

POLICY BRIEF



Multi-disciplinary research promotes sustainable solutions and effectiveness for development cooperation

Abstract

Research into the food systems can be used to affect global food and nutrition security and promote the UN sustainable development goals. Funding long-term research programmes out of development cooperation appropriations pays off, because:

- new, sustainable solutions addressing global challenges are obtained through research;
- broad actions involving different stakeholders over the long term takes account of the challenge as a whole and offers enough opportunities for disseminating research data;
- making use of such data will open up new business opportunities for companies in both donor and target countries, and provide young people with opportunities to make a living in the various parts of the food system; and
- putting research data into practice will improve the position of small farmers, especially women.

Global challenges require solutions

The UN Agenda 2030 and the related sustainable development goals (SDG) seek to address the sustainability challenges posed by the quickly growing population. Finland is committed to promoting the attainment of sustainable development goals. The effectiveness of development work and the added value derived from work are increasingly important in Finland as well as in the target countries.

Research plays an important role in finding solutions, and recommendations must be based on scientific information. Development policy funding should better support effective international research cooperation in the developing countries. Participatory, multidisciplinary research simultaneously promotes several sustainable development goals and offers opportunities to take better into account the needs and expectations of the end users.

Considering that the world's population will reach nine billion by 2040, the sufficiency of food and producing it

in an environmentally, socially and economically sustainable manner pose a major global challenge. Special emphasis is on food production in the developing countries, where the population is increasing fastest and that already lack nutritious food. Food production also plays a decisive role in the developing countries in improving population income levels and national economies. Climate change is another threat to food production.

Multidisciplinary research covering the entire food system not only offers means to create impact and promote sustainable development goals, but also to build added value for the operators in donor countries. New research data offer opportunities for new business. They can be used to create sustainable, permanent solutions that reduce costs, enhance production and, when put into practice, permanently improve the living conditions of hundreds of millions of people, often the poorest of the poor, in entire states or continents.

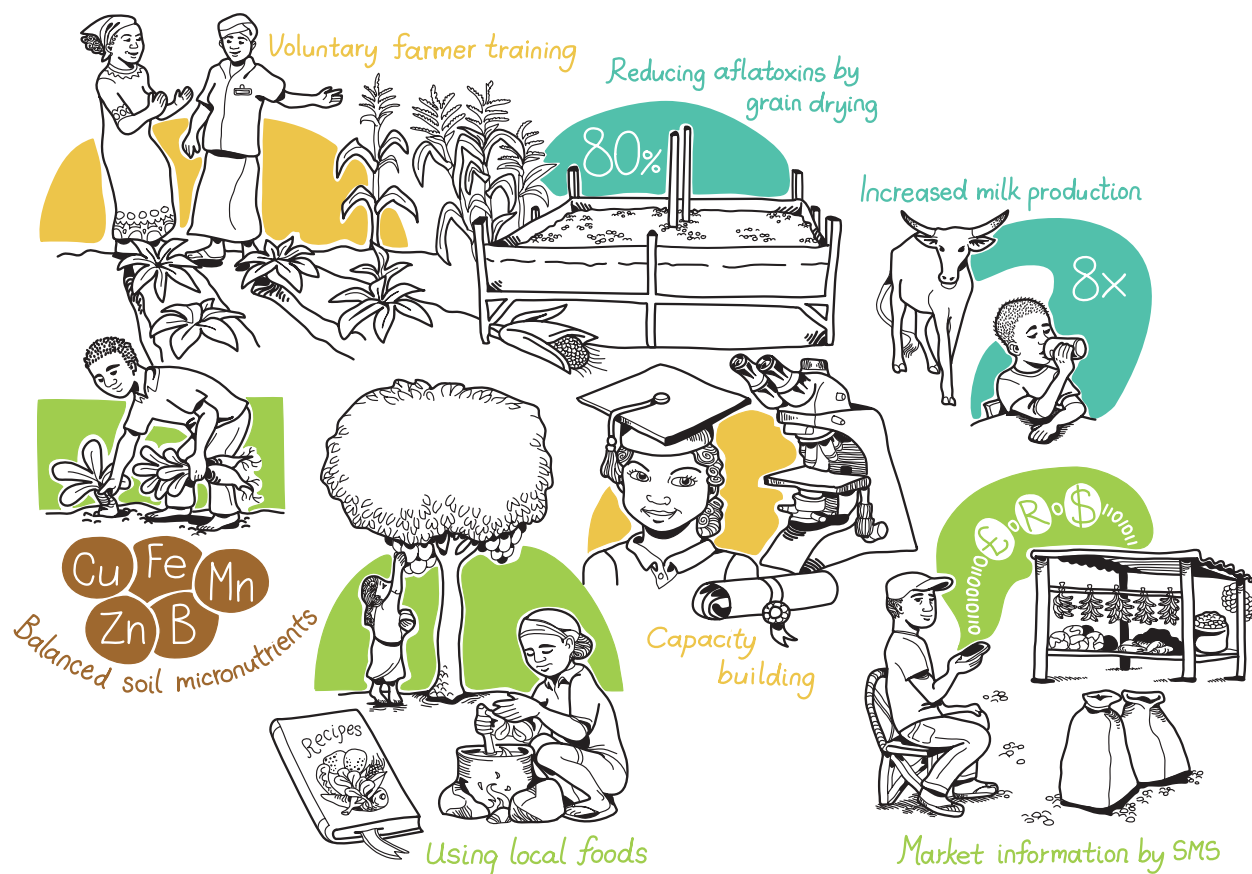
Cooperation creates value for the donor and target countries

The FoodAfrica research programme (2012-2018), funded by the Ministry for Foreign Affairs of Finland and coordinated by Natural Resources Institute Finland (Luke), is a good example of the impact of successful stakeholder cooperation. FoodAfrica has improved food security, i.e. food availability, safety and quality, in Western and Eastern Africa by providing new information and tools for researchers, decision-makers and local farmers for developing food security. In addition to food security, the project promoted the climate action and gender equality targets of the sustainable development goals.

FoodAfrica has created a broad network between research institutes in Finland and its target markets. It operates with different stakeholders in various sectors, covering the entire value chain. The programme's research themes were selected together with international and African researchers based on local needs. The programme has created permanent added value for local operations and expertise and increased research capacity. FoodAfrica has directly reached more than 10,000 farmers, trained doctoral students and other professionals in the field, and produced publications and training materials for advisors and farmers. This information can be disseminated to all farmers in Africa and it can have a permanent impact on improving food security in the continent.

Multidisciplinary research on food systems promote global sustainable development goals and benefits both the donor and target countries.





The results of the FoodAfrica programme can be used to:

- survey micronutrient deficiencies of smallholder farmers' fields in order to promote their balanced fertilization for better nutrition of plants, animals and people;
- multiply milk production with smaller greenhouse gas emissions by cross-breeding local dairy cattle breeds and improving livestock farming;
- better adapt to climate change;
- improve the nutrition of mothers and children by making more diverse use of local wild foods;
- cut down the mould toxin contents of crops by employing better crop processing technologies and reduce their harms by using microbes in food processing;
- improve the profitability of production by providing market insight and information via text messages; and
- instruct farmers on how they can train other farmers.

Recommendations

1. More development aid should be channelled to research, as scientific information and its dissemination

- a) create permanent, sustainable solutions for the broad, poorest population segment and, thus, improve their livelihoods
- b) improve the situation of smallholder farmers, especially women, and offer opportunities for young people to make their living in different parts of the food system
- c) improve the impact of funding and open up opportunities for companies in the target countries

2. Particularly, research funding should be targeted at projects that

- a) solve large entities instead of a single research problem
- b) involve the entire value chain and all of its operators
- c) deal with the root causes of problems and develop sustainable solutions for them

Read more

FoodAfrica is a research and development programme enhancing food security in West and East Africa. It's funded by the Ministry of Foreign Affairs of Finland and participating organizations.



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Ministry for Foreign
Affairs of Finland

Authors

MILA SELL, Senior Specialist, Luke
MARTTI ESALA, Research Professor, Luke
SUSANNA ROKKA, Senior Scientist, Luke
JARKKO NIEMI, Research Professor, Luke

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