

Trade and Development Board
Investment, Enterprise and Development Commission
Multi-year Expert Meeting on International Cooperation:
South–South Cooperation and Regional Integration
Second session
Geneva, 14–16 December 2009

The case for increased aid to LDCs for agricultural development

Issues note by the UNCTAD secretariat

I. The importance of agriculture in developing countries, particularly in LDCs

1. The importance of a strong agricultural sector both for those directly dependent on the sector and for long-term development has long been established. Historically, the development process has been based on structural transformation in which the share of agriculture in gross domestic product (GDP) declines in favour of secondary and tertiary activities. Still, agriculture continues to play a crucial role by generating an increasing agricultural surplus through rising productivity and releasing labour force for industry and services, while production and consumption linkages spread and deepen. Moreover, the performance of the agricultural sector is crucial because it directly provides for the livelihoods of a significant part of the population and is a crucial source of food security for the wider population.

2. The performance of agriculture has a direct impact on the well-being of the majority of the population of developing countries because most of their population still lives in rural areas and depends mainly on agriculture for their livelihood. While the share of economy-wide employment that is generated by agriculture has been declining over the long term, this sector of economic activity still generates more than half the jobs in developing countries that are not least developing countries (LDCs) – the so-called other developing countries (ODCs). In the case of LDCs, this share is even higher – over two thirds. In terms of its contribution to total economic activity, agriculture continues to play an important role in developing countries. While its contribution to national economic activity has declined over the long term, agriculture still accounts for some 13 per cent of GDP in ODCs. At the same time, in LDCs the share of agriculture in GDP has declined only marginally, to 28 per cent in 2006 (table 1).

Table 1

Agricultural employment and share of GDP in LDCs and ODCs, 1980–2006

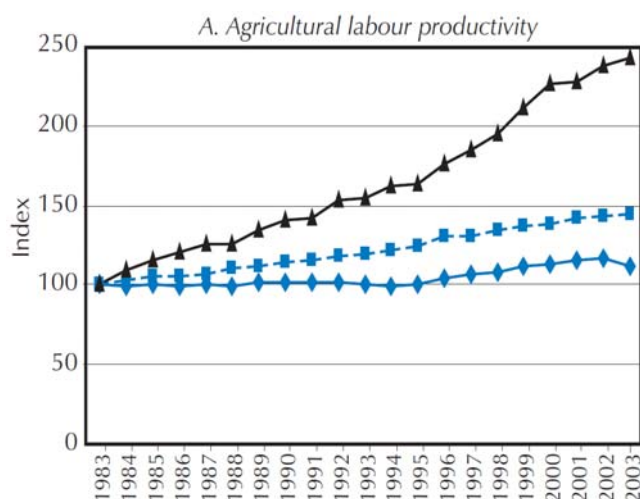
	Agriculture employment as % of total				Agricultural GDP as % of GDP			
	1980	1990	2000	2006	1980	1990	2000	2006
LDC average	79.5	76	70.8	68.6	30	29.5	30.2	28
ODC average	66.4	61.6	55.5	53.1	20.3	19.1	13.6	12.8

Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators 2008*, online.

Note: The list of ODCs comprises: Argentina, Belize, Bolivia (Plurinational State of), Botswana, Brazil, Cameroon, Chile, China, Colombia, Costa Rica, Côte d'Ivoire, Dominican Republic, Ecuador, Egypt, El Salvador, Ghana, Guatemala, India, Indonesia, Kenya, Malaysia, Mexico, Morocco, Nigeria, Panama, Paraguay, Philippines, Republic of Korea, Sri Lanka, Thailand, Tunisia and Uruguay.

3. For those working in agriculture, trends in labour productivity have a direct impact on earnings and well-being. Labour productivity in agriculture has been following divergent trends over the long term in different regions and countries of the world. In developed countries, it doubled between 1983 and 1999, and continued rising thereafter. In ODCs it rose by half between 1983 and 2003. This group includes some middle-income countries that have successfully developed their agriculture to serve not only the domestic market (e.g. China and India), but also export markets (e.g. Brazil, Argentina and Viet Nam). In the LDCs, by contrast, labour productivity is much lower than in ODCs. Moreover, it remained stagnant until the mid-1990s and since then it has risen only marginally (figure 1).

Figure 1



Source: LDCR 2006.

4. The main reasons for the low and stagnant levels of agricultural productivity in the world's poorest countries are declining investment, increasing scarcity of land and water, inadequate rural infrastructure, declining spending on agricultural research and development (R&D), low fertilizer use, subsistence production techniques and the withdrawal of State support to the sector, particularly since the 1980s. The last, in turn, emerged in the context of the neglect of agriculture in both national and international policymaking. This translated into the dismantling of institutions and support measures,

particularly in the fields of agricultural extension, technological advice, financing, marketing and reduced budgetary support for agriculture – both in terms of its share in the national budget and as a percentage of agricultural GDP. All of these factors have reinforced each other and fed a vicious circle of weak economic performance and political neglect.

5. Donors have strongly influenced national priority-setting through their allocation of aid and through conditionality attached to external financing. Since the 1990s, official development assistance (ODA) has increasingly been diverted from productive sectors such as agriculture, industry, infrastructure and research and development. Instead, donors have increasingly opted for allocating aid to health, education and sanitation, in line with a development policy guided by the Millennium Development Goals. In the case of LDCs, for example, aid flows to the agricultural sector in LDCs, which have seen a decline in the last 30 years from 18 per cent of total ODA flows to just 4 per cent.

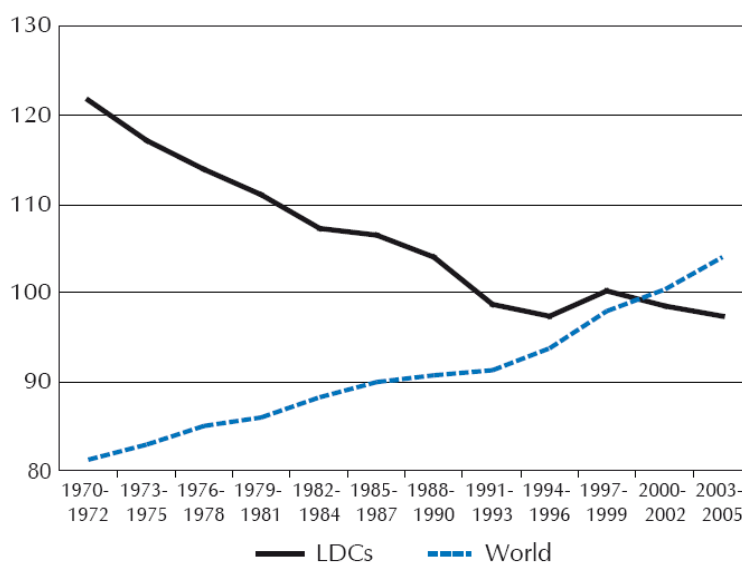
II. The impact of agricultural performance on the well-being of populations in developing countries

6. The depressed and virtually stagnant level of labour productivity in the agricultural sector of LDCs means that the earnings generated by the sector are insufficient to allow its workers to make a decent living. In fact, poor agricultural productivity is the main cause of pervasive and generalized poverty in those countries. Three fourths of the population in LDCs live at or below \$2 a day (total poverty) and 35 per cent live in absolute poverty (earning less than \$1 a day).

7. The poor performance of the agricultural sector in the world's poorest countries acts as a drag on their long-term overall economic growth and structural transformation. Moreover, it jeopardizes their food security. In fact, the per capita food production of these countries declined from 1970 to 2005. Although the level has stabilized since the first half of the 1990s, in 2003–2005 it was 23 per cent lower than in 1970–1972. At the same time and in sharp contrast, worldwide food production per capita rose continuously (figure 2).

Figure 2

Food production per capita (index, 1999-2001=100)



III. The critical importance of raising ODA for agriculture

8. The present state of agriculture in the world's poorest countries is already critical, highlighted by the global food crisis of 2007–2008. Looking into the future, agriculture will be on the frontline of a series of interacting long-term challenges, including climate change, natural resource depletion, poverty, clean energy provision and population pressure.

9. The necessary policy response by both developing countries and their development partners is to put agriculture back at the centre of development policy, with a view to raising its productivity, increasing the earnings of those that directly depend on agriculture, reducing poverty, increasing countries' food security, and allowing agriculture to play its role in the process of development.

10. LDCs have to boost agricultural investment, fostering the uptake of new technology, developing infrastructure (roads, warehouses, wholesale facilities, etc.) and improving access to credit, particularly for small- and medium-sized farmers. Governments also need to take measures that favour small farmers' access to improved inputs, support agricultural R&D, and spread knowledge about effective farming and farm management.

11. Given that the downscaling of support and priority to agriculture over the last 30 years was strongly influenced by donor practices and policies, putting agriculture back to the centre of development policy will also require the strong support of donor countries and institutions. Their financing and capacity building will be required for such reorientation of development policies. A major difference in the present context, however, is that the new external impetus and backing of agricultural development should come not only from traditional donors, but also from emerging countries that are increasingly active in South-South cooperation.

12. Additional financial support to agriculture should be provided in the form of grants or concessional loans, targeted at generating future streams of income from agriculture. Such aid should be directed mainly to two major types of goals: agricultural infrastructure and support services and agricultural STI. However, South–South support is likely to be broader in nature.

A. Aid to agricultural infrastructure and support services

13. Aid for agriculture in developing countries – and particularly in LDCs – should target first infrastructure and support services, comprising in particular the following:

(a) Transport infrastructure that connects producers with markets for inputs and outputs, as well as different producers among themselves and villages with larger urban centres. This comprises both roads and waterways. An efficient and competitive transportation sector is important, because it lowers marketing costs for both agricultural and non-agricultural products that are domestically or internationally traded. Furthermore, improvements in the transportation sector have a positive impact not only on the country where they take place, but also on neighbouring countries;

(b) Electrification of rural areas. Electricity supply has been a critical factor behind the success of the Green Revolution in Asia;

(c) Provision of water and sanitation in rural areas;

(d) Irrigation systems. The provision of irrigation infrastructure – together with rural electrification – was essential for achieving the goals of the success of the Green Revolution in Asia;

(e) Facilities, institutions and installations for storing and marketing of farm input and outputs (local markets, etc.);

(f) Building and strengthening institutions that finance agricultural activities, e.g. micro-finance, subsidized credit, agricultural development banks. A major commonly reported obstacle to investment and entrepreneurship in the non-farm rural economy is inadequate access to capital.

B. Aid to agricultural science, technology and innovation

14. Empirical evidence suggests that there are high rates of return from agricultural R&D investments, making agricultural research a cost-effective way for governments to accelerate agricultural development. The Bangladesh Rice Research Institute (BRRI), for example, has developed and released 31 modern varieties of rice (the main staple food) in the past two decades, and these now account for 65 per cent of total rice production. It is estimated that annual rice production doubled between 1970 and 2002, from 10.8 million metric tons to 24.3 million metric tonnes, but that without the BRRI's modern varieties, it would have increased by just 10 per cent over that period. However, the low level of donor support for agricultural research in LDCs makes it very difficult for developing country governments (particularly in LDCs) to sustain sufficient public investment in agricultural research.

15. An agricultural research intensity ratio is typically used to measure the agricultural research investment effort of a country or a group of countries. It is calculated as the percentage share of investment in agricultural research in agricultural output. The latest agricultural public research intensity ratio for the LDCs amounts to 0.47 per cent compared to 1.7 per cent for the other developing countries. Although there is no official recommendation about preferred intensity ratios for agricultural R&D investments, the World Bank has suggested a 2 per cent target rate, while the Inter-Academy Council, focusing particularly on sub-Saharan Africa, recommends that an agricultural research intensity ratio of 1.5 be reached by 2015. Raising the level of agricultural R&D expenditure even just to 1 per cent of agricultural GDP by 2015 will require a major increase in investment in the latter.

16. Part of that increase could come from the private sector. However, past patterns are not encouraging. Estimates suggest that only 2 per cent of total agricultural research expenditure in sub-Saharan Africa in 2000 came from the private sector. Although the private sector can make a small contribution and there are certainly opportunities for some kinds of public-private partnerships, increasing the agricultural research intensity ratio in developing countries, and especially LDCs, will require increased public R&D expenditure and this will, in turn, need increased ODA for agricultural R&D. Indeed, ODA flows to agricultural research for the LDCs must increase to levels much higher than the current ones.

17. International scientific linkages are important for increasing agricultural productivity in the LDCs. In that regard, recent research has identified worrying trends in global R&D in which there is evidence of a large and sustained, if not growing, gap between a comparatively small group of scientific haves and a substantial group of scientific have-nots. The rich countries' agricultural research agendas are shifting away from simple productivity concerns, and to high-technology inputs (such as precision farming technology), which are not as easily adopted and adapted by the developing countries as they were before and are particularly irrelevant for LDCs. They indicate that some fear that less developed countries will become "technological orphans".

18. Against the background of global shifts in agricultural R&D, the role of the network of international agricultural research centres known as the Consultative Group on International Agricultural Research (CGIAR) is particularly important in undertaking scientific research relevant for increasing agricultural productivity in the LDCs. In the 1990s, there was a broadening of the CGIAR's research agenda away from research on agricultural production of staple foods towards post-harvest handling, food processing and food safety and environmental issues, and this was accompanied by a stagnation of donors' financing. This change in goals reflects the developed countries' concern about environment and agriculture-related issues that are not strictly related to farming improvements, as well as the rise of new and powerful lobbying groups.

19. Whilst issues related to post-harvest handling, environmental sustainability and food processing are certainly relevant, agricultural research does not adequately reflect the reality of subsistence-oriented smallholder agriculture in low-income developing countries. It has been estimated that, in 2003, CGIAR spent only 10 per cent of the combined real spending by the African national agricultural research agencies on "African" issues. Alston, Dehmer and Pardey (2006:348) argue, "Over time, the CGIAR has misplaced its original, well-defined sense of purpose and to some extent has degraded its capacity to meet its original objective: to stave off hunger by enhancing the capacity of the world's poor people to feed themselves, through research-induced improvements in agricultural productivity". Thus, a key priority for aid for science, technology and innovation (STI) in the agricultural sector is to ensure that CGIAR work remains relevant to the concerns and realities of developing countries, particularly LDCs.

20. Public investment is needed in the generation and diffusion of research and technology, in order to encourage broad-based adoption of available technologies and to strengthen indigenous capacities to develop and/or adapt and diffuse the kinds of technologies needed to compete effectively in domestic, regional and global markets. This will require strengthening of LDC research capabilities. In some LDCs, given the generally small national budgets for R&D in the agricultural sector, the establishment and/or strengthening of regional centres of excellence for agricultural research would help build critical research capacity, and also bolster the financial resources required to achieve economies of scale. Hence the importance of South-South cooperation.

IV. Sources and forms of aid for agriculture in developing countries

21. The need for substantially increased aid for agriculture in developing countries, and especially in LDCs, will have to be met primarily by traditional donors. However, new and emerging donors can play an important role.

22. Traditional donors must be the major source of additional aid for agriculture in developing countries, both in terms of infrastructure and support services to agriculture and in supporting agricultural STI. This additional aid should come from both bilateral and multilateral sources.

23. The G-20 announcement of commitments to ODA for agriculture made in March 2009 is welcome. The same is true of Aid for Trade, which puts strong emphasis on infrastructure projects. These projects can be either concentrated on the "trade" sector itself, or have a wider focus on productive capacities. In the latter case, it has the potential to contribute to agricultural development in developing countries.

24. Agriculture is a sector in which the rationale for South-South cooperation is particularly strong, especially in terms of STI and technical cooperation. Given the similarity of climate, soil, ecological, social, economic conditions among developing

countries, the potential for effective South–South cooperation is very strong. This can be financed in two ways: either by traditional donors (i.e. triangular cooperation) or by relatively higher-income developing countries (i.e. South–South cooperation *strictu sensu*). An example of extremely productive use of these modalities of aid for agriculture is the funding of and technical cooperation with regional research centres for agricultural research. These could be created along the lines of agro-ecological zones or strategic food commodities. Such centres would give special attention not only to farm-level technologies, but also to post-harvest technologies (i.e. storage, processing and transport) and appropriate biotechnologies for food and cash crops.

25. In summary, the importance of agriculture for the livelihood of the majority of the population in developing countries and the contribution that the sector must give to the process of development are the main rationales for strengthening aid for agriculture. The fact that the sector has been neglected in most developing countries (especially the poorest among them) and the low and stagnant levels of agricultural productivity provide additional force to this argument. In the present context, aid should come in three different forms: direct bilateral and multilateral aid from traditional donors, triangular aid and South–South aid.
