Growing, higher income and more urbanised populations continue to demand a more varied and nutritionally balanced diet. The bio-economy, including renewable energy, also increases demand for food and agricultural products. While responding to these opportunities, the agriculture and food sector is confronting increased competition for natural resources, has to adapt to changing temperatures, precipitation patterns, and more frequent extreme weather events, and is expected to improve its impact on the environment and to provide ecosystem services. There are multiple challenges in improving the well-being of farm households, especially of smallholders and women, while facilitating structural change. A range of health-related issues is coming to the fore, among them animal disease risks, antimicrobial resistance and human health and nutrition. The sector in many countries is also expected to contribute to climate change mitigation while improving global food security.

OECD work to date notes that while policies for food and agriculture have begun to change, international and domestic policy settings are not sufficiently aligned with these emerging needs. There is now widespread recognition of a growing urgency for integrated policy approaches that will better enable farmers and the food sector to simultaneously improve productivity, increase competitiveness and profitability, improve resilience, access markets at home and abroad, manage natural resources more sustainably, contribute to global food security, and deal with extreme market volatility.*

OECD work on food, agriculture and fisheries is placing a high priority on informing government policy decisions that would support a shift away from production linked and trade distorting measures to strategic public investments to build a productive, sustainable and resilient global food system.

*Adapted from the Declaration on Better Policies to Achieve a Productive, Sustainable and Resilient Global Food System, 7-8 April 2016 Meeting of the OECD Committee for Agriculture at Ministerial Level (signed by all 47 participating countries and the EC).
The OECD’s annual agriculture policy measurement, monitoring and evaluation exercise covers 50 countries, which together account for 88% of global value added in agriculture. Most recent additions to the country coverage include Indonesia, Viet Nam and Colombia, and work is underway on Costa Rica, the Philippines and India. This annual exercise produces comparable, up-to-date policy indicators and tailored policy advice, and is published each year in the OECD Agricultural Policy Monitoring and Evaluation report, complemented by individual country chapters on agricultural policy developments.

Following a similar approach, measurement and monitoring of fisheries policy is now expanding beyond OECD membership to include major fishing countries, including some that are involved in negotiating fisheries subsidies disciplines at the World Trade Organization (WTO). A biannual overview of the fisheries and aquaculture sectors of OECD and selected partner economies highlights fishing fleet characteristics, employment, government support, total allowable catches, landings, aquaculture, recreational fisheries, and trade.

Continual efforts are made to ensure that OECD methodologies appropriately consider new policy developments, including in countries at different levels of development, and that data are disseminated and accessible through interactive online tools such as “compare your country”. The OECD is also spearheading a broad-based consortium of international organisations which aims to harmonise indicators of agricultural support and protection to enable global benchmarking and analysis. This consortium includes the OECD, International Food Policy Research Institute (IFPRI), the World Bank Group (WBG), the Food and Agriculture Organization of the United Nations (FAO), the Asian Productivity Organisation (APO), and the Inter-American Development Bank (IADB).

Over the period 2013-15, the 50 countries included in the annual OECD review provided USD 585 billion (EUR 469 billion), on average, in annual support to their farmers.

Quick read
• Agricultural Policies at a Glance

In-depth
• Agricultural Policy Monitoring and Evaluation 2016
• PSE Database and Compare Your Country
• Review of Agricultural Policies for Colombia, Viet Nam, Switzerland, Kazakhstan, and Indonesia
• Fertiliser and Biofuel Policies in the Global Agricultural Supply Chain
• OECD Review of Fisheries 2015
• FSE Database
World agricultural markets are currently very different from what they were even a decade ago. International prices of crop and livestock products have fallen back from exceptionally high levels, and demand remains subdued by the underperformance of the world economy and the fact that consumption of many products is close to saturation point in parts of the world.

The OECD-FAO Agricultural Outlook is an annual flagship publication that assesses the medium-term prospects of global agriculture, providing policymakers and market analysts with a ten-year outlook for global commodity markets. It provides supply, demand, trade and price estimates of major agricultural commodities for 41 countries and 12 geographical regions. Recognising that the biggest market changes will occur in developing countries over the next ten years, special features are now included that focus on major players in world markets. In recent years these have included Brazil, China, India, and Sub-Saharan Africa, and in 2017 will focus on Southeast Asia.

The OECD also contributes to short-term market analysis through active participation in the FAO-led Agricultural Market Information System (AMIS). AMIS was established at the request of the G20 in 2011, improving the quality, timeliness and transparency of information about the short-term market and outlook situation for key food commodities. It also serves as a platform for improved policy dialogue and co-ordination among participating countries in the event of an actual or impending crisis caused by high or volatile prices.

Motivated by governments’ needs to develop robust and flexible policy strategies to deal with future risks and uncertainties, the OECD is also refining its scenario analysis work through medium and long-term “alternative futures” exercises.

Agricultural commodity prices are expected to remain lower over the coming decade than the previous one, but future supply shocks and price hikes are expected to be more frequent – not least due to climate change.
OECD’s annual measurement and monitoring of domestic and trade policy developments, and analysis of the medium-term outlook for markets, together provide context for the discussion of international trade policy issues in food and agriculture, including comparable “benchmarking” indicators of protection. OECD work provides a solid evidence base in support of domestic reforms that are non-production and non-trade distorting and would permit beneficial market opening, while at the same time enabling legitimate domestic policy goals to be achieved.

Particular attention is being paid to the role of domestic production, regional stocks, and trade in achieving food security, with methods tailored to the situation in individual countries, in particular in Southeast Asia. The OECD has also examined export restrictions in depth, with a view to proposing less damaging, alternative policy approaches to mitigate the impact of price peaks on consumers. Agricultural-specific aspects of international regulatory cooperation, trade facilitation and global value chains are also being explored.

Efforts towards negotiating a multilateral trade agreement on fisheries subsidies at the WTO have taken on new impetus. The OECD is supporting this process by improving the evidence base, including not only increased reporting on policies in the Fisheries Support Estimate (FSE) database, but also work to better understand the impacts of support to fisheries on overfishing and overcapacity, the two overarching concerns of global action on fisheries subsidies.

OECD’s Codes and Schemes for International Trade continue to facilitate trade in seeds, tractors and fruits and vegetables and have a widening membership beyond the OECD.

Many current food and agricultural policies are ineffective in increasing global production and improving global food security, while hindering trade opportunities for competitive farmers around the world.
Food security is a complex, multidimensional problem related to food availability, access to affordable food, the effective use by people of the food that they consume, and the stability of these elements over time. While much progress has been made in addressing food security across the globe – between 1992-94 and 2014-16, the prevalence of undernourishment fell significantly, from 23% to 13%, according to FAO statistics – around 793 million people still remain food insecure, the majority of whom are concentrated in South Asia and Africa.

Fundamentally, most food insecurity is a result of poverty, and requires measures that generate better incomes for the poor. To achieve this, infrastructure policies, rural development, agriculture and wider economic policy are all important. To translate any improvement in incomes into improved nutrition, policies in health, education and social protection are also needed.

Placing the issue of food security in the broader context of development and poverty reduction, the OECD’s work emphasises multi-faceted approaches that go beyond just food production. The organisation has carried out in-depth analysis to better understand the appropriate balance between domestic production, food reserves, and trade in achieving food security in countries at different levels of development, and with different resource endowments. Looking at the specific case of Indonesia and Southeast Asia, the OECD has explored the effectiveness of different policy measures in dealing with transitory threats to food security. At the same time, the OECD is also investigating social safety nets to mitigate household level food insecurity and private storage as alternatives to the buffer stocks mechanisms which governments sometimes use in pursuit of food security.

Price support measures for food staples do not improve any dimension of food security, including stability; instead they worsen the situation.

Quick read
- Getting the Policy Mix Right for Global Food Security and Nutrition

In-depth
- Agricultural Policies for Poverty Reduction: A Synthesis
- Global Food Security: Challenges for the Food and Agricultural System
- Managing Food Insecurity Risk: Analytical Framework and Application to Indonesia
- Alternative Policies to Buffer Stocks for Food Security
- The Implications of Agricultural Trade and Market Developments for Food Security
The global food system must be supported by policies that not only meet increased demand for a wider range of food from a growing population, but that also enhance countries’ abilities to mitigate and adapt to climate change, foster economic growth and ensure the sustainable management of natural resources.

In April 2016, the OECD convened a Meeting of Agriculture Ministers to discuss the opportunities and the challenges facing global agriculture and food systems today. The ministerial was attended by 48 countries, and included participation by Ministers and Vice Ministers from OECD members and partner economies, as well as representatives of international organisations active in food and agriculture. Participants discussed policies that could best achieve a productive, sustainable and resilient global food system, emphasising increased resilience and investment in innovation achieved through international co-operation and collective action.

At the end of the meeting, all participating countries and the European Union adopted a Declaration on Better Policies to Achieve a Productive, Sustainable and Resilient Global Food System. The Declaration underlines the widely shared goals for the food and agriculture sector, affirms policy principles to achieve these goals, and sets out areas for urgent attention by governments, with support from the OECD. The outcomes of the Ministerial also support and advance the aims of the COP21 agenda, Paris Agreement and the Sustainable Development Goals.

Notwithstanding the many challenges faced by modern food production worldwide, the outcomes of the ministerial meeting positively reflect the ambition of participants to achieve twenty-first century agricultural policy, and to embrace the opportunities that reform to the sector will bring.

It is time to capitalise on the momentum of recent events, among them the WTO’s 10th Ministerial Conference, the Paris Agreement on Climate Change and the new Sustainable Development Goals. The OECD has a long history of accompanying governments in their efforts to improve agricultural and food policies; we will continue to do so in the years to come.

Angel GURRÍA
Secretary General of the OECD
OECD’s work on green growth takes an economy-wide development focus that is consistent with long-run environmental protection, using natural resources within their carrying capacity, while providing acceptable living standards and poverty reduction in all countries. Specific work on green growth in agriculture focused on the role of agricultural advisory services, training and extension and the potential contribution of particular farm practices. Building on these earlier efforts, the OECD has developed a comprehensive multi-dimensional framework, in collaboration with the G20, to evaluate the extent to which broad policy settings – and innovation systems in particular – are conducive to sustainable productivity growth. This framework has been applied on a pilot basis to six G20 countries, and is currently being applied to others. It aims to develop policy recommendations that help governments ensure consistency in the overall policy settings, strengthening innovation systems in particular.

OECD analysis suggests that for sustainable productivity growth to be achieved, policy signals throughout the economy need to point in the same direction. In recent decades, productivity improvements have driven considerable growth in agricultural production, enabling farmers to produce affordable food, feed, fuel and fibre for a rapidly-growing global population. Higher productivity has also raised farm household incomes, improved competitiveness, and contributed to national growth. Sustainability performance has already been improving in OECD countries with the observed increase in Total Factor Productivity achieved with lower environmental impact per tonne. But future sustainable productivity growth in agriculture depends on the capacity of agricultural innovation systems to provide farmers with advancements that address an increasingly diverse and complex range of needs, including improved farm productivity and environmental performance, in addition to better responses to climate change.

Returns to investment in agricultural research and development are very high in the long term: between 20% and 80%, according to some sources. But many countries are spending less now on public research than in the 1990s.
Agriculture is both a significant emitter of greenhouse gas and one of the sectors expected to be most damaged by climate change. The OECD’s work on climate change quantifies the possible scale of impacts, identifying an urgent need for strong policy action to spur both adaptation and mitigation efforts beyond what farmers would otherwise undertake by themselves. It underlines the need for integrated, coherent, and consistent policy frameworks which remove perverse and conflicting policy signals. Ongoing efforts seek to identify policy solutions to enable sustainable productivity growth and climate change adaptation and mitigation and to address associated trade-offs. The OECD Agri-Environmental Indicators are updated on a regular basis and support in-depth country analysis.

Agriculture is also a major, often dominant, user of water. It faces increased competition for scarce water resources from urban and industrial uses, as well as stresses related to climate change. Water quality issues, including pollution, also need to be resolved. The OECD focuses analytical efforts on increasing the efficiency of water use in agriculture, reducing the sector’s impact on freshwater, and strengthening its resilience to water-related risks. Ongoing work identifies important agriculture-producing regions in the world that are already experiencing (or likely to experience) water stress at a level that will affect production capacity – “water risk hotspots” – and proposes policy solutions.

The OECD has also developed a number of recommendations to help policymakers optimise the provision of agriculture “public goods” and minimise “public bads”, and to better conserve and sustainably use natural resources, including fisheries. The analysis shows that market-based approaches, clear objectives, and rigorous policy design processes can lead to more profits for fishers and better sustainability for our shared ocean resources.

Complementing this work, the OECD Co-operative Research Programme supports the development of scientific information to feed into future policy decisions related to the sustainable use of natural resources, in the areas of food, agriculture, forests and fisheries.
The agricultural sector has always been exposed to price volatility. This is partially due to the reliance of production on natural conditions and weather influences, and partially to the specificities of agricultural commodity markets that can lead to sharp reactions by prices to changes in supply. At the same time, disease outbreaks and adverse weather events, such as floods and droughts, likewise contribute to supply volatility, which can negatively impact producer incomes, markets, trade and consumers; these are expected to become more frequent as a result of climate change.

Risk management tools are essential to enable farmers to anticipate, avoid and react to shocks. Efficient agricultural risk management systems will preserve the standard of living of those who depend on farming, strengthen the viability of farm businesses, and create an environment that facilitates investment in the farming sector. Work at the OECD on agricultural risk management proposes careful delineation between risks that can and should be borne by farmers, those for which market-based instruments can be developed, and those where governments have a clear role to play in coping with unavoidable catastrophic risks. Drawn from in-depth analysis of risk management systems in a number of countries, the organisation has sought to ascertain the extent to which these general policy principles are followed, and to define best practices. Analysis has also focused on specific dimensions of risk management facing smallholders in emerging economies, including the impacts of different risk management instruments under a number of possible climate change scenarios. Recent efforts have focused on risk management in relation to livestock diseases, in order to identify the efficiency and effectiveness of different policy responses to outbreaks.
The OECD has investigated structural issues beyond the farm gate and throughout the food chain, notably with respect to transparency, price formation and market concentration. Impediments to competitiveness of the food chain are identified, usually in the context of in-depth country reviews. At the same time, the OECD has explored policy approaches to reduce loss and waste along the food chain, in close collaboration with FAO. Throughout this work, the importance of investment in the enabling environment is stressed – particularly in developing and emerging countries – as the best means to improve incomes and to assist the integration of smallholders into domestic and international markets, including through global value chains.

Amid growing concern about the impact of anti-microbial resistance in humans, the OECD is undertaking studies of antimicrobial usage in livestock production, and its impact on public health and the food economy. An inter-disciplinary approach brings veterinarians and health professionals together with economists and policymakers. The economic impacts of withdrawing growth-promoting use of antimicrobials have been examined. Ongoing work in collaboration with the OECD’s Health Committee will seek to better understand links between the use of antimicrobials in animal husbandry and the human health dimension. Collaboration is also occurring on a range of issues relating to health and nutrition dimensions of how policy may influence food production and consumption.

Analysis of many of these issues draws on the expertise of academics, private researchers, and business and civil society participants in the OECD Food Chain Analysis Network.
The OECD Committee for Agriculture (COAG) was established in 1961 as one of the OECD’s founding policy committees, and oversees OECD work on agriculture and food policy. It provides the evidence base and analysis to support governments in improving policy performance and creating an enabling environment for the sector to thrive. OECD Agriculture Ministers and invited delegations met most recently in April 2016 to discuss the opportunities and challenges facing global agriculture and food systems. All participants (47 countries and the European Union) adopted a Declaration that underlines the widely shared goals for the food and agriculture sector, affirms policy principles to achieve these goals, and sets out areas for urgent attention by governments.

The OECD Fisheries Committee (COFI) was also established in 1961, and continues to provide timely, evidence-based policy analysis of pressing global issues in fisheries, aquaculture, and sustainable fisheries management. Its long-term strategy aims to achieve sustainable fisheries and aquaculture while providing quality food.

New Partnerships

Since 2010, OECD membership has grown from 30 to 35, and a further three countries are currently undergoing active accession processes (Colombia, Costa Rica, and Lithuania). The OECD has been forging close ties with key partner countries (Brazil, India, Indonesia, the People’s Republic of China, South Africa), and the major economies of South East Asia; stronger links are also being created with Latin America, the Middle East-North Africa, and Sub-Saharan Africa.

Mirroring these developments, the COAG has become increasingly more global in its efforts. G20 members are
systematically invited to dedicated Committee sessions and to the Global Forum on Agriculture, where food and agriculture issues of global significance are discussed. Argentina, Brazil, South Africa and Romania are full participants in the Committee’s work, and the Committee has collaborated closely with successive G20 presidencies. Close links are being developed bilaterally with the Association of Southeast Asian Nations (ASEAN) Secretariat and its member states and with the Asia-Pacific Economic Cooperation (APEC), with a focus on food security issues. In recent years, the Secretariat has hosted visiting experts from Brazil, China, India and South Africa. The COFI is also expanding its coverage of fisheries support, and now includes major fishing powers like China and Indonesia in analytical efforts for the first time.

Partnerships and collaboration with other international organisations are crucial to the work of both Committees. The Food and Agriculture Organization (FAO) of the United Nations is a key partner institution, co-producing the annual long-established medium-term OECD-FAO Agricultural Outlook. OECD partners with an ever-growing range of other international organisations including the World Bank Group, the International Fund for Agricultural Development, the United Nations World Food Program, the International Food Policy Research Institute, and regional development banks. It supports the World Trade Organization by promoting domestic policy reforms that are non-production and non-trade distorting, and by providing data and analysis relevant to ongoing multilateral trade negotiations. Multi-disciplinary work on human and animal health issues is being carried out in collaboration with the World Health Organization and the World Organisation for Animal Health. The COFI’s work on Illegal, Unreported and Unregulated (IUU) fishing is carried out in partnership with the FAO and the UN Office on Drugs and Crime as well as the active participation of INTERPOL, the World Customs Organisation and regional fisheries management organisations such as the General Fisheries Commission for the Mediterranean.

New Methods and Approaches

Recent years have seen not just widening geographical reach, but also new work methods, inter-disciplinary approaches, and a focus on issues beyond the farm gate and throughout the food chain, including the need to achieve sustainable productivity growth. As the complexity of the international landscape continues to evolve, the Committees are re-doubling efforts to incorporate knowledge and insights from other relevant policy areas and disciplines. As a consequence, while maintaining their valued comparable cross-country analysis, policy advice in the areas of agriculture, food and fisheries has become more concrete and operational and increasingly tailored to the needs and circumstances of individual countries.

Both Committees continue to contribute to OECD’s New Approaches to Economic Challenges (NAEC) initiative. Agriculture and food policy advice is increasingly placed within broad, integrated policy frameworks that recognise that the challenges facing the sector are economy-wide. To contribute to the development of a thriving, competitive sector that can deliver sustainable productivity growth and a resilient food sector, the Committees will continue making efforts to define an alternative, positive reform agenda that would enable countries to realise their domestic objectives without unintended international spill-overs.