Overview

Despite the importance of food safety to public health, agrifood trade, and poverty alleviation, systems that assure the safety of the food supply are sorely under-resourced.\(^1\) Building on work undertaken in the Asia Pacific Economic Cooperation (APEC\(^2\)) forum, the World Bank Group plans to establish and administer a multi-donor trust fund dedicated to food safety capacity building, tentatively called the Global Food Safety MDTF. Enlisting a wide range of stakeholders, including government, industry, and educational institutions, the Global Food Safety MDTF will improve understanding and technical competencies that underpin the effective management of food safety throughout the food system, from farm to fork.

Improved competencies, protocols, and risk-based management systems and regulations will lead to cascading social and economic benefits – including better health and nutritional outcomes, reduced risk of food-borne hazards, expanded participation of farmers and producers into higher value and global food supply chains, reductions in poverty, and improved food security.

The Global Food Safety MDTF will act as:

- a vehicle for awareness raising on the importance of food safety capacity building;
- a source for policy and economic analysis on the efficacy, costs and benefits of potential interventions in food safety systems with respect to desired outcomes, and requirements for robust investments in food safety systems as well as mitigation that targets specific high priority risks;
- a point of coordination among food safety experts, capacity building providers, and those in need of capacity building;
- a source for identifying best practices in capacity building program and investments in food safety, including metrics as well as monitoring and evaluation systems that can inform the design of new programs; and
- a vehicle to mobilize public and private funding to develop, coordinate, and deploy capacity building and analysis.

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\(^2\) Asia-Pacific Economic Cooperation, or APEC, is the premier forum for facilitating economic growth, cooperation, trade and investment in the Asia-Pacific region. APEC has 21 members - referred to as "Member Economies" - which account for approximately 41% of the world's population, approximately 54% of world GDP and about 44% of world trade. APEC's 21 Member Economies are Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; The Republic of the Philippines; The Russian Federation; Singapore; Chinese Taipei; Thailand; United States of America; Viet Nam.
The Global Food Safety MDTF will support broad global food safety efforts, with defined program pillars that reflect regional priorities and opportunities. The model for these efforts will be based on the successful tripartite public-private partnership pioneered by the Asia Pacific Economic Cooperation (APEC) Food Safety Cooperation Forum (FSCF). Pilot programs under the Global Food Safety MTDF will also be developed and tested in this ethnically, linguistically, geographically, and economically diverse region under the Memorandum of Understanding (MOU) signed between the World Bank and the APEC FSCF. Capacity building programs will be customized for other regions as they are rolled out.

Background

Expanding the effective participation of small-scale farmers, handlers, processors and marketers in more profitable food supply chains offers an enormous opportunity to lift the world’s farmers out of poverty. But it also raises significant public health and trade challenges. Food and waterborne diseases are leading causes of illness and death in developing countries, with a mortality rate of some 2.2 million each year, mostly children. As a result, all stakeholders in the food system now face the crucial task of strengthening food safety capacity in order to safeguard public health while promoting food security and economic development.

Responding to the need for a more coordinated approach to food safety in the Asia Pacific region, particularly in food safety capacity building, APEC established the Food Safety Cooperation Forum (FSCF) in 2007 to address the twin challenges of improving public health and facilitating trade of food and food products in the region. The need for FSCF and PTIN was reinforced when a number of high profile food safety incidents occurred in the region. Since 2007, the FSCF has built a model of collaboration across a network of food safety regulatory officials, industry food safety professionals, trade officials, academic experts and training practitioners. These experts have taken action to improve the availability, accessibility, and use of food safety capacity building materials and protocols based on international standards and best practices – as well as to begin to build the public-private partnerships and institutions to deliver capacity building consistent with local needs.

**Competing in more profitable, expanding food supply chains: A key to poverty alleviation**

“...the ability of smallholder [farmers] to compete in growing higher value markets will likely determine the poverty reducing effect of future agricultural growth.”

- Inger Andersen, Vice President of Sustainable Development at the World Bank

In many of the poorest countries and rural areas of middle income countries agriculture still comprises a substantial share of overall growth and household income, and provides essential food security. Seventy-five percent of the world’s poor live in rural areas, and most are involved in farming. Overall GDP growth originating in agriculture has proven to be, on average, two to

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four times as effective in raising incomes of the poor as growth generated in nonagricultural sectors. However, if small-scale farmers and producers are to effectively compete for a piece of higher value food supply chains that may also be expanding in volume – in their own countries or globally – then they and their regulators must understand and meet international standards and best practices.

**Higher value food supply chains, higher risk**

Farmers, many in the poorest countries, are becoming integrated in higher value food supply chains, both as local and global suppliers. The various ingredients of a food product are increasingly grown, processed and consumed in different locations around the globe. WTO trade statistics indicate that the value of agricultural exports rose an average of 9% annually between 2000 and 2009, while the value of food exports rose 10% annually. However, this growth in a global food supply also means that food safety hazards which may have previously been confined to a relatively small area can now disseminate with ease across countries and continents. At the same time, consumers have come to expect and demand safe food that meets international standards and practices. The increasing geographic spread of the food production, processing and consumption chain opens up vulnerabilities at multiple points. Therefore, food safety incidents at any point in the chain no longer have only a limited local impact, but may affect multiple markets worldwide – both consumers and farmers/producers.

**Food safety incidents: A leading cause of illness and death**

Up to one-third of the population of developed countries are affected by food borne illness each year, and the problem is likely to be even more widespread in developing countries. Food and waterborne diseases, for example, are leading causes of illness and death in developing countries, with a mortality rate of some 2.2 million each year, mostly children. The World Health Assembly Declaration of 2010 has confirmed that food borne disease continues to represent a serious threat to the health of millions of people in the world, particularly those in developing countries with poor nutritional status.

**Food safety incidents: Severe economic impacts**

The economic impact of food safety incidents can also be severe. Food incidents negatively impact both governments and the private sector. Governments face declines in trade, increases in health costs, and reduced consumer confidence. The private sector faces losses due to worker absenteeism (illness), loss of markets, and damage to brand. Small and medium enterprises in the agri-business sector can be severely affected – by post-harvest losses, loss of domestic and

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8 63rd World Health Assembly, Advancing Food Safety Initiatives, May 2010.
export markets, and loss of productivity. One incident can have a significant economic impact on an entire product category, industry, or even country (i.e., Guatemalan raspberries, Belgium dioxin contamination), and spill over into other source areas even when not actually implicated. In the United States alone, recalls have had a significant economic impact, with losses estimated at $200 million from tomatoes/peppers (salmonella); $66 million from peanut butter (salmonella); $25-60 million from spinach (E.coli); and, $40+ million from pet food recalls (melamine).9

Food safety: A key component of food security

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

- World Food Summit, 2009

More than one billion people are hungry and each day more than 17,000 children will die of hunger10. Food scarcity can force people to consume whatever food is available even if it is unsafe or contaminated. Further, a food safety scare in a country already facing food scarcity can severely disrupt the food supply and cause wastage of available food.

Establishing a Global Food Safety Multi-Donor Trust Fund: Mobilizing Support for Safe Food Systems”

In recognition of the fact that food safety is a critical element of food security, poverty alleviation, and economic growth, The World Bank Group, in cooperation with a wide range of stakeholders (including government, industry, educational institutions, and regional stakeholders) is establishing a Global Food Safety Multi Donor Trust Fund, aimed at improving understanding and technical competencies that underpin the effective management of food safety throughout the food system, from farm to fork. The fund will support policy research and economic analysis to make the investment case in food safety systems and mitigation of high profile risks, and design and deploy capacity building programs globally on a more consistent and coordinated basis where there is specific need. The Global Food Safety MDTF will support global food safety efforts broadly, while focusing on defined program pillars that reflect regional priorities and opportunities.

Pillar One: The Asia Pacific Economic Cooperation (APEC) Food Safety Cooperation Forum (FSCF)

The first pillar under the Global Food Safety MDTF will involve the development and testing of food safety capacity building modules through pilot programs operating in the ethnically, linguistically, geographically, and economically diverse Asia Pacific region under the Memorandum of Understanding (MOU) signed between the World Bank and the APEC FSCF.

9 Grocery Manufacturers Association.
10 Address by UN Secretary General Ban Ki-Moon to the World Summit for Food Security, November 2009.
APEC includes 21 member economies accounting for approximately 41% of the world’s population and nearly half of the world’s food production. Since 2007 the APEC FSCF and its Partnership Training Institute Network (PTIN) has been undertaking a series of highly successful capacity building programs, including the development of freely available reproducible capacity building modules. In May of 2011 the World Bank and the APEC FSCF signed an MOU to scale up food safety capacity building in the APEC region with a view towards taking capacity building modules to other parts of the world. As a result, APEC serves as an ideal principal pilot region to test capacity building programming developed by the Global Food Safety MDTF.

Once capacity building programs are piloted in the APEC region through the FSCF PTIN, they will then be customized for other regions as they are rolled out. Priorities regions for food safety roll out are developing countries of: Africa, South Asia, East Asia and Pacific, Latin America and Caribbean, and the Middle East.

**Pillar Two: High Priority Food Hazards**

The second pillar of the Global Food Safety MDTF will respond to high priority food safety hazards through enhancing evidence-based systems to inform food safety risk analysis. For example aflatoxin is a highly poisonous cancer-causing toxin produced by a fungus which, according to the United Nations, affects 25 percent of the world's agricultural production. The fungus infects crops before harvest in the field and spreads as a result of poor drying and storage. Maize and groundnuts are of particular concern, but other susceptible crops include sorghum, millet, soybeans and cottonseed. An estimated 4.5 billion people in the developing world are chronically exposed to dangerous levels of aflatoxin through diet, which contributes to either acute or chronic health problems such as liver cancer and Hepatitis B, and undermines food security. Animals (including fish) fed with contaminated feed have low productivity and may suffer actual stunting or disease, while major agricultural commodities containing aflatoxin above permissible limits are often denied formal trade opportunities.

**Pillar Three: Strengthening Analytics and Metrics**

The third pillar of the Global Food Safety MDTF will strengthen evidence of food safety systems performance, metrics for measuring impact, and economic analyses for investing in safe food systems that can inform decision-making, resource allocation, and lending priorities. This pillar would bring external expertise to contribute to developing metrics and measurements to track progress and outcomes, and leverage the World Bank’s human resource base in economic analysis and its potential for informing Bank lending priorities. These analytic contributions are essential to developing a solid evidence base about the benefits that investments in food safety

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capacity have on health and development outcomes, as well as to identifying best practices to inform the design of new programs and investments.
Figure 1: Elements of the Global Food Safety MTDF

Experts
- contribute content for capacity building programs
- help deploy capacity building

Global
Food Safety MTDF
- raise awareness
- serve as source for policy and economic analysis
- coordinate providers and recipients of capacity

Donors
- contribute funding
- provide strategic input

Recipients
acquire capacity building

Partners
- help raise awareness
- conduct policy/economic analysis

Experts
The Global Food Safety MTDF will coordinate the substantial existing capacity building expertise and materials available among experts to provide content for capacity building programs. These experts include:
- government officials (food safety regulators, development assistance and trade officials);
- international organizations and other development organizations (i.e., Food & Agriculture Organization, World Health Organization);
- regional organizations (i.e., Asia Pacific Economic Cooperation, Pan American Health Organization);
- the private sector (particularly food, beverage and related companies and associations);
- academic organizations;
- and standards and conformance bodies.

Over time a consensus has been emerging that regulatory agencies should reach out to relevant partners – for profit and non-profit private stakeholders – to help deliver the public goods for
which their institutions were created. The private sector can complement regulators’ technical expertise by adding practical know-how. The private sector and academic organizations can help to reach greater numbers of actors in the agri-food system. Academic organizations can develop curricula. And specialist bodies can assure consistency in lab analytical methods, procedures, and proficiency.

**Partners**

Therefore, these experts will also be critical partners to deploy capacity building programs. For instance, the APEC FSCF and its Partnership Training Institute Network (PTIN) is a unique public-private partnership bringing together APEC food safety regulators, multi-lateral institutions such as the World Bank, academia and industry, with a common mission of building food safety capacity to protect public health, promote economic development, facilitate trade, and assure food security. The FSCF and PTIN have conducted numerous capacity building programs throughout the APEC region in areas such as: risk analysis (including workshops on risk assessment, management, and communication); developing food laws; standards and enforcement systems; export certification; supply chain management; incident management; assessing capacity building needs of national food control systems; and laboratory competency issues. Clearly, there are opportunities for global synergies, leveraging existing APEC capacity building to be deployed elsewhere in the world and vice versa.

**Recipients**

The Global Food Safety MDTF will coordinate deployment of capacity building programs to recipients -- those in need of capacity building-- such as:

Other recipients might include:
- NGOs with relevant expertise
- Academic organizations with relevant expertise

Those eligible to receive funds from the Global Food Safety MDTF would include the recipients, partners, and experts listed above.

**Modes of capacity building**

Modes of capacity building will be customized to the recipient and may involve:
- Workshops, including train-the-trainer workshops
- Web-based tools
- Old media (i.e., TV, public service announcements, print)
- New media (i.e., internet, social media, text messaging, smart phones)
- Technical and consultancy expertise
- Economic and sector work (ESW ) reports
- Analytical and advisory activities (AAA)

Where possible, capacity building programs will be developed in a format that is freely available and reproducible. Programs will be measured and evaluated.
**Priority capacity building areas**
Priority capacity building areas will be determined by the governing body of the Global Food Safety MDTF but may build on those already identified by the APEC FSCF:

- Food safety policy
- Food safety regulatory systems
- Food surveillance, inspection and certification systems
- Technical skills and human resource capacity
- Information sharing and communication networks

**Complementarities with existing capacity development initiatives**
The Global Food Safety MDTF is intended to complement the work of the Standards and Trade Development Facility (STDF), a joint initiative in capacity building and technical cooperation that seeks to raise awareness of the importance of sanitary and phytosanitary (SPS) issues, to increase coordination in the provision of SPS-related assistance, and to mobilize resources to assist developing countries enhance their capacity to meet SPS standards. The food safety MDTF may, for example, deploy capacity building programs developed by the STDF globally on a more consistent and coordinated basis.

**Governance**
The Global Food Safety MDTF’s governance mechanisms will be developed in consultation with donors and key stakeholders.