

A PLANET FOR LIFE

**SUSTAINABLE DEVELOPMENT
IN ACTION**



DEVELOPMENT, THE ENVIRONMENT AND FOOD

TOWARDS AGRICULTURAL CHANGE?

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AGRICULTURE: A PREREQUISITE TO SUSTAINABLE DEVELOPMENT

A *Planet for Life* 2012, our annual book on sustainable development issues, focuses this year on agriculture and its relation to development and the environment. In 2011, agriculture has come back to the fore of the international agenda in the aftermath of the 2008-2010 price hikes in food and other farm commodities, as well as the various weather shocks leading to food crises in parts of Africa and to the humanitarian crisis in the Horn of Africa. Suddenly, a series of issues that were hardly mentioned gained prominence in the international public debate. Yet, little was really new. The 2008 and 2010 price shocks were indeed very large, but were not without historical precedent. Besides which, the challenge of food security was daunting long before the crisis: since the mid-1990s, the proportion of undernourished people in developing countries has stopped declining, remaining more or less stable at just above 15%. Given the population increase, this means that an increasing number of people, nowadays close to one billion, are suffering from malnutrition. However justified and understandable the post-crisis uproar may be, this crisis can thus be interpreted as a wake-up call rather than a fundamental cause of the problem.

This points once again to the role of crises in sustaining action and correcting unsustainable situations. As we have already underlined in former issues of *A Planet for Life*, what is “unsustainable” will by definition not be sustained, so that the central policy issue for sustainable development is when to act in order to minimize the costs of necessary adjustments. But if one wants to go beyond mere normative statements, a theory of action is needed, one of the central questions being when the adjustment can actually be decided and implemented – as opposed to what it should consist of. This is indeed the core challenge of sustainability. The minds of decision-makers and others tend to focus on issues at times of crisis rather than on an ongoing basis. There are many reasons for this: first, the human mind is able to manage complexity, but certainly cannot simultaneously focus on all issues, so that some issues will receive less attention, and it is of course understandable that short-term pressures define the priorities; second, when there is no perceived sense of urgency, there are always debates and oppositions to any course of action; third, policy makers are under great media pressure to show that they are in charge and know how to react to ongoing crises with concrete measures and solutions. As a result, they tend to look for quick fixes on current problems, and are in a reactive rather than a pro-active, crisis prevention mode. This is why it is so important, when a crisis concentrates attention on any issue, to use the political momentum not only to respond to the crisis, but to put in place measures and processes that will have a longer term effect and address the issues at their core rather than only the symptoms of their earlier mismanagement.

It was nonetheless encouraging that after so many years of neglect, agriculture and food security eventually received so much political attention in 2011. The French presidency of the G20 has succeeded in mainstreaming them as G20 priorities, and there is a good chance that these issues will still be addressed on priority in the following G20 exercises, starting with the 2012 Mexican presidency. The various chapters in this book shed light on the core underlying issues, focusing on the nexus of agriculture, food, development and the environment. They show that on virtually all aspects, there is hardly any consensus, and the debate goes on. As mentioned above, this may also explain why timely action is hard to come by without a crisis: crises and the perception of their potential impact act as powerful coordination incentives that help bridge disagreements and invite action.

Faithful to the general principles of this annual book, which aims at documenting sustainable development issues and actions, we have called on many highly specialized authors from different countries and perspectives, so that controversies may emerge. This diversity also shows how the formulation and reality of various stakes are both bound by time and geography. Our goal, in this book, is not to bridge gaps and reach conclusions: the challenge of sustainable development precisely amounts to finding the conditions for action, and this is a constant, domestic and international, negotiating process between the various stakeholders. As citizens, we are deeply concerned. But our book is an exercise in analytic documentation, rather than in advocacy.

The following, substantive synthesis by the book’s scientific directors provides a substantial survey of the various chapters, highlighting major issues and controversies

and questioning some of the conventional wisdom that shapes ongoing views on agriculture and sustainable development. This introduction highlights four main issues: production, ecology, the international dimension, and the role of public policies.

FEEDING THE PLANET

Feeding the planet has been presented as one of the crucial challenges ahead, given the expected population increase to 9 billion by 2050¹. As will be suggested in this book, the main challenge, though, is not one of volume for global production. Prospective studies tend to show that enough land, human and water resources can be mobilized to provide the necessary calories. This suggests that production increases will be necessary and are possible in many parts of the world, notably in sub-Saharan Africa. However, there still remains a twofold challenge. First, there will be a need for complex and reliable logistics, so that food can be adequately and timely supplied to the populations that need it. It is, however, likely that the timing and geography of needs will not smoothly correspond to those of production. Hence, there is a major role for stockpiles and for delivery systems, and for all services that are needed in terms of quality control and maintenance over the supply chain. In developing countries, these issues remain crucial. Local commodity exchanges, like the Ethiopian commodity exchange in Addis Ababa, are useful building blocks for more effective production and logistical systems. As a first step, local exchanges provide a place to exchange information and settle disputes. They play a major role in helping de-personalize transactions, by providing collective guarantees (about delivery and quality) that allow producers and customers to transact without necessarily knowing each other. This may expand trade and production, and requires the building and maintenance of stockpiles as well as measuring and maintaining quality in a credible way. This is, however, vastly underdeveloped in the poorest countries and will require social and institutional, as well as financial, investments. Beyond the local dimension, there is also a logistical challenge in preparing for the next crisis, which points to the role of the World Food Programme (WFP) as a last resort food supplier and major contributor to crisis management. The G20, under French presidency in 2011, has given its support to a pilot project of the Economic community of Western African States (ECOWAS) to set up a targeted regional emergency humanitarian food reserve system to the creation of a strategic food reserve².

The second dimension is economic: the poorest and most vulnerable do not have access to food because they cannot afford it. Hence, economic availability is a more

1. For a discussion of these issues see Vindel, B. et P.Jacquet (2011), "Agriculture, développement et sécurité alimentaire", in P. Jacquet and J.H. Lorenzi (eds.), *Les nouveaux équilibres agroalimentaires mondiaux*, Paris: PUF et Descartes & Cie.

2. See G20 (2011), Final Declaration of the Cannes Summit, <http://www.g20.utoronto.ca/>

serious problem than physical availability. This leads some³ to the conclusion that an increase in food production is not necessary because there is enough of it already, especially if one is able to deal with the considerable waste of resources in that area. Pervasive waste is indeed a serious issue in developed and developing countries alike, and may represent about one third of production, but reducing it calls for heavy investments and a substantial and sustainable evolution of consumption and production behaviours, so that it is not amenable to quick fixes. Besides, in the poorest developing countries, farming still remains key to improving the standards of living. FAO studies show that the potential is there, especially in Latin America (Brazil, Argentina, Colombia and Bolivia) and sub-Saharan Africa (Soudan, Angola, Democratic Republic of Congo) in terms of land and irrigation. The considerable lag in farm productivity in sub-Saharan Africa also suggests that the productive potential is very high. Surely, economic development is not only about farm production, but it is hard to see how to engineer a path toward a diversified economy without first building on the assets and know-how existing in the rural areas and which can be expressed through farming. This is also why the focus promoted by the G20 on agricultural investment and production is welcome.

HOW TO PROMOTE SUSTAINABLE AGRICULTURE?

However, climate and environmental risks prevent the increases in food production and productivity from taking place along the classical, intensification route and invite the development of modes of intensification that will respect the land, soil and environment and will save energy. Techniques in agroecology seem very promising in that respect, but they require an increased effort in agricultural research, the development of adapted seeds, the involvement of local farmers in the experimentation of new farming practices and the evaluation of these experiments, and the interaction between scientific and technical progress with local know-how and knowledge.

Farming also produces many environmental services such as land maintenance, preservation of landscape, or in some instances carbon and energy savings. There has been much discussion already of the multifunctional dimension of agriculture, and this dimension should increasingly be recognised and valued. The focus of a multifunctional agriculture would still be agricultural production, but a production that fully takes account of all its externalities, both positive and negative. This is particularly important in Europe, where the strengthening of a multifunctional, productive agriculture is at the core of the reform of the Common Agricultural Policy currently under discussion.

In developing countries, farm development requires the involvement of small farmers. There is a tendency to set up export-oriented farming in opposition to family farming that essentially produces staple foods. This is overly simplistic. The modernization of agriculture is not a change of state that takes place overnight,

3. Like the Green European Parliamentarian Franziska Keller, during a hearing organized by the European Parliament Commission on Development on 4th October 2011

but a dynamic that requires the involvement of local actors, namely small farmers and producer groups. This is why a focus on smallholders is essential to develop an agricultural system that will be able to meet the food requirements and to anchor the modernization and sustainable development of agriculture.

Land grabbing has been very much in the news in 2011 and is further examined in this book⁴. There are several issues that need to be differentiated. The debate is sometimes cast in Manichaeian terms between a view that celebrates foreign technology and capital inflows and the development of an export potential through modern farming and those who object to the capture of land by foreign investors who don't care for local food needs but count on profitability through exports. Here again, the well-being of local farmers is a crucial factor to monitor. Behind this whole issue of land grabbing, there is the question of land rights. The specific problem does not come as much from the foreign investor as it comes from the capacity of local governments to deprive local farmers from land use and to arbitrarily contract with foreign investors. Beyond this, if such contracts exist, they must be transparent and clearly specify the respective obligations of contracting parties, as would be necessary for all forms of foreign direct investment.

Finally, there is no single approach to sustainable agriculture: rather than a state to reach, it is also a process through which a mutually satisfactory trade-off is obtained between conflicting productive or non-productive land use choices, such as food production, exports, industry, energy production, housing, reforestation... There was heated debate in 2011 about the role of biofuel production as a cause of the recent food crises. Certainly, the use of land to produce biofuels implies that there will be less production of other crops, which may ex post prove detrimental to the evolution of the prices of these crops. But the solution is neither to forbid biofuel production nor to ignore the potential problem. It will rather rest in a twofold combination: the formulation of integrated and consistent farm policies, clearly setting the objectives and taking into account the challenges of food security, in order to provide a framework in which to define the necessary trade-offs and manage them over time; and the development of innovative approaches, such as the experimentation of various combinations of food crops and biofuels. One of the guiding principles is to let farmers decide the best way to use their own land. These choices can usually be altered across farming seasons, so that such decisions are not irreversible.

THINK INTERNATIONAL

In the aftermath of the recent food crises, there have been some calls in favour of restoring food self-sufficiency at the national level. However, without the occurrence of massive movements of population, this is unpractical, as the aforementioned developments suggest. On the contrary, international trade is bound to be a crucial component of food security. Our energies should therefore be devoted to

4. For a thorough discussion of landgrabbing see *Afrique Contemporaine* (2011) issue on Land grabbing, No. 237, October.

the strengthening of the multilateral system for world trade. What is now at stake is not a rather sterile debate between free trade and protectionism, but the stability and credibility of trading rules, especially when crises occur. We need a reliable trading framework to which countries may be willing to entrust their food security. Obviously, we are not there yet.

One of the most conflicting debates has been on how to deal with export bans in times of crisis. These bans have a clear rationale: allow local consumers to access cheaper food by using domestic production for domestic consumption. Such measures disrupt world markets and world prices and may compound crises, both through their direct effect on world supply and through the uncertainty they generate on future supply conditions. Yet, the prohibition of export bans does not seem very realistic: at times of crises, national interests always prevail. However, two complementary approaches may help: first, the negotiation and introduction of collective disciplines, a sort of good practices, on the use of such measures; second, a decision to address crises immediately through collective discussions, rather than through unilateral, uncooperative moves. G20 discussions in 2011 have been useful in these respects. In Cannes, according to the June 2011 Action Plan on Food Price Volatility and Agriculture that was submitted by the G20 agriculture ministers, G20 governments have agreed to remove food export restrictions for food purchased for non-commercial humanitarian purposes by the World Food Programme. They have also launched a “Rapid Response Forum” to coordinate responses in times of market crises.

REVISITING FARM POLICIES

In everything that has been said so far, there is a recognition of the need for active farm policies to help mobilize the productive potential, to promote investments towards sustainable agriculture and to put in place a set of international rules conducive to food security. The development of agriculture has suffered, in industrial as well as developing countries, from the demise of such policies. Indeed, there is a belief that the contribution of the markets has led to the demise of the state. Moreover, the very notion of liberalism was associated with the illusion that free markets would on their own be better contributors to the common good than public policies. Yet, neither politics nor good economics is compatible with this view, even though it has become conventional wisdom. The fact is that public spending went on increasing in most countries (cases in point are the current debt crisis in the Eurozone, but also the situation of public debt unsustainability in other countries such as the US and the UK), but it did so in reaction rather than proactively, and without an agreed framework on the role of public policies. In Europe, for years the main objective of CAP reform was the need to cut support for budgetary and international reasons; instead there should have been a debate on what the CAP should be trying to achieve and with what instruments. Encouragingly enough, this debate now seems to have started.

Situations and policy needs differ between advanced and developing countries. In the poorest countries, agricultural development should be a clear policy priority. Farm policies should simultaneously address land rights, training and capacity

building, infrastructure, research, data collection, access to credit, organization of markets, among others. The modernization of agriculture is an acute requirement in a context of: rapid population increase; migration pressures toward cities with rates of growth that are greater than the capacity to equip them with facilities and basic services; and the need to promote job creation in rural areas. This situation differs from the one in which European countries found themselves at the start of their agricultural modernization, therefore the policies and trajectories for this modernization will have to be reinvented, notably by engaging smallholder farming.

We wish to highlight two further dimensions: risk management and the relationship with the private sector. In 2011, there was much discussion on food and agricultural price volatility. Indeed, this volatility substantially increased over the course of the 2000s. Yet, there were many successions of high and low volatility sequences across the last century, with notable periods of high volatility for example after the World Wars and in the 1970s in the aftermath of the oil shock and of the demise of the Bretton Woods system⁵. While there is therefore a need to better understand what has led to the recent crises, there is also a risk of myopia by doing so, especially by focusing on the detrimental role of speculation. As mentioned above, food security was a problem before the recent crises, even at times when there was much less “financialisation” of agriculture than today. Speculation may be excessive and costly, and there is a good case to rethink and strengthen regulations. But this work also needs to take into account the useful role played by speculators: they make risk hedging possible, and they act as signals of potential imbalances between supply and demand that policies have ignored for too long and should consider. More generally, it is likely that speculation has increased the amplitude of volatility and the impact of changing expectations on prices. But price volatility also signals fundamental causes linked to the low elasticity of the supply and demand of farm products.

Volatility matters in two ways. First, the level of prices impacts on production and on poverty. Prices have increased recently in response to the expected evolution of demand (demographic and economic growth, change in diets) and of supply (weather uncertainties, natural catastrophes, energy prices, etc.), at a time when the level of food stocks was too low to act as a buffer. Price increases may sustain production, but they are costly in the short term for vulnerable populations. According to the FAO, for example, the number of people suffering from malnutrition in Africa increased by 20 million between 2007 and 2008, reaching a level of 240 million where it stabilized. Second, price uncertainty matters because it affects the expected income of farmers and may lead to underinvestment, and also because it penalizes fiscal management.

Farm policies should address volatility and help move from a mode of crisis management, which is costly in human and financial terms, to a mode of risk management. This is not only linked to a proper use of market-based, risk hedging instruments such as futures and options or other financial contracts. These instruments may

5. See for example Roache, S.K. (2010), What Explains the Rise in Food Price Volatility, IMF Working Paper WP/10/129

prove very useful, notably in industrial and emerging countries. However, they are less adapted to the needs of poorer countries, given their costs, the need to transact on high volumes, the need to understand financial and derivative markets and also the fact that they deal with international risks that often do not reflect the local risks facing producers. Local prices may differ from international prices for a number of reasons: the specific character of local production, exchange rate variations, uncertainty on transaction costs, etc. Risk management invites a local approach, beyond the sole price risk. As NEPAD recognised in a letter sent to the G20 in September 2011, farm policies should integrate a dimension of risk management, and donors should help in doing so. The G20 has also supported an initiative to create a joint, multi-donor platform for agricultural risk management that would act as an advisory body for developing countries in assessing risks and choosing the best options to address them, through policy measures as well as market instruments.

The second dimension we wish to highlight relates to the involvement of the private sector. Agricultural development essentially rests on private firms of various sizes, domestic and foreign. But it also engages the common interest, through food security and through the various environmental services (or negative externalities) it exerts. There is thus a de facto interaction that should lead to a deeper public-private partnership, which underlines one of the crucial dimensions of a renewal of public policies, in agriculture and elsewhere: how to more effectively engage private firms in the production of common goods? There are obvious complementarities, which still need to be exploited. The G20, in 2011, has given support to reinvented public-private partnerships along such lines, and this is also one of the initiatives taken by the World Economic Forum with the creation of a New Vision for Agriculture, through a taskforce which groups the CEOs of major international food and food processing firms. This taskforce has concluded country partnership agreements with a number of countries, including Vietnam, Indonesia, Mexico, Tanzania, and with NEPAD.

In 2011, the debate and mobilization seem to have progressed in an encouraging direction. The G20 has mainstreamed food security and agricultural development as a clear priority and has validated the Action Plan adopted by the G20 agricultural ministers in June. This Plan insists on production and investment, and reaches meaningful agreement on various issues: the need for more data collection and transparency, notably through the AMIS (Agricultural Markets Information Systems) initiative, through the Rapid Response Forum mentioned above, through the implementation of a system of emergency food reserves, through new disciplines on export bans, through the promotion of risk management and risk management instruments within consistent, national farm policies, and through public-private partnerships. These recommendations were delivered under short-term pressure, and many issues have clearly been left untouched, exposing ongoing disagreements. However, fundamental issues have been addressed which may open the way for better coordination and more effective policies toward agricultural development, if the collective momentum can be sustained. ■