CHAPTER 4
INVESTMENT

International Investment and Local Food Security

JAMES ZHAN, HAFIZ MIRZA, AND WILLIAM SPELLER

James Zhan is the director of Investment and Enterprise at the United Nations Conference on Trade and Development (UNCTAD), Geneva, Switzerland. Hafiz Mirza is professor of international business and strategy at the Henley Business School, University of Reading, UK. William Speller is economist, Investment and Enterprise, UNCTAD, Geneva, Switzerland.

KEY FINDINGS

- International private investments in agriculture can help the world meet the Zero Hunger goal by boosting food security and nutrition and supporting development.
- International investments can: create jobs; develop rural infrastructure; connect smallholders to global markets; introduce new productivity-enhancing technologies; and improve access to finance for farmers.
- Benefits are felt through increases in production, improved value chains, rising rural incomes, infrastructure development, increased use of digital and other technology, and higher safety and quality standards for food.
- A study of 50 major private agribusiness investments in Africa and Asia found that the greatest benefit was improved ability of local people to buy more food and more nutritious food.
- Without proper governance and screening, international investments can have negative impacts, including violations of people’s rights and access to land.

KEY RECOMMENDATIONS

- Align food security and nutrition targets with broader national development strategies, with attention to the role of private investment.
- Promote and facilitate investment in staple and cash crops in food insecure regions.
- Support public-private partnerships for agro-infrastructure to link farms to markets and attract investment.
- Improve access to digital technology from farmer to consumer to address information needs for productive investments.
- Ensure responsible investing by implementing agricultural investment principles and supporting government screening of investments through technical assistance to host governments.
- Give preference to business models that fairly integrate smallholders through contract farming or out-grower schemes.
- Prioritize investments that support women’s empowerment, given women’s key role in food and nutrition security, as well as improve the position of vulnerable groups such as youth and pastoralists.
- Develop a data collection consortium to improve data on international investment in agriculture.
International investments in agriculture have a broad range of social, economic, and environmental impacts. At their best, they create decent jobs that upgrade local skills, provide local farmers with incomes, improve access to markets and finance, develop rural infrastructure and introduce new technologies to modernize domestic sectors, create new sources of food security, and generate lasting, mutually beneficial partnerships with surrounding communities. At worst, investments result in the displacement of people, are detrimental to existing sources of food security, lead to violent conflicts with local communities, damage the natural environment, fail to generate promised benefits for the host country, and themselves fail financially, with companies exiting the host country and leaving a void in their wake.

In an era when globalization—and associated flows of international investment—is increasingly under threat, the challenge for policy makers is how to maximize the benefits of international investments while minimizing the risks. Achieving Zero Hunger, the ambitious Sustainable Development Goal 2 (SDG2), will require significant increases in investment, including international investment. Agricultural production must grow by 70 percent by 2050 to keep 9 billion people fed and healthy. Ninety percent of this increase needs to come from sustainable intensification of existing production. To reach this goal, investment must be increased in rural development and agriculture in developing countries, including investment in production, processing, and storage infrastructure. Current annual investment (private and public) is about US$220 billion, significantly less than the US$480 billion required annually if SDG2 is to be realized. This figure includes investment in agriculture-specific infrastructure, natural resource development, research, and food safety nets.

Much of this investment will need to come from the public sector. Meeting the total cost of ending hunger worldwide by 2030 is estimated to require an additional US$11 billion per year in public spending over and above current public investment levels, which would need to be contributed

The findings of this chapter derive from an ongoing program of field work conducted by the United Nations Conference on Trade and Development (UNCTAD) and the World Bank, generously funded by the Government of Japan. The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the United Nations or its officials or Member States. The authors would like to thank Richard Bolwijn for valuable comments on earlier versions.
by developing country governments and international donors.³ A more significant share will come from the domestic private sector. The largest investors in agriculture are smallholders investing in their own farms—on-farm investment is estimated to be three times as much as all other sources of investment combined.⁴

International private investment, in comparison, represents a relatively small share of the total investment in developing country agriculture. Yet the international private sector is critical to achieving the SDGs. The role of international investment in delivering food security includes, but is certainly not restricted to, investment in the agriculture sector, either in primary production or other segments of the agricultural value chain. Foreign investment in a range of other sectors can have positive impacts that contribute indirectly to greater food security. In fact, investment in agriculture alone will never be enough. A food security strategy must be part of a broader economic development strategy that takes advantage of foreign investment flows across a range of sectors and in the various links of the value chain.

Turning to investment in agriculture and related food and beverage sectors, international investment can play a more important role than suggested by its current scale. International investments can create jobs, develop rural infrastructure, connect smallholders to global markets, introduce new technologies that improve productivity, and improve access to finance for local farmers. International investments can also “crowd in” further domestic investment through demonstration and spill-over effects.

But international investments can also have negative impacts on host countries and local communities and have been criticized in recent years for violations of people’s rights and access to land. It is important, however, not to conflate foreign investment in agriculture with foreign investment in land for primary production. A significant and, anecdotally at least, increasing share of international investment occurs through business models that require little land, such as contract farming and processing operations. Furthermore, investment is often through modes that require neither land acquisition nor equity investment in the host country, and instead focus on the economic power that multinational enterprises have over links in the value chain.⁵

### INTERNATIONAL INVESTMENT AND FOOD SECURITY

International investment affects food security across its four key dimensions: availability of food; access to food; stability of supply; and safe and healthy utilization, including access to nutritious diets.⁶ To design policies that ensure that international investments enhance food security, governments need to be aware of the potential positive and negative impacts and the various pathways through which investment affects food security (Figure 1).

**DOMESTIC PRODUCTION.** The most direct impacts on food security are felt when an international investor engages in the production of staple crops for domestic consumption, which improves their availability and stability of supply. International investors may also enter other segments of a country’s domestic agricultural value chain, as suppliers of inputs, processors, or supermarkets and retailers, which can also enhance food availability and stability of supply. However, to the extent that international agricultural investments are either in production for export or in high-value-added cash crops, the direct impact on staple crops and local food security will be limited and potentially negative. For example, where large areas of land are converted from staple crop to cash crop production, poor urban consumers may be adversely affected by rising prices for staple crops.

**RISING INCOMES.** Multinational enterprise activity can enhance food security indirectly through rising rural incomes. International investments can increase formal employment levels and the number of people enjoying a living wage. Where a contract farming or outgrower business model is adopted, farmers receive revenue from their sales to the investor. When an investor sources other inputs (such as fertilizer or equipment) locally, suppliers also benefit. Higher and more stable incomes improve people’s ability to access food. And higher incomes tend to be associated, at least initially, with a shift to more nutritious diets, thereby improving food utilization.

**PRODUCTIVITY AND TECHNOLOGY.** Multinational enterprise activity can also lead to improvements in domestic agricultural productivity, both in domestic and internationally run farms and operations. Where training and contract farming or outgrower schemes
exist, the resultant spillover gains in production volume and efficiency can occur beyond the investment area. The transfer of agricultural technology, modern management techniques, use of enhanced inputs, and better supply chain management can all contribute to increases in the amount of food produced (improving availability) and better distribution (improving access). The digital economy in particular is making a growing contribution to productivity. The critical importance of increasing agricultural productivity is recognized by SDG2 target 2.3 to “double the agricultural productivity and incomes of small-scale food producers” by 2030.7

**Infrastructure.** Multinational enterprises require infrastructure to store and transport output from their operations, especially for export products. International investment in infrastructure—by investors, host governments, or through public-private partnerships—that connects producing regions to urban centers and ports can promote other investments in rural development. Building these connections can help improve food access and stability of supply for food-insecure regions. Improved infrastructure can also play a critical role in reducing the postharvest losses that often result from inadequate transport, storage, and refrigeration facilities.8

**Natural Resources.** Depending on the business model adopted, international investment can alter access to natural resources, especially land and water. This is particularly true for large-scale, land-based investments that require relocation of people in order to provide secure tenure to investors. Such business models have real potential for socioeconomic harm, including jeopardizing existing food availability and access.

**Quality and Safety Standards.** Finally, international agribusinesses can introduce higher quality and safety standards for food. Their involvement in agricultural production has spillovers related to quality control, food standards, and consumption patterns that can lead to improved food utilization and nutrition in host developing countries. In some cases, however, undesirable food consumption patterns, such as frequent fast food meals that are less nutritious than traditional diets, may be emulated in developing countries.

---

**FIGURE 1** International investment in agriculture and impact on food security

![Diagram showing the impact of international investment on food security](image-url)

EVIDENCE FROM FIELD WORK

With these theoretical linkages between international investment and food security in mind, we now turn to evidence from the field. A five-year program of field research—undertaken by the United Nations Conference on Trade and Development (UNCTAD) and the World Bank under the auspices of the interagency working group of UNCTAD, the World Bank, the International Fund for Agricultural Development, and the Food and Agriculture Organization of the United Nations—conducted extended field work in close concert with over 50 major private agribusiness investments in Africa and Asia. More than 500 external stakeholders (community members, employees, resettled persons, government officials, civil society organizations, suppliers, and local business owners) were interviewed to gather perceptions regarding the full range of impacts of these investments, including impacts on food security.

Of the investors included in the field research, fewer than one-third were producing staple crops for sale in domestic markets, meaning their direct impact on food availability was low (Figure 2). Most investors were either selling to export markets or growing cash crops that were not part of the local staple diet. Local communities often switched from growing staple crops to growing the crops that investors committed to buy as part of contract farming arrangements. At one site, local farmers were encouraged to intercrop the cash crop introduced by the investor with their local food crops.

The main positive impact on food security and nutrition was the ability of local people to buy more food—and more nutritious food—due to a rise in rural incomes from direct employment, participation in outgrower schemes, and broader economic spillovers related to the agribusiness investment. These benefits were not automatic, however. Some investments in the study operated as “enclaves”—predominantly employing expatriates, adopting estate-style business models, importing inputs, exporting produce, and generating few linkages with the local economy—with limited benefits to local and national food security. For food security improvements to occur, jobs must be stable and pay a decent wage; outgrower schemes must be well designed and pay fair prices; and strategies must be in place to maximize forward and backward linkages between the investment and the local or national economy. Value-chain multipliers can also yield significant local impacts. For instance, an investor in Tanzania...
invested in a new processing facility, adding further value to the primary product. The resulting product was sold to local beverage industries, creating some 60 additional jobs. The new facility also acted as an incentive for local people from within and outside the area to establish logistics companies to support the investor’s operations.

Training provided as part of some outgrower schemes helped local smallholders to improve productivity, thereby improving the availability and stability of food sources (where food crops are grown), and to increase the income received through such schemes. Training was not always provided, or in some cases was provided but not beneficial. This depended on the design of the outgrower scheme and the level of technical support provided to outgrowers by the agribusiness.

Some investors built roads or other rural infrastructure, including for provision of water and electricity, required for project implementation, but which was also made available for wider local public use. For smallholders, these investments contributed to improved productivity and market access, thereby improving food access, availability, and stability of supply. An investor in Cambodia constructed and improved road infrastructure in surrounding villages that resulted in better access for the residents and improved market access for local farm produce. The investor built a 4-kilometer road to connect a key junction with its farm and has maintained a 50-kilometer section of government road. The surrounding area was previously left uncultivated because of inaccessibility, but since the road construction, people have returned and it is now a market town. In another instance, an investor provided free electricity to support the operation of local businesses where public electricity could be unreliable. Despite some similar positive examples, a lack of rural infrastructure generally remained a major constraint to food security, and the lack of transportation and storage facilities contributed to food loss and waste along the supply chain in food-insecure areas.

In the worst cases, the arrival of an agribusiness investor was detrimental to food security. This occurred where allocation of large land areas to investors forced the displacement or resettlement of local communities. When displacement occurred, existing sources of food security were often jeopardized. Even when resettlement conformed with principles of free, prior, and informed consent, there was a risk that resettled persons, relying on alternative livelihoods and food sources, would suffer a decrease in food security. Reduced access to land and natural resources, including water, on which smallholders often depend for survival was the main negative impact identified. In addition, the fencing off of land may impede local access to particular resources if areas and routes become unusable. One woman explained that she and other women in her village used to collect wild spinach and a variety of other edible plants on land they no longer had access to, due to an electrified perimeter.

Food security also suffered when investments were failing or struggling. A significant proportion of agricultural investments failed to achieve anticipated outcomes, many for reasons that could and should have been foreseen and dealt with at the outset through a comprehensive screening of prospective investors and investments.

Financial and operational success is essential for investments to make a positive contribution to sustainable development in the host country and to local communities. Moreover, when local communities become reliant on investors for income, either through direct investment or outgrower schemes, the failure and departure of an investor can leave local communities struggling to find alternative means to ensure food security. One investor in Mozambique had to reduce permanent employee numbers and was three years behind schedule due to the withdrawal of a key financier during the implementation phase. It also had to put a planned smallholder scheme on hold. On the other hand, an investor that successfully developed an outgrower scheme in Cambodia was able to move from semi-processing in the host country to establishment of full-scale processing and export operations, generating further employment, value added, and export revenue for the host country—with significant benefits for food security.

Overall, research indicated a wide range in the extent to which investors contributed to food security, depending on the business model, crop, target market, integration with the local economy, approaches to social and environmental responsibility, and the financial success of the investment.
POLICY APPROACHES

How can policy help to maximize the food security contribution of international investments and minimize the associated risks?

NATIONAL DEVELOPMENT STRATEGY. Although international investment in agriculture and related value chains is not a panacea that can deliver food security and nutrition alone, international investment can play a key role in providing demonstration effects, enhancing productivity through technology, and catalyzing market access. But its role in boosting food security must be part of a broader nationally appropriate development strategy. The critical factor is to align food security and nutrition targets with the broader national development strategy and to be selective about the type of international investment desired.

INVESTMENT PROMOTION AND FACILITATION. There is a case for targeted agricultural investments in remote and food-insecure areas that may not appear attractive to international investors. Boosting investor interest in these areas will require investment promotion and facilitation in food-insecure regions, coordinated by central governments and attentive to the needs of regions and local communities. This might include fiscal, financial, and technical support through “sustainability-based” incentives aimed at promoting investment conditional on its sustainable development impact. Some countries have sought to develop and market a pipeline of bankable projects in agricultural growth poles or corridors such as the Bagrépôle in Burkina Faso and the Southern Agricultural Growth Corridor of Tanzania. Investment in either staple or cash crops could generate employment or incomes for food insecure people, improving food access. Investment in staple crops would have the additional advantage of improving local and national food availability. With increasing urbanization in developing countries, potential exists for investors to consider production of domestically consumed crops. At the same time, it must be recognized that in some areas the underlying reason for food insecurity—such as conflict or extreme drought—cannot be addressed through investment and requires other strategies.

RURAL INFRASTRUCTURE. Investment in remote areas, and indeed all agricultural investments, must be supported by adequate rural infrastructure to enable investors to run their operations and transport produce to market. While examples exist of multinational enterprises’ investing in infrastructure facilities that benefit farmers and promote rural development, rural infrastructure remains inadequate in many developing countries. Improving infrastructure will require promotion of public-private partnerships for agro-infrastructure, including power, irrigation, transport, and storage networks.

DIGITAL ECONOMY. A further critical component of the commercialization and modernization of agriculture sectors is access to digital technology for farmers and domestic agribusinesses. Agriculture in developing countries is becoming increasingly integrated with the digital economy. Farmers can use mobile phones and applications to access information on weather and climatic conditions, to find market prices, to hire equipment, and to link with customers and suppliers along the value chain. Digital adoption remains low in countries where food insecurity is most prevalent: in developing countries as a whole, 70 percent of the population has 3G broadband coverage, but only 40 percent uses the internet; in the least developed countries, 50 percent has coverage, but usage is only 13 percent. Developing countries should enact policies that speed up digital adoption in the wider economy, through investment in infrastructure and in skills development for farmers to increase adoption and use of digital technology and services.

RESPONSIBLE INVESTMENT PRINCIPLES. More broadly, the impact of investments on food security depends on investors’ approach to social and environmental responsibility. For foreign investments to make a positive contribution to reducing food insecurity, both good governance by host country governments and responsible behavior by investors are necessary. Ensuring responsible behavior calls for practical implementation of responsible agricultural investment principles. Several sets of principles have been devised; the challenge for investors and host governments is how to apply these on the ground in day-to-day decision making. To this end, UNCTAD and the World Bank produced a series of guidance notes for use by private investors and governments that are relevant to specific issues, including food security and nutrition.
INVESTOR SCREENING AND MONITORING. A critical element of ensuring responsible investment is improving host country governments’ ability to screen and select among prospective investors. Government screening procedures were often underresourced and lacked capacity to assess the viability of business plans. Screening and selection of prospective investments is a critical component of countries’ policy frameworks, intended to ensure that investments maximize social, economic, and environmental benefits while minimizing risks. Screening should verify that a proposed investment aligns with national food security strategies, that it has a viable business model to be run by competent management, and that the investor takes its social and environmental responsibilities seriously. Screening should consider the full range of potential food security impacts of an investment. The UNCTAD–World Bank guidance notes, mentioned above, provide detailed advice on how governments can improve screening and monitoring procedures.

INCLUSIVE BUSINESS MODELS. Preference should be given to business models that employ contract farming or outgrower schemes, as opposed to large-scale, estate-style models. Support from international investors to small-scale producers—through training, provision of inputs, and access to finance—is a key mechanism for achieving the SDG target of doubling agricultural productivity among smallholders. These inclusive business models link small-scale producers with global value chains and increase rural incomes, provided the schemes are designed in a fair and transparent manner. Support for cooperative arrangements among outgrowers can improve economies of scale and collective bargaining power, redressing to some extent the power differential between investors and producers. Governments, in partnership with international development agencies, can help to develop model contracts between investors and outgrowers or cooperatives, with a view to safeguarding the interests of smallholders.

WOMEN’S EMPOWERMENT AND VULNERABLE GROUPS. Progress in women’s empowerment and gender equality is strongly correlated with improved nutrition. Given these multiple benefits, priority should be given to investments that have a positive impact on women’s empowerment, by providing training, integrating women into the workforce, facilitating their participation in outgrower schemes, and giving them a voice in decision-making and consultative forums. Attention should likewise be given to improving the position of other vulnerable groups, such as youth and pastoralists.

DATA AND RESEARCH. Finally, more detailed and comparable data are needed on the patterns and impact of international investment. Official data are not available on a sectoral level for many countries, and international investment deals are often conducted without public transparency. Data sources often rely on media reports that have proved inaccurate. The international community should develop a data collection consortium to improve data on investments in agriculture. Further research is also needed to analyze the impacts of international investments on food security and increase understanding of how best to design policies to maximize positive impacts and minimize negative ones.