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Resource-seeking Foreign Direct Investment in African Agriculture

A review of country case studies

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RESOURCE-SEEKING FOREIGN DIRECT INVESTMENT IN AFRICAN AGRICULTURE: A REVIEW OF COUNTRY CASE STUDIES¹

Abstract

Although there has been much debate about the potential benefits and risks of international investment, there is no systematic evidence on the actual impacts on the host country. This paper reviews the main findings of eight case studies in selected African countries. It shows a mixed picture, as the impacts vary significantly across countries and also across locations within a given country. They depend on many factors, including the contents of the investment contract, the type of business model implemented and the institutional framework in place in the host country. The main benefits that can be expected for the host country are economic benefits such as employment creation, higher productivity, improved access to finance and markets for smallholders, technology transfer and enforcement of production standards. However, some studies found that FDI had not generated the expected benefits and two studies even observed that investment projects removed income opportunities for local farmers. The studies found that the legal framework and procedures governing land acquisition, land registration, land-use and the rights of smallholders are generally unclear and lack transparency. The granting of land without undertaking the relevant studies and public consultations to ensure the social, environmental and economic feasibility of an investment project was seen as a critical problem that is likely to have adverse effects on local communities. In order to maximize the positive impacts of international investment while minimizing the risks, governments should verify that the existing policies, regulations and institutions are adequate, as well as undertake preliminary studies and consultations with all stakeholders.

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1. Introduction

After several decades of under-investment in the agricultural sector in developing countries, the late 2000s witnessed a surge in foreign direct investment (FDI) in primary agricultural production. The reasons for this surge are diverse and complex, but the main drivers can be linked to the steep rise in commodity prices in 2007-2008. The spike in food prices prompted countries that are heavily dependent on food imports to invest in other countries where land and other natural resources are abundant with a view to securing supply. In addition, high energy prices triggered international investment in the production of feedstock for biofuels. In this respect, this new trend differs from more traditional forms of international investment in the agro-food sector which were mainly targeting markets. Through the new investment forms, investors seek to gain access to natural resources, in particular land and water.

Weak investment in African agriculture over the past 30 years has resulted in low productivity and stagnant production. The recent food crisis has exposed these weaknesses, as agricultural production was slow to respond to rising prices. Additional investments of at least US\$21 billion annually (including US\$7 billion from the public sector) are needed in Sub-Saharan African agriculture to meet targets for reducing poverty and the numbers of malnourished. Self investment by African countries and official development assistance are clearly insufficient to reach this amount. FDI can potentially generate benefits for the agricultural sector of the host country such as employment creation, technology transfer and access to capital and markets. However, these benefits cannot be expected to arise automatically. They will depend to a large extent on the investment contract, the type of business model and the institutional framework in place in the host country. Further, various organizations have raised concerns concerning the possible adverse impacts on host countries of the new forms of international investment, in particular large-scale land acquisitions. These transactions have attracted the interest of policy-makers, development agencies, intergovernmental organizations and the media due to the economic, social, political and environmental issues they raise. They certainly raise complex challenges in terms of local participation, social equity, food security, poverty reduction, rural development and access to natural resources.

Although there has been much debate about the potential benefits and risks of international investment, there is no systematic evidence on the actual impacts on the host country. In particular, there is a lack of detailed information and data. In order to acquire an in-depth understanding of potential benefits, constraints and costs, several development agencies have carried out country case studies. FAO has contracted consultants to undertake case studies in various developing countries. Six of them were completed in 2009 in the following countries: Egypt, Ghana, Morocco, Senegal, Sudan and Uganda. These studies are listed in the References section at the end of this report and are available upon request. This paper summarizes the main findings of these six studies and two studies on Madagascar and Mali released by the German Technical Cooperation Agency GTZ. It focuses on Africa, as the continent seems to be the largest recipient of FDI in agricultural land and African agricultural development strongly needs investment. The first section provides brief summaries of the outcomes of each case study. The second section is a synthesis of the studies' findings on the economic, environmental and social impacts of FDI on host countries. Finally, the authors offer some conclusions and recommendations.

2. Main findings of country case studies

This section provides short summaries of the main findings of the case studies for each of the eight African countries that were analysed. The references of the studies can be found in annex.

2.1. *Uganda*

The study found that agricultural FDI flows were mainly directed to the following sub sectors: coffee processing, cultivation of flowers, and fish processing. Besides attracting a large number of foreign transnational corporations² (TNC), these sub-sectors can potentially contribute to poverty reduction (especially coffee). They are part of the government's strategy of promoting non-traditional agricultural exports³ and enjoy relevant competitive advantages in the country. The monetary GDP contribution of commercial agriculture accounted for 13 percent in 2008 and agricultural products nearly made up 50 percent of Uganda's exports. Non-traditional agricultural exports increased significantly over the period 1990-2007, but 20 percent of the export revenue still derives from coffee. FDI in commercial agriculture is low and planned projects in the sector accounted for less than 10 percent of total planned foreign-owned projects registered in the period 1992-2008 by the Ugandan Investment Authority. The main investor countries are India, United Kingdom and Kenya. The study is based on interviews with officials from 11 TNCs. Most foreign-owned companies have invested in the following subsectors: agricultural engineering, equipment and services; floriculture and flower exports; and coffee processing and export. While the presence of foreign-owned and domestic companies in agriculture is balanced, data reveal that foreign-owned TNCs operated more efficiently in terms of asset utilization during 2007.

2.2. *Mali*

The main FDI inflows originated from Libya (86 percent), South Africa, China and United States. In 2009, 173 605 hectares of land were known to be demanded by foreign investors, where the dominant investment purposes were food production (rice, millet, corn, sorghum, cotton, sugar and mango) and, to a lesser extent, biofuel production. Projects are mainly implemented in the irrigable zone of the Niger Basin Authority Area and involve the leasing of land on a 50-year contractual basis, extendable to a 99-year long-term lease.

The most prominent examples of FDI in agriculture include the Malibya-Agriculture project and the Markala Sugar project. While the former is based on an investment agreement between Libya and Mali, the latter is covered by a private-public partnership agreement.

2.3. *Madagascar*

The share of agriculture in the overall FDI inflow was less than 2 percent in 2007. The total area of land demanded for FDI was 1.7 million hectares in 2009 (without the Daewoo project). International capital was invested in nearly half of the currently cultivated land. The production of biofuels (Jatropha, sugar cane, palm oil) was generally the dominant purpose of investment by European and American countries, whereas Asian countries tended to invest in food production. TNCs investing in the biofuel sector are rarely agro-business companies and there is a risk that they overestimate both their own capabilities and Jatropha yields. In the case they failed to attain their business objective, it is unclear what would happen to the plantations. The situation is different for TNCs investing in food production. FDI in food production is mostly market seeking and the production is meant to be sold in

² According to UNCTAD, a transnational corporation (TNC) is an enterprise comprising entities in more than one country that operate under a system of decision-making that permits a consistent common strategy.

³ Fish, cut flowers, vanilla maize, beans, cattle hides, cocoa beans, groundnuts, soybeans, sesame, a variety of fruit and fruit products.

the domestic market. This may possibly result in increasing food self-sufficiency. For example, if the VARUN project meets the objective of tripling rice production while exporting only 20 percent of output, Madagascar could become self-sufficient in rice production.

GEM Biofuels FDI in Jatropha plantations is an example of weak plantation management and subsequent partial divestment, due to high correlated risk arising both from the unstable business environment (no transparency related to land rights) and decreasing expected returns. However, during the last campaigns 4 000 workers were employed.

Daewoo Logistics planned an investment in 1.3 million hectares of land for maize production, but the project was cancelled by the transition government due to intense debates at national level. The case revealed the importance of the lack of documentation on land use rights and of the cultural environment (e.g. the concept of *tanindrazana*, according to which land belongs to the ancestors and cannot be sold, especially to foreigners). As most agro-fuel projects, the project aimed at leasing unused or underutilized grasslands and could have contributed to significant increases in production.

In the VARUN case, the US\$1.2 billion investment is mainly directed to the lease of 170 000 hectares of paddy fields (previously used by local farmers). Contracts with 13 associations representing 250 000 farmers have been signed. The company pays a rent of 30 percent of the yields, which is approximately the same as what farmers had before at lower risk than under contract farming (no economies of scale), where needs and yields are unknown. At the same time, this results in the loss of jobs.

2.4. Sudan

FDI in agriculture grew at an average of 23 percent over the period 2000-2008 and the annual average increased to US\$256.5 million over the period 2005-2008. The share of agriculture in total foreign investment is only 2 percent and large fluctuations in agricultural FDI have been observed due to investor's varying levels of risk aversion. The country's natural resources endowments are vast (e.g. underground waters) and the investment climate has actively been improved over the last decade according to the Foreign Investment Agency of Sudan, although significant investment barriers still exist (e.g. lack of information on business start-ups).

The income gap between rural poor and urban rich increased over the last several years and FDI is seen as a crucial factor for increasing productivity in the agricultural sector. The main investors are the Arab countries, whose share of total FDI in agriculture represented 91.3 percent. Among the non-Arabs, European countries' share of total FDI in agriculture equalled 9 percent and the one of Asian countries around 7 percent.

2.5. Morocco

FDI in agriculture accounts for less than 1 percent of total FDI received by the economy and the trend is stable. However, around 150 foreign-owned TNCs operate in the agro-food sector, accounting for one third of production and some 30 percent of employment. The main investors are Spain, France and Arab countries. In 2008, 38 731 hectares of state farmland were leased by France, Egypt, Spain and the United Arab Emirates. Some 90 percent of the foreign investment is FDI, while 9 percent is contract farming.

FDI primarily targets the fruits and vegetables (mainly strawberry, tomato and asparagus) sector. In particular, foreign companies have invested heavily in the early tomato industry, where they account for 15 percent of the cultivated area and 40 percent of exports, which are mainly directed to Europe. The other sectors that attract substantial foreign investment are staple crops (e.g. rice, grains,...), oilseeds (sunflower) and floriculture.

2.6. Ghana

Agriculture is the largest sector in the economy. It contributed to around 39 percent of GDP on average over the period 2000-2008, providing livelihood to some 56 percent of the workforce. However FDI in agriculture only accounted for 5 percent of the total number of FDI projects and 1 percent of their total value over this period. Joint-ventures appear to be the most attractive entry mode, followed by wholly-owned subsidiaries.

The main investor countries are United Kingdom, United States, India, Switzerland, France, Netherlands, Republic of Korea, Denmark, Singapore and Indonesia. Energy crops (Jatropha) and fishing are the main sectors of foreign investment. The presence of Asian investors has increased and accounted for 37 percent of the total FDI projects in agriculture. The Accra region is the most attractive one for investors.

FDIs are crucial with respect to Ghana's economic policy objectives. The government aims to achieve the status of middle-income country by 2015 and to become a leading agro-industrial country. It tries to attract foreign capital through various reforms, new institutions and an increasingly stable business environment. However, procedures related to land-acquisitions, land registration, land-use and small holder land rights remain to be clarified.

2.7. Senegal

Agriculture accounts for a relatively small share of total FDI in Senegal. Agricultural projects are concentrated in crop farming (35 percent of registered agricultural projects), where the preferred entry mode is joint-ventures. The most attractive subsector for agricultural FDI is the tomato sector. The main investors are France and new actors such as the Arab states, Malaysia and China. The irrigated lands of the Senegal River Valley are the most appealing to foreign investors, who expressed renewed interest in land acquisitions or leasing opportunities to farm food or energy crops. The available land and water resources are decreasing and further land acquisitions by foreigners are likely to result in opposition by domestic stakeholders.

2.8. Egypt

In Egypt, foreign investment in the agricultural processing, food and inputs industries has increased significantly, rising from some US\$577 million in 2000 to US\$3 680 million in 2008. Land reclamation and agricultural production attract 38.3 percent of foreign investments, with a predominance of poultry production projects. The food processing industry ranks second in terms of international investment, especially the processing of agricultural crops (8.9 percent of investment) and prepared food projects (4.96 percent).

Conclusion

In the surveyed countries the share of agriculture in overall FDI inflows was low. It accounted for less than 3 percent of total FDI inflows in Madagascar, for some 2 percent in Sudan and for less than 1 percent in Morocco. Yet, the agricultural sector has a critical importance in these economies, accounting for a substantial share of GDP and employing generally more than half of the workforce. Various studies have shown that it needs investment. Hence, increasing international investment in the agriculture sector would be expected to generate economic benefits.

The studies found that the main objectives of international investment are food production and biofuel production. Investors primarily respond to food security concerns in their home country and seek to secure food supply in case a surge in food prices occurs again in the future as it happened in 2007/2008. As a result, they purchase agricultural land in order to produce food and export it to their home countries. The biofuels boom that began in 2003, especially in the United States and the European Union, significantly contributes to increased interest in distant agricultural production

opportunities. In some surveyed countries, such as Mali, FDI in food production projects prevailed over biofuel projects, while in others (e.g. Madagascar) the opposite situation was observed.

3. Impacts of resource-seeking FDI on host countries: a synthesis

This section draws a synthesis of the impacts of FDI in the agricultural sector found by the eight case studies of African countries, with a focus on the acquisition or lease of land. It examines three categories of effects, namely economic, environmental and social impacts.

3.1. *Economic Impacts*

The positive impacts of investment by transnational companies on agricultural production at the microeconomic level in the host country can be divided into Pull and Push factors: Pull factors lead to the involvement of semi commercial farmers into the business of TNCs, which in turn contribute to employment opportunities and improved access to finance and markets for smallholder farmers. Push factors include technology transfer, training and knowledge sharing along with the enforcement of production standards.

a. Impacts on employment

Job creation

According to the World Bank (2007), the agricultural sector provided 1.3 billion jobs worldwide in 2007, but severe unemployment is still a crucial problem in rural areas. Generating more jobs is thus an integral aim of sustainable agricultural development and crucial for poverty alleviation. Employment creation, in particular in rural areas, where most of the poor live, is often presented as an expected advantage of international investment in agriculture. The case studies observed this effect in Sudan (over 6 500 jobs created over the period 2000-2008) and Uganda (3 000 jobs were provided by 11 TNCs in the agricultural sector in 2009). In Ghana, employment creation by FDI in agriculture was estimated to exceed 180 000 jobs in the period 2001- 2008. In Morocco, the 150 foreign firms operating in the agro-food sector account for some 30 percent of employment, although the case study does not indicate the net number of jobs they created. Beyond the observed effects, the case studies expect some projects to have high employment creation effects. For instance, the Markala Sugar Project in Mali is expected to create 5 000 direct jobs and 20 000 indirect jobs.

Employment generation is correlated to the capital intensity of the investment projects in the various surveyed countries. Therefore, significant variations in the number of jobs created per project were found due to large differences in capital intensities across projects. Activities such as mixed farming had much higher capital intensities than others such as poultry production. Job creation in these sectors was thus more significant.

Possible adverse employment effects when local people are displaced

While governments try to attract FDI in the agricultural sector and hope that the primary benefit is increased employment opportunities, the case studies provide some examples that do not support this argument, in particular with respect to the employment of local people. First of all, the main risk of FDI in agriculture and the large-scale acquisition or leasing of land is that indigenous people are displaced, lose their fertile fields and hence their primary source of income. The creation of new jobs may not necessarily compensate these job losses. Even when it does, in the cases where local farmers are simply displaced and have less access to water resources, the loss of farming activities may worsen their already poor standard of living. For instance, the GTZ (2009a) argues in its case study on Mali that the Markala Sugar Project will lead to the displacement of more than 1 600 inhabitants who are likely to suffer from a decline in food production leading to a loss in income while no new job opportunities are expected. It also expects negative employment effects from the Malibya-Agriculture

project, as skilled Chinese labour will be employed. Former smallholders might become low-paid seasonal workers and have difficulties earning their living during the off season.

In its case study on the Varun project in Madagascar, the GTZ (2009b) states that sometimes farmers are only compensated by a certain share of output for leasing their fertile land but fail to find new jobs. Also in the Varun case, it argues that while 250 000 farmers were working and living on the areas where the Varun project is foreseen, there are not employment opportunities for all of them.

Other case studies such as the one on Sudan underline that if FDI continues to be allocated to the most developed regions in the country, it is likely that capital intensive investment will continue to increase and larger income gaps will arise.

Finally, the new jobs created by an investment project may not be all sustainable. In some case studies it was observed that projects are labour intensive during the initial phase but become increasingly mechanized later on, thus reducing future labour requirements.

b. Impacts on agricultural production

Increase in productivity and output

Some case studies show that FDI projects contributed positively to productivity levels, increasing output levels and eventually leading to lower domestic prices. In Ghana, investment by a single TNC is expected to contribute significantly to the increase of Ghana's total palm oil output. It could potentially generate secure incomes for over 50 000 people both directly and through outgrower schemes. In Uganda, companies such as Tilda (U) Ltd contributed significantly to the production of rice, which nearly doubled over the last decade due to the introduction of a new rice variety (Nerica 4). Also, the GTZ states that if the Varun project, a market seeking project, meets the objective of tripling rice production and exporting only 20 percent of it, Madagascar could become self-sufficient in rice. The project is thus an example of a considerable expected increase in production using underutilized land with intensive production methods. In Morocco, yields more than doubled in 15 years for most commercial vegetable crops.

The study on Senegal found contrasted results depending on the industry. FDI contributed positively to the production of some high quality fresh fruits, whereas in the tomato industry yields grew only by around 1 percent on average over the last decade in spite of the involvement of TNCs.

Whether productivity increases occur also depends on the expertise of the investors and the professionals they hire. In Madagascar for instance, investments in biofuel production were done by investors that are not agro-business companies. The overestimation of yields and the inefficient management of the plantation have already led to the first divestments. In case business objectives fail, it is unclear what happens to the plantations.

Diversification of production

A few case studies found that international investment contributed to the diversification of agricultural production with the introduction of new crops or new varieties. For example, foreign investors introduced new products such as cherry tomatoes in Morocco.

c. Impacts on trade

Increased exports

Resource-seeking investment projects usually aim to export a large share of the output, if not all, to the investor country. Therefore, they are expected to raise the exports of the host country. Beyond this direct effect, TNCs can provide African countries with a channel to market their products into high-value developed markets. They can have significant internal markets, accessible only to their affiliates and are therefore a ready market and a reliable source of income for suppliers. Through them African farmers may benefit from distribution channels and brands that are recognized by consumers in the export markets. This may allow farmers to exploit their competitive advantage. The studies found evidence of this positive effect on trade. For example, in Ghana, exports earnings of

non-traditional agricultural commodities (e.g. fruits and vegetables) increased four-fold between 2000 and 2009 due to FDI. Also in Egypt, agricultural production projects to which foreign investment contributed had considerable positive impacts on agricultural exports. A positive contribution was also observed in Senegal, where for example, the volume of mango exports grew remarkably fast. In Morocco, foreign companies have contributed to the development of early tomato exports to Western Europe, a high-value market.

More efficient marketing

International investment in the agro-food sector may help enhance and modernize the marketing of agricultural products in host developing countries. Some positive impacts on marketing and transportation are worth mentioning: in Morocco, for instance, the delivery time from the most distant production place (Agadir) to Spain decreased from 24 hours in 1990 to less than 8 hours in 2009. Although one would expect investment in infrastructure by the public sector to be the main reason for this improvement, the authors of the study argue that investment by TNCs was a major cause.

Adoption of standards

Stringent quality and safety standards in developed economies may act a barrier to the agricultural exports of African countries. Foreign investors may help African producers and exporters overcome these non-tariff barriers through the transfer of technical procedures and know-how. TNCs may also facilitate the access to international standards governing the quality and safety of agricultural products. This is ultimately a key element of their brands and reputation and an integral factor of their competitiveness. Overall, the case studies found positive effects on quality and traceability (e.g. use of the ISO 9000 series and GlobalGAP standards in Uganda) and expect these to rise in the near future.

Dependence on foreign companies for exports?

However, marketing through a TNC may sometimes have negative outcomes, when contract farmers over rely on the production of one commodity and risk heavy losses in case of a price fall or other factors. When prices are guaranteed by the contract, the main risk that farmers face is the exit of the TNC.

d. Impacts on access to finance for small-scale farmers

TNCs involvement in the agricultural sector often includes contract farming, which can have an important impact on agriculture in developing countries, as it can help to ease financial constraints on local farmers. The latter might otherwise have insufficient access to financial services, which are indeed still inaccessible to a majority of smallholders due to a lack of collateral according to the World Bank (2007). Some case studies show that TNCs provide additional credit facilities to contract farmers or outgrowers so that they do not need to obtain credit from financial institutions. In Uganda, foreign-owned enterprises such as British American Tobacco Uganda Limited provide credit facilities to contract farmers or outgrowers. The financing provided by the foreign-owned enterprise is at a low interest rate and is usually tied to farmers' output. What the farmer borrows from the enterprise is deducted from the payment. The agreements commonly include the provision of inputs by the TNC for small-scale farmers.

e. Technology transfer

In view of the increasing human pressure on limited natural resources such as land and water, technological innovation and progress are vital for agricultural development. Technology transfer is often presented as an important potential benefit of international investment. TNCs can indeed play a fundamental role in filling knowledge gaps, both by transferring technology and by engaging in Research & Development activities in developing countries. However, the literature shows conflicting findings. For example, UNCTAD's World Development Report (2009) argues that overall the concrete technological contributions of TNCs have been limited. Often, technologies are not suitable to developing countries, as their use is constrained by climatic or geographical conditions. Significant technological spillovers have been observed in the production of certain cash crops, but less so in the

cultivation of staple foods such as potatoes, wheat, maize and rice. However, as the new investors currently target these crops, it can also be expected that they will benefit from more technological transfer in the future.

Some of the reviewed case studies found evidence of such positive effects. In Morocco, significant technology transfers (e.g. drip irrigation, fertigation) by foreign investors were observed. This led to improved yields, which more than doubled over the past 15 years for most vegetables. Similarly, in Egypt and Uganda, TNCs contributed to introducing new high-yielding rice varieties. Drawing from the data available, a survey by Aryeetey et al (2008) covering 54 multinational enterprises operating in Ghana found the presence of TNCs beneficial to their Ghanaian competitors, contributing to increasing the productivity of these local firms. In contrast, the technological transfers observed in Senegal were very limited.

Moreover, the adoption of new technical packages may have some negative side effects. In Uganda, for example, the introduction of the DEKLAB maize hybrid variety, created dependence by farmers on Monsanto's seeds. The case study quotes farmers indicating that they need to purchase the Monsanto hybrid seed every season in order to have consistently high crop yields.

f. Development of infrastructure in rural areas

TNCs' investment in infrastructure to support their agricultural projects can benefit farmers in the connected locations and promote rural development in general. For instance, roads built as part of an agricultural project can also help farmers who are not directly involved in the project take their products to the market and facilitate local business and social activities. Many investment projects necessarily lead to the development of infrastructures, as access to fields and water resources needs to be improved. For example, the Markala Sugar Project in Mali plans to rebuild villages and provide local communities with housing, educational, health and road infrastructure.

g. Financial impacts at the macroeconomic level

Impacts on the balance of payments

Many sub-Saharan African countries suffer from a net trade deficit contributing to the deficit in the balance of payments and lack of foreign currencies. FDI in agriculture may contribute to the generation of foreign exchange earnings and the correction of macroeconomic disequilibrium. Much of the literature assumes that, because of their involvement in global agribusiness value chains, TNC's investment in agriculture will have a strongly positive balance-of-payments effect. This effect is to be expected even more in the case of resource-seeking FDI, as usually much of the output is meant to be exported. Several case studies found evidence of this impact. Positive trade balance effects were observed in Ghana and Egypt. In Uganda and Egypt, international investment raised rice production, thereby reducing the expenditure on rice imports. A positive contribution was also observed in Senegal, where FDI helped to improve the overall balance of payments.

Additional tax income

Foreign-owned TNCs may contribute significantly to tax revenues. In Uganda three foreign owned TNCs were ranked among Uganda's 50 largest taxpayers. According to the calculations of the Markala Sugar Company, their Malian project will generate a fiscal revenue increase of CFA 4 billion (more than US\$8 million). However, the practice of exhaustive tax exemption to attract foreign investors, seemingly common in African countries, should be addressed by governments, as income tax from these investments could present a major income for the national budget. There is a trade-off between attracting FDI through large tax rebates and obtaining additional tax income.

3.2. Environmental Impacts

In agriculture, the impact of TNC activities on the environment is a significant aspect of their overall effects on sustainable development in host countries. Farming has contributed to creating and maintaining a variety of semi-natural habitats over the centuries. However, production activities in agriculture, as in other industries, may as well harm the environment through their damaging effects on water, soil, air and biodiversity if they are not managed in a sustainable manner.

a. Intensive use of land and water resources

FDI projects are commonly located within the most fertile areas with potential for irrigation. This is the case in the Malibya Agriculture project situated in an agro-pastoral area. The case study expects that due to the project there will be limited irrigation for fields leased to local farmers. Furthermore, local farmers will lose their farmlands used for dry farming and pasture. The Malibya Agriculture project furthermore brings about the risk of desertification and salinization. Also, the Markala Sugar Project in Mali blocks transhumance routes. At the same time, farmland will be converted from dry farming into sugar cane plantation, thereby threatening water of the supplies of the Macina canal in the dry season. Fertilizers will affect the water quality and the transformation process from sugar cane to ethanol will imply the use and pollution of large quantities of water. Also, sugar cane or oil palm cultivation, crucial investment sectors in Madagascar and Mali, require more water resources than other farming activities and are likely to have similar adverse impacts.

b. Impacts on forests and biodiversity

In the Markala Sugar Project, farmland will be converted from dry farming into sugar cane plantations, which will cause a loss of biodiversity due to the introduction of monoculture. A further serious adverse FDI effect is logging and the transformation of Ghana's forest ecosystem and its diversified ecosystem-based traditional economy into various vulnerable artificial monoculture systems. This has led to the reduction of the national forest cover from some 8 million hectares in 1960 to only some 2 million hectares today. Climate change effects can be expected.

In Uganda, investment in the fish-processing industry by a large number of TNCs has contributed to high demand for Nile Perch fish, which in turn has contributed to the depletion of the Nile Perch fish stocks in Lake Victoria. This has led to an increase in prices, which are expected to increase further.

In many case studies, negative environmental effects such as deforestation and soil degradation could be directly attributed to FDI. For example, environmental degradation was observed in Uganda, where tropical forests were converted into oil palm plantations by TNCs. In many cases the negative environmental externalities were due to weak or absent environmental audits and monitoring systems.

c. Introduction of more environment-friendly production techniques

In spite of the above negative externalities, some case studies show that certain advanced production techniques introduced by foreign TNCs may be more environment-friendly than domestic ones. For instance, in the floriculture industry in Uganda, TNCs use environment-friendly production techniques and soak pits for the disposal of crop chemical rinseate. Also, the establishment of *Jatropha* plantations on marginal soils (e.g. in the mountainous areas of Madagascar) may contribute to increasing soil fertility.

3.3. Social Impacts

A number of concerns have been raised on the social and political implications of large-scale foreign investment in agriculture. Some of them are not new, such as concerns about the involvement of TNCs in the political process of the host country. Besides, resource-seeking investment by TNCs may induce a transformation of the agricultural sector that may have an impact on income distribution (e.g. by gender and farm size) and poverty in rural areas in a number of ways. Finally, a range of socio-political externalities can arise, such as the disruption of traditional economic systems, and impacts on health and safety as well as on land rights.

a. Displacement of indigenous people and loss of income opportunities

In Africa, up to 90 percent of rural land is under customary tenure, i.e. formally held as government land but used by communities, often for generations. Among the most negative impacts of FDI projects in agriculture is the loss of farmlands currently used by the local population for activities such as dry farming, cattle crossing and pasture. This results in a deterioration of livelihoods due to production on marginal lands and more difficult access to water. Many projects lead to deforestation, which implies a loss of resources for daily life as well as sources of revenue (e.g. firewood and charcoal). In some cases, as in the Markala Sugar Project in Mali, hundreds of farmers are displaced, lose their fields and traditional income-generating activities are no longer possible. According to some case studies, it is not yet possible to say if the new jobs will provide the same or better livelihood than the subsistence mode of operation lifestyle did. In some of the case studies it was observed that projects are labour intensive during the initial phase but become increasingly mechanized later on, thus reducing future income opportunities.

In Mali, according to the GTZ (2009a), 100 000 hectares of land were made available to the Malibya Agriculture company without any form of involvement or consultation of the local population in the decision process. Thus, no Environmental and Social Impacts Assessment (ESIA) was conducted. Also, compensation for resettled farmers did not meet legal obligations, as the company did not make any provision to compensate people who would be displaced or harmed by the project. This led to conflicts with cattle breeders, as their traditional grazing areas and routes were ignored. In Madagascar instead, the Daewoo Logistics case revealed the importance of the proper documentation on land use rights as well as the recognition of the cultural environment (e.g. the concept of *Tanindrazana*, according to which land belongs to the ancestors and cannot be sold, especially to foreigners). Also, the study on Ghana found that the area of arable land remaining was shrinking rapidly and land issues were underestimated. Similarly in Senegal, available land and water resources were decreasing and further land acquisitions by foreigners were likely to meet the opposition of local farmers.

b. Impacts on the legal framework and governance

Most case studies reveal that the legal framework governing the acquisition, registration and use of land is vague and not transparent. Property rights over natural resources are seldom well defined. This is especially problematic in the case of smallholders. However, there are signs showing that farmers who have unwritten customary land rights have started to realize that these provide no legal guarantee. The case study on Mali indicates that farmers increasingly prepare private contracts, so called “petit papiers”, signed and approved by the mayor, when they transfer land (informally). However, the GTZ (2009a) recommends that the Government of Mali should review the Land Act (CDP) with special attention to issues related to FDI, as land use rights derived from the customary land allocation system need to be recognized.

On the other hand, many governments have recognized the need for a legal framework that is more attractive to investors and are increasingly enacting policies that provide for more stability. According to the World Bank (2010), the investment framework of many African countries has actively been improved over the last decade, although significant investment barriers still exist. While these efforts are primarily aimed at investors, civil society will also benefit from a more stable political environment.

c. Impacts on food security

Many commentators have raised concerns that some forms of international investment in agriculture, in particular large-scale land acquisitions, could have an adverse impact on food security in the host country. Most of the FDI projects analysed by the case studies sought to provide access to natural resources and the majority of investors aimed at exporting the output to their home countries or other markets. For example, in the Malibya-Agriculture case, the Libyan company will engage in producing rice in Mali for export to Libya, in accordance with a bilateral investment treaty signed by the two countries in 2009. The GTZ (2009a) argues that this objective conflicts with Mali's national food security program PNSA. Similarly, it states that in Madagascar, investment projects overall do not seem to contribute to food security (GTZ 2009b), with the exception of the Varun project. If this project achieves its objective of trebling rice production while only exporting 20 percent of the output, it could have a positive effect on food security. Overall, FDI projects are too recent for having an observable impact on food security. However, the GTZ fears an increase in food insecurity of vulnerable groups who may be affected for instance by a lack of recognition for their customary rights on land, by disappearance of their forest habitats or by unavailability of sufficient water for agriculture as well as for livestock keeping which will deprive them of their production base (GTZ 2009a). Ultimately, the effect of investment projects on food security will closely depend on their ability to increase the income of the local community.

d. Uneven allocation of FDI at the sub-national level

The case study on Sudan found that FDI was mainly directed to capital intensive regions. Over 86 percent of total FDI capital in agriculture was allocated to the developed regions, of which 46 percent went into the most developed region of Khartoum. The Western regions are characterized by low capital intensities, but only 2.3 percent of total FDI was invested there (creating 167 jobs), while 23.4 percent of total FDI was allocated to the Central region which has high capital intensities. The employment potential of FDI differs substantially across regions. The study calculated that if instead these 23.4 percent of total FDI were allocated to the Western region, holding the capital-labour ratio constant, more than 60 000 jobs would have been created.

e. Interaction of foreign firms with domestic enterprises

While competition has in many cases led to improved quality standards and new export markets were guaranteed to local farmers through TNCs, leading to increased farm gate prices, there were also negative impacts. In Uganda, increased competition from new players for limited supplies of fish led to the closure of most of the domestically-owned fish processing factories. However, in studies such as the one on Morocco crowding out effects were not observed, as foreign capital is not dominant and present only in specific agricultural activities (e.g. high value added fruits and vegetables). These are thus complementary activities that are not likely to cause the above effects. In Ghana, a survey by Aryeetey et al (2008) found the presence of TNCs beneficial to their Ghanaian competitors.

f. Access to rural education and health services

Foreign companies such as ENI (2009) have signalled their intention to invest in education and health services, at least for their own staff. The overall effects on welfare are unknown and differ across projects. It has been observed that TNCs have contributed to increasing provision of social services and increasing demand for goods and services in the communities where they operate. Examples can be found in Uganda, where schools were constructed, HIV prevention and counselling services were provided and power lines were erected.

4. Conclusion and recommendations

The studies reviewed in this report found that only a very small share of total FDI inflows is directed to the agricultural sector. Yet, the sector has a vital importance for the economies of African countries, accounting for a substantial share of GDP and employment. Hence, increasing international investment in the agricultural sector would be expected to generate economic benefits.

The studies suggest that the main benefits that can be expected for the host country are economic benefits such as employment creation, higher productivity, improved access to finance and markets for smallholders, technology transfer and enforcement of production standards. Evidence of these benefits was found in a few case studies. Other studies expected these positive impacts to arise in the future although they had not been observed yet. However, some case studies found that FDI had not generated the expected benefits; for example, technology spillovers were insignificant. More disturbingly, two studies even observed negative effects, as investment projects removed income opportunities for local farmers.

All case studies found that the legal framework and procedures governing land acquisition, land registration, land-use and the rights of smallholders are generally unclear and lack transparency. The granting of land without undertaking the relevant studies and public consultations to ensure the social, environmental and economic feasibility of a given project seems to be the greatest problem of FDI in Africa. The studies suggest that the land needs of local people are rarely taken into account and the parties to the investment agreement usually fail to respect the customary rights of local people such as grazing pastures and herders' accommodation. This seems to be one of the main disadvantages of agricultural FDI, as it directly affects farmers' livelihoods. Nevertheless, the studies could not find conclusive evidence that international investment had increased food insecurity. Other main disadvantages found related to the environmental impacts, especially the highly intensive use of water and land resources as well as a decrease in biodiversity and the forest cover.

However, the above findings should be treated with caution, as it is difficult to draw general conclusions on the impacts of resource-seeking FDI on host countries. The case studies reviewed in this paper show a mixed picture. Outcomes are often ambiguous and depend on the focus of the empirical research. The impacts vary significantly across countries and also across locations within a given country. They depend on many factors, including the contents of the investment contract, the type of business model implemented and the institutional framework in place in the host country.

In addition, the case studies were constrained by several factors. There is a lack of available information and data on the impacts of international investment in the host countries. This may be explained by the fact that many resource-seeking investment projects are very recent and their full effects cannot be observed yet. Furthermore, even when projects are older, host countries seldom have the resources needed for monitoring and documenting their impacts. In view of these constraints, the resources and time allocated to the studies were generally insufficient to allow an in-depth analysis of the economic, social and environmental impacts. Further research is needed to analyse the full impacts at the local level, in particular through the use of local community surveys and environmental impact analyses.

Recommendations

As noted above, foreign investment in the agricultural sector can potentially deliver benefits to the host country. Yet, whether these benefits will materialize or not will depend to a large extent on policies and measures implemented by the host country itself. Based on the findings of the studies, the following recommendations can be made to governments seeking to attract investors.

First of all, the government should verify that the existing policies, regulations and institutions are adequate in order to maximize the positive impacts of international investment while minimizing the risks. Policies should favour national interests (e.g. food security, natural resources, export earnings and employment) and those of the community where the project is located, while offering attractive conditions to foreign investors. For example, the fiscal policy should determine the appropriate tax rate that attracts investors without foregoing too much tax revenue.

Second, the government should undertake preliminary studies to assess the economic, technical, social and environmental feasibility of the project before it is implemented. The potential impacts on the local community and the environment should be carefully appraised, as well as possible effects on food security. The various users and right holders of the land should be identified, including customary rights and use. The local community should be consulted before the government signs the contract with the investor. The whole process should be carried out in a transparent manner. The consultations should be documented and written records of decisions kept.

Third, provisions should be made to remedy the potential adverse effects or compensate for them. For example, in cases where the investment leads to the displacement of local people, a fair compensation scheme for resettled farmers should be designed, based on realistic economic analyses.

Fourth, because the transfer of land ownership generally deprives local populations of an important economic asset, governments could consider alternative business models to land acquisition. In fact, the purchase and direct use of land resources is only one strategic response to the food security concerns of countries with limited land and water. A variety of other business models can offer just as much – or even higher security of supply. These include contract farming, joint ventures and outgrower schemes.

Finally, the government should provide incentives for shifting FDI into sub-sectors that have the potential to decrease poverty through job creation. Policies should give investors incentives to invest in underexploited land, in particular where substantial infrastructure construction is needed.

The above recommendations derive from the findings of the studies and are not meant to be comprehensive. The *principles for responsible agricultural investment that respects rights, livelihoods and resources* provide a more complete and detailed framework. These seven basic principles have been formulated by FAO, UNCTAD, IFAD and the World Bank as follows:

- i) *land and resource rights*: existing rights to land and natural resources are recognized and respected
- ii) *food security and rural development*: investments do not jeopardize food security and rural development, but rather strengthen it
- iii) *transparency, good governance and enabling environment*: processes for accessing land and making associated investments are transparent, monitored, and ensure accountability by all stakeholders
- iv) *consultation and participation*: all those materially affected are consulted and agreements from consultations are recorded and enforced
- v) *economic viability and responsible agro-enterprise investing*: projects are viable economically, respect the rule of law, reflect industry best practice, and result in durable shared value
- vi) *social sustainability*: investments generate desirable social and distributional impacts and do not increase vulnerability

- vii) *environmental sustainability*: environmental impacts are quantified and measures taken to encourage sustainable resource use while minimizing and mitigating negative impacts.

These principles can be used as a reference by the governments of host countries, investors and technical cooperation agencies to guide the preparation of investment contracts, international agreements or policies. They can provide a means for reconciling the objectives of the investors with the investment needs of developing countries.

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