

Agriculture and employment

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The importance of the agricultural sector for employment and prosperity

The agricultural sector is the main employer and driver of development in rural regions and partner countries of German Financial Cooperation (FC). According to FAO estimates, some 1.3 billion people work in agriculture around the world, 97 per cent of them in developing countries. Depending on the region, 30 to 50 per cent of household income in rural regions is generated directly through farming. The employment impetus for regional economic development is enormous, particularly where agricultural production goes beyond subsistence and supplies the food market or enterprises that process primary prod-

ucts. Employment in sectors closely associated with farming such as retail trade, services (transport, finance) and food processing is directly linked to agriculture. The International Fund for Agricultural Development (IFAD)² indicates that each additional US dollar earned in the agricultural sector generates another 30 to 80 cents outside the sector. In regions with a prospering and export-orientated agriculture, the World Bank has determined that as farmers' incomes increase, more and better paid jobs emerge within and outside the agricultural sector as well⁴ (see box Regional impacts).

Challenges facing rural economies

Year after year, millions of jobs need to be created to provide employment and income for a growing population. McKinsey estimates that in Africa more than 120 million young people will enter the job market over the next 10 years³, a large portion of them in rural areas. In India, rural regions will have to absorb another 4 million jobseekers each year; in Bangladesh, one million³.

The agricultural sector will not be able to meet this enormous challenge alone. However, its sustainable growth is of fundamental importance for the creation of additional jobs.

The overall conditions for the growth of the sector are favourable. Global demand for food, fibres, oils, medicinal plants, energy and other agricultural primary products is on the rise. Increasingly scarce resources such as water, farmland and biodiversity, as well as the impacts of climate change, are forcing adjustments. The agricultural sector must work more efficiently and sustainably and adapt faster to new environmental conditions.



Smallholder tomato growers in the Dominican Republic. Source: Jürgen Fechter

In addition, the rising number of people living in urban regions requires more processed foods.

Regional impacts

A study conducted by the Seminar for Urban Development (Seminar für ländliche Entwicklung (SLE))¹ on the impacts of irrigation projects running for 30 years under German Development Cooperation with Bolivia has revealed that income and employment effects from these projects are impacting very positively on other sectors. The study reports an increase in the demand for micro-loans, a near doubling of public suburban transport (more minibuses) and growth in the transport sector, agricultural trade and the local food service industry.

Surveys conducted under the same study among teachers in the Incahuasi region also showed that students are skipping class less frequently and are going to school increasingly better equipped with books, pens and writing blocks every year.

Irrigation and employment

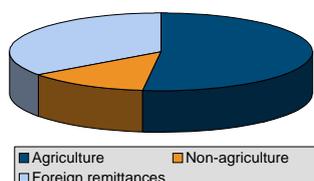
Irrigation projects financed by KfW in Latin America (Bolivia, Peru, Ecuador) and in Mali each cover some 500 to 1,500 hectares of land. Smallholders are the immediate target group. Installing irrigation systems to more areas allows farmers to dedicate some of their land to labour-intensive fruit or vegetable production. This generates substantial additional yields. The additional yield per hectare is worth EUR 500 and EUR 1,500 each year. The additional employment impacts achieved are obvious. Producing one hectare of grain takes around 30 days of labour each year, one hectare of onions, tomatoes or strawberries, 150 to 300 days. This is work that can be performed by the farmers themselves, family members or day labourers.

¹ Seminar für Ländliche Entwicklung (2009): 30 Anos de Cooperación entre Bolivia y Alemania en el Sector de Riego; SLE Publication Series –S237-.

² International Fund for Agricultural Development (2011): Rural Poverty Report. www.ifad.org/rpr2011/.

³ McKinsey Global Institute (2012): Africa at Work: Job Creation and Inclusive Growth. www.mckinsey.com/insights/mgi/research/africa_europe_middle_east/africa_at_work.

⁴ World Bank (2008): World Development Report. Agriculture for Development. http://siteresources.worldbank.org/INTWDR2008/Resources/WDR_00_book.pdf.



Household incomes of small farmers ⁵

Subsistence farming is not enough

In virtually all of our partner countries, subsistence farming is no longer sufficient to ensure peoples' livelihoods. Smallholder families in Africa or Asia already generate only 50 per cent of their household income from their own production (see illustration). In addition to working on their own fields, they perform paid work within or outside the farming sector. Remittances from family members living in cities are becoming increasingly necessary to secure families' livelihoods. People are working long and hard, and still they have hardly enough to survive.

Not just more but better work

To improve the situation, farm workers and small farmers need to earn more for the work they perform, and better working conditions. Therefore, it is only at first glance that the high demand for jobs resulting from demographic trends appears to contradict the lack of employment that is evident in rural regions. Many farming operations – including small ones – have difficulties finding reliable seasonal workers or motivating family members to help out.

The reasons are obvious. In many partner countries, the type of work currently being performed in agriculture is unpopular, and people seize every opportunity to find other employment options. They prefer to migrate to cities – even without hope of finding work there.

The reason jobs in farming are so unpopular is not just the pay level, which is extremely low in comparison with work in other sectors. The work is also physically demanding and working conditions are poor. The International Labour Organisation (ILO) rates occupational

hazards in agriculture as very high and records just as many fatal occupational accidents here as in mining or construction. Farm workers often cannot find year-round employment. Many people find work in the harvest season but are forced into idleness or labour migration the rest of the year. In years with poor harvest expectations there is also less work for seasonal workers which exacerbates an already precarious situation. In its 2008 World Development Report, the World Bank reports that millions of farm workers are trapped in poorly paid jobs⁴. Poorly paid workers are also unmotivated and contribute to poor product quality, environmental degradation and the insufficient reliability of the sector.

Agriculture can do more

The agricultural sector has great potential to provide an essential contribution to both employment numbers and work quality. Every additional dollar earned from the sale of agricultural products provides substantial relief for poor rural households and eases demographic pressure. Even in regions with adverse climate, farming operations can earn additional income. According to a United Nations study, for example, organic smallholder farming in Sub-Saharan Africa holds the potential to increase yields by some 80 per cent⁶. The study is based primarily on projections of results obtained in pilot projects and is very optimistic. Nevertheless, practical experiences gained by KfW show that significant income increases can be achieved in smallholder farming on various levels. In a project in Burkina Faso, for example, investments in simple erosion control measures have increased yields of sorghum or cowpeas by 30 to 40 per cent per hectare while the labour input has remained the same. Although this measure does not create new jobs, the farmers earn higher incomes for the work they perform – and this is achieved in a structurally weak region of the Sahel with a limited job market.

Not all regions have the climatic, ecological and economic conditions necessary for the introduction of irrigation systems. Where irrigation is possible and ecologically justifiable, the conversion from rainfed agriculture to irrigated agriculture has a measurable

Better work

The International Crop Research Institute for the Semi Arid Tropics (ICRISAT) documents experiences gained in Benin. In a project aimed at supporting women, changing from irrigation with buckets and watering cans to solar-powered drip irrigation brought about an enormous improvement in the quality of work and life. Instead of hauling water for five hours a day, women can now grow many times more vegetables in half the time. The main motivation for changing the production method was not to increase revenues but to relieve the women from the extremely exhausting task of hauling water.



Farm worker removing weeds in Paraguay.
Source: Jürgen Fechter

positive impact on employment and incomes. The World Bank reports on projects in Mexico where the conversion of maize production to tomato production (under irrigation) provides work for over four times more people⁴. Evaluations conducted by KfW (see box: Irrigation and employment) in Latin America and Sub-Saharan Africa shows similar employment impacts. Positive impacts on employment in the non-farming sector can also be demonstrated (see box: Regional impacts).

Modernisation for more employment

Migration, especially by young people, poor working conditions in the sector and the growing demand for agricultural products are some of the factors that call for the adaptation and modernisation of agriculture, especially in African countries with an agrarian-based economy.

However, modernisation does not necessarily

⁵ Deutsche Welthungerhilfe (2011): Handbuch Welternährung; Campus Verlag.

⁶ United Nations (2011): Eco-Farming Can Double Food Production in 10 Years. http://www.srfood.org/images/stories/pdf/press_releases/20110308_agroecology-report-pr_en.pdf.

mean large-scale agro-industry and monocultures that greatly minimise labour input. Small and medium-sized farming operations that offer jobs for independent farmers and farm workers are at the heart of this measure.

To modernise their farming operations, farmers not only need to have access to capital from necessary investments but also entrepreneurial thinking, more training and specialised technical knowledge. In rural areas, access to these resources is often problematic ⁷.

Partnerships with small farmers

Cooperation between farmers and the processing industry through contract farming provides a chance for regular, reliable income as well as access to expertise and technical and organisational innovations. For example, German Development Cooperation is supporting the cooperation between small farmers and processing businesses in cotton or rubber production in West Africa. Today the farmers are earning regular incomes. Another finding is that the partnership in the production of cash crops has led to improvements in the production of staple foods.

Sustainable private investments by enterprises which depend at least in part on supplies from farming operations can make an essential contribution to technical progress and to increasing employment and self-employment. The promotion of such investments, for example through the African Agriculture and Trade Investment Fund (AATIF), can contribute to accelerate the rate of sustainable regional growth.

Conclusion

Rising food prices, the need for greater agricultural output and challenges posed by dwindling resources, climate change and, in particular, the growing world population are creating enormous pressure for economic reforms in rural regions.

A sustainably growing agricultural sector can generate decisive impetus and make significant contributions to the fight against poverty. Employment in agriculture and in sectors directly connected to agriculture plays a crucial role in achieving this.

In order to increase incomes and create jobs,

it is imperative that the specific site conditions, market needs, demands of final customers or the processing industry are taken into account. Rural regions with favourable conditions for sustainable economic growth can be identified in virtually all partner countries of German Development Cooperation. In the context of safeguarding and creating employment, it is a promising start that our partner countries have begun to embrace this approach and are being supported by German Development Cooperation.

Further information

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http://www.kfw-entwicklungsbank.de/ebank/DE/Home/Sektoren/Laendliche_Entwicklung_und_Landwirtschaft40454/index.jsp

⁷ African Agriculture in 50 years: Smallholders in a rapidly changing world (2009): Paul Collier et al.; FAO Expert Meeting June 2009.