate those ships. According to testimony provided to the House Armed Services Committee in 2014 by the MARAD Administrator, the average age of RRF vessels was 40 years at that time (Jaenichen 2014). Anecdotal reports suggest that the technology embodied in the equipment on many of these ships is so obsolete that many mariners found it difficult to operate them.

The bulk of profits accruing through agricultural cargo preferences go to vessel owners, not to workers. The industry does not make the data necessary to make credible estimates of the likely employment effects of relaxing some of the current restrictions on US food aid available to researchers. However, the small number-- up to 495--of mariners who hypothetically could be affected by food aid reforms -- could be readily absorbed by one of the more than 32,000 US flagged coastal or inland freight vessels operating under the Jones Act (US Maritime Administration N.D.(b)).

Furthermore, most cargo preference vessels are ultimately owned by foreign corporations. Three foreign shipping lines, the A.P. Moller-Maersk Group from Denmark, Neptune-Orient Lines from Singapore, and Hapag-Lloyd of Germany, accounted for 45 percent of all food aid carried by US flagged ships from 2012 through mid-2015 (Mercier and Smith 2015). In other words, several of the companies who profit from anti-competitive statutory restrictions on US food aid are not even American.

Advocates for cargo preference, which include the US maritime industry, the unions representing the seamen and officers who operate them, and their supporters within Congress and the Executive Branch, seem unwilling or unable to contemplate alternatives to cargo preference rules that might also ensure the availability of an adequate supply of trained mariners. In his 2014 testimony, Mr. Jaenichen presented the attitude of mariners' unions, which is that their members without berths on ocean-going ships would have no incentive to maintain certification in their professional skills.

This assertion begs the question--what if the US government, either through the DOD or Department of Transportation, established a program that actually provided such mariners with a financial incentive to keep their certification current? Such a program could follow the model of the National Guard and Reserve, under which individuals who have civilian jobs nonetheless train and serve in military units that can be deployed in the event of war, in exchange for regular pay based on their rank and education level, insurance, education benefits under the GI Bill, and even retirement pay. Mariners seeking training as deck and engineering officers have the opportunity to enlist in the Strategic Sealift Officers program, which provides financial assistance to students — up to \$32,000 over four years. Upon graduation, those students are commissioned in the Naval Reserves when they become fully licensed Merchant Marine officers. They commit to maintain an active license for at least 6 years and serve in the Navy Reserve for 8 years. No similar program currently exists for mariners filling non-officer berths.

Even though MARAD estimates that 3,886 US mariners would be needed to man the full reserve sealift fleet (both MSC and RRF vessels), they maintain that the real number is 13,034 mariners, because they assume that the civilian US-flagged ships would maintain their regular operations during such a Stage III scenario. Part of the reason that MARAD's estimate of the needed supply is so high is that some mariners may decline to accept deployment to a surge fleet because their civilian position would not be protected while they are absent.

Members of the National Guard and Reserves already have such protection under the Uniformed Services Employment and Reemployment Rights Act, which provides that persons taking time off to perform military service cannot be disadvantaged in their civilian careers because of that service (US Congress 1994). Extending such protection to mariners deployed under similar circumstances would seem consistent with the role they would be asked to play to ensure the national security of the United States.

III. Cash for programming

Program overview and assessment

Food security programming requires cash. Even a program that simply distributes food to targeted hungry individuals incurs administrative, distribution and storage costs. The Food Security Act of 1985 introduced monetization – allowing for the overseas sale of US food aid purchased in and shipped from the US – as a way to help NGOs cover such costs. Over time, the

acceptable uses of monetization proceeds were expanded legislatively beyond administrative costs to include the funding of broad development initiatives. The 1996 farm bill set a 15 percent minimum for the volume of non-emergency food aid that must be monetized.

Monetization is a wasteful practice for at least two reasons (Barrett and Lentz 2009; US GAO 2011a). First, in open monetization, each taxpayer dollar spent purchasing US food and international freight services earns only 70-75 cents when sold abroad for use in recipient countries. By its very nature, monetization loses money; GAO (2011a) estimated that the inefficiency of the monetization process reduced funding available for development projects by more than \$70 million a year. The higher cost of ocean freight due to cargo preference rules also tends to reduce the return from monetization transactions.

Second, ill-conceived monetization transactions can also destabilize commodity markets in those countries. A multi-country study from 2013 found that food aid deliveries from donor countries, including for monetization purposes, are far more likely to adversely impact food price levels and volatility than are local food aid purchases (Garg et al. 2013). These market effects undermine the farmers, traders, and processors whose financial well-being and commercial viability the US government aims to promote through many of the very same programs financed by the proceeds from monetization. The law requires assessments of the likely impact of food aid monetization on local markets – known as Bellmon analyses. However, the GAO (2011a, 2017) has repeatedly found that neither USDA nor USAID conduct effective market assessments or post-monetization evaluations and, given that they often monetize large volumes, they are unable to credibly guarantee not to disrupt local food markets, which raises concerns within the World Trade Organization (on which, more below).

The net result is that monetization often undoes with one hand whatever good work is done with the other hand through the programs the proceeds are designed to support. That is why most other donor countries and some of the major NGOs involved in distributing US food aid have chosen to curtail their use of monetization in recent years.

Relevant programs

Currently, USAID meets the current 15 percent statutory minimum on monetization through a single, large (\$16 million) closed monetization arrangement with the Government of Bangladesh. This marks a sharp decrease from recent years. In fiscal year 2011, \$157 million of Title II non-emergency food aid was monetized in multiple countries (USAID 2016). The 90 percent decrease in Title II monetization to the statutory minimum was made possible because the 2014 farm bill increased the percentage of Title II resources that can be requested as cash under Section 202(e). This cash now covers much of the non-commodity costs associated with food aid deliveries, effectively removing the need for operational agencies to monetize food aid above the statutory minimum.

More precisely, the 2014 farm bill raised the maximum share of 202(e) funds that USAID could make available to NGOs undertaking Title II programs from 13 percent to 20 percent. It also expanded the activities and expenses that Section 202(e) funds are authorized to cover. Section 202(e) funds can now fund development activities previously funded through monetization and enhance any existing Title II program, including emergency programs, through what are called Impact Funds. USAID often complements Title II resources with Community Development Funds provided from the Development Assistance budget authorized under the Foreign Assistance Act, an entirely separate authorization and appropriations process.

These changes have enabled USAID to pay directly for the costs associated with non-emergency programs and sharply reduce monetization in Title II programs as well as to channel essential cash resources to emergencies such as the Ebola crisis in West Africa (USAID 2016). The result is that more people are reached per Title II dollar expended and greater programmatic flexibility is available to fill critical food assistance gaps. The shift has also enabled USAID to prioritize Title II in-kind food deliveries for nutrition interventions where local markets provide less reliable means of inexpensively sourcing high-quality commodities.

Nevertheless, the statutory minimum requirement for monetization necessarily generates inefficiencies. Moreover, activities under USDA's Food for Progress program are financed almost entirely through monetized food aid commodity shipments, roughly \$150 million annually. A 2011 GAO study reported that cost recovery in monetization was only 58 cents on the dollar for this program.

Monetization also continues in part due to a "hard earmark" or "safe box" provision introduced in section 412(e) of the Food for Peace Act in the 2008 farm bill (and revised in the 2014 farm bill), which requires that USAID obligate between 20 and 30 percent of FFPA funding, and no less than \$350 million, for non-emergency, development food aid. This rule was intended to ensure that food aid would be reliably available to support NGO development programming, at a time when funding for agricultural development efforts elsewhere in USAID was at historic low levels.

Although most non-emergency food aid-supported projects are beneficial, they typically have less impact in nutritional, development and humanitarian terms than emergency food aid (Barrett and Maxwell 2005). Further, in emergencies, timely response matters, as reflected in the Golden Hour principle of emergency medicine. The populations affected by disasters and war are at recent all-time highs globally. Currently, there is insufficient food aid available to address food insecurity associated with those emergencies, so resources should be provided where the bang for the food aid buck is greatest and where funds are most needed. For example, had Super Typhoon Haiyan struck the Philippines two months earlier in 2013, before the end of fiscal year 2013 rather than at the start of fiscal year 2014, the US government would have been unable to tap Title II resources on a timely basis to respond because the non-emergency minimum was then binding late in the fiscal year. In that case, lucky timing precluded an embarrassing encumbrance on humanitarian response. But it underscored for

astute observers how current restrictions could restrict humanitarian response to an August or September disaster, in the final months of the USG fiscal year.

Effective disaster response requires flexibility in funding. Until the hard earmark / safe box provision was introduced with the 2008 farm bill, the USAID administrator had unquestioned authority to use as much of the total Title II budget for emergency needs as necessary to respond to humanitarian disasters, and exercised that authority in each of the previous 20-plus years to address underfunded disasters. This authority may have diverted funds from other effective non-emergency food aid projects that build rural roads, provide school lunches or enhance smallholder farmers' productivity. But saving lives and preventing disaster victims' collapse into poverty traps is the first-best use of food aid, especially now that new resources for such development projects are now available under the Feed the Future initiative established in 2010. In April 2016, the GAO upheld the USAID Administrator's continued authority under section 202(a) of the Food for Peace Act to obligate less than the minimum non-emergency funding required by section 412(e) (GAO 2016).

Recommendations, Opportunities and Challenges

Perhaps the most important food aid reform included in the 2014 farm bill was the increase in 202(e) funding, which enabled a sharp reduction in Title II monetization and greater flexibility in PL480 Title II deployment. The clear lesson is to make cash available and obviate the wasteful shipment of food commodities that get sold at a significant loss, often disrupting local markets in the process.

This outcome argues in favor of providing cash to support USDA Food for Progress projects in place of heavy reliance on food aid monetization. This could advance the same policy objective of strengthening the agriculture sectors in developing countries at lower cost and risk. Meanwhile, maintaining or even increasing the maximum level of 202(e) funding can reinforce the proven positive effects of replacing monetization with cash.

IV. US Sourcing & Procurement Flexibility

Program overview and assessment

Worldwide, the gap between food aid needs and available funding has been growing in recent decades. In March 2017, the UN's Under-Secretary-General and Emergency Relief Coordinator announced the need for \$4.4 billion within three months in order to stave off famine in Nigeria, Somalia, South Sudan, and Yemen.⁸ Emergencies are more common than they were 15 years ago, and often more complex and/or protracted. The *2015 State of Food Insecurity in the World* report argued, "protracted crises have become the new norm, while acute short-term

⁸ For sample media coverage, see <http://www.cbc.ca/news/world/un-famine-starvation-warning-1.4020901>.

crises are now the exception” (FAO 2015, p. 38). Countries in protracted crisis face rates of undernourishment more than double the rates of undernourishment in other developing countries: 39 percent compared to 15 percent (FAO 2015). Globally, this has put pressure on humanitarian and emergency funding, resulting in a practical and moral imperative to use funds in the most efficient manner possible (ODI 2015; WFP 2016).

The successful use of cash-based distributions following the 2004 Asian Tsunami generated interest in alternative approaches, include cash and vouchers, local and regional purchases of food (LRP), and prepositioning food aid closer to places that were likely to be in need. A growing body of evidence indicates that these tools tend to be faster and often cheaper than transoceanic food aid (Lentz et al. 2013; Lentz and Barrett 2014; Margolies and Hoddinott 2015).

Donors such as Australia, Canada and the European Union have “untied” their food assistance, meaning assistance does not need to be purchased within their borders. This flexibility has expanded the reach of their programs. For example, Canadian food assistance dollars go twice as far as US food aid dollars because Canadian programs can leverage lower cost food assistance options such as LRP, cash and vouchers for the entirety of their international food assistance (Lentz and Barrett 2014).

Both the George W. Bush and Obama administrations have advocated for a variety of food aid reforms, including increased flexibility to use a variety of food assistance tools (Schnepf 2016). The Obama administration’s 2014 proposed budget allowed for up to 45 percent of Title II funds be untied from domestic sourcing requirements. USAID estimated that, in total, the Obama administration’s proposed changes would have allowed them reach between two and four million more people per year (Schnepf 2014).

As other donors have untied their assistance, they have raised concerns during World Trade Organization negotiations, both during Uruguay and Doha rounds, that food aid may displace commercial export flows (Schnepf 2016). This is of particular concern regarding monetization, which is more likely to displace commercial products because it is sold in markets to generate cash rather than delivered to needy individuals (Barrett and Maxwell 2006). Untying food aid would more clearly decouple food assistance from domestic commercial interests, and ending monetization would indicate a commitment to not displacing commercial sales in low income countries.

Food Assistance Toolbox

The current lack of flexibility to utilize the most appropriate food assistance tool, be it transoceanic food aid, prepositioned food aid, cash, vouchers, or LRP foods, decreases both the timeliness of delivery and increases costs. Flexible funding would enable USAID, USDA, and their implementing partners to leverage the most appropriate combination of food assistance tools, meaning that US food assistance can reach more people faster and or at a lower cost.

The 2002, 2008, and 2014 farm bills made modest steps towards improvements in increasing flexibility. First, the 2002 farm bill introduced funds for prepositioning of food aid, discussed below. Second, the 2008 farm bill authorized \$60 million for USDA to run a local and regional procurement pilot project (LRPPP), as well as expanding the number of overseas prepositioning sites. The LRPPP allocated funds to NGOs and the WFP to purchase food locally, or regionally. Under the 2014 farm bill, funds were authorized for LRP, but no funds were appropriated in 2014, 2015, or 2016.⁹ Funding from other sources, such as the Emergency Food Security Program (EFSP), have expanded the use of LRP, cash and vouchers for food assistance programming. EFSP, funded through the International Disaster Assistance and Overseas Contingency Operations accounts and intended to complement Title II emergency food aid (Schnepf 2016), has grown from \$244 million in fiscal year 2010 to over \$1 billion in fiscal year 2015. The Bill Emerson Humanitarian Trust (BEHT) is a reserve of resources to help meet needs resulting from unanticipated humanitarian crises. In 2008, the BEHT moved to holding cash rather than commodities. The BEHT was last used in fiscal year 2014 to support responses in South Sudan and currently holds about \$281 million (Schnepf 2016).

Relevant programs

Transoceanic food aid & domestic sourcing

The most common form of food assistance is transoceanic food aid, purchased in the US and then shipped abroad. Since 2000, Title II programs have accounted for 73 percent of all US food aid funds and all Title II in-kind food aid must be sourced in the US (Schnepf 2016).

Food aid sourced from the US tends to be the slowest of all food assistance tools. Transoceanic food aid deliveries can take between three and six months to reach their destination (Barrett and Maxwell 2005; Lentz et al. 2013; USAID 2016). USAID (2016) notes that, in order to reach their destinations, on average, bulk commodities, such as cereals, require about three months whereas processed foods, such as vegetable oils and blended foods, require six months.

Prepositioning

Prepositioning was first authorized in the 2002 Farm Bill. Prepositioning allows USAID to tap into up to 100,000 metric tons of food aid for emergency deliveries. Prepositioned food aid is currently stored at one of five global locations, including US Gulf ports (USAID 2016). In emergencies, USAID can also redirect food aid vessels that were headed to a prepositioning site to a location in crisis, called diversion. The GAO found that on average diversions saved two months while prepositioned food aid saved between one and two months relative to standard food aid deliveries (2014). Prepositioning of Title II food aid has increased from six percent in 2007 to 22 percent in 2012 (GAO 2014).

⁹ For FY16, USDA was allowed to use up to \$5 million of funding provided to the McGovern-Dole program for locally procured foods.

Prepositioning is not without its downside. A 2014 GAO report noted that prepositioning is more expensive than procuring food on-demand. For example, the 2014 Farm Bill allows for international warehouse costs of up to \$15 million. Beyond storage expenditures, prepositioning requires additional fumigation costs and second leg shipping (e.g., from storage to the final destination). In 2014, USAID commissioned an outside study to evaluate the additional costs associated with use of prepositioned commodities. Based on data for prepositioning shipments made in 2012-13, that study found that such commodities, primarily bagged sorghum, corn-soy blend, vegetable oil, and split yellow peas, cost on average about \$56/ton more than commodities delivered directly from the United States.¹⁰

Local and regional procurement

Local and regional procurement afford significant time savings, and often cost savings, relative to in-kind transoceanic food aid. In a nine-country study of the LRP pilot from the 2008 farm bill, Lentz et al. (2013) found that procuring cereals locally or regionally saved 53 percent relative to purchasing grains in the US, while procuring legumes and pulses locally and regionally saved 25 percent. However, the authors also reported that procuring vegetable oil in Latin America was not less expensive than purchasing US vegetable oil. This suggests that the location of the programs, which are closely linked to shipping costs, combined with the type of product, influences the relative costs of US and local sourcing. Thus, the evidence indicates that the further a recipient country is from the US, and the less processed (and therefore bulkier) the product, the likelier it is significantly cheaper to use LRP than in-kind shipments from the US. Harou et al. (2013) found substantial cost savings using local procurement in a side-by-side comparison of LRP and in-kind food delivered to school feeding programs in Burkina Faso. On average, procuring school rations locally was 38 percent cheaper. Local rations were also more nutrient dense, with more protein and fat, both badly needed by the children targeted in the program.

According to Lentz et al. (2013), transoceanic in-kind food aid also reaches individuals about 14 weeks more slowly than other forms of food assistance. Recent evidence on the first 1,000 days of life – from conception to a child reaching the age of two – shows that adequate nutrition during this window is vitally important for life outcomes. Children who are well-nourished and healthy during the first 1,000 days have higher educational attainment, increased income, healthier lives, and healthier offspring than those who are not (Black et al. 2013). Fourteen weeks is about ten percent of the first 1,000 days; delays of assistance during this crucial period can have life-long consequences, putting the human costs of slower delivery of transoceanic food aid into stark relief (Lentz and Barrett 2014).

Cash and vouchers

Cash and vouchers are two other widely used forms of food assistance. Cash transfers can be conditional, meaning that beneficiaries have to undertake some action (e.g., send children to

¹⁰ Based on conversation with Gregory Olson, USAID/Office of Food for Peace, January 2017.

school or engage in a local work project) to receive the transfer, or unconditional, meaning that beneficiaries have complete control over when and on what the transfers are used. Vouchers are coupons or credit that can be redeemed to acquire food by recipients at certain, usually pre-approved vendors.

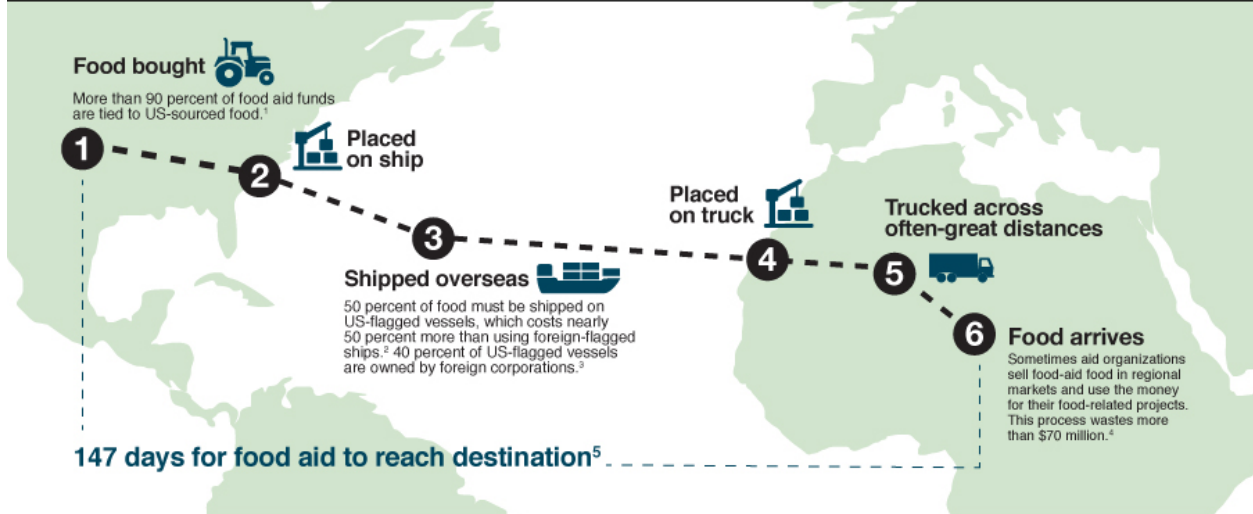
Use of cash and vouchers is growing rapidly.

In general, cash-based interventions have been found to have a much lower cost on both a per person and per ton basis than in-kind food aid shipped from the donor country. In Ethiopia, WFP estimated that delivering cash was 25 to 35 percent more efficient than delivering food (ODI 2015). An evaluation of food assistance responses during the 2011-12 crisis in Somalia found that 85 percent of cash transfer and voucher budgets went to recipients, while only 35 percent of the value of the resources expended to provide in-kind food aid went to recipients (Humanitarian Outcomes 2012). Margolies and Hoddinott (2014) find that, in a four-country study, examining Ecuador, Niger, Uganda, and Yemen, if everyone received cash rather than food, 18 percent more people could be reached. Cash and vouchers also tend to be much faster than in-kind food aid (Upton and Lentz 2012; Lentz et al. 2013). As mobile money becomes more commonplace in developing countries, distributing cash transfers will likely become even faster (ODI 2015). See the *Food Aid Folly* Graphic (American Enterprise Institute (AEI) 2015) for a striking illustration of the waste involved in longstanding IFA delivery systems.

Food Aid Folly

The current rules for providing food aid waste resources at every step.

HOW IT WORKS NOW



HOW IT COULD WORK



By locally and regionally sourcing food aid, along with other reforms, the US would save \$400 million a year that could help feed at least four million more people in dire need.⁷



Sources: 1. Erin C. Lentz and Christopher B. Barrett, "The Negligible Welfare Effects of the International Food Aid Provisions in the 2014 Farm Bill," *Choices* (3rd Quarter 2014). 2. Elizabeth R. Bageant, Christopher B. Barrett, and Erin C. Lentz, "Food Aid and Cargo Preference," *Applied Economic Perspectives and Policy* 4 (2010): 624–41. 3. Kenneth Burton, Wayne Ferris, and Phillip Thomas, *The Political Economy of Shipping Food Aid under the Cargo Preference Regime*, School of Public Policy, George Mason University, MS-381, 2015. 4. US Government Accountability Office, "International Food Assistance: Local and Regional Procurement Can Enhance the Efficiency of US Food Aid, but Challenges May Constrain Its Implementation," GAO-09-570, 2009, 5. *Ibid.*, 6. *Ibid.*, 7. See US Agency for International Development, "Food Aid Reform: Behind the Numbers," 2015, www.usaid.gov/foodaidreform/behind-the-numbers; Erin C. Lentz, Simone Passaroli, and Christopher B. Barrett, "The Timeliness and Cost-Effectiveness of the Local and Regional Procurement of Food Aid," *World Development* 49 (2013): 9–16; Vincent Smith, "American Food Aid: Why Reform Matters," testimony before US Senate Foreign Relations Committee, April 15, 2015, www.foreign.senate.gov/imo/media/doc/D41515_Smith_Testimony.pdf; and Stephanie Mercier, "American Food Aid: Why Reform Matters," testimony before US Senate Foreign Relations Committee, April 15, 2015, www.foreign.senate.gov/imo/media/doc/D41515_Mercier_Testimony.pdf.

Source: AEI, 2015. <https://www.aei.org/multimedia/food-aid-folly>

Recommendations, Opportunities, & Challenges

The evidence is clear. Increasing flexibility of food assistance sourcing in the next farm bill would provide an opportunity to shorten delivery times and ensure that more of every taxpayer dollar goes to those who need it the most. Transoceanic in-kind food aid is the slowest form of food assistance, and often the most expensive. Ending requirements that food aid must be sourced in the US could allow the US to reach an additional 4 to 10 million more people, at no additional cost (Elliot and McKitterick 2013). With savings of between 18 and 53 percent on some products (Lentz et al. 2013; Margolies and Hoddinott 2014), this is perhaps the single-most effective change that could be made to current US food assistance policies.

Incremental improvements to programming include (1) directly appropriating funds for LRP and expanding the size of the program and (2) increasing the ability of USAID to utilize Title II funds as global need requires by ending the hard earmark / safe box and by expanding use of 202(e) funds. These changes would allow USAID to use more funding for emergency response to reach more people. Prepositioning allow for some time savings but is more expensive than transoceanic food aid. Based on available evidence, in nearly all cases, LRP, cash, and vouchers will be cheaper and faster than prepositioning and then in-kind food aid sourced from the US. Therefore, expanding flexibility to allow for funding these food assistance modalities should be the priority.

A 2015 High Level Panel on Humanitarian Cash Transfers argued that the best available evidence clearly indicates that cash transfers are often, but not always, “first-best.” There are instances when non-cash forms of transfers may be preferred, such as in some conflict environments, when markets are unstable, when inflation is a concern, or when people have limited mobility or access to markets (Upton and Lentz 2012; Bailey and Harvey 2015; Gordon 2015). While much of the earlier debate about food assistance took the form of “cash versus food”, the different types of food assistance are best considered not in competition with one another but as synergistic and complementary tools (Mercier 2014). While cash tends to be the lowest cost and fastest form of food assistance, in some situations, it may not be appropriate. Food assistance programming needs the flexibility to enable cooperating sponsors to sequence different forms of assistance or to combine them in complementary ways.

Concerns that cooperating sponsors would not be able to choose among and effectively utilize food assistance tools appropriate to the local situation have proven, thus far, to be unfounded (ODI 2015; CaLP 2016). Many NGOs have developed the capacity to manage more flexibility in food assistance programming (CaLP 2016). Researchers, practitioners, and donors have identified a series of best practices to identify the best food assistance tools for local needs (Barrett et al. 2009; ODI 2015; CaLP 2016). For example, response analysis can help agencies and donors identify which food assistance tool is most appropriate given a local market context (Barrett et al. 2009). Nonetheless, as GAO (2016) notes, there is a need for careful data collection from both cash and food-based assistance programs to better facilitate comparing the efficacy of different transfers and to monitor the any potential market-related impacts of

transfers. Thus, the primary barrier to reaching more people in need, faster is one of flexibility of funding, not of capacity.

Conclusion¹¹

The Global Food Security Act of 2016 (GFSA), authorized in 2016, calls for a “whole-of-government” approach to addressing global food insecurity, primarily by focusing on smallholder farmers and women (US Congress 2016). The GFSA also seeks to “ensure the effective use of United States taxpayer dollars to further [GFSA] objectives” (Section 3a(9)). As a primary tool for USG responding to immediate food insecurity, particularly in emergencies, US food aid and food assistance is an important complement to the GFSA. Ending statutory restrictions on food aid to allow for greater flexibility will allow current-levels of Title II funds to reach more people, faster.

Improving flexibility can be accomplished in three ways. First, the farm bill should end cargo preference requirements for food aid and protect the positions of merchant mariners. To maintain the availability of trained mariners, employment protections similar to those offered by the National Guard and Reserves ought to be established. Second, effective disaster response requires flexibility in funding. Increasing the share of Title II funding under Section 202(e) that is available to support food assistance programming and decreasing the hard earmark / safe box for non-emergency Title II PL 480 will allow more funds to reach people in emergencies, arguably those who are most in need. Third, requirements that food aid be sourced within the US (i.e., “tied” food aid) should be ended. Locally procured foods, cash, and vouchers are nearly always less costly and faster relative to food aid procured from the US. Cash also provides individuals with the dignity of choice.

The net economic and humanitarian losses caused by the inflexibility of US food aid programs are significant. Every tax dollar spent on US food aid yields only 35-40 cents in food commodities delivered to those in need. In recent years, American taxpayers have spent more FFPA funds on shipping and handling than on food (USAID 2014; US GAO 2015). By way of comparison, Canada has no such restrictions and makes far more extensive use of LRP, cash, and vouchers; Canadian taxpayers deliver almost 70 cents worth of food to those who need help from every food aid dollar spent (Lentz and Barrett 2014).

Further, there are real human costs resulting from the wasteful mandates embedded in the current US food aid legislation. It costs roughly \$125 per child life-year saved to manage the acute malnutrition whose incidence routinely arises in the wake of natural disasters and conflict (Bhutta et al. 2015). Using a conservative, back-of-the-envelope estimates derived from the research cited above, the \$350-400 million/year wasted on cargo preference, monetization and U.S.-sourcing requirements where cash-based alternatives would be cheaper, effectively costs at least 3 million child life-years every year. Given global life expectancy at birth of roughly 70

¹¹ This section draws on Barrett’s testimony before House Foreign Affairs Committee. October 7, 2015.

years, a conservative estimate is that we put at risk 40-45,000 children's lives annually because of antiquated food aid policies.

Opponents of reform deploy several myths about food aid to discourage changes to the status quo. First, the special interests served by cargo preference claim cargo preference advances military readiness. But, as described above, that myth has been conclusively rebutted by multiple recent rigorously conducted studies that find the overwhelming majority of the agricultural cargo preference fleet is out-of-date and/or fails to satisfy the DOD standards for military usefulness (Bageant et al. 2010; GAO 2015; Mercier and Smith 2015; Thomas and Ferris 2015). The Departments of Defense and Homeland Security's clear support in recent years for food aid reforms indicate that cargo preference makes no important contribution to military readiness (US Undersecretary of Defense 2013; US Department of Homeland Security 2014).

Advocates of cargo preference also advance claims that cargo preference supports employment for trained mariners who might need to be deployed for operating ships carrying military cargo. The 2012 reforms that reduced food aid cargo preference coverage from 75 percent to 50 percent do not appear to have led to a single vessel ceasing ocean freight service nor to the loss of any mariner jobs. Further, direct subsidy payments or employment protections, similar to those offered to members of the National Guard, would be far more efficient than this indirect subsidy, which costs taxpayers an estimated \$100,000 per mariner position (Bageant et al. 2010).

Another myth used to maintain the status quo is that food aid purchased in the United States helps American farmers. No careful study supports such a claim. Commodity prices are set by global markets, not by USG purchases of food aid, which are dwarfed by the scale of the commercial market. Food aid procurement has no effect on the prices farmers receive, even for the commodities (such as sorghum, lentils, dried beans or peas) for which US food aid programs absorb five percent or more of domestic production (Mercier and Smith 2015). The basic reason is that US food aid is a drop in the ocean of the global agricultural market. US food aid programs procure hundreds of millions of dollars' worth of commodities in a US agricultural industry that has generates close to \$100 billion in annual net farm income in recent years and is tightly integrated into a nearly \$4 trillion global agricultural economy.

Some opponents of food aid reform claim that purchasing food abroad under cash-based programs compromises food safety and quality. This conjecture is also untrue. A careful recent study in Burkina Faso found the quality and safety of locally procured commodities was equal to or better than that of commodities shipped from the United States (Harou et al. 2013). Spoilage is commonplace in trans-oceanic shipments, for which replacement deliveries may be impossible and/or prohibitively expensive (GAO 2011b). Consumer satisfaction surveys among food aid recipients in multiple countries likewise find no advantage from commodities shipped from the US over those locally procured; if anything, local products are favored and found to be of higher quality (Violette et al. 2013).

A final myth is that cash-based food aid programs are somehow more vulnerable to theft and corruption. In some extreme cases, either cash-based or in-kind food transfers may be at risk of theft, corruption, and fraud. However, as Gordon (2015) notes, well-designed, modern cash-based programs are often at less risk than in-kind food. Cash transfers can take advantage of technologies, such as electronic payments, that can minimize fraud and diversion and can improve accountability. Such technologies are infeasible for in-kind deliveries (Gordon 2015). High rates of loss of food shipments have been commonplace, especially in programs that serve conflict-affected populations (Maxwell et al. 2016). To avoid this issue, USAID, for example, relies on cash-based assistance provided under the EFSP to serve Syrian refugees.

US food aid is a highly visible symbol of Americans' commitment to assist the downtrodden wherever they are in the world. But US food aid programs can do better. The shortcomings of US international food aid programs directly result from statutory restrictions, many of which can be addressed in farm bill legislation. In responding to food emergencies around the world and to the distressingly high level of food insecurity faced by the world's poor, the USAID Administrator and Secretary of Agriculture need flexibility to employ current best practices, as is currently provided through the International Disaster Assistance account but not through US international food aid programs.

The upcoming farm bill has the opportunity to eliminate (1) food aid cargo preferences, (2) the hard earmark / safe box, which protects less critical non-emergency food aid over emergency assistance, and (3) the restriction against cash-based international food assistance, while reinforcing cash availability through (4) enhanced 202(e) funding. It is time to reform food assistance programs to stop wasting taxpayer dollars and unnecessarily putting people's lives at risk.

References

- American Enterprise Institute (AEI) 2015. Food Aid Folly Graphic. https://www.aei.org/wp-content/uploads/2015/07/Food-Aid-Folly_infographic_july24.png Accessed March 5, 2017.
- Bageant. E., C.B. Barrett, and E.C. Lentz 2010. "Food Aid and Cargo Preference," *Applied Economic Perspectives and Policy*, 32, no. 4 (2010): 624–41.
- Bailey, S. and Harvey, P. 2015. "State of evidence on humanitarian cash transfers: Background note for the High Level Panel on Humanitarian Cash Transfers." Overseas Development Institute. Accessed January 24, 2017. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9591.pdf>
- Barrett, C.B. 2015. Hearing on "Reforming Food Aid: Desperate Need to Do Better." Testimony before the House Foreign Affairs Committee. October 7. <http://docs.house.gov/meetings/FA/FA00/20151007/104039/HHRG-114-FA00-Wstate-BarrettC-20151007.pdf> Accessed February 27, 2017.
- Barrett, C.B., and D.G. Maxwell. 2005. *Food Aid after Fifty Years: Recasting Its Role*. London: Routledge.
- Barrett, C.B., and D.G. Maxwell. 2006. "Towards A Global Food Aid Compact," *Food Policy* 31(2): 105-118.
- Barrett, C.B., R. Bell, E.C. Lentz, and D.G. Maxwell. 2009. "Market Information and Food Insecurity Response Analysis." *Food Security* 1: 151-168.
- Barrett, C.B. and E. C. Lentz, *U.S. Monetization Policy: Recommendations for Improvement*, Chicago Council on Global Affairs Policy Development Study Series, December 2009;
- Bhutta, Zulfiqar A., Jai K. Das, Arjumand Rizvi, Michelle F. Gaffey, Neff Walker, Susan Horton, Patrick Webb, Anna Lartey, Robert E. Black (2013). "Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?." *Lancet* 382(9890): 452-477.
- Black, R. E., C. G. Victora, S.P. Walker, Z. Bhutta, P. Christian, M. de Onis, M. Exxati, S. Grantham-McGregor, J. Katz, R. Martorell, R. Uauy. 2013. "Maternal and child undernutrition and overweight in low-income and middle-income countries." *The Lancet*. 382(9890): 427-451.
- Cash Learning Partnership. 2016. "An Agenda for Cash: Part of CaLP's '100 days of cash' initiative." May. Accessed January 20, 2017. <http://www.cashlearning.org/downloads/100daysofcash-agendaforcash---final.pdf>

Elliot, K.A., and W. McKitterick. 2013. *Food Aid for the 21st Century: Saving More Money, Time, and Lives*. Center for Global Development: CGD Brief. June. Available online: http://www.cgdev.org/sites/default/files/archive/doc/full_text/CGDBriefs/3120442/food-aid-for-the-21st-century.html Accessed January 17, 2017.

Food and Agriculture Organization. 2015. *The State of Food Insecurity in the World: Meeting the 2015 international hunger targets: taking stock of uneven progress*. Accessed January 24, 2017. <http://www.fao.org/3/a4ef2d16-70a7-460a-a9ac-2a65a533269a/i4646e.pdf>

Fritelli, J. 2015. "Cargo Preferences for U.S.-Flag Shipping." Congressional Research Service, R-44254, October.

Garg, T. C.B. Barrett, M. I. Gómez, E. C. Lentz, and W. Violette (2013), "Market Prices and Food Aid Local and Regional Procurement and Distribution: A Multi-Country Analysis," *World Development* 49(9): 19-29.

Gordon, L. 2015. "Risk and humanitarian cash transfer programming: Background note for the High Level Panel on Humanitarian Cash Transfers." Overseas Development Institute. May. Accessed January 26, 2017. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9727.pdf>

Harou, A., J. B. Upton, E. C. Lentz, C. B. Barrett, and M. I. Gomez. 2013. Tradeoffs or synergies? Assessing local and regional food aid procurement through case studies in Burkina Faso and Guatemala. *World Development* 49: 44-57.

Herberger, A.J. et al. 2015. *Global Reach: Revolutionizing the Use of Commercial Vessels and Intermodal Systems for Military Sealift, 1990-2012*. Annapolis, MD: Naval Institute Press.

ODI 2015. *Doing cash differently: How cash transfers can transform humanitarian aid: Report of the High Level Panel on Humanitarian Cash Transfers*. Report of Overseas Development Institute and Center for Global Development. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9828.pdf> Accessed January 17, 2017.

Humanitarian Outcomes. 2012. "Final Evaluation of the Unconditional Cash and Voucher Response to the 2011-12 crisis in Southern and Central Somalia." UNICEF. Accessed January 26, 2017. https://www.unicef.org/somalia/SOM_resources_cashevalfinep.pdf

Jaenichen, P. 2014. "Statement of Paul N. Jaenichen Before the Subcommittee on Seapower and Projection Forces, House Armed Services Committee." July 30, 2014. Available at: <http://docs.house.gov/meetings/AS/AS28/20140730/102432/HHRG-113-AS28-Wstate-JaenichenP-20140730.pdf>

Kendall. F. 2013. "Letter to the Chairman of the House Foreign Affairs Committee," June 18.

Lentz, E. and Barrett, C. 2014. "The Negligible Welfare Effects of the International Food Aid Provisions in the 2014 Farm Bill." *Choices*. 29(3).

Lentz, E.C., S. Passarelli, and C.B. Barrett. 2013. "The Timeliness and Cost Effectiveness of the Local and Regional Procurement of Food Aid." *World Development*. 49: 9-18.

Margolies, A. and Hoddinott, J. 2015. "Costing alternative transfer modalities." *Journal of Development Effectiveness*. 7(1): 1- 16.

Maxwell, D., N. Majid, G. Adan, K. Abdirahman, and J.J. Kim. 2016. "Facing famine: Somali experiences in the famine of 2011." *Food Policy*. 65:63-73.

Mercier, S. 2014. "New and Unique Provisions in the Agricultural Act of 2014." Prepared for AGree. March.

http://www.foodandagpolicy.org/sites/default/files/Farm%20Bill%202014_Mercier.pdf

Accessed January 24, 2017.

Mercier, S. and Smith, V. 2015. "Military Readiness and Food Aid Cargo Preference: Many costs and few benefits." American Enterprise Institute. Accessed January 20, 2017.

<https://www.aei.org/wp-content/uploads/2015/09/Military-readiness-and-food-aid-cargo-preference.pdf>

Nikulkov, A., Barrett, C.B., Mude, A. G., and Wein, L.M. 2016. "Assessing the Impact of US Food Assistance Delivery Policies on Child Mortality in Northern Kenya." *PLoS One* 11(12): e0168432. doi:10.1371/journal.pone.0168432.

Overseas Development Institute. 2015. "Doing cash differently: How cash transfers can transform humanitarian aid: Report to the High Level Panel on Humanitarian Cash Transfers." September. Accessed January 20, 2017. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9828.pdf>

Schlubach, M. "Logistics in Focus: U.S. Waterways." Commodity Market Update, Brown Brothers Harriman Company, 2016. Accessed on April 4, 2017: <https://www.bbh.com/blob/17578/6a121b48eb1647ab76337fab48e3001b/logistics-in-focus--u-s--waterways-pdf-data.pdf>

Schnepf, R. 2016. "US International Food Aid Programs: Background and Issues." Congressional Research Service. R41072. September 14. Accessed January 24, 2017.

<https://fas.org/sgp/crs/misc/R41072.pdf>

Thomas, P.J., and W.H. Ferris. *Food Aid Reforms Will Not Significantly Affect Shipping Industry or Surge Fleet*. Centers on the Public Service, George Mason University. June 2015.

United Nations Office for Disaster Risk Reduction (2015). *Making Development Sustainable: The Future of Disaster Risk Management. Global Assessment Report on Disaster Risk Reduction* (Geneva: UNISDR).

United Nations High Commissioner for Refugees (2015), *World At War: Global Trends, Forced Displacement in 2014* (Geneva: UNHCR).

Upton, J., and E.C. Lentz. 2012. "Expanding the Food Assistance Toolbox", in: Barrett, C.B., J. Steets, and A. Binder. (eds.), *Uniting on Food Assistance: The Case for Transatlantic Cooperation*. London: Routledge.

US Agency for International Development (2014), *Food for Peace: Behind the Numbers*

US Agency for International Development. 2016a, *Food for Peace Act, Section 202(e) Funding Report: Fiscal Year 2015*.

US Agency for International Development. 2016b. "Quick Facts." Accessed January 20, 2017. <https://www.usaid.gov/what-we-do/agriculture-and-food-security/food-assistance/quick-facts>

US Agency for International Development. N.D. "Food for Peace Emergency Program: Impact Funds Case Study." Accessed January 20, 2017. <https://www.usaid.gov/sites/default/files/documents/1866/202e%20stories%20FY%202014%20-%20Food%20for%20Peace.pdf>

US Congress. "Foreign Assistance Act of 1948." Available at: http://marshallfoundation.org/library/wp-content/uploads/sites/16/2014/06/Foreign_Assistance_Act_of_1948.pdf

US Congress. 1994. Uniformed Services Employment and Reemployment Rights Act of 1994 (38 USC. 4301).

US Congress. 1996. Maritime Security Act of 1996 (46 App. USC 1101 et seq.).

US Congress 2012. MAP-21 legislation (P.L. 112-141).

US Congress. 2015a. The Bipartisan Budget Act of 2015 (P.L. 114-74).

US Congress. 2015b. Omnibus Appropriations bill for FY2016. Enacted December 22, 2015.

US Congress. 2016. The Global Food Security Act of 2016. (P. L 114-195)

US Department of Agriculture and US Agency for International Development. 2016. "US International Food Assistance Report: FY 2015." Accessed January 20, 2017. https://www.fas.usda.gov/sites/default/files/2016-05/fy_2014_ifar_-_may_13_2016.pdf

US Department of Homeland Security. 2014. Letter dated April 17, 2014.
<http://www.scribd.com/doc/220264499/DHS-Coast-Guard-Letter> Accessed October 4, 2015.

US Undersecretary of Defense. 2013. Letter dated June 18, 2013.
<https://www.documentcloud.org/documents/814075-pentagon-letter-on-food-aid-reform.html> Accessed October 4, 2015.

US Government Accountability Office. 2011a. *International Food Assistance: Funding Development Projects through the Purchase, Shipment, and Sale of U.S. Commodities Is Inefficient and Can Cause Adverse Market Impacts*, GAO-11-636.

US Government Accountability Office. 2011b. *International Food Assistance: Better Nutrition and Quality Control Can Further Improve U.S. Food Aid*. GAO-11-491.

US Government Accountability Office. 2013. *Military Airlift: DOD Needs to Take Steps to Manage Workload Distributed to the Civilian Reserve Air Fleet*. GAO-13-564.

US Government Accountability Office. 2014. "International Food Aid: Prepositioning speeds delivery of emergency aid, but additional monitoring of time frames and costs is needed." GAO-14-277.

US Government Accountability Office. 2015. *International Food Assistance: Cargo Preference Increases Food Aid Shipping Costs, and Benefits Are Unclear*. GAO-15-666.

US Government Accountability Office. 2016. *U.S. Agency for International Development – Nonemergency Food Assistance*. B-327212.

US Government Accountability Office. 2017. *International Food Assistance: Agencies Should Ensure Timely Documentation of Required Market Analyses and Assess Local Markets for Program Effects*. GAO 17-640.

US Maritime Administration, US Department of Transportation. ND(a). "U.S. Flag Privately Owned Merchant Fleet Report." Available at: https://www.marad.dot.gov/copy-of-ds_usflag-fleet20161201/ Accessed December 1, 2016.

US Maritime Administration, US Department of Transportation. ND(b). Estimate:
<http://www.marad.dot.gov/ships-and-shipping/domestic-shipping/> Accessed December 4, 2016.

US Maritime Administration, US Department of Transportation. 2011. "Comparison of US and Foreign-Flagged Operating Costs," September.

US Maritime Administration, US Department of Transportation. 2016. "U.S. Flag Privately Owned Merchant Fleet, 1946-Present." <https://www.marad.dot.gov/wp-content/uploads/pdf/US-Fleet-Summary-Table-1946-2016.pdf>

US Department of Defense, Undersecretary of Defense. 2013. Letter dated June 18, 2013. <https://www.documentcloud.org/documents/814075-pentagon-letter-on-food-aid-reform.html> Accessed October 4, 2015.

Violette, W.J, A.P. Hour, J. B. Upton, S.D. Bell, and C.B. Barrett, 2013. "Recipients' Satisfaction with Locally Procured Food Aid Rations: Comparative Evidence from a Three Country Matched Survey." *World Development*. 49:30-43.

World Food Programme 2016. "Annual Performance Report for 2015." Rome. May 25. Accessed January 24, 2017. <http://documents.wfp.org/stellent/groups/public/documents/eb/wfp282360.pdf>