

# Food Security and Sustainable Agriculture

Donald J. Johnston, Secretary-General of the OECD

**O**ver the last fifty years the world's population has more than doubled. By the year 2020 there are likely to be almost 2 billion more people to share the planet. Economic growth has meant that most of us have more money to spend; as a result, global demand for food has expanded hugely. Yet agriculture and the food industry manage to supply ever-larger amounts of food and raw materials to satisfy this demand.

Paradoxically, the enormous increase in production has not solved the problem of food security. Although much progress has been made, roughly 20% of the world's population is still malnourished. Simultaneously, some countries struggle to control production in order to avoid the build-up of costly surpluses of food. The existence of want amidst plenty shows that ensuring global food security – the consistent access to adequate nutrition by all people in the world – is not a simple problem with a simple solution.

In many countries the structural transformation of agriculture over recent decades has been astonishing. Productivity has improved substantially, often at a faster rate than in the economy as a whole. In many parts of the world, agriculture is now a sophisticated industry employing advanced technologies. Many of the labour-intensive practices of the past have been replaced by capital-intensive methods, using far more chemicals, water and energy to produce, process and market food.

Without the considerable improvements in productivity that these advances have created, it is unlikely that the average OECD consumer would have seen the striking fall in the proportion of disposable income he or she spends on food – now less than 20% in many OECD countries compared to 30–35% at the beginning of the 1960s.

Continued increases in the efficiency with which resources are used in agriculture are essential to promote economic growth and raise living standards, particularly in poorer countries where agriculture is often a major part of the economy. Thus there is nothing to suggest that the forces contributing to the structural transformation of world agriculture will abate. But it is growing clearer that the increasing demand for food is exerting substantial pressure on the environment. The degradation of wildlife habitat reduces biodiversity. The use of large quantities of agro-chemicals damages water quality. Productivity is lost through soil erosion and salinisation. Any number of similar examples come to mind. In spite of the contribution of agriculture to shaping the landscape and maintaining the countryside, eco-systems are clearly under strain, and the environmental performance of farming will have to be improved.

In order to ensure food security and at the same time the protection of the environment, a number of problems have to be tackled. In so doing, a global perspective is vital. Although food security is a national obligation, it

is not one which can be pursued effectively by countries in isolation. International co-operation and co-ordination will be necessary in the search for solutions.

First and foremost, the world community has to tackle the problem of poverty which lies at the root of much food insecurity. Sustainable economic growth is a crucial element in raising incomes and thus guaranteeing access to food. Ensuring a macro-economic climate which is conducive to private investment and promoting freer trade are both basic requirements for improving economic well-being. Micro-economic policies should focus on eliminating structural impediments to growth, such as poor transport and communication infrastructure or the lack of skills in the use of new technology. Overcoming these barriers will contribute to job-creation, the development of human capital and a more efficient allocation of resources within and among countries. The higher, sustained rates of growth necessary in developing countries can be met through such policy approaches, complemented by well-targeted development assistance.

Second, the policies which form the economic framework must provide the right incentives to farmers and others for the use of agricultural practices that are economically and environmentally sustainable. In many poorer countries agricultural policies have often taxed producers, thereby depressing production and limiting the adoption of sustainable agricultural practices. In these countries, continued policy reform will be required to redress the balance. Similarly, in many richer countries, the reform of those agricultural policies that promote the intensification of production through artificially high prices or subsidies will play a central role in reducing the damage that agriculture does to the environment.

Where there are still environmental problems, farmers can be rewarded directly for reducing harmful effects, protecting the countryside and improving wildlife habitats. Research and development, and the diffusion and adoption of improved techniques, will be crucial in stepping up production to meet demand, while nonetheless safeguarding the environment. Above all,

market-oriented agricultural sectors should respond to changes in global supply and demand rather than being isolated from international developments.

Indeed, countries should make full use of international markets in ensuring food security. Trade encourages the efficient transfer of food supplies from areas where there are surpluses to others where there are deficits. It allows countries to become self-reliant, instead of wasting large amounts of scarce resources trying to become self-sufficient. In the special circumstances created by food crises in poor countries, the selective and judicious use of food aid is required. But it should be used to make up temporary shortfalls in production, rather than forming a permanent source of domestic supply. It should be of local origin, where possible, rather than being used by richer countries to dispose of surpluses.

The traditional aim of analysis at the OECD has been to identify the most effective and efficient mix of policies, both macro and micro, to achieve both economic and social objectives. Food security is a case in point. Coherent policies, good governance and efficient markets are vital for ensuring national and global food security. Since food insecurity is the product of a complex mixture of physical, social and economic factors, attacking it requires an inter-disciplinary approach. The work of the OECD is taking such a perspective in the search for appropriate policies. Achieving food security is a global challenge that requires countries to work together. The work of the OECD, its promotion of international co-operation and its growing emphasis on expanding the policy dialogue with non-member countries will all contribute to finding solutions to the most basic of human needs – the need for food.

