

International Food Security Coordination in Support of Human Security and the SDGs



Ann Tutwiler & Laura Frigenti, Co-Chairs

The Aspen Institute Energy and Environment Program (EEP) provides nonpartisan leadership and a neutral venue for improving energy and environmental policy-making through values-based dialogue. The Program's core competency is convening professional, high-level, content-driven dialogues in the policy, science, finance, and business arenas with experts from government, business, academia, and nonprofit organizations. These dialogues are structured and moderated for discussion, exploration, and consensus building. The Program was first established in 1969 as the Program on the Environment and Quality of Life.

www.aspeninstitute.org/leep

The Aspen Institute Italia is an international non-profit association dedicated to in-depth discussion and a high level exchange of information and values. Its mission is to internationalize the country's entrepreneurial, political and cultural leadership, as well as to promote the free exchange of ideas and beliefs, in a search for common values, knowledge and interests. Programs focus on the problems and challenges facing today's decision-makers in politics, economics, academia and the media, with particular attention to the business world. The Aspen Institute Italia community is made up of Sustaining Members, Ordinary Members, Friends of Aspen, Aspen Junior Fellows and Former Aspen Junior Fellows.

www.aspeninstitute.it/en

For all inquiries, please contact:

Energy & Environment Program
The Aspen Institute
One Dupont Circle, NW | Suite 700
Washington, DC 20036
Email: anna.giorgi@aspeninstitute.org
Phone: 202.736.3851
Fax: 202.467.0790

Copyright © 2016 by The Aspen Institute

The Aspen Institute
One Dupont Circle, NW | Suite 700
Washington, DC 20036

Published in the United States of America in 2016 by The Aspen Institute

All rights reserved

Printed in the United States of America

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

A SHIFTING CONTEXT: CLIMATE CHANGE, POPULATION GROWTH, AND MIGRATION 3

PRIORITIES FOR INTERNATIONAL FOOD SECURITY ALIGNMENT & COORDINATION..... 5

MOBILIZING FINANCIAL RESOURCES TO ACHIEVE THE SDGS 8

CONCLUSION 9

APPENDICES

 Participant List..... 11

 Acronyms 13

 Bibliography..... 14

EXECUTIVE SUMMARY

The three United Nations (UN) agencies addressing global food security, or the “Rome-Based Agencies (RBAs)” — the World Food Programme (WFP), the International Fund for Agricultural Development (IFAD), and the Food and Agriculture Organization of the United Nations (FAO)—develop and implement critical food security and humanitarian interventions at the global level. Each agency’s impact is magnified through effective collaboration and partnerships with corporations, NGOs, and national governments, playing a growing role in scaling pilot projects and marshaling funds for urgently needed food system development.

The **International Forum on Food Security Coordination**, hosted by the Aspen Institute in May 2016 in Rome, explored how to deepen cross-sector coordination on food security and better link existing initiatives, in the context of an ongoing global humanitarian crisis. This report summarizes the forum roundtable, as participants discussed the new context affecting food security and strategies for improving international alignment and financing of humanitarian aid.

The global community faces a snowballing of humanitarian crises caused by the growing forces of climate change, globalization, migration and political conflict. In just the past year, the UN World Food Programme has faced five emergencies, from 5 million people displaced in Syria to the Ebola virus outbreak in West Africa, one of the largest global public health crises in recent history. The World Humanitarian Summit (May 2016 in Istanbul) Chair’s Summary describes this “new normal”:

Civil strife and conflicts are driving suffering and humanitarian need to unprecedented levels and serious violations of international humanitarian law and abuses of international human rights law continue on an alarming scale with entire populations left without essential supplies they desperately need. Natural disasters, exacerbated by the effects of climate change, are affecting greater numbers of women, men and children than ever before, eroding development gains and jeopardizing the stability of entire countries.

A heightened level of international coordination is needed to meet global human security goals, while continuing to eradicate hunger. A population boom is expected over the coming decades, with the world’s population expected to reach 8.5 billion in 2030 and 9.7 billion in 2050. More than half of this growth is expected to take place in Africa, with Nigeria’s population estimated to surpass that of the U.S. by 2050, and surpass the Euro Zone by 2100. At the same time, population stagnation and decline are expected in some places like Europe and Japan, caused by falling fertility rates inadequate to fully replace the population over time.

Migration is an increasingly present dynamic in food security discussions, given the staggering growth rate of migration worldwide. Today, there are more than 60 million refugees and internally displaced people—the highest migration rate the world has seen since World War II. Although frequently caused by climate change and political conflict, migration has also intensified with the increasing prevalence of cellular technologies and social media, which have served to educate individuals and families about opportunities and relative standards of living abroad. While an estimated 17% of people in Sub-Saharan Africa do not own a cell phone, more than half of those people have access to one sometimes, and many African nations have cell ownership rates similar to the U.S. (i.e. 80-90% of the population).

Climate change's role in migration and human security is expected to increase in the coming decades, and direct impacts of climate change—from loss of sea ice and rising sea levels to long, more intense heat waves—are already hitting vulnerable regions. Changing weather patterns threaten global crop production, livestock operations and fisheries. With global temperatures continuing to rise for decades to come (The Intergovernmental Panel on Climate Change forecasts predict a 2.5–10 degree °Fahrenheit temperature rise over the next century), the annual costs of climate change will only increase.

These developments all point to a staggering financial bill for humanitarian aid as communities tackle changes in population, weather and markets, and populations on the move face challenges in achieving food security and meeting their other basic needs. The current model of humanitarian aid and funding systems for these services is inadequate. Today's funding gap for humanitarian aid is estimated to be \$10 billion, notwithstanding the significant increases in humanitarian funding over the past 15 years (from \$2 billion in 2000 to \$24.5 billion in 2014 for humanitarian action.) Based on current trends, humanitarian assistance needs in 2030 may reach \$50 billion. Significant investment in both rural and urban areas will be required over the coming years to achieve the Sustainable Development Goals; the FAO estimates that eradicating world hunger by 2030 will require \$267 billion per year, on average.

To bring in new sources of financing for humanitarian and food security efforts, NGOs, philanthropies and corporations must be engaged and aligned with the UN Rome-Based Agencies in the long term sustainable transformation of rural areas and development of resilient food systems. **Participants in the Aspen forum highlighted seven priorities around which the international food security community can better align in the next decade to increase current levels of financing for humanitarian aid:**

PRIORITIES FOR INTERNATIONAL ALIGNMENT & COORDINATION ON FOOD SECURITY

1. **PRIVATE SECTOR ENGAGEMENT:** Investment from the private sector will be essential for achieving Sustainable Development Goal 2: “Zero Hunger.” Corporations—including those outside of the food sector—must be better engaged around the SDGs as true partners in development.
2. **IMPROVED COMMUNICATION:** The international community should study and communicate the links between migration, climate change, population and food security. The Decade of Nutrition and Committee on World Food Security can be leveraged in this communication effort.
3. **WOMEN'S EMPOWERMENT:** Equitable access to land, training and credit for women, social protection programs, governance reforms, and inclusion of women in peace negotiation processes are strong solutions for empowering women and their societies more broadly.
4. **MIGRATION POLICIES:** Once settled, migrants send remittances to their countries of origin at levels significantly higher than humanitarian aid. Having supporting policies in place around integration of migrants is critical for this flow of investment to take place.
5. **RURAL INVESTMENT:** Public and private investment should be made to enhance rural economic development and quality of life beyond agricultural investment, to stem migration flows, bolster food security, and build resilience.
6. **POST-HARVEST LOSS REDUCTION:** Strategies for mitigating post-harvest losses can reduce food assistance and cash transfer needs, while also bolstering the entire food system.
7. **TECHNOLOGICAL INVESTMENT:** Technological innovations and data availability can increasingly open unrealized potential within the food system, and new cross-sector partnerships should be explored in support of this goal.

A SHIFTING CONTEXT: CLIMATE CHANGE, POPULATION GROWTH, AND MIGRATION

5

FACTORS THAT INFLUENCE THE FUTURE OF GLOBAL FOOD SECURITY

1

HEIGHTENED NUMBERS OF CRISES GLOBALLY

The UN food agencies are facing an unprecedented number of global crises, including five recent emergencies (Syria, Yemen, Iraq, South Sudan, West Africa).

UNPRECEDENTED LEVELS OF MIGRATION

There are more than 60 million refugees and internally displaced people (IDPs) around the globe right now – highest levels of migration since WWII.

2

3

A PREDICTED POPULATION BOOM

The world population reached 7.3 billion in 2015 and is projected to reach 8.5 billion in 2030, 9.7 billion in 2050, and 11.2 billion by 2100.

CLIMATE CHANGE

By 2100 scientists predict average global temperatures will increase between 1.5–5° C. This increase, though seemingly small, can have dramatic environmental impact, including raising global sea levels and shifting ecosystem characteristics.

4

5

A STAGGERING FINANCIAL BILL

If current trends in violence and natural disasters continue, by 2030 the cost of humanitarian assistance will have risen to \$50 billion.

Sources: CrisisWatch 2016, UN World Population Prospects, Union of Concerned Scientists Climate Hot Map, NASA Vital Signs of the Planet, Pew Research Center, FAO (Achieving Zero Hunger, 2015), UN High-Level Panel on Humanitarian Financing, United Nations High Commission for Refugees

Global food security is threatened by increasing levels of volatility in financial, energy, and agricultural markets—what has come to be recognized as the “new normal”—whether caused by political conflict, climate change, national agriculture policies, or other intersecting variables. At the same time, rapidly increasing populations in Sub-Saharan Africa and Asia, particularly in areas resistant to family planning or women’s empowerment, are predicted to heighten migration.

Today’s staggering levels of migration to Europe from Africa and the Middle East are only the beginning of an expected population flow over the coming decades. Technologies like cellular phones and social media have served to increase the public’s understanding of opportunities and standards of living in other countries, motivating those with resources to emigrate. The food security of these families on the move, as well as refugees, must be more effectively addressed through collective action across relevant UN agencies and private sector stakeholders.

Demographic surges often take place in already fragile countries, and further jeopardize environmental security and effective governance. Study of demographic surges should go beyond population growth, to the specific composition and dynamics expected—i.e. where populations are expected to increase or decrease, out-migration from rural areas, declining numbers of farmers (with increasing average ages), etc.

Issues of demographic explosion are often ignored by the international community because of political and cultural sensitivities around access to contraception; yet these issues must be addressed in an intentional and holistic manner. Women’s empowerment should be kept high on the global food security planning agenda and in cross-sector alignment efforts, in order to address this challenge.

Forum participants noted that migration is both caused by crisis events like wars and natural disasters, and also by slowly developing trends like changing demographics and climate. Therefore, rather than solely planning for strategies to address current migration and crisis events, decision makers across sectors should look for opportunities to improve standards of living where individuals currently live. This can include

corporate approaches to managing labor standards within supply chains and creating sustainable business models for agriculture within domestic markets. Government leaders should look to create stable legislative environments that encourage private sector investment and support women in driving economic growth by ensuring education opportunities and labor participation.

Women's education and labor force participation are critical in achieving sustainable demographic outcomes.

Reducing numbers of unwanted pregnancies by empowering women to determine the number of children they have, and economic empowerment through gender equality, will go a long way toward managing expected population surges. While migration can provide the benefit of remittances flowing back to migrants' countries of origin, significant concerns regarding international trafficking of women migrants must be addressed at a global level.

Climate change can be expected to affect the global poor the most, particularly in their ability to grow food. This will likely lead to an increased need for agricultural land, and the subsequent deforestation with further GHG emissions, which in turn cause climate change. Rising sea levels and increasing population levels will put tremendous pressure on natural resources and communities, further increasing migration rates. This vicious cycle will create an ever increasing number of climate refugees, unless resilience to climate change is built into public and private sector efforts at the national level.

An important aspect of migration to be noted is the significant level of internal migration occurring worldwide—an estimated 740 million. International migration often begins with internal migration that is caused by inequalities within countries. Internal migration can strip individuals of their access to social services, health services, education and land. Addressing these internal issues and investing in quality of life in areas vulnerable to out-migration should be an area of increased focus for the food security community in the coming years.

Migration and human security are critical factors that can serve to reprioritize food security on the G7's agenda. The integration of migration into the Sustainable Development Goals—having been missing in the Millennium Development Goals—is an important step for the international food security community. EU member states should develop long-term understandings of population trends, and work with African countries—particularly countries of origin of recent migratory flows—to manage migration, limit illegal immigrants, and support migrant return or integration.

PRIORITIES FOR INTERNATIONAL FOOD SECURITY ALIGNMENT & COORDINATION

The Sustainable Development Goals (SDGs) are not solely the purview of government, but rather should be understood as a beacon for how NGOs, corporations, and the UN agencies align on food security. Given pressures from climate change, the refugee crisis, and the establishment of the SDG targets themselves, the food security community must collectively communicate to decision makers across sectors the linkages between food security and other challenges including climate adaptation, migration, and economic development. Beyond humanitarian and development aid, **investment from the private sector and national governments will be critical in achieving SDG 2 – “Zero Hunger” making improved alignment and communication critically important.**

Several critical areas were highlighted by Forum participants for increased alignment and partnership within the international community, in support of both food security and overall humanitarian aid: **women’s empowerment, technological investment, and post-harvest loss reduction.** Equitable access to land, training and credit for women, social protection programs, governance reforms—including those relevant to inheritance management—and inclusion of women in peace negotiation processes are strong solutions for empowering women and their societies more broadly. In addition, technological innovations and data access can open unrealized potential within the food system, and new cross-sector partnerships should be explored in support of this goal (*see for reference* the FAO-Google Maps satellite data partnership.) Finally, post-harvest loss should be addressed not only to reduce food assistance and cash transfer needs, but also to bolster the entire food value chain.

The importance of both political will and the private sector should not be underestimated. The pressure that climate change and the ongoing refugee crisis place on food security make it especially important that experts coherently explain to non-food security experts and decision makers the targets outlined in the SDGs, and how food and nutrition security are linked to climate adaptation, migration, employment, health, and economic development. Policymakers will need to create policy frameworks that facilitate private sector investment and decrease barriers to market for smallholder farmers, particularly the producers most vulnerable to climate change and conflict. International organizations and governments will require new divisions to be created focused on small scale agriculture resilience to climate change effects.

The food security community must recognize that the private sector’s operating model is based on turning a profit, and that using this market model, corporations can play an important role in reaching smallholder producers globally. Forum participants emphasized the importance of corporations integrating these high-level agendas throughout their business operations and incentive structures.

SUSTAINABLE DEVELOPMENT GOAL #2: ZERO HUNGER

*“End hunger, achieve food security
and improved nutrition and promote
sustainable agriculture”*

The majority of multinational companies now recognize the relevance of the SDGs, but are still looking to understand how to align with them; according to a recent Price Waterhouse Coopers study, 92% of companies are aware of the SDGs (compared to 33% of the general public), and 71% of companies have said they are planning how they will engage with the SDGs. However, only 13% of companies surveyed knew how to do so. Companies not directly focused on food (for example, mobile data companies) should be engaged in building both nutrition and food security. **The established framework of the SDGs provide a critical and immediate opportunity for the food security community to engage the private sector.**

Philanthropies, NGOs, and corporations can all be engaged in the long term sustainable transformation of rural areas, including diversification of rural economies and improvements in quality of life through investment in infrastructure, access to good quality and affordable healthcare, education, water and sanitation. Through inclusive business models, corporations can directly reduce poverty and create wealth through sustainable access for smallholder farmers and small-scale producers to regional and global agribusiness and retail sectors. By working with producer organizations—and thereby pooling risks and costs faced by small-scale and vulnerable producers—companies can significantly impact sustainable development while making a profit. (*See for reference:* Business Call to Action, the G20 Inclusive Business Framework, and the Connecting Business Initiative.) Importantly, the SDGs will be achieved—or not—at the national level; therefore, partnerships will also need to be established at the national level.

Public-Private Partnerships (PPPs) that engage the private sector's profit motive while meeting the current needs of society can play a significant role in food security in the coming years, but require a broad **acknowledgement and acceptance by the humanitarian aid community that the private sector will expect to and should be supported in profiting from its investments** in this space. A true **partnership revolution** is needed to transform and rigorously evaluate food security PPPs. Partnerships need to move from cumbersome, time-intensive, poorly structured collaborations to effective and better aligned tools for impact, with rigorous evaluation methods. Roundtable participants recommended that a new “science for partnerships” be developed, with strategically-aligned incentive structures. Transformative partnerships should be established that focus in particular on joint agriculture research, innovation, increasing access to finance and insurance mechanisms (to help stakeholders build resilience to market and climate volatility), and knowledge transfer.

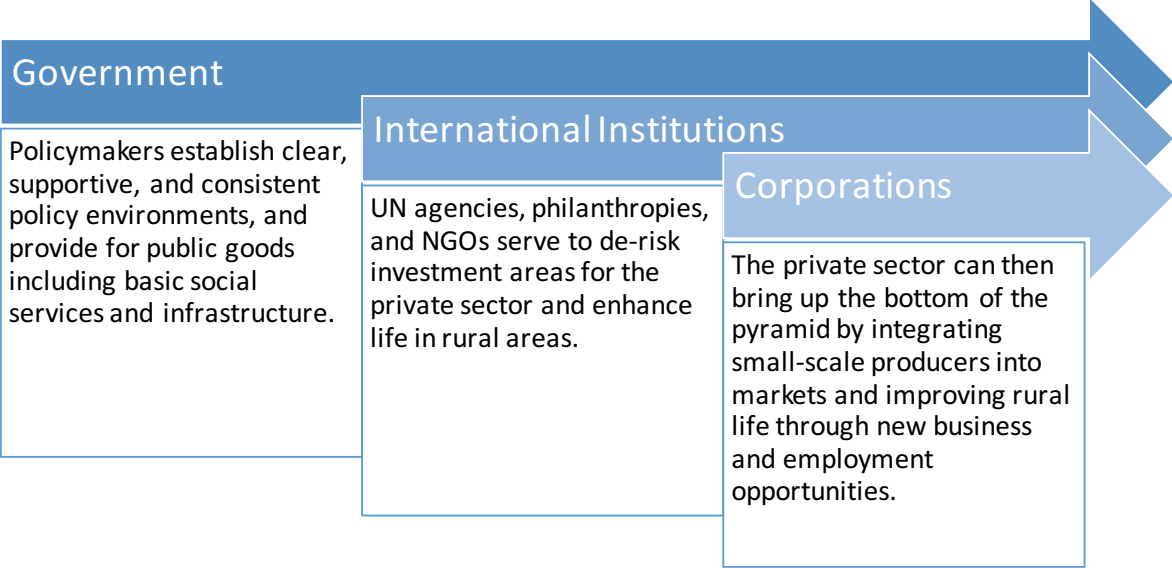
One mechanism for improving coordination across the food security community—including the corporate sector—is the **Committee on World Food Security (CFS)**, an international and intergovernmental platform reporting to the UN General Assembly through the Economic and Social Council (ECOSOC) and to FAO Conference. Participants noted that the CFS currently has a communication gap, and should enhance its outreach to other entities focused on the 2030 SDG agenda. The CFS can play an important role in providing policy guidance around responsible investment in agriculture, land tenure, and the multi-stakeholder process.

Other platforms like the **Decade of Nutrition** established by the UN General Assembly should also be used to educate stakeholders (from government to the public) around sustainable diets and train future public and private sector food system managers in critical food system issues from sustainability to women's empowerment. Youth in particular should be engaged on the types of policies and partnerships needed to achieve the SDGs. Diverse actors can be brought together to make the Decade of Nutrition a success, building on the international SDG targets with local, sustainable food system approaches. Finance ministries, foreign affairs ministries, the medical community, and other non-traditional food security players will also need to be included in the planning process.

Importantly, participants noted that the food security community—particularly the UN Rome-Based Agencies—will need to **recognize and discuss areas of past or ongoing failure and opportunities for improvement, without jeopardizing overall fundraising capability**. Part of the UN agencies' responsibility will be to oversee the multi-sector implementation of the SDGs, by pushing governments to implement supportive policies and partnering with the private sector on critical solutions.

Relationships of trust and communication are needed between the UN agencies, corporations, and farmer organizations, so that partners can help to de-risk opportunities for the private sector, thereby allowing the private sector to move down the pyramid and connect to new markets and business opportunities. In this way, **the private sector can engage at the bottom of the pyramid to help connect farmers to markets and thereby feed cities**. On the public sector side, education, health, finance, social protection and public procurement policies should be put into place to increase the likelihood of success for new cross-sector partnerships. With this framework, PPPs can work to diversify rural economies and enhance life in rural areas, which can stem future migration.

Establishing Cross-Sector Alignment on Food Security



MOBILIZING FINANCIAL RESOURCES TO ACHIEVE THE SDGS

Taking into account the current levels of both internal and international migration and the combination of ongoing crises globally, public sector and Official Development Assistance/RBA financing will not be adequate to meet SDG-2. By 2030, estimates show that the bill may increase to \$50 billion annually for only the most critical life-saving support required in emergency operations. With refugee camps now frequently housing three generations, current models of humanitarian aid will be inadequate in the future.

Opportunities exist for mobilizing financial resources to achieve the SDGs through international coordination. For example, **blended financing** that combines Official Development Assistance with private sector and financial institution funding will be increasingly important given the significant shortfall in public resources. Co-financing opportunities and blended facilities—like the Green Climate Fund—can leverage domestic resources while integrating the private sector.

New types of funding and financial instruments can help to fill the growing financing gap, but **political and financial incentive structures need to be in place** for these to be fully utilized. Financing mechanisms can be used to leverage technology and infrastructure to scale agriculture developments. Specific financing mechanisms to be considered include development bonds, social impact bonds, public expenditure combined with local investment, and accelerator investments (e.g., clean water investments that also address food security).

These new financial mechanisms and risk-mitigation models in development should be leveraged to support middle income countries, through the development of well-functioning food systems and creation of new economic opportunities. This will help ensure that their populations are able to stay and thrive in their countries of origin. Additionally, proposals for agriculture investment (including land rehabilitation and reclamation) should be integrated into migration-related proposals, given that migration is often caused by agriculture system failure.

Importantly, smallholder farmers should be recognized as part of the private sector (i.e., having assets, making investments, turning profits—and taking risks, as the rest of the private sector does), and agriculture sector growth should be recognized as a business opportunity for investors and reinsurers.

Finally, **parliamentarians are an important and central actor to be engaged in financing discussions**, as they generate political will, ensure that governments set nutrition targets, and determine national budgets (*see for reference* Parliaments for Better Nutrition and the Parliamentary Front against Hunger).

CONCLUSION

Food security is a necessary condition for alleviating poverty, generating employment, and increasing the long-term sustainability of natural resource use. The international food security community must be realistic about the role that international development aid can play in food security and sustainable agriculture, and better leverage the private sector and national policymakers in achieving the SDGs.

The complexity of food security planning today lies in the reciprocating, compound effect that political conflict, demographic upheaval, and climate change have on human security, food security, and migration—and vice versa. These forces sit in the context of the now global responsibility to eliminate hunger, secure economic equality and civil rights for women, and provide environmentally sustainable development for all of the planet's inhabitants. Decision makers will need to anticipate the significant impacts from climate change and migration on food security, and leverage international coordination to build resilience into global food systems.

Forum participants raised food security as a priority for the agenda of the upcoming 43rd G7 summit in Sicily, in May 2017. As Italy prepares to take over the chair position of the G7, food security can once again be prioritized within the global agenda (as it was during the l'Aquila Summit). The role of food security in the overall SDG agenda is clear, given that some of the highest levels of population growth are expected to take place in agriculture-dependent regions that are also food insecure. By adopting a nuanced and holistic view of food security that takes into account migration, climate change and conflict, global decision makers will be better equipped to achieve the ambition of the Sustainable Development Goals in the coming decades.

PARTICIPANT LIST

Note: Forum participants were invited as experts in their fields and not in their organizational capacities or affiliations. The Participants are listed for identification purposes only; they are not responsible for, nor do they or their organizations endorse, this document's narrative, conjecture or any errors.

Hassan Abouyoub, Ambassador of The Kingdom of Morocco in Italy

Marco Alberti, Head of International Institutional Affairs, Enel

Robynne Anderson, Director General, International Agri-Food Network

Federica Barbaro, Managing Director, PB Tankers

Roberto Barbieri, Director General, Oxfam Italia

Mohamed Benaissa, Former Minister of Foreign Affairs and Cooperation, Kingdom of Morocco

Emma Bonino, Former Minister of Foreign Affairs, Italy

Adolfo Brizzi, Director of Policy and Technical Advisory Division, IFAD

Natalie Brown, Deputy Chief of Mission, U.S. Mission to the UN Agencies in Rome

Dominique Burgeon, Director, Emergency and Rehabilitation Division, FAO

Giampaolo Cantini, Directorate General for Development Cooperation, Ministry of Foreign Affairs, Italy

Giovanni Castellaneta, Chairman Sace; President of the Board, WFP Italian Committee

Paolo Ciocca, Deputy Director General, DIS - Italian Security Intelligence Department

Pier Sandro Cocconcilli, Professor of Food Microbiology, Milan Catholic University

Ertharin Cousin, Executive Director, World Food Programme

Jaleh Daie, Managing Partner, Aurora Equity

Marta Dassù, Senior Director, European Affairs, The Aspen Institute

Valerio De Luca, Chairman, International Academy for Social Economic Development

Vichi De Marchi, Former Communications Officer – Italy, WFP

Pasquale De Muro, Associate Professor, Tre University of Rome

Rasmus Egendal, Director, Government Partnerships Division, WFP

Mella Frewen, Director General, FoodDrink Europe

Laura Frigenti, Director - Italian Agency for Development Cooperation, Ministry of Foreign Affairs, Italy

Pietro Gennari, Chief Statistician and Director of Statistics Division, FAO

Fernanda Guerrieri, Assistant Director General, Corporate Services, FAO

Caroline Heider, Director General and Senior Vice President, Evaluation, The World Bank Group

Maurizia Iachino, President, Oxfam Italia

Luis Jiménez-Mcinnis, Director, Partnership and Resource Mobilization Office, IFAD

David Lane, U.S. Ambassador to the United Nations Agencies in Rome

Nick Martell-Bundock, Corporate Responsibility Lead, EMEA, Cargill

Sonia Massari, Gustolab International Institute for Food Studies Director; Academic Director, Champaign Food Studies Programs in Rome, University of Illinois at Urbana

Gonçalo Matias, Food Security Advisor to Minister Jaime Gama, Portugal

Giovanna Melandri, President, Human Foundation Giving and Innovating

Roberto Menotti, Editor-in-Chief of Aspenia online and Deputy Editor of Aspenia; Senior Advisor International Activities, Aspen Institute Italia

David Monsma, Executive Director, Energy & Environment Program, The Aspen Institute

Marcos Neto, Director, Istanbul International Center for Private Sector in Development, UNDP

Stineke Oenema, Executive Secretary, UN Standing Committee on Food Security & Nutrition

Angelo Maria Petroni, Secretary General, Aspen Institute Italia; Professor of Logic and Philosophy of Science, “La Sapienza” University

Bianca Pomeranzi, Expert - Italian Development Cooperation, Italian Ministry of Foreign Affairs

Taara Rangarajan, Director of Strategy and Partnerships, Global Citizen

Adele Rossetti, Director General, WFP Italian Committee

Pierfrancesco Sacco, Permanent Representative for Italy to ONU

Arturo Semerari, Managing Director, Agriconsulting

Simona Seravesi, Advocacy and Policy Advisor, Save the Children

Arun Sharma, Chief Investment Officer, Global Financial Markets, International Finance Corporation

David Simmons, Managing Director, Willis Towers Watson

Federico Soda, Chief of Mission and Director of IOM Coordinating Office, International Organization for Migration, Rome

Roberta Sonnino, Professor of Environmental Policy and Planning, Cardiff University

Jörg Spieldenner, Head of the Public Health Nutrition Department and Responsible for the Sustainable Nutrition Research Programme, Nestlé Research Center

Kostas Stamoulis, Assistant Director-General, Economic and Social Development Department, FAO

Josephina Stubbs, Director of the Latin America and the Caribbean Division, IFAD

Claudio Tesauero, President, Save the Children Italy

Angelo Trocchia, Chairman and CEO, Unilever Italia

Ann Tutwiler, Director General, Bioversity International

Marcela Villarreal, Director Partnerships, Advocacy and Capacity Development, FAO

Rob Vos, Director, Agricultural Development Economics, Economic and Social Development Department, FAO

Duncan Williamson, Food Policy Manager, WWF-UK, Surrey

THE ASPEN INSTITUTE - STAFF

Nicole Buckley, Assistant Director, Energy and Environment Program, The Aspen Institute

Novella Cavallari, Executive Assistant to Director Marta Dassù, Aspen Institute Italia

ACRONYMS

WFP	World Food Programme
IFAD	International Fund for Agricultural Development
FAO	Food and Agriculture Organization of the United Nations
SDGs	Sustainable Development Goals
RBA	UN Rome-Based Agencies (i.e. FAO, WFP, IFAD)
PPP	Public-Private Partnerships
CFS	Committee on World Food Security

BIBLIOGRAPHY

FAO, IFAD and WFP. *Achieving Zero Hunger: the critical role of investments in social protection and agriculture*. Rome, FAO. 2015.

High-Level Panel on Humanitarian Financing. *Report to the Secretary General: Too important to fail—addressing the humanitarian financing gap*. 2016.

NASA. “Vital Signs of the Planet.” 2016. <http://climate.nasa.gov/>.

The International Rescue Committee. *Crisis Watch* 2016. 2015.

Union of Concerned Scientists. “Climate Hot Map.” 2011. <http://www.climatehotmap.org/>.

United Nations Development Programme. *Human Development Report 2009, Overcoming barriers: Human mobility and development*. New York, Palgrave Macmillan. 2009.

United Nations. “United Nations High Commission for Refugees.” 2016. <http://www.unhcr.org/en-us>.

United Nations. “World Population Prospects.” 2015. <https://esa.un.org/unpd/wpp/>.



THE ASPEN INSTITUTE

The Aspen Institute is an educational and policy studies organization based in Washington, DC. Its mission is to foster leadership based on enduring values and to provide a nonpartisan venue for dealing with critical issues. The Institute is based in Washington, DC; Aspen, Colorado; and on the Wye River on Maryland's Eastern Shore. It also has offices in New York City and an international network of partners.

www.aspeninstitute.org