At its fourth and final session, the Panel continued and deepened its examination of the most pressing issues, many of which are related to problematic or controversial aspects of globalization, such as the loss of crop biodiversity, the ethical imperative of ensuring to all the fundamental right to be free from hunger, the realization of the right to food for all, the challenges and potential benefits of biofuel (with a focus on liquid biofuel for transport [agrofuel]), intellectual property rights (IPRs) in food and agriculture, and problems related to food marketing and public nutrition policies.

ON GLOBALIZATION AND INTENSIFICATION OF AGRICULTURE

On economic globalization: salient aspects for food and agriculture

Right from its first session in 2001, the Panel has highlighted the fact that far too many of the world’s people remain marginalized, and the gap between the poorest and the most affluent groups is growing. There are serious power imbalances arising from the concentration of economic power in the hands of a few. Benefits accrue more to what has been called the North, while poverty is extensive in the South. Annex 5 of this report includes a brief, independent presentation of a Southern perspective on globalization, written by Panel member Tewolde Berhan Gebre Egziabher from Ethiopia. While not all members of the Panel share all the views reflected in that annex or would have used other terms, we have found it important to include, in his own words, these reflections by this eminent environmentalist scholar from the South.

Existing international mechanisms are too weak and institutions are not yet in place to ensure that these imbalances are properly addressed. Therefore, the Panel expresses the hope that United Nations (UN) Member States will cooperate more than in recent years through the UN system, including FAO, to develop a rule-based framework for global governance founded on ethical considerations. Increased linkages with civil society, facilitated by modern communication technologies such as e-mail and the Internet, can strengthen the decentralized global governance system that is now emerging.

The term “globalization” is itself a subject of controversy. However, the Panel notes that economic globalization involves the dismantling or reduction of national import regulation measures, a parallel dismantling or reduction of regulations and restrictions on foreign investment, and a weakening of national restrictions on foreign commercial service operations. It accelerates major changes in local food systems, which become increasingly vulnerable to external threats (as shown in the recent food price crisis).

The effect is the growing strength and worldwide operations of transnational corporations and investors, and an increasing global trade in agricultural goods. Inequality between trading partners has often resulted in unequal accruement of benefits.

The Panel observes that this is accompanied by growing economic inequality, internationally and domestically, with a strong impact on access to food. Although the
considerable increase in agricultural productivity could easily keep up with global population growth, the absolute number of people who are hungry or undernourished has not been reduced. Only the share of the world population that is hungry has to a very limited extent diminished. The growing inequality has also led to unequal exposure to the future harmful effects of global warming and to unequal capacities to adapt to the consequences of global warming.

In the light of these observations, it is an ethical imperative to question the direction and implementation of the process of economic globalization.

On intensification of agriculture and industrialization of animal production

The Panel notes that there is an accelerating intensification of agriculture, with numerous ethical problems involved. The intensification of agriculture includes mechanization of agricultural cultivation and elaboration and utilization of new forms of biotechnology. It has led to greater use of high-yielding seeds or seeds that are pest-resistant. It further involves increased use of chemicals for fertilizers and pesticides, and a growing use of water for cultivation. A related issue is the industrialization of animal production (discussed during the third session of the Panel) and aquaculture fish production. The emergence and growth of production of liquid biofuel for transport is one of the more recent steps in the intensification of agriculture. This aspect warrants particular ethical reflection as there might be a conflict with food production. Therefore, it was discussed in some depth at the fourth session (below).

On the linkages between economic globalization and intensification of agriculture

While intensification of agriculture is a necessary consequence of the growing demand for food from an increasing world population, the particular direction of the intensification in recent decades has been driven by the major agents of economic globalization. There is an expanding role of large corporations producing seeds, chemical fertilizers and pesticides for these markets. This causes an increasing dependence of farmers, including smallholders involved in cash production, on these corporations.

The Panel further notes that the combined effect of economic globalization and agricultural intensification has a negative impact on sustainability, on greenhouse gas (GHG) emissions and global warming, on competition for water, on pollution, and on soil degradation. It has also led to the marginalization and exclusion of households that have not been able to participate in the changes owing to insufficient or denied access to natural resources and capital.

The Panel also notes that there is a growing role and influence of global food processing and retailing corporations. In reflecting on ethical issues concerning the role of the corporate intermediaries in the expanding food chain from producer to consumer, there are several aspects that should be subjected to critical ethical examination: the relatively small share of the final price of the food product that goes to the peasant farmer; the difficulties of small-scale farmers in adapting to changes in the marketing system; the negative environmental impact of long-distance transport; the high transaction and
distribution costs; insufficient regulation to ensure access for all; and insufficient measures to ensure that food marketing facilitates the consumption of healthy diets.

The Panel further notes that the use by developed countries of subsidies (including export subsidies) causes a lopsided intensification of agriculture, weakening the possibilities of local farmers in developing countries to compete even within their own national markets.

The need for more balanced agricultural development

The harmful consequences mentioned above are not unavoidable. They are the result of weak or non-existent public regulations, whose absence has also facilitated a growing influence of international speculation in food and related products. These harmful consequences could have been avoided or reduced if there had been proper regulation in place to prevent speculation in land and in food prices, which has been responsible for a significant part of the recent soaring food prices. Restrictive regulations should also include a better system of legal and physical security of the tiller of the land against exploitation, deprivation of land and forced evictions, and offer protection against plantation-type agro-industrial expansion.

The Panel has taken great interest in the International Assessment of Agricultural Science, Knowledge and Technology for Development (IAASTD), which has been supported by FAO and the World Bank. The assessment, in which hundreds of scientists and other experts from nearly all parts of the world have been involved, was presented in a final report in April 2008 (IAASTD, 2009) and was endorsed by more than 60 countries. It is the latest and most authoritative assessment of the role of science and technology in agriculture and should form the basis for ongoing discussions on the potential role of agricultural technologies. It provides valuable insights and recommendations recognizing the need for complementary and diversified approaches to sustainable agriculture, and pointing out that agricultural models based on small farming can present important alternatives appropriate for a human-rights-based food security.

Account must be taken of the relative shortage of natural resources as a result of population growth, overconsumption in parts of the world, land degradation and increasing urbanization. In some regions where people have in the past been able to feed themselves, this will for many not be possible in the future. Some outmigration from environmentally stressed areas is unavoidable and will present the dual problem of adequate emergency measures and an intensified production of food at prices affordable to those who need it.

Recommendations

The Panel recommends that more support be given to small-scale food production, particularly for issues regarding access to or control over seeds, water, infrastructure, information, credit and marketing, and that in place of almost unregulated international trade in agriculture, the primary emphasis be put on fair trade regulated in ways that benefit primarily those that are food-insecure, while focusing on traditional food culture and on traditional crops produced for local markets.
The Panel also recommends that measures be adopted to counteract pressure towards acceptance of genetically modified crops, and in this respect urges that due attention be given to the precautionary principle and to the potentially negative social impacts, particularly for smallholders, of the use of such crops. More attention should be given to assessing the potential of existing biodiversity.

The Panel recognizes that intensified agricultural production will be required in order to meet the increasing needs of a growing population and to compensate for production lost in environmentally stressed areas, but recommends that measures be adopted to ensure that the intensification of production at all times protects the poor and food-insecure and ensures environmental sustainability.

**THE LOSS OF CROP BIODIVERSITY IN THE CHANGING WORLD**

**Globalization and crop genetic diversity**

The accelerating increase in communication is mixing ideas, technologies, cultures and even people throughout the world. This process seems to be taking us towards one homogenous global culture. However complex this evolving global culture might turn out to be, it is inevitable that we will have lost much of the content of our former diversity in the process of achieving it. We have already witnessed a high level of attrition in our crop genetic diversity. And yet, the very process of globalization is changing the world’s environment through monocultures, rainforest clearing for biofuel targeted agriculture, etc., which in turn increases the need for crop genetic diversity to adapt agriculture to the changing environmental conditions. If human survival into the indefinite future is to be assured, globalizing humanity has to put all its efforts into increasing crop genetic diversity and not fatalistically accept its accelerating decrease.

The southern parts of Europe constitute a part of the Mediterranean Vavilovian Centre. This is now part of the industrialized world, also often referred to as the North. The rest of the industrialized world is relatively unimportant as a source of crop genetic diversity. All the other important Vavilovian centres are in the developing world, also referred to as the South. Thus, geographically speaking, the problems of conserving crop genetic diversity are problems of the developing world although the erosion of crop genetic diversity concerns humanity as a whole. Because of these and related reasons, the difficulties in the actions that are required in order to maintain crop genetic diversity remain intimately linked to the problems of development that the South is facing in this era of economic globalization. The fact that globalization is led by the North while crop genetic diversity is mostly in the South confounds the responsibilities for the failure to protect diversity and makes it difficult to solve these problems, even if there is the political will to do so. Usually, in fact, there is insufficient national, let alone global, will to take all the needed action. Industrialization of agriculture and changes in food habits are emerging as the main factors in accelerating the global erosion of crop genetic diversity. The very process of globalization, which is exacerbating the erosion of crop genetic diversity, is also making that very diversity