Agriculture for Development:
Lessons from the World Development Report 2008

by
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Agriculture for development in the headlines

While agriculture is rarely a sensational topic, it has been in the headlines across the world over the last two years, if for the wrong reasons. "The End of Cheap Food", "The Silent Tsunami", "Grains Gone Wild", "Across the Globe, Empty Bellies Bring Rising Anger" have been front page titles in *The Economist* and *The New York Times*. This surge of interest in agriculture and what it can do for development has been motivated by a conjunction of negative outcomes: sharply rising food prices with associated food riots and rising hunger; an approaching deadline for the Millennium Development Goals (MDG) that will not be unmet in most countries, while 75% of world poverty is rural and agriculture has to play a major role if the MDG of halving poverty is to be met; rising rural-urban income disparities creating political tensions in rapidly growing countries such as China and India; threats to the future of the family farm and excessively rapid rural exodus toward urban slums; new demands on agriculture to contribute to energy supply and to deliver environmental services; the destabilization of weather patterns and rising temperatures creating threats to the resilience of farming systems on which the rural poor depend; rising water scarcity and pollution of potable water sources with agro-chemicals associated with the intensification of cropping patterns; loss of biodiversity associated with deforestation and horizontal expansion of extensive farming systems; and pandemics such as the avian flu linking agriculture to human health. Agriculture clearly needs to do a better job for development as the developmental failures of agriculture have reached crisis proportion. Reassessing why agriculture has not been more effectively used for development is thus happening by popular demand.

Yet, can we expect that this reassessment will result in significant changes on the way agriculture is used for development? Or are we to return to "business as usual", with a continued neglect of agriculture and the associated failed opportunities to use it to stimulate growth in poor countries, reduce rural poverty, and improve sustainability in resource use, as occurred over the last 25 years following the debt crisis and the policies of the Washington Consensus. The World Development Report 2008 was a call to make better use of agriculture for development. Urgency of the call has been enhanced by the food crisis. Will governments and international development agencies hear the call and stop turning their backs on agriculture? What would it take for agriculture to be effectively used for development and to address the many crisis that have brought it to

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the headlines? It is the objective of this presentation to raise these questions and discuss answers.

The WDR 2008 storyline and messages

Every year, the World Bank produces a World Development Report (WDR) as its main flagship publication. For 2008, the Report revisited the theme of agriculture for development, last considered in 1982. This 25 years hiatus, symbolic of the neglect of agriculture as an instrument for development, saw major changes leading to the current situation of missed opportunities and crisis. This neglect is, however, not accidental: it reflects the forces of the political economy and the misunderstanding that played against agriculture for development among governments, international development agencies, and development thinkers over the period. A neglect that today proves to have huge costs.

Not surprisingly, the WDR's main message is that, "to capture agriculture's potential for development, and to address the challenges brought up in the headlines, agriculture must be given a more prominent place in government and donor priorities". Crises are clearly propitious moments to find political support in reconsidering the role of agriculture and to invest again, but differently, in agriculture. This main message is widely shared because the WDR was developed in a broad consultative and participatory fashion, evolving into a consensus document of its time. It was elaborated in close cooperation with many divisions of the World Bank, the regional development banks, the FAO, IFAD, bilateral development agencies such as DIFID and the AfD, a broad range of NGOs, producer organizations such as IFAP, and Universities such as Wageningen and Sussex. And the message has been heard: the WDR was presented in 70 countries with more than 300 public engagements, the Report and the Overview were translated into 15 languages, more than 50,000 copies were distributed, the WDR website had half a million page views in only six months, most major media have given repeated attention to the WDR's main messages, and recommendations have been extensively discussed among international development agencies. Time would thus seem to be ripe for a reconsideration of the role of agriculture for development. Will it effectively happen and will it make a difference?

The case for agriculture as an effective instrument for development hardly needs to be made. History, both recent and more distant, starting in Western Europe and Japan with the agricultural revolution as the mother of industry, and followed by success stories of agriculture-based development in Taiwan and Korea, and more recently in India, China, Chile, Brazil, and Vietnam, gives us strong supportive evidence of what agriculture can do for development. In these cases, agriculture has been an engine for overall economic growth at early stages of development. This condition still applies to Sub-Saharan Africa today, where limited tradability of food implies the need for a dynamic agriculture to keep food prices and wage costs low. Given resource endowments and levels of institutional development, competitive advantages are in agriculture and in agro-industry. Successful agricultural growth is a pre-condition for sustained economic growth beyond what the mining and tourism sectors can contribute.

The case for agriculture as an effective instrument for poverty reduction has also convincingly been made. For the WDR, Ligon and Sadoulet calculated that GDP growth originating in agriculture has been 2 to 3 times more effective in raising the income of the poorest 40% of the population than growth originating in the rest of the economy. This is not surprising given where the poor are and what they do. Successful agricultural productivity growth in China has helped some 400 million people move out of poverty over a twenty year period following land reform (the household responsibility system) and market liberalization.

Yet, in spite of this, agriculture has also been neglected. Many countries find themselves today deprived of its potential development benefits and into food crises as a consequence of neglect, with Sub-Saharan Africa the most dramatic case in point. Why did this happen?

Why the neglect of agriculture?

Neglect by governments is seen in low and declining public spending on agriculture. In Sub-Saharan Africa, it is typically 3 to 4% of public expenditures compared to 10% in successful countries at similar stages of development (Figure 1). In spite of NEPAD's (The New Partnership for Africa's Development) recommended 10%, the share of agriculture remains well below that level. Neglect by international donors is seen in the decline in the share of official development assistance by OECD countries going to agriculture, forestry, and fisheries. Over the period running from 1985 to 2006, it fell from 12% to less than 4%, with no major improvements in spite of recent events (Figure 2). The striking message conveyed by these data is that the neglect of agriculture has been widely shared across governments and donors, and systematically happening over time, not an isolated event. How can this be explained?

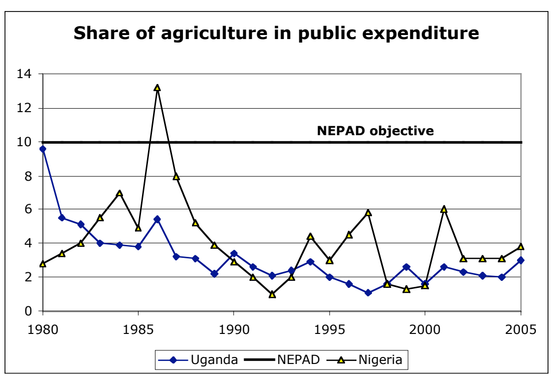

Figure 1. Share of agriculture in public expenditures, Uganda and Nigeria

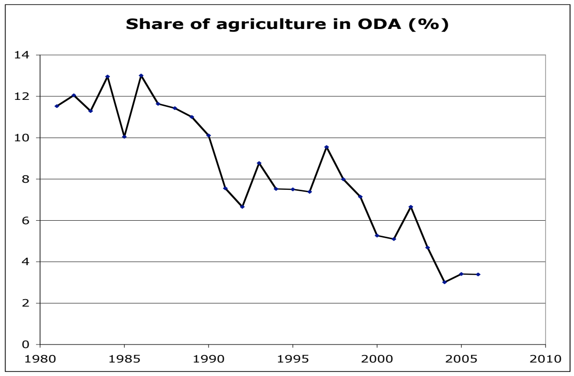

Figure 2. Share of agriculture in official development assistance by OECD countries
Source: OECD Stat Extracts. Agriculture includes forestry and fisheries.
http://stats.oecd.org/wbos/Index.aspx?DatasetCode=ODA_SECTOR

Several reasons explain the neglect of agriculture since the event of the debt crisis. They include the following: (1) Low profitability of investment in agriculture under conditions of low and continuously falling commodity prices. This was due in part to protectionist OECD farm policies depressing international market prices, and in part to urban biases in public policy in the developing countries. (2) Policy priorities toward stabilization and adjustment to respond to the debt crisis, resulting in the descaling of the role of the state in agriculture in spite of its fundamental importance to overcome pervasive market failures in that sector. (3) Focus on rapid poverty reduction via transfers and social assistance programs as opposed to increased autonomous incomes among rural households. Pressures for quick success were enhanced by the urgency of meeting the MDG and the need to meet donor conditions for debt relief. This resulted in Poverty Reduction Strategy Papers (PRSP) that frequently disregarded the role of agriculture and focused instead on the role of the macro-fundamentals and of social safety nets. (4) Concerns by donors and environmentalists with the negative environmental effects of agriculture, creating reticence to invest in a sector with such large negative externalities, particularly water and climate change. (5) Development theories that looked at agriculture as a backward and declining industry, while sources of growth were to be found in industrialization (China) and high tech electronic services (India). The result was to direct investment priorities toward import substitution industrialization (protective tariffs), export-oriented industrialization (subsidies to the "winners"), and open economy industrialization and services (foreign direct investment). (6) Ill defined roles for the state, the private sector (market), and civil society (producers organizations) that placed barriers to private sector investment coming in replacement to descaled public roles. This severely reduced the quality of the investment climate for private investment, and limited the possibility of public-private partnerships in opening new areas of economic activity. Finally, (7) a low rate of success in investment projects involving agriculture due to poor desing and weak implementation. Insufficient attention was given to the difficulty in defining and implementing projects using agriculture as the source of income generation for beneficiaries. Insufficient expertise was available at the level of decentralized governments, ministries of agriculture, and international development agencies to guarantee success in such complex projects.

In the end, looking at this long list, no wonder that agriculture was neglected across the board over the last 25 years. But, have things changed?

Are conditions different today?

Incentives to invest in agriculture have, in many ways, changed, creating expectations that we may be entering a phase of renewal in using agriculture for development. Changes includes significantly improved macro-economic conditions, the main achievement of Washington Consensus policies; price incentives coming both from the international market with the upsurge in commodity prices and generally reduced taxation of agriculture; new dynamic markets both for import substitution in cereals and for high value activities; technological innovations such as NERICA, Bt crops, conservation farming, and applications of ICT to agriculture; and institutional innovations in finance, insurance, value chains, producer organizations, and public-private partnerships. Political support to more public investment in agriculture has been expressed in response to frequent stagnation in agriculture, extensive rural poverty and rising rural-urban income disparities, and the food crisis. This has materialized under the form of increased government commitments (NEPAD's priority to agriculture in public budgets, India's 11th Five Year Plan putting agriculture as the priority sector, and China's fiscal reforms reducing tax burdens on farmers) and higher ODA support coming from specific development quarters such as the World Bank's commitments to double investment in African agriculture over the next two years, the Rockefeller-Gates Foundations Agra initiative to bring a Green Revolution to Africa, and the United Nations' New Deal for Hunger to respond to the food crisis. Conditions are thus more appealing to invest in agriculture to day than they were until the mid-2000.

These opportunities of course come with major challenges. There are severe constraints on growth, in particular declining farm size associated with population growth, soil depletion, accelerating climate change, and rising water scarcity. Pressures to accelerate the growth of agriculture often have little concern with the pro-poor value of that growth. Potential conflicts exist between the urge to seize new market opportunities and using sustainable farming practices, weak governance for agriculture especially at the level of Ministries of Agriculture and decentralization initiatives, and short run responses to protect consumers from the food crisis that run counter to long run incentives for supply response in the sector.

The balance between opportunities and challenges is, however, exceptionally favorable to using agriculture for development, creating a rare window of opportunity. What is to be done is generally well understood by development experts. But will this happen?

Toward a Green Revolution for Africa

There is abroad agreement that what needs to be done to address poverty and the food crisis in Africa is achieve a Green Revolution on that continent where per capita food production has declined (Figure 3, left panel) and where yields have been stagnant

(Figure 3, right panel). While land expansion has been the source of growth for SS-African agriculture as opposed to East Asia where it has been exclusively based on yield growth, this has been an insufficient source of growth for SS-Africa, and land expansion opportunities are being rapidly exhausted (Figure 4). Yields will have to raise if growth is to accelerate.

A Green Revolution for Africa will, however, have to be different from what it was in Asia. This is because both farming systems and the context where agriculture is practiced are markedly different there. There is much more local heterogeneity in Africa as it is mainly rainfed agriculture with numerous agro-ecological niches, a large number of crops, and many different farming systems. Social systems are also more fragmented, with a great deal of specificity in local institutions. Designing new options will consequently require access to local information and to local social capital. For this decentralization and participation are essential. There are also multiple constraints to be overcome that differ from the situation faced in Asia. In Sub-Saharan Africa, soils tend to be exhausted, infrastructure (roads, water control, market facilities) deficient, levels of education and health low, and producer organizations eventually numerous but not correspondingly effective. Most countries are also small, requiring regional cooperation to face up to large economies of scale in research and development.

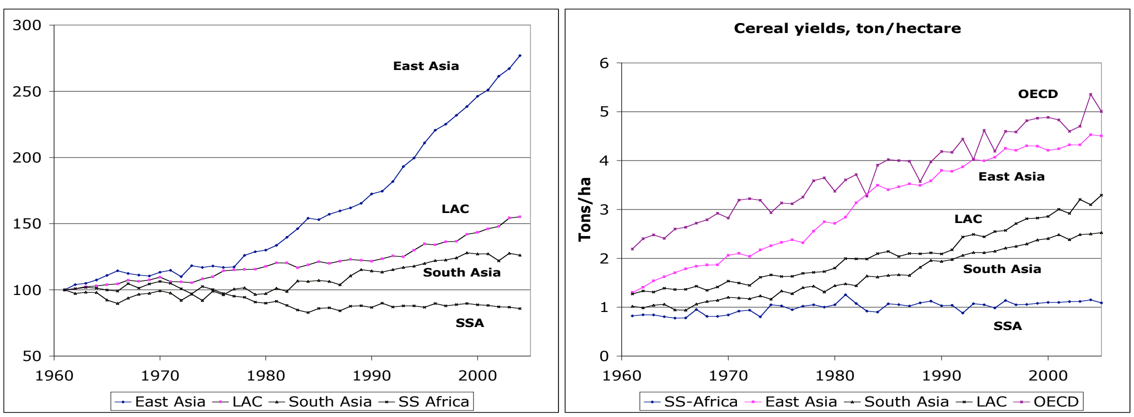

Figure 3. Left panel: Food production per capita across regions, 1961=100. Right panel: Cereal yields in tons per hectare across regions, 1961 to 2005

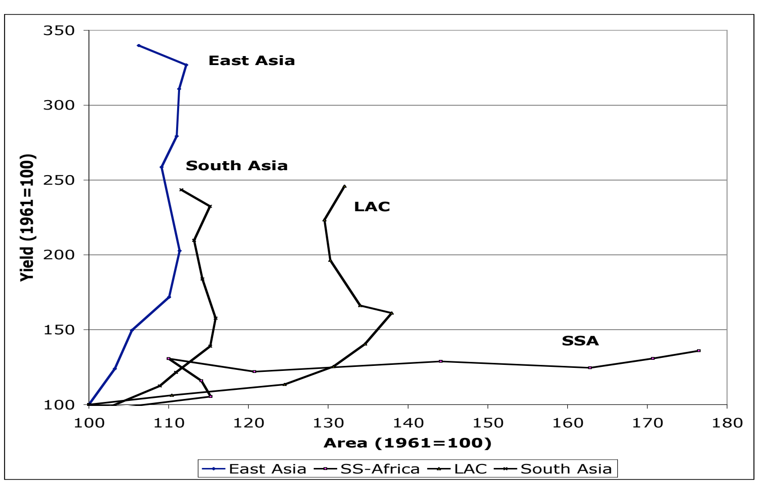

Figure 4. Roles of area and yield expansion in the growth of cereal production across regions over the 1961-2005 period (each point is a five year average).

This means that new approaches need to be found. Countries need to develop participatory agendas that define local Green Revolution strategies. New ways of designing and implementing agriculture-for-development projects need to be explored. The key to success, then, is not to replicate what has been done elsewhere, but to adapt, innovate, experiment, learn, and scale up. A Green Revolution for Africa must be designed as a learning process, grounded on experimentation and impact evaluation, with extensive participation of local organizations and local governments. In general, we have a sense of what needs to be achieved. But what will it take to go beyond business as usual and succeed?

Back to business as usual? Messages for the profession

There are basically five conditions that will need to be met in order to avoid the business as usual scenario. They are awareness, options, capacities, political support, and effective crisis response. Meeting each of these conditions gives us an agenda as development professionals coming from a multiplicity of complementary disciplinary efforts.

Increase the awareness of what agriculture can do for development

An important reason for the neglect of agriculture over the last 25 years, contributing to the food crisis, was a mis-understanding of the role of agriculture for development. This was in part because other ideas took precedence: priority to industry and urban environments as sources of economic growth and "modernity", focus on stabilization and adjustment policies with the expectation that supply response in agriculture would follow, massive descaling of the role of the state under the perspectives of the Washington Consensus, a vision of continuing large food surpluses at a world scale and that hunger was consequently due to poverty and not to lack of supply, and belief that less agriculture would help reduce greenhouse gas emissions and water scarcity. Yet, blame is partially on us as development professionals. Most of our theories of the role of agriculture for development are still in closed economy models, with atomistic food markets, technologies that are public goods, and little concern for interactions between development and the environment. This does not match the facts. Conditions for agriculture have changed dramatically over the last 25 years, and theories need to be adapted to reflect the new conditions: globalization, integrated value chains, technological and institutional innovations, climate change, etc. New models of the role of agriculture for development under these conditions and new empirical analyses of how agriculture can be used for growth and poverty reduction are needed. Research on these subjects has been neglected and is badly needed. Young talents need to be attracted to the field. Massive efforts need to be made to diffuse information and educate policy makers about what agriculture can do for development. As academics and development professionals, we have a major responsibility in achieving this first condition for success.

Identify new options for effective investment in agriculture

Market conditions to invest in agriculture are more favorable today, duly taking into account rising energy prices for the choice of techniques. We need to produce more, but we must produce differently: agricultural growth has to be pro-poor, resource saving, and environmentally friendly. But do we have good investment options that meet these conditions in the project pipeline? Another important reason for the neglect of agriculture over the past 25 years was that many agriculture and rural development projects had been ill-designed and fared poorly in implementation. The difficulty of using agriculture for development had been badly underestimated. For this reason, reducing rural poverty was found to be easier through social assistance programs, such as the widely popular conditional cash transfers (Oportunidades in Mexico, Bolsa Familia in Brazil, and their current extension to many countries, including Africa), than through complex, multi-sectoral, and low-performing agriculture-based projects. Meeting the objective of providing attractive agriculture-based investment options to ministers of finance and development agency country directors requires two initiatives. The starting point is to help countries develop agriculture-for-development **agendas** tailored to their own specific conditions and interests. Successfully developing these agendas requires information (developing "agriculture-for-development assessments" by analogy with the "poverty assessments" so important for the PRSP process) and participation (broadly consultative agenda setting initiatives). Because so many countries are small and there are large economies of scale in research and value chains, national agendas should be coordinated regionally, as under CAADP for Africa (the Comprehensive Africa Agriculture Development Program). It also requires experimenting with new ways of designing and implementing agriculture for development projects. Many new approaches have been introduced in recent years, following in the wake of the rather unsuccessful integrated rural development approaches: decentralization and participation in community-driven development projects, public-private partnerships, improvements of the rural investment climate, linking local entrepreneurs to international investors, maintaining local identity and quality recognition of specialty foods while capitalizing on the advantages offered by trade and specialization (a Whole Foods approach, as opposed to Michael Pollan's locavores), technological innovations for subsistence agriculture and resilience to climate change, recognizing the very special role that women play in agriculture and removing the barriers to productivity gains that specifically apply to them, territorial development approaches in support of the rural non-farm economy, and investing at all levels of the food value chain and seeking greater coordination among its many actors. Innovations are not lacking, but evaluations for results-based management are. This requires systematic impact analyses to learn from successes and failures, and capacity to internalize lessons from these evaluations into institutional learning and change. Credible sourcebooks need to be up kept that collect and disseminate this information. This information is necessary to identify the conditions of success and devise strategies for scaling up. Here as well, our profession is in the driver's seat to come up with appealing and credible investment opportunities that are competitive with other approaches to reducing rural poverty.

Build capacities to use agriculture for development

Another reason for the neglect of agriculture has been the lack of capacity to understand and use agriculture for development. Experts in this field have been aging. New talents are needed at four levels. First, at the individual level. Farmers and small and medium entrepreneurs (SME) need to have the ability to deal with the complexities of new technologies, new institutions, new market opportunities, and the far reaches of globalization. Where are the rural business schools to provide training in entrepreneurship for smallholders and SME? Most rural education is quite unfit to support these functions. Second, at the collective level. Smallholders need membership to effective producer organizations to access information and markets, acquire bargaining power in contracting in value chains, and exercise voice in policy making. This requires training in collective action: new leaders and administrative expertise in representative organizations to participate to complex contractual relations and policy negotiations. Third, governance for agriculture will not be reshaped without developing the technical and administrative skills required by the ministries of agriculture and decentralized administrations to perform effectively. Today, there is broad agreement that ministries and local governments need to assume new functions in support of agriculture for development. Yet, this will not come about without a major effort at building the capacities needed to assume these functions. Finally, the international organizations have a major role to play in support of agriculture for development. The international public goods dimensions of agriculture -- from trade rules, to intellectual property rights, technology, climate change, and health endemies -- make it impossible for national agriculture-for-development agendas to succeed alone. For this, foreign aid support is essential. Yet, this requires an expertise in international development agencies that has been depleted and not adapted to the new approaches to using agriculture for development. Financial commitments will not yield agriculture for development and solutions to the food crisis without this expertise. The international development agencies thus need to start by investing at home. New agriculture development professionals are needed, not only in numbers but with the new skills and breadth of knowledge to make them effective in using agriculture for development. Here again, universities and the development profession have a unique role to play in helping meet this condition for success.

Mobilize political support to pro-agriculture for development coalitions

Finally, we well know that using agriculture for development will not happen without political support. Good policy ideas need to be not only physically, financially, and administratively possible, but also politically feasible. Where will political support to making use of agriculture for development come from? Crisis conditions and media headlines help create attention and a sense of urgency. But this is not enough. Needed is empowerment of producer organizations, particularly representing the rural poor, and mobilization of the rural vote. There are new actors in agriculture that can provide uniquely supportive coalitions to agriculture-for-development agendas. This includes cooperatives that bring together small and large farmers, value chains that rely on smallholders as essential suppliers, and urban interests concerned with un-crowding labor markets and the provision of environmental services. In general, the development profession must not look at the problem of agriculture for development as only a technological and economic program. Understanding and using the political economy of agriculture-for-development in overcoming the interests of the business-as-usual approach is an essential dimension for success.

Effective crisis response

The most immediate test in using agriculture for development is successfully addressing the current global food crisis, particularly for the most vulnerable countries and the most vulnerable people in these countries. Vulnerable countries are those with high cereal import dependency, a high food import burden in their foreign exchange earnings, weak capacity to use price policy instruments to contain rising food prices, and weak fiscal and administrative capacity in providing social protection. This concerns nearly one billion people located in Sub-Saharan Africa, Central Asia, Yemen, Haiti, and part of Central America. In this population, In these countries, import tariffs on food have largely been removed after the debt crisis, and whatever remains pales relative to the surge in international market price. Price policy is of limited value. Social protection under the form of targeted transfers and of conditional cash transfers is quite limited by costs and capacity to manage. Using existing institutions such as schools (student feeding programs) and maternal health centers (nutritional supplements for pregnant and lactating mothers and their infants) are very important to avoid irreversibilities, but they only reach a limited spectrum of the undernourished. Food-for-work programs are important, but are also costly and difficult to organize. This basically leaves agriculture, with the advantage that the very larger majority of the poor, and those affected by rising food prices as net buyers, have, in these agrarian countries, access to a least a plot of land. "Next harvest" programs can be organized through vouchers to subsidize access to seeds and fertilizers, complemented by technical assistance, with the objective of bridging the huge productivity gap that exists in subsistence agriculture for which most markets have historically failed. Beyond next harvest, subsistence agriculture will produce a marketed surplus as a source of cash income, and production will evolve toward high value activities, transforming subsistence farmers into competitive smallholders. And successful agricultural growth, following the perspectives of the WDR, will create new opportunities all along the value chain, including in the agricultural labor market and the rural non-farm economy. Putting agriculture at the center of a response to the food crisis for vulnerable countries and vulnerable people is an effective way of demonstrating what agriculture can for development and avoiding return to business as usual.

Conclusion

Agriculture has been in the headlines, but this has been to expose a multiplicity of failures in using agriculture for development, not to praise success. Headlines prefer bad news, and there have been enough to call attention on agriculture. But many success stories are also there to see, even if not in the headlines, with agriculture delivering growth, poverty reduction, food security, and environmental services, and there is much to learn from them.

Being in the headlines creates an advantage: broad popular attention, rhetorical political support, and improved financial commitments by donors. Yet, will this help promote agriculture for development or will it result in continued neglect, in the business-as-usual attitude toward agriculture that characterized the last 25 years? There are unique opportunities to make the first happen, in spite of huge challenges. For this, university and development professionals have a central role to play. We argued that action needs to be pursued on five fronts: we need to help re-conceptualize how to use agriculture for development and build **awareness** of what it can do; we need to help explore new **options** for the design of financially appealing agriculture-for-development projects along the value chain; we need to help build **capacity** in using agriculture for development at the entrepreneurial, organizational, national, and international levels, starting with the development profession itself; we need to help consolidate **political** support to using agriculture for development and build supportive coalitions; and we need to demonstrate that agriculture can be the most effective instrument to solve the food **crisis** for vulnerable countries and vulnerable people, both for the next harvest and to provide food security in subsequent years.

To achieve these five conditions, especially for Sub-Saharan Africa, narrow focus on technological innovations, efficient market forces, and social safety nets -- the relatively easier instruments -- will not be sufficient. Essential is to focus on broad coordinated approaches that promote human capacities, information flows, stakeholder participation, experimentation with new approaches and learning, institution building, quality of governance, and political support. These are the relatively harder instruments, but success stories speak for themselves, and urgency of the food and environmental crises leaves little room for any other alternative