

Food security and nutrition

This note provides guidance on how to ensure an agricultural investment makes a positive contribution to local and national food security and nutrition.

Investments can play a critical role by introducing technologies to increase productivity, by providing demonstration effects, by creating quality jobs, by catalyzing modernization of the sector, and by linking small-scale producers with global markets—all of which, in the right circumstances, contribute to food security and nutrition. Yet, investments can have a negative impact and be detrimental to food security and nutrition, especially where investments reduce local access to land and water. The challenge for policymakers and investors is how to design policy and business models that maximize the positive benefits to food security and nutrition but minimize the associated risks.



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RESPONSIBLE AGRICULTURAL INVESTMENT (RAI)

KNOWLEDGE INTO ACTION NOTES

The **UNCTAD–World Bank Knowledge Into Action Note Series** is a compendium of practical, thematic guidance documents for use by governments, investors, and other stakeholders in the implementation of responsible agricultural investment principles. Background and a complete list of notes are in *Note 1: Introduction*.



WHAT DOES FIELD RESEARCH SHOW?

After falling in prevalence over recent decades, world hunger is on the rise. Over 800 million people (10 percent of the global population) are undernourished; and about 2 billion suffer from micronutrient deficiency. In parts of Africa and Asia, the share of the population that is food insecure is as high as 20 percent or more (United Nations, 2015, FAO et al. 2017). Inadequate food security and nutrition has negative consequences for livelihoods and economic capability and thereby hinders development.

Increased investment in the agriculture sector and rural development is a key element in addressing food security and nutrition, including investment in agriculture-specific infrastructure, natural resource development, research, technology, and extension services. The focus of this note is restricted to relatively large-scale, land-based investments in agricultural production and processing.

Food security and nutrition are seldom a primary objective of large-scale investment in agriculture. Nevertheless, the impact of these investments on food security and nutrition—direct and indirect—is an important consideration, and therefore addressed in this Note (World Bank 2016a and 2016b).

Food crops for domestic use. Few investors were growing food crops for sale in domestic markets, so their direct impact on food availability was low. Most investors were either selling to export markets or growing cash crops that were not part of the domestic staple diet. With increasing domestic demand in developing countries, land-based investors can consider production of domestically consumed crops. Even fewer investors were contributing to the availability of staple crops in the local areas surrounding the investment.

Rural incomes. The main observed positive impact on food security and nutrition was the ability of local people to buy more food—and more nutritious food—as a result of a rise in rural incomes from direct employment, participation in outgrower schemes, and broader economic spillovers from the presence of the investor. These benefits were not automatic, however. Jobs need to be stable and pay well; outgrower schemes should be well designed and pay fair prices (see *Note 4: Outgrower schemes*); and strategies should be in place to maximize forward and backward linkages (see *Note 24: Economic linkages*). There was divergence in the extent to which investors contributed to rising incomes and hence food security, depending on the company policies and business models adopted. For example, employment was the main benefit of agricultural investments and the resultant wages are a key contributor to improved food security. There was, however, divergence in the extent to which local people were integrated into the workforce, as opposed to jobs going to expatriates or migrants. Enhancing local food security requires investors to provide jobs to local communities, although that may require dedicated training schemes (see *Note 17: Training and integrating local people into the workforce*). Moreover, for the food security benefits of employment to be realized, investors need to pay an adequate wage and provide sufficient job security. Rising rural incomes for women tends to lead to improve food security more effectively than improving incomes for men, so attention also need to be given to the gender dimension of rural incomes (see *Note 20: Empowering women*). A number of investors also provide free or subsidized food to employees, including to increase their diet diversity; in the form of meals on site during the workday as well as grain for home consumption.

Access to land. The main negative impact on food security occurred in cases of reduced access to land, water, and the productive resources upon which smallholders rely for survival. Some investments were detrimental to existing sources of food security and did little to provide alternative livelihoods or sources of food for people displaced by the investment. In some cases, the food security of pastoralists who relied on the land to graze cattle was negatively affected (see *Note 11: Respecting land rights and averting land disputes*).

Infrastructure. Some investors built roads or other infrastructure (such as water and electricity) required for project implementation. When these were extended for wider local public use, they improved the productivity of local communities and access to markets, thereby improving food access, food availability, and stability of supply. Improvements to rural infrastructure, including transport, refrigeration, and storage facilities, can play a key role in reducing food waste and loss.

Technology transfer. Training provided as part of outgrower schemes helped local smallholders to improve productivity, thereby improving their availability and stability of food sources (where food crops are grown), as well as income received. For further information, see *Note 4: Outgrower schemes* and *Note 23: Technology transfer*.

Change in crops. Local communities often changed the crops they grew from food crops to the non-food crops that investors buy as part of contract farming arrangements. Thus they become reliant on sales to generate income to be able to feed their families. Where communities growing a range of crops were replaced by an investor producing a single crop, local communities' access to a diverse diet was reduced, affecting nutrition. Thus improvements in food access and availability may actually result in reductions in access to nutritious diets. One investor adopted a practice of intercropping to help ensure local farmers' food security and nutrition in a situation where crops grown had changed due to the presence of the investment (box 1).

Community development agreements. Some investors had food security-related schemes as part of their community development programs (see *Note 18: Community development agreements*) (box 2).

Government support. Governments were spending little on activities that could help improve food security and nutrition, such as supporting extension services or developing rural infrastructure. Extension services educating households on nutritional aspects of their food consumption would be especially pertinent.

Box 1. Inter-cropping to support food security

The impact of investments on local farmers' food security depends in part on the crop chosen by investors and how it fits with local cultivation. In the case of food crops, the introduction of new varieties by the investor can enable local farmers to be more productive and produce a range of products. On one site visited, local farmers were encouraged to inter-crop the crop introduced by the investor with their local food crops. The production of the new crop did not displace traditional crops grown (for example, corn, durian, mango, soybean, cassava), as those were suited for interplanting given that the new crop required partial shade conditions.

Crop choice further positively affects food security, when local farmers continue to grow their staple foods and when new techniques help raise yields, thereby adding an income stream for local farmers through surplus sales. The introduction of new varieties can also cause unanticipated problems: although they are generally more productive, they also require more inputs. This can be a challenge for farmers who are accustomed to low-input agriculture.

Source: UNCTAD-World Bank Survey of Responsible Agricultural Investment Database.

Box 2. Food security initiatives

- Several companies in Malawi, Liberia and Ghana provided meals to workers during the day as part of the terms and conditions of employment.
- One company in Ghana had annual agreements with local communities that permitted local people to plant food crops on land cleared for planting the next season and/or between the rows of the trees on the investor's land.
- In another case in Ghana, a company established an NGO through which they encouraged their outgrower farmers of palm oil bunches to cultivate food crops on their own land.
- One investor in Uganda allowed communities to glean fields for produce that the combine harvester had missed and helped local community members, focusing on widows, with ploughing of their fields in preparation for planting season.

Source: UNCTAD-World Bank Survey of Responsible Agricultural Investment Database.

✓ ELEMENTS OF GOOD PRACTICE FOR INVESTORS

Do no harm. Investors should ensure that existing sources of food security are not compromised by the investment. Adhere to the do-no-harm principle that investments should not decrease local food security and nutrition. This could involve consideration of the impact on local and national food security and nutrition when assessing social aspects (for details, see *Note 14: Environmental and social impact assessments*). The food security implications of resettlement, displacement of people, and reduced access to land, including by informal users of land, are especially important to consider and incorporate in the design of mitigation measures (FAO 2015).

Include food security in community consultations and agreements. Discussion of food security and nutrition implications is essential as part of consultations with local communities and part of the design of community development agreements. The education component of nutrition security is important, e.g. in terms of diet diversity and eating food with appropriate nutrition content, so investors can make efforts to help communities in this respect. This can include supporting dissemination of Government education programmes on Nutrition. Attention needs to be given to marginalized groups and those most likely to be food insecure, including women, youth, indigenous groups, and pastoralists.

Consider impacts on nutrition. Investors should consider the nutrition impact of investments, drawing on existing guidance on how to design, implement, monitor, and evaluate nutrition-sensitive food and agriculture investments (FAO 2019ab, 2012, 2017).

Ensure employment improves food security. Providing jobs that are high-quality, stable, and well paid is crucial. Food security and nutrition will be improved only if employment provides sufficient and consistent pay that enables employees to afford a nutritious diet for their families. The impact of employment on food security and nutrition, positive and negative, can vary by type of employee; see, for instance, *Note 20: Empowering Women*.

Ensure outgrower schemes improve food security. Investors should design outgrower schemes that have fairly priced crop purchase agreements and provide training to enable growers to improve productivity. Support farmers' associations for outgrowers, as appropriate, to allow economies of scale and productivity improvements.

Assist rural infrastructure development. It is important to work with governments to develop public-private partnerships for rural infrastructure development, the lack of which is a substantial hindrance to food availability, food access, and the stability of supply.

ESIA. Consider the food security impacts of investment in the environmental and social impact assessment (see *Note 14: Environmental and social impact assessment*) and design mitigation measures as appropriate.

Gender impacts. Consider the impacts of the investment on women. Increasing women's incomes through employment or participation on outgrower schemes could improve food security, but may also have negative impacts through women's double burden of work and household commitments (see *Note 20: Empowering women* for further details).

✓ ELEMENTS OF GOOD PRACTICE FOR GOVERNMENTS

National food security strategy. It is vital to have a coherent national agricultural development plan that reflects the country's size, population, food and nutrition, natural resource endowments, and level of economic, infrastructural, and agricultural development. The plan should specify the types of investments and business models that are most needed, including food production and distribution, as well as priority geographic areas such as food-insecure areas.

Give food insecure areas particular attention. It is important to undertake investment promotion and facilitation for food production in food-insecure areas. Governments should seek to ensure that agricultural investments are aligned with a country's food security and nutrition strategy. Such a strategy can be reflected in various documents, such as multi-sector food security and nutrition policies and investment plans or sector policies and plans that incorporate food security and nutrition considerations.

Consider food security implications of proposed business models. Business models that employ contract farming or outgrower schemes should, in general, be preferred to large-scale, land-based “pure estate” investments. Consideration needs to be given to how to support small-scale producers and link them to global value chains, including through investment in agricultural research, extension services, and dissemination of new technologies. This is a key mechanism through which the Sustainable Development Goals to double both agricultural productivity and smallholder incomes can be realized.

Create an enabling environment for investment. Governments should enact and enforce regulations that provide a safe, enabling environment for investment. Doing so includes investing in market and transportation infrastructure, support for local research, and extension services; providing support for smallholders to meet quality standards; and providing training or capacity building to ensure human capital suitable to a modern agriculture sector.

Develop rural infrastructure. It is important to develop public-private partnerships with investors for rural infrastructure, to connect and open up food insecure areas, including transport, power, irrigation, and storage networks.

Embed food security commitments in the contract. It is good practice to ensure commitments made by investors relating to food security are included in the investment contract.

Monitor food security impacts. Monitor the impact of the investment on food security and nutrition. Consider food security implications of investment proposals during screening procedures (see *Note 6: Screening prospective investors*).

REFERENCES AND RESOURCES

This Note is complementary to the literature and guidance documents to which many organizations have contributed, a selection of which is provided below. Further resources are provided in *Note 2: Additional resources*.

COMMITTEE ON WORLD FOOD SECURITY. (2014). [Principles for Responsible Investment in Agriculture and Food Systems](#). (FAO: Rome).

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