Regional Developments

In addition to global developments and food policy changes, 2014 also saw important developments with potentially wide repercussions in individual countries and regions. This chapter offers perspectives on major food policy developments in various regions including Africa, the Middle East and North Africa, Central Asia, South Asia, East Asia, and Latin America and the Caribbean. The individual regional sections cover many critical topics:

- Renewed focus on the role of agriculture in broad economic growth, poverty reduction, and food and nutrition security in Africa
- Policy reforms in fuel subsidies, agriculture, and food trade in the Middle East and North Africa
- Economic challenges and opportunities for Central Asia's food system
- Responses to high food inflation and climatic risk in South Asia
- Laying of the groundwork for multilateral cooperation on food policy in East Asia
- Progress in South-South learning initiatives in Latin America and the Caribbean tempered by weather and other shocks

Africa

Ousmane Badiane, Julia Collins, and Tsitsi Makombe

The year 2014 was designated by the African Union as the Year of Agriculture and Food Security and as an occasion to mark the first decade of the Comprehensive Africa Agriculture Development Programme (CAADP), a continentwide framework for accelerating agricultural development.

RECENT GROWTH AND DEVELOPMENT TRENDS

Following CAADP's launch in 2003, Africa's economic performance has been strong. Gross domestic product (GDP) and GDP per capita for Africa as a whole rose, respectively, from 3.9 and 1.8 percent in 1995–2003 to 5.2 and 1.9 percent in 2003–2012.[1] Agricultural growth has also been strong for Africa as a whole, expanding at 6.2 percent in 1995–2003 and falling slightly to 5.1 percent in 2003–2012. Although more recently the growth fell short of CAADP's 6 percent annual growth target, seven countries met or exceeded the target during 2003–2012.[2] Public agricultural expenditures, which are critical to sustaining the recent growth, grew at a remarkable 7.7 percent for Africa as a whole in 2003–2008. However, such expenditures declined by 1.34 percent in 2008–2013 in the aftermath of the 2007–2008 global food and financial crises, which shrank governments' fiscal revenues and overall expenditures. Africa's share of public agricultural expenditures in total public expenditures decreased from 3.7 percent in 2003–2008 to 3.1 percent in 2008–2013, falling short of the CAADP 10 percent target. Nonetheless, seven countries did meet the budget share target or came very close to it, having agricultural expenditure shares of more than 9 percent.[3]

External flows, and especially foreign direct investment (FDI), play an increasingly important role in Africa's economic growth and development. FDI to Africa increased from US$51.7 billion in 2012 to $56.6 billion in 2013 and was projected to reach $60.4 billion in 2014.[4] While FDI has remained concentrated in a few mostly large resource-rich countries, nonresource-rich countries have also seen their share of FDI flows in total GDP increase in recent years.

Poverty and hunger reduction saw steady but slow improvement. For Africa as a whole, the percent of the population living below the US$1.25/day poverty line decreased from 44.4 in 1995–2003 to 41.0 in 2003–2012. The percent of the population that is undernourished fell faster, decreasing from 24.6 to 20.6 between the two periods. Meanwhile, the prevalence of child malnutrition (underweight) declined from 23.1 percent in 1995–2003 to 20.9 percent in 2003–2012. The pace of poverty and hunger reduction has been too slow to prevent the absolute number of poor and hungry from rising, and, on average, Africa as a whole will not meet the first Millennium Development Goal of halving 1990 poverty and hunger rates by 2015. However, there are indications that progress is accelerating: the rates of decline in 2003–2012 were higher than in 1995–2003.

At the country level, progress in meeting key nutrition targets has also remained rather slow. In Africa, only 21 and 8 countries, respectively, are on track to meet one or two of the World Health Assembly targets on nutrition.[5] Sixteen are not on track to meet even a single target.

On the trade front, Africa's share in the world trade of goods and services and of agricultural products, after dropping sharply in the 1990s, began to rise in the 2000s. During the 2000s, agricultural

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exports from Africa increased fourfold, but imports rose 2.5 times faster, widening the agricultural trade deficit.[6] African countries are reported to have also increased their competitiveness and gained shares in regional and intra-African markets for agricultural products.[7] Because of the sharp declines in prior decades, African countries still have a long way to go either to reach their 1960 shares of global trade or to raise intra-regional trade to levels that have been reached by other developing regions.

PROMOTING BETTER NUTRITION, INCREASING INTRA-AFRICAN AND GLOBAL TRADE, AND TRANSFORMING AFRICA'S ECONOMIES

The focus of the African Union's 2014 Assembly of Heads of State and Government was on transforming Africa's agriculture and agriculture's role in stimulating broad-based growth and poverty reduction. At the close of the assembly, African leaders issued the Malabo Declaration, recommitting their respective countries to CAADP's agricultural expenditure and growth targets; principles and values, including the pursuit of agriculture-led growth, regional cooperation, evidence-based planning, dialogue, review, and accountability; and inclusive partnerships with multiple stakeholders, including farmers, the private sector, and civil society. Leaders committed to the ambitious goals of ending hunger and halving poverty in Africa by 2025 through increased agricultural productivity, employment opportunities for both women and youth in agricultural value chains, and effective social protection programs. They also pledged to reduce child malnutrition by lowering the rate of stunting and underweight in children under five years to 10 and 5 percent, respectively, by 2025.[8]

The pledge will help to further drive efforts by countries to scale up nutrition interventions. In 2014, five African countries joined the Scaling Up Nutrition (SUN) movement, bringing the total number of African countries in SUN to 36 (out of a total of 54 SUN members). The five countries are Guinea Bissau, Lesotho, Liberia, Somalia, and Togo. By joining the movement, countries have committed to put in place nutrition-sensitive policies and to work with all key stakeholders and mobilize resources needed to scale up specific nutrition interventions.

As part of the Malabo Declaration, African leaders committed to tripling intra-African trade in agricultural products and services by 2025. This is to be accomplished through investments in trade and market infrastructure and through policy and institutional changes, including establishing a Continental Free Trade Area.[9] These goals and actions will facilitate the trade-related aspirations of the African Union's Agenda 2063, which envisions the free movement of people, capital, goods, and services, as well as significant increases in trade and investments among African countries.[10]

The Regional Strategic Analysis and Knowledge Support System (ReSAKSS) *2013 Annual Trends and Outlook Report*, launched in October at the ReSAKSS Annual Conference, underlines the potential of regional trade to contribute to food security by buffering individual countries' food supplies from shocks. The report states that intra-African trade is increasing, but from a low base: only 34 percent of agricultural exports from African countries stays within the continent. In analyzing three major regional economic communities, the report observes significant potential for regional trade expansion, which could play a greater role in reducing volatility in national food supplies. Its simulation results also suggest that regional trade could be increased significantly through moderate reduction in overall trading costs and removal of nontariff barriers to cross-border trade.[11]

ECONOMIC PARTNERSHIP AGREEMENTS AND TRADE RELATIONS BETWEEN AFRICA AND THE EUROPEAN UNION

In 2014, significant progress was made in advancing Economic Partnership Agreements (EPAs) between the European Union (EU) and several African regions. Replacing the former unilateral preference arrangements, EPAs are reciprocal but asymmetric free trade agreements: African countries receive full access to European markets and open the majority of their markets to the EU over time while maintaining the ability to protect their sensitive products.[12] West Africa, comprising the 15 member countries of the

Economic Community of West African States plus Mauritania, approved its EPA on July 10, 2014. The South African Development Community EPA group initialed its EPA on July 15, and the East African Community initialed its EPA on October 16. The agreements must still be ratified and implemented.

The benefits of EPAs for African countries remain controversial. Proponents of these agreements suggest that liberalizing trade will benefit producers and consumers by lowering the prices of inputs and other imported goods, and that the stability provided by the agreements will make African countries more attractive for investors.[13] They have also suggested that the asymmetry principle allows African countries to keep tariff and quota protection for the most sensitive goods, which are often in agriculture. Detractors argue that (1) increased competition from European imports will hurt producers, undermine local food production and food security, and slow industrialization in Africa,[14] (2) African governments will face decreased revenue from tariffs,[15]and (3) EPAs may impede regional integration efforts within Africa.[16] Others suggest that the real effect of these agreements will be smaller than expected and will not be felt for years.[17]

THREATS TO FOOD SECURITY FROM DISEASE AND CIVIL UNREST

Several serious crises occurred in 2014 that threatened food security and development prospects in the affected and surrounding areas. These included conflicts in northern Mali, northern Nigeria, South Sudan, and the Central African Republic, several of which led to humanitarian emergencies. In addition, West Africa was struck by the largest outbreak in history of the Ebola virus disease, resulting in thousands of deaths and jeopardizing the food security of many more people. The Ebola outbreak, which began in late 2013, spread from Guinea to Sierra Leone and Liberia throughout the spring and summer of 2014. As of February 10, 2015 there were an estimated 9,177 deaths out of 22,894 reported cases, but the actual death rate was thought to be much higher.[18]

The economic impact and the effects of this outbreak on food security could be disastrous. In a report issued in January 2015, the World Bank estimated that the outbreak would reduce 2014 economic growth in Liberia by 3.7 percentage points, in Sierra Leone by 7.3 percentage points, and in Guinea by 4 percentage points. The effects will continue to be felt throughout 2015.[19] As of October 2014, Ebola was reported to have killed hundreds of farmers and caused many others to abandon their farms; trade in the affected countries and the larger region had also been disrupted by market and border closures.[20] Many were forced to reduce their food intake, and disruptions to farming practices and markets led to food shortages, thus increasing food prices further.

At the time of this writing, the Ebola outbreak still had not been contained. While addressing the urgent health needs, measures to prevent the Ebola outbreak from inducing a food crisis are also needed. Possible options include food and cash transfers to affected households and keeping trade open to the extent possible. And at whatever point the crisis finally abates, there will be a need to restore agricultural production capacities, including by providing farmers access to seeds, fertilizer, and other inputs.

In 2014, food security was also severely threatened in countries facing civil insecurity and unrest. For example, civil unrest in northern Mali, northern Nigeria, and the Central African Republic caused significant displacement of people from their homes and countries, led to elevated food prices, and caused a deterioration of the food and nutrition security situation in the affected and surrounding countries. For example, cassava prices in southern Chad rose sharply as a result of disrupted trade flows and the arrival of refugees from Central African Republic; at the same time high rates of acute malnutrition were reported among Central African Republic children in Cameroonian refugee camps.[21]

Cognizant of the increasing threat posed to Africa's food security by various crises and especially the effects of climate change, African leaders also committed themselves during the Malabo Summit to enhancing the resilience of their populations by investing in social security for vulnerable groups and mainstreaming resilience and risk management into their policies and investment programs.

IMPROVING AGRICULTURAL SECTOR GOVERNANCE AND POLICY PROCESSES

A key tool in enhancing mutual accountability and improving policy effectiveness and outcomes at the country level are agricultural joint sector reviews (JSRs). JSRs are inclusive platforms in which multiple stakeholders review agricultural sector progress and hold each other accountable for commitments.

In 2014 an initial group of seven countries took part in efforts to improve agricultural sector review processes in terms of comprehensiveness, inclusivity, and technical robustness. National teams, facilitated by the International Food Policy Research Institute and ReSAKSS, prepared JSR assessments with input from multiple stakeholders that evaluated current agricultural review processes against JSR best practices as well as sector performance and progress against commitments made by governments, donors, and other stakeholders. Most assessments found that countries were making significant progress in advancing mutual accountability, but called for further improvements in inclusivity of agricultural reviews.

Findings of the JSR assessments have been incorporated in countries where JSR processes are ongoing, while in others new JSR processes that reflect JSR best practices have been developed. For example, Malawi's JSR report, launched at its October 2014 JSR meeting, reviewed all the key elements recommended by the assessment. Based the findings of its JSR assessment, Senegal drafted a new ministerial decree to establish a JSR process laying out coordination, key activities, reporting procedures, and roles and responsibilities of stakeholders. Meanwhile Burkina Faso revised the language establishing a JSR to enhance its inclusivity and operations. In addition, findings of the JSR assessments were used in drafting the country-level and overall New Alliance for Food Security and Nutrition reports for 2013–2014.

2015 AND BEYOND

The outlook for Africa's economic and agricultural performance in 2015 is generally positive. Economic growth for Africa south of the Sahara is projected to remain strong, growing at an estimated 5.8 percent in 2015.[22] The growth would largely be driven by continued strong performance in the agricultural and service sectors as well as by investments in infrastructure. In addition, Africa's agricultural trade is expected to continue to expand, owing to recent improvements in economic growth.[23]

In particular, as incomes increase, agricultural imports are projected to continue to rise faster than exports, thus widening the trade deficit.[24] This represents the challenges and opportunities faced by Africa as a result of its recent growth. Recent research on the emerging middle class in Eastern and Southern Africa suggests that income growth is leading to dietary changes and rapid increases in the amounts of processed and perishable foods consumed. Over the next decades, households' own production will likely account for decreasing shares of household consumption as purchased food increases and as supermarkets account for a rising share of food purchases. Although these changes present huge opportunities for the expansion of agribusiness and agribusiness employment, taking advantage of the opportunities while ensuring that smallholders and microenterprises are not left behind will require continued investments and careful policy choices.[25]

The year 2015 promises to be one of intense action taken to both translate the various provisions of the Malabo Declaration into implementable programs and expand efforts to establish comprehensive and regular JSRs to more countries. While Africa's economic prospects for 2015 are strong, the recent Ebola outbreak, if not brought under control soon, could result in even larger negative impacts in the affected and surrounding countries, especially in terms of increased food insecurity and reduced trade and investment. Similarly, protracted civil unrest in northern Mali, northern Nigeria, and the Central African Republic could perpetuate and eventually worsen the negative impacts on livelihoods in the crisis zones. ■

Middle East and North Africa

Clemens Breisinger, Perrihan Al-Riffai, Olivier Ecker, and Danielle Resnick

IN 2014, STABILITY, OR THE LACK THEREOF, continued to be a key factor for development and food security outcomes in the Middle East and North Africa (MENA) region.[1] While several countries saw a resurgence or aggravation of conflicts, Egypt and Tunisia enjoyed increased stability. Despite, or sometimes because of, often difficult security and fiscal conditions, several countries implemented policy reforms, including fuel subsidy cuts. With a main focus on 2015 and beyond, this essay emphasizes how improving capacity for implementation as well as mechanisms of accountability can play a critical role in increasing confidence in government performance and thereby enhance the positive impacts of ongoing and future policy reforms.

STABILITY REMAINS A CHALLENGE TO DEVELOPMENT AND FOOD SECURITY

In recent years civil conflicts and their spillover effects have continued to limit progress in improving economic development and food security in several MENA countries. Syria's ongoing civil conflict caused the economy to contract by more than 40 percent between 2011 and 2013,[2] and perceived food insecurity continued to worsen in 2014 (Table 1). In neighboring Iraq, recent advances made by the Islamic State in Iraq and Syria (ISIS) are threatening economic progress and raising sectarian tensions across the region. In Yemen, the modest progress in improving food security made in 2013 has likely been reversed by the instability related to the recent insurgency by the Houthis. Similarly, the resurgence of fighting in Libya resulted in negative per capita growth in 2013 and 2014. Such civil conflicts as these often have implications for security and stability in other countries of the region. For example, because of the challenges posed by hosting sizable numbers of refugees, peoples' perceptions of law and order have sharply deteriorated in Jordan and Lebanon (Table 1).[3] Additionally, in parts of Lebanon fighting has actually broken out among groups with sympathies to opposing combatants in Syria.

In contrast, transitions in Egypt and Tunisia have helped lead to greater stability and economic development. In Egypt, a strongly improved perception of stability has re-attracted domestic and foreign investment. The most recent data on gross domestic product (GDP) confirm that investment in 2014 was about 20 percent higher than in the previous year, and the economic recovery has been accelerating. National confidence was demonstrated when the US$8.5 billion needed for financing the expansion of the Suez Canal was raised domestically in only eight days. GDP expanded by 3.7 percent in the second quarter of 2014, compared with 2.5 percent year-on-year during the same period of 2013.[4] These positive developments are consistent with the favorable changes in popular perceptions in Egypt about the economy and food security (Table 1). Amid relative stability in 2013 and 2014 and the largely peaceful elections in October 2014, Tunisians also became more optimistic about the economy and employment (Table 1).

MAJOR FOOD POLICY CHANGES AND DEVELOPMENT

In 2014, several countries implemented significant policy reforms in the areas of fuel subsidies, agriculture, and food trade.

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TABLE 1 **Perceptions of changes in political, economic, and social conditions in MENA countries, annual averages between 2012 and 2013 or 2014**

	(1) LAW & ORDER	(2) NATIONAL ECONOMY	(3) EMPLOYMENT	(4) FOOD SECURITY
MENA COUNTRIES	● (Worsened)	■	● (Worsened)	● (Worsened)
Low and middle income countries	● (Worsened)	● (Improved)	● (Worsened)	● (Worsened)
Egypt (2014)	●●●● (Improved)	●●● (Improved)	●● (Worsened)	●●●● (Improved)
Iraq (2014)*		●● (Improved)	●●● (Improved)	●●● (Worsened)
Jordan (2014)	●●● (Worsened)	● (Worsened)	●●●● (Worsened)	●●● (Worsened)
Lebanon (2014)	●●● (Worsened)	● (Improved)	● (Improved)	●●● (Improved)
Mauritania (2013)	●●● (Worsened)	●●● (Improved)	● (Worsened)	● (Worsened)
Morocco (2013)	●●●● (Improved)	● (Improved)	● (Worsened)	●● (Worsened)
Palestine (2014)*	● (Worsened)	■	● (Worsened)	●●● (Improved)
Syria (2013)	●●●● (Worsened)	● (Worsened)	●●●● (Worsened)	●●●● (Worsened)
Tunisia (2013)	● (Worsened)	● (Improved)	● (Improved)	● (Worsened)
Yemen (2014)*	●●● (Worsened)	● (Worsened)	●● (Improved)	●●● (Improved)
High income countries		●●● (Worsened)	●● (Worsened)	●●● (Worsened)
Bahrain (2013)		● (Worsened)	●●● (Improved)	●●● (Improved)
Kuwait (2013)		●●●● (Worsened)	● (Worsened)	
Saudi Arabia (2014)		●●●● (Worsened)	●●●● (Worsened)	●●●● (Worsened)
UAE (2014)		●●●● (Improved)	● (Improved)	●●●● (Worsened)
NON-MENA COUNTRIES	● (Worsened)	● (Improved)	■	● (Worsened)
Low and middle income countries	● (Worsened)	■	■	■
High income countries	● (Improved)	●● (Improved)	● (Worsened)	● (Worsened)

Percent change

●●●● ≥11
●●● 6–10
●● 4–5
● 1–3†
■ No change
Improved
Worsened

Source: Authors' representation based on data from Gallup Analytics (accessed October 10, 2014, www.gallup.com/products/170987/gallup-analytics.aspx).

Note: *Survey was conducted before the recent conflicts. The reported indicator changes measure the percentage point changes in the response rates to the perception-based questions on (1) "feeling safe walking alone," (2) "economic conditions in the country," and (3) "not enough money for food" as well as in (4) Gallup's (un)employment index. †No significant change (falls within the standard survey error range of 1–3). All numbers are rounded.

Fuel subsidy reduction reforms are often viewed as a "triple win" policy: they tend to bring down unsustainably high budget deficits, increase public investments, and improve private investors' confidence. In a drastic move, on July 4, 2014 the Egyptian government increased prices for different types of fuel between 40 and 78 percent, saving an estimated 44 billion Egyptian pounds (US$6.14 billion).[5] In September 2013, Morocco partially indexed its energy prices to the international market price, and in January 2014, it removed all the subsidies on petrol and fuel oil and also significantly cut diesel subsidies.[6] In late 2013, Sudan introduced fuel subsidy cuts, and the prices of fuel and its derivatives increased between 68 and 75 percent.[7] In July 2014, Yemen increased the prices of gasoline and diesel by 60 and 95 percent, respectively, in an attempt to reduce its unsustainable fiscal burden. Public outcry resulting from these reforms varied from nonexistent or minimal in some countries, such as Morocco and Egypt, to violent riots in others, including Sudan. At the extreme end of the spectrum is Yemen, where these reforms likely exacerbated the ongoing civil conflict.

In the face of continuously rising food imports, governments have continued to emphasize the importance of agriculture and food trade for building resilience to food price shocks. In 2014 Egypt prepared several laws related to the support of farmer associations, contract farming, crop insurance schemes, and health insurance for farmers.[8] The government has also supported the cultivation of new land, with the aim of producing more food and creating jobs. To encourage new production efforts, both Egypt and Jordan introduced higher government procurement prices for wheat during 2014.[9] The Jordanian government also increased its strategic wheat reserves more than threefold to a 10-month reserve. To protect the price of local wheat, Morocco continues to control the customs duties of wheat and subsidizes local wheat importers. Following the 40 percent reduction in global wheat prices in 2013, the government raised wheat tariffs from 17 to 45 percent in 2014. By 2015 Saudi Arabia plans to increase its strategic grain reserve capacity by close to 75 percent in order to cover a larger share of its growing annual consumption of wheat.[10] While these policies and public investments are likely to help build resilience, the fiscal sustainability and efficiency of these measures remain uncertain.

At the regional level, progress has been made in improving access to development-related information with the launching of the first blog on food and nutrition security for the region (www.arabspatial.org) at the Committee on World Food Security meeting on October 17, 2014.

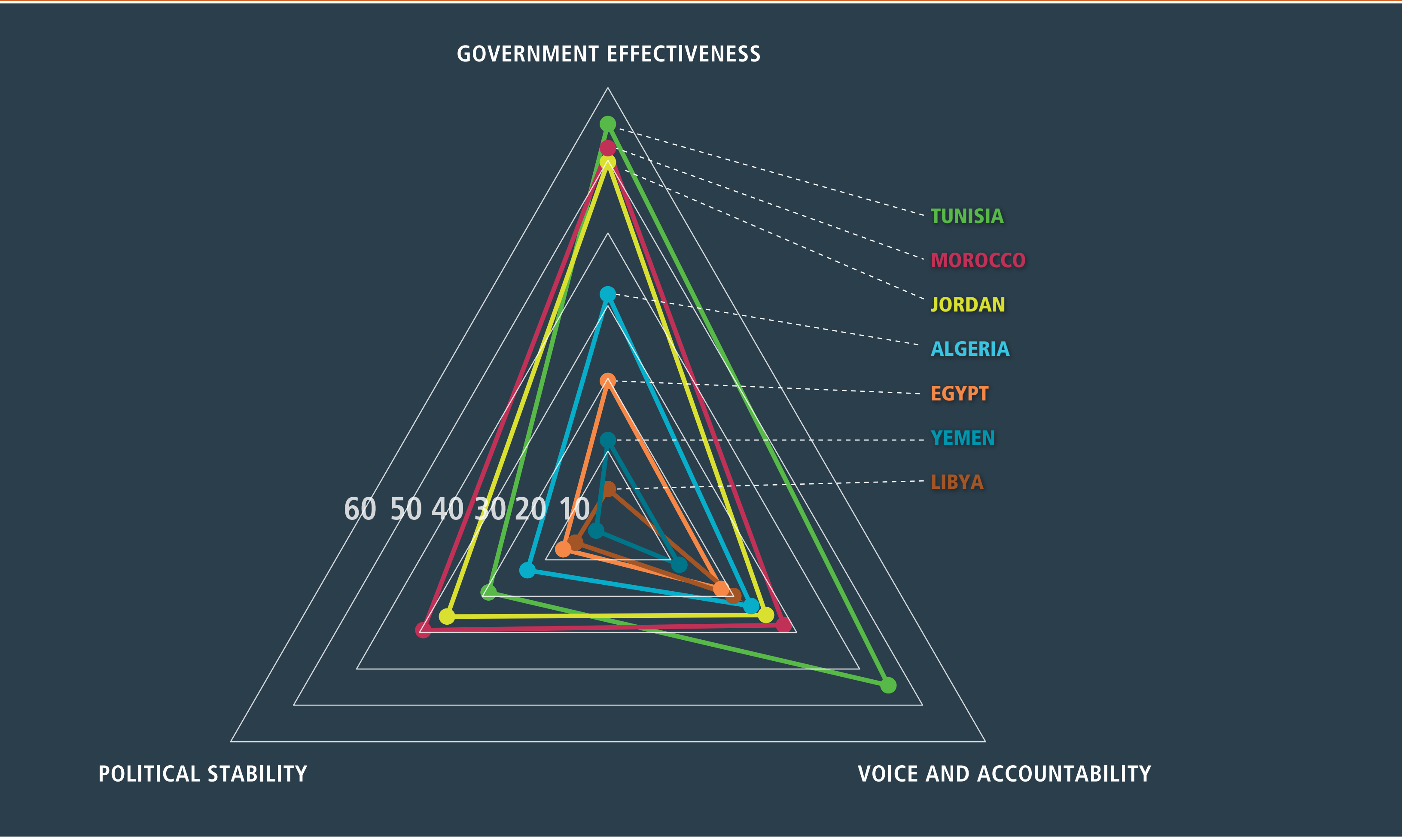
2015 AND BEYOND

Looking ahead in 2015, enhancing stability and good governance will likely become even more important for improving food security. Surely, many of the policy actions that need to be urgently tackled remain the same as before the Arab awakening, such as fostering economic transformation and growth that creates jobs, improving the business climate, shifting from subsidies to targeted income transfers, developing innovative solutions for agriculture and water constraints, improving trade and market integration, and leveraging health, nutrition, and education for food security.[11] Posing a challenge to these pro-poor reforms, however, are persistent problems of governance within the MENA region.

For the most part, policy reforms with redistributive consequences, such as those related to food and fuel subsidies, are contentious because they result in winners and losers, be they real or perceived. Therefore, to gain public support for such reforms, citizens need to have sufficient trust that their government can effectively implement reforms and that the promised benefits from reform will materialize. Furthermore, analyses of successful subsidy reform programs suggest that the reforms involve extensive sequencing and potentially multiple government agencies.[12] To ensure that vulnerable households are not adversely affected, more targeted instruments for beneficiaries (such as smart cards) or the concurrent implementation of social protection policies (such as cash transfers) may need to be introduced. For example, the gradual approach to fuel subsidy elimination that Morocco took in 2014 involved mitigation policies that expanded the coverage and amount of its social safety net and retained subsidies on wheat, sugar, and cooking gas. Egypt, weary from three years of social turmoil, also coupled its fuel subsidy cuts with an expanded and larger safety net, which included increasing the number of subsidized commodities under the food ration program. In juxtaposition, when the Yemeni government reneged on its promise to redirect the savings from fuel subsidy cuts, public outrage ensued and created grievances on which the Houthis mobilized, aggravating civil conflict and lowering fuel prices to pre-reform levels.

One could conclude that successful policy reforms seem to require at least three factors: (1) confidence in government, (2) adequate state capacity for implementation, and (3) effective mechanisms of accountability. Taking these three elements into account reveals the broad diversity of governance quality within the MENA region. For those countries that underwent regime change in the wake of the Arab awakening, trust in government is a particular challenge because current ruling parties and leaders, relatively new and unknown to citizens, do not have a proven track record. But the Tunisian case highlights that low levels of confidence in government can co-exist with relatively high levels of state capacity. According to the World Bank's Governance Indicators, in 2013 Tunisia remained the region's highest-ranked country for the quality

FIGURE 1 Comparisons of governance quality in select MENA countries, 2013



Source: Calculated from World Bank's Good Governance Indicators, http://info.worldbank.org/governance/wgi/index.aspx#home.

Notes: *Government effectiveness* captures the quality of public services, the professionalism of the civil service and its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. *Voice and accountability* reflects whether citizens can select their government and whether they have freedom of expression, association, and a free media. *Political stability* is the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means. Good Governance Indicators range on a scale from 0 to 100; a country with a score of 60 would rank better than 60 percent of the world's countries.

of the civil service and for policy formulation and implementation, followed by Morocco and Jordan.[13] In addition, as highlighted in Figure 1, the country has the highest rankings for voice and accountability, aided by (albeit flawed) multiparty elections and novel tools, such as the *Marsoum 41* website, which allows citizens to directly access public documents.[14] At the other extreme are Libya and Yemen, which are among the lowest ranked in terms of capacity andremain plagued by high levels of social polarization and instability.

Thus, in addition to more commitment for policy reform—as highlighted in the *2013 Global Food Policy Report*—more emphasis needs to be put on tailoring these reforms to countries' existing governance characteristics. For example, where confidence in government is problematic, mechanisms to facilitate consensus and spur buy-in from all major political factions may be necessary. Where state capacity is low, less technical options that involve very gradual changes, such as small-scale pilot reforms, may be the only feasible pathway. ■

Central Asia

Kamiljon Akramov and Allen Park

Central Asia is bracing for the ripple effects of falling commodity prices and declining migrant remittances from Russia, which may undermine the region's recent gains in economic growth and food security. Some Central Asian countries have depended heavily on these now-faltering engines to drive their economic growth during the last decade. This could have important consequences for the region's households, that have recently enjoyed improved food security along with declines in poverty and undernourishment. The prevalence of undernourishment has declined from approximately 17 percent in the late 1990s and early 2000s to less than 6 percent in Kyrgyzstan and Uzbekistan in 2014. In Kazakhstan and Turkmenistan, the rate declined to less than 5 percent. However, the prevalence of undernourishment in Tajikistan continues to persist at high levels (32 percent in 2014).

All countries of the region are facing overlapping burdens of different forms of malnutrition. For example, Tajikistan is struggling with stunting for children under the age of five as well as with anemia among women of reproductive age (WRA). At the same time, Kazakhstan, Kyrgyzstan, and Uzbekistan are having overlapping burdens of WRA anemia and adult overweight.[1] Additionally, all Central Asian countries continue to face various forms of micronutrient deficiency–related public health threats.[2]

Furthermore, stunting rates for children under five—a common measure of chronic malnutrition—remain relatively high throughout the region, varying from 13 percent in Kazakhstan to 26.8 percent in Tajikistan, according to the most recent data from UNICEF, the World Health Organization, and the World Bank.[3] Nationally representative data for Kyrgyzstan and Tajikistan, released in 2014, reveal new insights about the prevalence of stunting in the region's two poorest countries. In Tajikistan, stunting rates for children under five declined from 39 percent in 2007 to 26.8 percent in 2012. On the other hand, stunting rates in Kyrgyzstan remained around 18 percent, representing virtually no change between 2006 and 2012. The evidence also suggests that stunting rates are significantly higher among rural children and those born to mothers with less education. The rates also appear to rise most rapidly for children during the transition period between breastfeeding and solid food consumption, typically between 6 and 24 months.[4]

Downward trends in global food and energy prices helped Central Asian countries to keep food price inflation in check through most of 2014. While stable or declining food prices positively influenced the food security situation in general, declines in global commodity markets, capital outflows from emerging markets, and geopolitical tensions significantly weakened the economies of their major trading partners, particularly Russia. This confluence of events has important implications for regional food policy. Below, we highlight some major external risks that these developments pose for food policy in Central Asia, and also briefly discuss important developments toward the diversification of the agricultural sector in the region.

MAJOR DEVELOPMENTS IN FOOD POLICY

Currency Issues

External factors dominated Central Asia's food policy situation in 2014. Leading among them were the spillover effects of events in Russia. The ruble, which had already been facing downward pressure since

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2013 as part of global capital outflows from emerging markets, plunged further to new depths in 2014, largely as a result of western sanctions and tumbling oil prices. By mid-December, the ruble had lost more than 75 percent of its value against the dollar over 12 months. More than half of the loss took place after the last week of October, coinciding with a similar decline in oil prices. Kazakhstan was also compelled to perform a 19 percent devaluation of its currency in February 2014. This has important implications for the economies of Central Asia through remittances (Kyrgyzstan, Tajikistan, and Uzbekistan), trade (all countries), and direct investment (Kyrgyzstan and Tajikistan).

Remittances

Economic growth in Central Asia has been blunted by deteriorating economic conditions in the Russian Federation, the region's main trading partner and source of remittances. Preliminary data on cross-border money transfers from the Central Bank of Russia suggest that remittance flows from Russia to the region have already begun to decline. For example, in the third quarter of 2014 remittance flows to Uzbekistan declined by about 10 percent compared with the same period in 2013.[5] The economic slowdown in Central Asia also reflects falling global energy and commodity prices. For example, average prices of gold, a major export commodity for Kyrgyzstan and Uzbekistan, declined by more than 15 percent in 2014.

Effects on Food Security

It is too early to accurately assess the impact of these negative developments on household food insecurity in Central Asia. However, past experiences suggest that they may manifest themselves in the region through fewer remittances from abroad, condensed employment opportunities, and reduced wages at home. Past experience also suggests that households are likely to reduce staple food consumption, lower diet quality, and cut health expenditures.[6]

Fallout from the geopolitical impasse between Russia and western countries, which has exacerbated pressure on the Russian economy, presents mixed consequences for Central Asian households. Those reliant on migrant remittances are clearly left vulnerable by the Russian slowdown. On the other hand, the Russian ban on western agricultural products has created a void that Central Asian farmers could fill, particularly for fruits and vegetables. The resumption of northward trade, which was common during Soviet times, would require considerable investment in both export infrastructure and quality control but could further encourage agricultural diversification in Central Asia. This could generate new opportunities for the region's horticulture and livestock sectors, especially in combination with growing domestic demand for fruits, vegetables, meat, and dairy products. Steady economic growth in the past decade, a growing population, and increased urbanization have all contributed to an increased domestic demand for these products.

In fact, agricultural diversification through allocation of more arable land to horticulture and feed crops has received increased government priority in recent years. For example, Uzbekistan's horticultural products are rapidly becoming an important source of the country's export earnings. Still, wheat and cotton remain the centerpiece of agriculture in countries like Tajikistan and Uzbekistan; a move toward higher-value products could have an especially positive impact on household incomes there. Agricultural diversification may also provide the added benefit of improving household dietary diversity, including nutrition outcomes for children and rural households.[7] Moreover, the arid climate that prevails throughout much of Central Asia (with the notable exception of northern Kazakhstan) lends itself well to a variety of popular water-sparing horticultural products, which may prove crucial in a region fraught with water issues. For these reasons, countries such as Kazakhstan, Tajikistan, and Uzbekistan are making efforts to diversify their agricultural production.

Other Challenges

Considerable barriers remain, however, affecting all aspects of the value chain in the horticulture and livestock sectors. These barriers include limited knowledge of modern technologies and farm practices, inadequate infrastructure and market information systems, weak food-processing and storage capacity, and limited institutional and technical capacity to meet phytosanitary and food safety standards, which are especially crucial for meat and dairy products. National governments, together with development partners, such as the US Agency for International Development (USAID) and the World Bank, are working to address these obstacles. For example, Tajikistan is working with USAID's Feed the Future initiative to boost horticulture and livestock production and agricultural diversity, thereby improving food and nutrition security. These programs plan to accomplish the latter goal by boosting household income and increasing dietary diversity in households in Tajikistan's poorest southern districts.

Similar efforts are also under way in Uzbekistan, where the government is also promoting a movement toward horticulture. In June, the government sponsored a conference of high-level policymakers from Uzbekistan and numerous experts from abroad that specifically sought to find ways to increase horticultural production in the country. The meeting also produced policy recommendations aimed at enhancing research and technology sharing, improving seed breeding and production, and encouraging investment throughout the agricultural sector. Shortly thereafter, the Uzbek government completed a US$150 million loan agreement with the World Bank for a horticulture development program.

2015 AND BEYOND

In 2015, Central Asia's food systems will likely remain vulnerable to external risks. The risks in this regard stem from economic developments in major trading partners, particularly Russia, and trends in global energy and commodity markets, such as gold, aluminum, cotton, and cereals. Uncertainties in the Russian economy as a result of international sanctions, low oil prices, and the country's overall weak performance will most likely have associated effects in the form of lower remittances, affecting macro- and household-level food insecurity in Kyrgyzstan, Tajikistan, and, to a lesser extent, Uzbekistan. At the same time, these countries can take advantage of the Russian ban against agricultural imports from European countries by increasing their exports of fruits and vegetables to Russia. Policymakers will have to take food price inflation into consideration while managing economic growth and employment opportunities.

Regional governments appear to be taking action to buffer their economies from looming problems. In November, Kazakhstan's president, directly citing geopolitical events affecting the region, announced a three-year $9-billion infrastructure development program financed by the country's national reserve fund. In addition, national governments in the region are attracting Chinese investments to develop their infrastructure and counterbalance external risks associated with both the anticipated slowdown in Russia and the downward trends in global commodity markets. China, which has secured bilateral strategic partnerships with all five Central Asian countries, offers both risks and rewards.

On the other hand, poor cooperation among the Central Asian countries themselves is a major constraint undercutting food security in the region. In addition to policy and regulatory constraints, regional road infrastructure is weak, with all countries in the region scoring less than three on a scale of seven in the World Economic Forum's Global Competitiveness Index for 2014–2015.[8] Furthermore, Kyrgyzstan is scheduled to join the Eurasian Economic Union of Russia, Belarus, and Kazakhstan in 2015. This could further complicate regional dynamics and pose new challenges for food security in the region. ■

South Asia

P. K. Joshi

Despite having made substantial efforts to ensure food availability for the poor, South Asian countries still face the key challenges of improving food and nutritional security and reducing poverty.

On the plus side of the ledger, the region has improved its position on the International Food Policy Research Institute's 2014 Global Hunger Index (GHI), with its nutritional outcomes ranking having moved from "alarming" in 2013 to "serious" in 2014 (a rise from 18.2 to 20.7 on the index). India in particular has made significant strides in boosting its nutritional outcomes. The proportion of the undernourished population declined from 21.5 percent in 2004–2006 to 17 percent in 2011–2013. Similarly, the prevalence of underweight in children under five years of age also decreased from 43.5 percent in 2004–2005 to 30.7 percent in 2011–2013.

Yet South Asia is still home to about one-third of the world's poor, ensuring that food and nutritional security remain at the top of the region's agenda. Among the biggest challenges faced by South Asian countries during 2014 were high food inflation and intense climatic risk. Average food inflation during 2014 ranged between 7 and 9 percent—a rate much higher than general inflation. The region also experienced delayed monsoons, which led to both floods and droughts that adversely affected food production. Particularly serious floods in Bangladesh, India, and Pakistan displaced large numbers of people, affecting their livelihood opportunities and decreasing food production. These twin stressors of high food inflation and climate risk may even work to dampen the ability of countries in the region to pursue accelerated economic growth, alleviate poverty, and end hunger.

This essay summarizes the main country-specific events that occurred in South Asia during 2014 and concludes with a look at likely developments in 2015 and beyond.

INDIA

Governmental Elections in India

A major change in the region in 2014 was the election of a new government in India. The 16th general elections for parliament were held April–May, with the National Democratic Alliance, led by the Bharatiya Janta Party, defeating the ruling United Democratic Alliance. India is the largest democratic country on the planet; close to 814.5 million people (about 64 percent of the population) were eligible to vote in the election.[1] The key issues were: (1) food inflation, (2) "black money" and corruption at high levels of government, (3) youth unemployment, and (4) reforms for inclusive and equitable development. The biggest outcome of the election was that it brought an end to the coalition era, in place since 1989, that had obstructed the governmental decisionmaking process. The one-party majority that has resulted may move a long-awaited reform agenda forward. The elections are also expected to lead to enhanced regional cooperation in South Asia; the government has already begun developing bilateral relations with neighboring countries with an eye toward building trust through trade and knowledge exchange.

Mainstreaming Financial Inclusion of the Poor

The new government's reform agenda is also seeking to step up investment, accelerate economic growth, and enhance welfare measures. Goals include reforming labor, insurance, and the financial sector to generate more employment opportunities and enhance financial inclusion for the poor.

In terms of financial inclusion, most notable is the new mega program "Pradhan Mantri Jan-Dhan

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Yojana," or the Prime Minister's Plan for People's Wealth.[2] The goal here is to provide universal access to bank accounts that provide overdraft protection as well as accident and life insurance. The prime minister hopes that by January 2015 at least 75 million such bank accounts, which have a zero balance requirement, will be opened in both rural and urban areas. Encouragingly, in a period of less than three months, 82.62 million bank accounts were already opened with more than US$1.076 billion in deposits.[3] The scheme is considered to be a prelude for direct cash transfers for food and fuel to the targeted beneficiaries in selected market-developed areas—transfers that will reduce the subsidy burden and minimize leakages. The current food, fuel, and fertilizer subsidies, which continue to increase, are imposing heavy pressure on the government exchequer. Such subsidies cost US$41 billion in 2014–2015—the equivalent of nearly 15 percent of total spending and about 2.5 percent of India's gross domestic product (GDP).[4] It is expected that direct cash transfers to beneficiaries, especially for food and fuel, will significantly reduce public expenditure. Additional savings can be gained by encouraging greater participation by the private sector, reducing transactions costs, and minimizing leakages.

FDI in Multi-Brand Retail

Unfortunately, the new Indian government took action to reverse the decision taken by the previous government in 2013 to allow foreign direct investment (FDI) in multi-brand retail. At present, 100 percent of FDI in single-brand retail is allowed. Single-brand retailing limits the ability of foreign retailers to offer competing products from multiple brands to consumers. The previous government had sought to relax this regulation and also to encourage vertical supply-chain integration that links farmers with retailing, thereby reducing the transaction costs of moving agricultural value-added products from the farm to consumers' plates. However, the new government has put on hold those rules that sought to allow FDI in multi-brand retailing. It should reconsider this decision, given that the original measure was expected to (1) bring improved technologies for modernizing food value chains, (2) increase investment in the back end to improve delivery systems, (3) improve marketing efficiency and better integrate markets, (4) reduce problems of adulteration and bring about increased compliance with food safety standards, and (5) promote agroprocessing and generate employment opportunities for rural youth.[5]

NEPAL

Nepal has recently assembled a constituent assembly to draft a new constitution for the country. In terms of agriculture, the country has already developed an Agricultural Development Strategy. Looking out 20 years, this strategy seeks to reform the country's agricultural policies and double its investment in agriculture. Nepal is largely an agrarian economy: the agriculture sector contributes about one-third of gross GDP and is the country's major source of employment. Implementation of the strategy is expected to significantly reduce poverty, improve food security, and achieve sustainable development. To accelerate agricultural growth, Nepal is undertaking efforts to reform such key sectors as seeds, fertilizer, and agribusiness and trade.

PAKISTAN

In 2014 Pakistan introduced a new credit guarantee scheme of financial inclusion for small and marginal farmers, one that encourages banks to lend to those who previously have not had access to banking facilities. This program guarantees that up to 50 percent in credit will be given by the financial institution to farmers who own up to five and ten acres, respectively, of irrigated and unirrigated land. Another program introduced that year is a crop-loan insurance scheme to cover the risk posed by natural calamities, climate change, and plant disease.

These programs are expected to increase private investment in agriculture and enhance the risk-taking ability of farmers seeking to adopt improved technologies. Given that similar schemes in other South Asian countries have had mixed outcomes in the past, the effectiveness and long-term financial viability of these programs will need to be carefully monitored. In terms of agricultural insurance, India is now considering expanding its weather-based and index-based insurance products to "agricultural income insurance." Such a move would protect farmers' income in the event of a fall in prices of food commodities while also guarding against climate risks in production.

BANGLADESH

South Asian countries have had a mixed record in terms of encouraging the development and commercialization of genetically modified (GM) crops. This is true despite the existence of biosafety policies, especially in terms of GM-crop cultivation. Earlier, India allowed the commercial cultivation of *Bacillus thuringiensis* (Bt) cotton but did not approve the release of Bt eggplant. The Bangladeshi government made the bold decision in 2013 to allow farmers to grow genetically modified Bt eggplant commercially under government supervision. In 2014, 20 small eggplant farmers were given Bt seedlings for cultivation under government supervision in four representative regions well suited to the varieties. Earlier studies have shown that Bt eggplant increased yields by 30 percent and reduced pesticide use by about 70–90 percent, resulting in a net benefit of about US$1,868 per hectare.[6]

The government plans on bringing about 40 percent of the total 50,000-hectare eggplant area under Bt eggplant cultivation in the next five years.[7] The Indian government, though, has not approved the commercial release of Bt eggplant, citing concerns about food safety and biodiversity. However, there is no scientific evidence to substantiate such concerns, and the initial Bangladeshi experience (although it is based on a very small sample) suggests the potential for significant benefits to small farmers. This common vegetable is largely grown in high poverty-ridden areas by farmers who cultivate very small plots. Savings on pesticide costs, increases in yields, and low crop damage all result in higher returns to farmers. Higher yields and lower costs of production for farmers can also result in lower prices of this vegetable, thereby benefiting consumers. This small technological intervention may therefore be a win-win proposition for farmers as well as consumers.

Progress has also been made in terms of non-GM crops, such as how Bangladesh, in collaboration with the International Rice Research Institute, developed and released zinc-biofortified rice for cultivation.[8] The non-GM biofortified rice variety contains 19 milligrams of zinc[9] and 9 percent protein per kilogram. It is worth mentioning that a large part of the population in South Asia is trapped by hidden hunger,[10] lacking key minerals, including zinc. Because rice is the main staple food crop in Bangladesh, this zinc-rich rice can help reduce child mortality and stunting rates by decreasing the incidences of diarrhea and pneumonia in the country.

SRI LANKA

Sri Lanka intends to amend its Seed and Planting Material Act, which mandates compulsory registration for farmers and certification of all seed and planting material by the government's Seed Certification Service. The act prohibits sharing or exchanging seeds and planting materials, unless farmers are registered with the service. The aim of the act is to protect farmers' interests from the seed industry—to avoid the marketing of their seed and plant material produced without sharing the benefits with the farmers.

2015 AND BEYOND

A main challenge facing South Asian countries is to reduce both poverty and undernourishment. Higher subsidies are a major constraint in investment in creating productive assets and ensuring food and nutritional security. Major reforms are needed to boost investment in agriculture, generate employment opportunities, and improve social safety net programs. The challenge for reforms in 2015 is how to better target the poor for various social safety net programs, and how to improve the efficiency of such programs. The reform process needs to increase the participation of the private sector in agribusiness, rural development, and grain management. It would be desirable to (1) reallocate government priorities and resource allocations away from direct input subsidies and toward such areas as agricultural science and rural education, (2) remove some of the governments' more distortionary market interventions, and (3) improve the ease with which private firms can invest in input and commodity markets as well as engage in value-added activities in the sector. ■

East Asia

Kevin Chen and Peter Timmer

East Asia is the fastest-growing region in the world in terms of growth in gross domestic product, and is also the most successful in reducing hunger and undernutrition.[1] At the same time, however, the region is increasingly challenged by a wide array of threats to its food security. For example, the industrialization that helped fuel East Asia's outstanding growth over the past several decades is argued by some observers to have also brought increased concern over soil pollution and food safety.[2] High-profile food safety and transboundary animal disease incidents included the Shanghai Husi expired meat scandal and the outbreak of AH7N9 in China.[3] Although such food safety scares also struck the region in 2013, sales estimates for companies involved in scandals for both 2013 and 2014, such as McDonald's, were more discouraging in 2014 (falling from sales growth of −1.4 percent for 2013 to −9.9 percent).[4]

Meanwhile, the region has long been vulnerable to natural disasters, including typhoons, earthquakes, floods, and tsunamis. With accelerating climate change, stronger typhoons and floods could further threaten the significant food security gains made thus far.[5] The region's continued economic development and population growth will likely exacerbate existing resource scarcity and environmental stress, and the region is expected to become much more dependent on food imports in the coming decades.[6]

Many East Asian countries are also struggling with obesity rates so severe that the problem has been labeled "Asia's nutrition time bomb."[7] There is a need for the formulation of a nutrition-based food security strategy that will involve a significant expansion of the traditional mandates of the region's ministries of agriculture.

Despite all these emerging challenges, traditional food security issues such as hunger and undernutrition have not been completely solved in the region. True, according to the 2014 Global Hunger Index (GHI), over the past 20 years the region has achieved the greatest percentage reduction (54 percent) in its GHI score (which is based on proportion of underweight children, proportion of undernourished people, and child mortality rate).[8] However, the total number of people who continue to be afflicted by hunger persists at above 220 million—or more than 10 percent of the world's population.[9] Reaching these remaining poor and hungry households will be increasingly difficult as the region's food system has become much more diversified and complex.

One area that has recently gained increased attention is the risk that threatened fish populations pose to East Asian diets.[10] Fish has played a critical role in improving China's food security and nutrition, as it also has in other East Asian countries. A report released at the end of 2013 by the World Bank, the Food and Agriculture Organization of the United Nations, and the International Food Policy Research Institute highlights the importance of fish for global food security and nutrition.[11]

MAJOR THEMES IN FOOD POLICY IN 2014

Sound policy will be the key to ensuring the region's food security. In 2014 there were a number of encouraging developments along the food policy front. For example, regionwide commitment on food security and safety cooperation has been reaffirmed by the Beijing Declaration on Asia-Pacific Economic Cooperation (APEC) Food Security and the APEC Food Safety Beijing Statement of 2014.

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There were also policy developments in individual countries:

- In China, the 2014 Number 1 policy document signaled a move away from the country's traditional food self-sufficiency stance and toward increased reliance on international trade. It also highlighted reform of the land tenure system, the strengthening of farmer property rights, and the entrance of private capital into cropping.
- In Indonesia, several aspects of rice policy are receiving attention. Foremost is a redesign of Raskin, a large, expensive, and mostly ineffective program that physically delivers rice to the poor. The program was implemented by the new government, led by President Joko Widodo ("Jokowi"), which is clarifying its agenda for the food and agricultural sector. There is also a clear need to revise the role of BULOG (the state logistics agency), not just in light of the Raskin reforms but also because the agency's role in setting rice prices has come to the attention of Indonesia's powerful Anti-Corruption Committee. However, the dominant role of food and agriculture populist themes in the presidential campaign—and especially the repeated promises to achieve self-sufficiency in rice, sugar, and corn within three years—raises serious concerns about Indonesia's commitment to the 2015 integration of the Association of Southeast Asian Nations (ASEAN), which requires open trade in all goods, except for a small handful of designated special commodities. The ASEAN community will be following developments in Indonesia very closely.
- In Viet Nam, a major new policy aims to restructure the agricultural sector action plan. Agriculture in Viet Nam faces several key challenges, including a low income level for current agricultural laborers, scattered land holdings suitable only to small-scale production, a low rate of return of investment in agriculture, and environmental degradation. The key aim of agricultural restructuring is to build a modern, effective, and environment-friendly agricultural sector with high added value that will generate jobs, provide high income for farmers, and ensure food security in a sustainable manner.
- In Thailand, which could soon resume its position as the world's top rice exporter,[12] the new military government that came to power is pushing through major agricultural policies related to the dissolution of the failed rice subsidy scheme.[13] Under this scheme a stockpile of 18 million tons of rice had been procured by the government from farmers at inflated prices, resulting in losses totaling US$9.9 billion.[14]
- The Philippines has pushed back its rice self-sufficiency target to 2016 and continues to struggle with the damage to its food supply caused by super-typhoon Haiyan.[15]
- The opening of Myanmar and the restructuring of its agricultural sector continue to address a number of institutional, policy, and structural constraints[16] that have hampered the country's agricultural growth. However, the political situation domestically remains delicate.[17] Myanmar's reliance on rice exports to China has also raised concerns. The exports are legal from the point of view of Myanmar but have been called into question by Chinese authorities. This lack of clarity has likely depressed rice prices in Myanmar to a level that is forcing farmers to curtail cultivation.

2015 AND BEYOND

The groundwork for future food policy cooperation is also being built up across a range of multilateral arenas. There are positive indications that policymakers across the region are shifting into higher gear not only to reduce hunger but to eliminate it altogether. A number of countries in East Asia are implementing the Zero Hunger Challenge at the national level, following global and regional initiatives. The challenge was initially launched by United Nations Secretary General Ban Ki-moon. In 2014, the first in the region to launch this challenge was Timor-Leste. Myanmar, Nepal, and Viet Nam have also committed to joining the challenge.[18] Current achievements in reducing hunger and undernutrition in China and Viet Nam have demonstrated that it is feasible for the world to end hunger and undernutrition by 2025.[19]

Within the ASEAN community, an Ad Hoc Task Force on Development of Vision, Objectives, and Goals for ASEAN Cooperation in Food, Agriculture, and Forestry (ATF-FAF) toward 2020 has been established. The imminent creation of the ASEAN Free Trade community (in 2015) is on the committee's agenda, as are the relevant implications of the ASEAN plus THREE for regional rice buffer stocks. The 2014 release of the FAO regional rice strategy identified six key objectives: (1) increasing productivity, nutrition value, and sustainability, (2) enhancing value chains and reducing post-harvest losses, (3) mitigating/adapting to climate change and reducing risk, (4) conserving the environment and heritage, (5) promoting fair and efficient markets and trade, and (6) improving organization of production and empowering youth and women.[20] The strategy has already gained traction and has likely inspired related national-level initiatives as well, such as in the reforms in Indonesia and Viet Nam described in the preceding section.

Looking toward the future, the region continues to focus on major food security challenges caused by the 2008 food price crisis, although a certain sense of satisfaction is justified as the region has not experienced another rice price spike, even though global markets for wheat and corn have been quite unstable. Part of this success is arguably attributable to effective multilateral cooperation, especially through ASEAN and its "plus 3" partners, which helps ensure both regional and global food security.[21] ■

Latin America and the Caribbean

Maximo Torero

Latin America and the Caribbean (LAC) are home to one third of the world's fresh water, the most of any developing region when measured on a per capita basis, and to more than one quarter of the world's medium- to high-potential farmland.[1] Little wonder that the LAC region as a whole is the largest net food-exporting region in the world. As shown in Figure 1, the region's total share of exports has increased more than 7.5 times since 1991, while imports measured in calories have increased by 3.5 times in the same period. In 2013 and 2014, these trends were reflected in the roles that Argentina, Brazil, Paraguay, and Uruguay played in increasing the world's supply of wheat, corn, and soybeans.

Given the important role LAC plays in global food production, this essay explores developments in the region's food policy in 2014 and then suggests policy directions for 2015 and beyond.

MAJOR DEVELOPMENTS IN 2014

In recent years, several countries in the LAC region—and notably Brazil's *Fome Zero*[2] and *Brasil sem Miséria*[3] programs in particular—have excelled in the implementation of policies to reduce food insecurity and malnutrition. This has led to several South–South learning initiatives, such as the World Food Programme's Purchase for Progress program or the Zero Hunger Challenge, launched by UN Secretary General Ban Ki-moon, which led to the second International Conference on Nutrition. The conference took place in November 2014 and put nutrition and sustainable food systems at the forefront of the international development agenda.[4]

Despite the aforementioned successes, and as shown in Figure 2, agricultural productivity is still behind in the region.[5] Three major shocks in 2013 and 2014 served to illustrate just how vulnerable Central America still is within the LAC region:[6] a coffee rust epidemic, a significant drought, and the child migration crisis. The third shock, in part a product of the first two, was also a consequence of significant deficiencies faced by El Salvador, Guatemala, and Honduras, which include a lack of access to infrastructure, health services, and security as well as severe malnutrition and stunting.

Extreme Vulnerability within the LAC Region

Coffee rust was not the first serious epidemic ever to hit the region, as previously severe cases were observed in Costa Rica (1989/1990), El Salvador (2002/2003), and Nicaragua (1995/1996). It was, however, the first to strike hard and wide in several agricultural-producing countries simultaneously. Some climatic factors could explain this unusual behavior, especially higher temperatures or increases in rainfall.[7] The resurgence of the disease was also associated with a 30 percent reduction in coffee prices during 2012,[8] and when prices could not cover production costs, producers stopped investing in preventive or palliative treatments.

On average, 80.4 percent of the coffee plantations in the region are susceptible to rust varieties, which have caused large losses in coffee production. As reported by PROMECAFE,[9] estimated harvest losses for Central America for 2012/2013 were approximately 20 percent—the equivalent of 2.8 million bags of coffee lost to the disease. The most affected countries were El Salvador, Guatemala, and Honduras, having faced production cuts of 15–31 percent during the 2012/2013 harvest. This epidemic heavily defoliated and destroyed enough branches that nearly 30 percent of the area that produces Central American coffee had to undergo severe pruning or be put directly in renewal,

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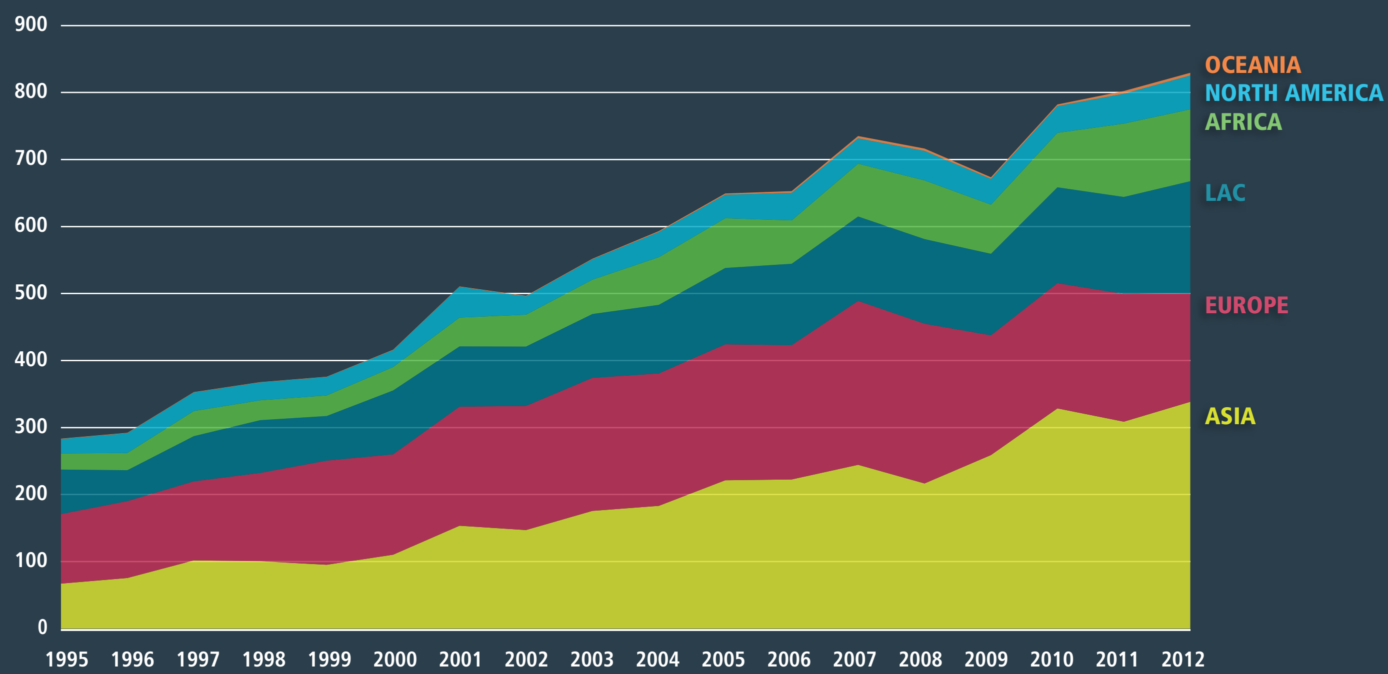
FIGURE 1 LAC exports to the world in trillions of calories



Source: L. Deason and D. Laborde, *Trading Food: A Nutritional Assessment,* IFPRI Discussion Paper (Washington, DC: International Food Policy Research Institute, forthcoming).

implying additional losses for crops in 2013/2014 and 2014/2015. The numbers tell the story: because 1.9 million Central Americans rely on coffee as their main source of income,[10] when demand for labor during this period decreased by 16–32 percent while wages decreased by 14–22 percent, 160,000 families found themselves facing food insecurity.[11]

The year 2014 was also critical for weather shocks, with organizations including the World Meteorological Organization, Famine Early Warning Systems Network (FEWS NET), and experts at the XLIV Foro del Clima de América Central all predicting El Niño to bring severe droughts in the region. By the close of July, it was estimated that the droughts had already affected 40,000 households in Guatemala and 72,000 in Honduras. By the end of August, the estimate for Guatemala had risen to 250,000 households, according to Secretaría de Seguridad Alimentaria y Nutricional (SESAN). Maize losses that July were predicted to be 10 percent in El Salvador, 40 percent in Guatemala, and 70 percent in Honduras. By August, the estimate for Guatemala was updated to 70 percent, according to SESAN.

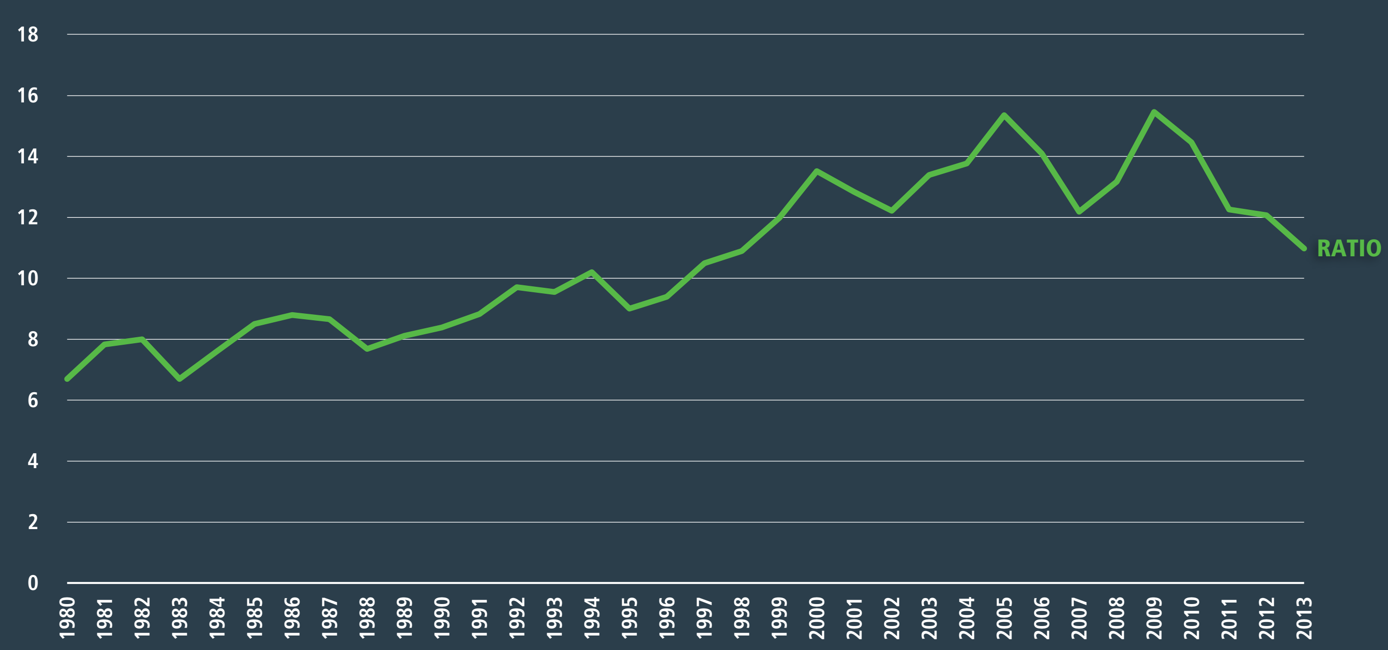
The droughts—particularly the negative economic consequences they imposed on rural households' income-generating activities and purchasing power—may have constituted an important additional factor behind the wave of unaccompanied alien children's migration to the United States. The number of such children from Central America seeking entrance to the United States has been increasing rapidly in the last few years and surged in 2014, prompting President Obama to declare the "wave of unaccompanied children across the US-Mexican border an *urgent humanitarian situation*" on June 2, 2014.[12] In the first eight and half months of 2014, the number of apprehensions climbed to 52,000 children. If extrapolated at the same rate to the end of the fiscal year, the figure would reach roughly 73,000, but news reports have cited an internal Department of Homeland Security memorandum estimating that for 2014 apprehensions could have totaled 90,000.[13] The challenge of housing tens of thousands of unaccompanied Central American migrant children while the US government decides whether to unite them with US-based family members or deport them is overwhelming policymakers at every level in both the United States and the children's countries of origin. [14]

Although there are important push-and-pull factors behind the increase in such migration, focusing on the key regions where the children originate from suggests that these children come from the most food-insecure regions in El Salvador, Guatemala, and Honduras.[15] The Human Development Index for 2013 ranks El Salvador 115th, Guatemala 125th, and Honduras 129th among 187 countries, outranking only Nicaragua (132nd) in the LAC region.[16] This is particularly troubling in the case of Guatemala, considering it is the biggest economy in Central America (with a gross domestic product of US$53.8 billion in 2013).

2015 AND BEYOND

The Brazilian experience shows that if we want a strategy to address food security going forward, it is essential not to rely on what is normally known as sustainable economic growth. The decline of stunting from 37.1 percent to 7.1 percent over the last 33 years in Brazil was particularly steep in the last 10 years of the period (1997–2007).[17] This was a time when the gaps between poor and wealthy families with children under age five were also reduced in

FIGURE 2 Ratio of agricultural productivity in the United States to that in Latin America and the Carribean



Source: World Bank, *World Development Indicators, 2013* (Washington, DC, 2013).

Note: Agricultural productivity is measured as agriculture value added per worker in constant 2005 US$.

terms of purchasing power, reproductive health indicators, and access to education, health care, and water and sanitation services. Despite this success in implementation and South–South learning, it is important to mention that in the case of Brazil, poverty has fallen; however, based on the literature, it is impossible to know the impacts of the various interventions on well-being among smallholders. Impact evaluations among agricultural interventions have been nearly nonexistent; this is true even for *Programa de Aquisição de Alimentos*, Brazil's food purchase program, which has now been exported to five African countries. The major program that does not have this caveat is *Bolsa Família*, which solely distributes cash to families that fall below the poverty line and meet the program conditions.

The first policy recommendation is to improve the way government interventions are targeted and prioritized within the countries. This includes (1) creating a typology of microregions that allows us to capture the heterogeneity of small farmers to better target interventions; (2) strengthening the institutional and infrastructural base necessary to respond to heterogeneity among smallholders; (3) helping rural smallholders become more competitive in the production and marketing of their products; and (4) improving knowledge about the impact those complementary investments in rural institutions and infrastructure, both capital-intensive infrastructure (roads, electricity, potable water and drainage, water for irrigation, and telecommunications) and post-harvest technologies (storage services, processing infrastructure, and the like) may have on market development and poverty reduction.[18]

Second, governments should focus on five pillars: agricultural technology, agricultural health and food safety, rural infrastructure, rural labor, and facilitating the provision of risk-coping mechanisms for poor populations and providing access to two key financial services—financial markets and insurance mechanisms.

As a third recommendation, Central America needs to improve its food and nutrition security by, as in the case of Brazil, significantly reducing the gaps between poor and wealthy families. This should be done not only by reducing the difference in terms of purchasing power but also by increasing the poor's access to education, health care, water and sanitation services, and reproductive health facilities. Clear examples of such programming already underway in the region are in Costa Rica and the Dominican Republic, as well as Guatemala's Hunger Zero Pact.

In summary, it is important to increase South–South learning within the LAC region—success stories need to be spread across the region. It is also essential that Central America invest significantly in a common policy among countries to strengthen their resilience to the effects of diseases like coffee rust and of shocks like drought. Finally, if properly executed to the scale and public budgets of other countries, good comprehensive programs like those in Brazil can be implemented cost-effectively. ■

NOTES

CHAPTER 9

Africa

1 Data cited in this section are provided by the Regional Strategic Analysis and Knowledge Support System (ReSAKSS), as reported in O. Badiane, T. Makombe, and G. Bahiigwa, eds., *Promoting Agricultural Trade to Enhance Resilience in Africa,* ReSAKSS Annual Trends and Outlook Report 2013 (Washington, DC: International Food Policy Research Institute, 2014).

2 These countries are Algeria, Angola, Equatorial Guinea, Ethiopia, Mali, Mozambique, and Sierra Leone.

3 These countries are Burkina Faso, Ethiopia, Madagascar, Malawi, Mali, Niger, and Zimbabwe.

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