

ZAMBIA: Promotion of Mechanisation



Ways out of poverty, vulnerability and food insecurity (AVE)



Carolin Rosenberg, Karin Gaesing, Mika Ache

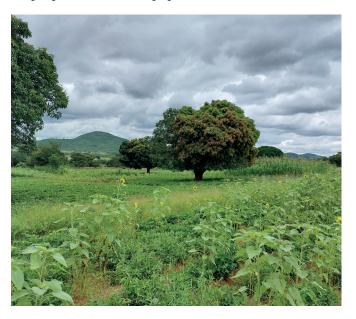
Promoting mechanisation in Zambia

About half of Zambia's population lives from agriculture. Of these, about 98% are smallholders, the majority of whom cultivate less than 2 ha of land. Smallholder structures are particularly common in Eastern Province. Despite its importance as a major employer, the Zambian agricultural sector is characterised by low productivity. The main reasons for this are labour-intensive and unproductive farming methods due to inadequate agricultural equipment. Many farmers lack the capital to invest in mechanising their farms. This is where the Agricultural Leasing Company Zambia Limited (AgLeaseCo), which is supported by KfW Development Bank, aims to provide assistance. By providing financing in the form of leasing, the private Zambian company helps smallholder farmers who cultivate 5 ha to 20 ha to purchase agricultural machinery and thus modernise their farming methods. The gains made by smallholder farms through mechanisation can be described as substantial: better harvests and land expansion lead to a significant increase in productivity and thus income. In addition, it is possible to react more flexibly to unpredictable climate risks, such as rain that comes too early or too late. Moreover, smallholder farmers who cultivate less than 5 ha of land can also be assisted by AgLeaseCo customers offering agricultural services with their leased machinery for a fee. By using such agricultural services, these smallholders also gain a significant increase in productivity and income. Consequently, the leasing model offered by AgLeaseCo to promote agricultural mechanisation can be classified as a good practice.

Agricultural finance, leasing, mechanisation, Eastern Province, Zambia

Country and project background

Zambia, a landlocked country in southern Africa, had a population of 19.6 million in 2022, of whom 11.7 million lived in rural areas and 7.8 million in urban areas (ZSA 2022: 7). The distribution of the population between rural and urban areas varies greatly across the country's ten provinces, with Eastern Province having one of the highest proportions of rural population, at 83.2% (ibid.: 11).



Zambia is one of the poorest countries in the world, with a poor population of 61%. Three quarters of these poor live in rural areas (World Bank Group 2023, 2015 data). According to the Zambian Ministry of Finance and National Planning, the main reasons for poverty in rural areas are low wages, lack of capital to buy necessary agricultural inputs or to start or expand other income-generating activities, and food insecurity (MFNP 2022). While the proportion of people with malnutrition in Zambia has decreased from 51.7% in 2000 to 30.9% in 2019-2021, it still remains at a very high level (FAO 2022).

Zambia's economy is strongly influenced by agriculture. From 2014 to 2018, 48% of the working population was engaged in agriculture, according to the World Bank (World Bank Group 2019). About 98% of agriculture is carried out on smallholder farms, of which 71% cultivate less than 2 ha, 24% of farms cultivate 2 ha to 5 ha and 5% cultivate 5 ha to 10 ha (ibid.: 5). Approximately 3,000 farms are large farms, some with more than 200 ha of cultivated land (ibid.: 5).

Despite the importance of the agricultural sector as a major employer, its economic contribution to gross domestic

product (GDP) is extremely low, at only 5% (World Bank Group 2019). The main reasons for this are labour-intensive and unproductive farming methods due to inadequate agricultural equipment: Most farmers still cultivate and care for the soil with the simplest tools, such as hand hoes. 36.5% use draft animals, e.g. ox ploughs, for support (IAPRI 2016: 21). Only 1.8% of farms are mechanised (ibid.: 21). As a result, the Zambian agricultural sector's yield performance remains far below its potential. Not only is less arable land being cultivated than is available, but the favourable periods for sowing and weed control cannot be used optimally.



One of the main reasons for the often unproductive farming methods is the lack of access to financing for agricultural tools. According to data from the Global Findex 2017, only 58% of adults who earned an income from the sale of agricultural goods have an account at a commercial bank (World Bank Group 2019: XIV). At the same time, the latter are reluctant to lend to smallholders. In 2017, for example, 85% of loans went to large, commercial farms; only 8% of agricultural loans went to small and medium-sized farms (ibid.: XIV).

Goals and activities at a glance

The Agricultural Leasing Company Zambia Limited (AgLeaseCo), supported by KfW Development Bank, promotes the modernisation of agricultural production in

Zambia through an innovative leasing model. The target group of the private Zambian company are mainly small-holders who cultivate an area of 5 ha to 20 ha. Through the provision of financing in the form of leasing, they are supported in modernising their farming methods through the acquisition of equipment such as tractors, tillage or planting machinery. The aim is to increase productivity and thus income.



AgLeaseCo is headquartered in the capital Lusaka, but direct customer contact is primarily through a field team consisting of regional officers and regional support officers stationed throughout the country, many of them young women. These act as competent contact and advisory persons at district level and thus represent an important interface between the head office and the farmers. Ag-LeaseCo currently cooperates with five local machinery dealers, with approximately 80% of the business volume being transacted through SARO Agro Industrial Ltd. In addition to providing agricultural equipment, the machinery dealers, together with the field team, are responsible for identifying and selecting customers. Initial contact with interested farmers often takes place at agricultural fairs or information events organised, for example, by the Conservation Farming Unit (CFU). In addition, AgLease-Co presents the leasing model at local farmers' meetings (so-called field ministries). Furthermore, local chiefs play a central role in customer acquisition, as they often act as "door openers" into the village communities due to the reputation and trust they generally enjoy among the local population. For example, in new business regions, AgLeaseCo usually first holds talks with the local chiefs, who then arrange meetings between potential customers and the AgLeaseCo field team. It is not uncommon for the chiefs themselves to be the first AgLeaseCo customers in a region and to recommend lease financing to others.



After the initial contact, employees of the machinery dealers or the AgLeaseCo field team visit the interested farmers in their villages. During these on-site consultations, the farmed area is inspected and it is determined which machine or which device makes sense for the farm with regard to sustainable and appropriate soil management. At the same time, the necessary maintenance measures, the repair costs to be included in the calculation, and the anticipated amount of the down payment are also discussed. Farmers are then subjected to a thorough assessment of their ability to pay. The assessment is based on indicators of the living situation and agricultural productivity as well as the personal recommendation of the responsible chief. Unlike traditional loan financing, collateral is not required. Rather, the financed machine itself acts as collateral insofar as it is confiscated and resold by the machine dealer in the event of default. Any losses incurred in the process are borne 50:50 by AgLeaseCo and the machinery dealer.

After signing the leasing contract and making a down payment of at least 25% of the purchase value, the farmer

receives the desired machine directly from the dealer, who is reimbursed by AgLeaseCo. Over a period of up to four years, the farmer repays AgLeaseCo the purchase value plus a fixed interest rate of 28% p.a. (35% p.a. for contract amounts under USD 5,000). In most cases, monthly repayments are made in the local currency, the kwacha (ZMW, 100 ZMW = 4.90 euros in July 2023), so that lessees are not exposed to any currency risk.

With the aim of reducing the risk of default, AgLeaseCo works closely with the German development agency Gesellschaft für Internationale Zusammenarbeit (GIZ) to promote the entrepreneurial skills of its clients. For example, lessees are encouraged to participate in the Agricultural Business Analysis and Investment Training (AgBAIT), which was developed as part of the GIZ Global Project on Agricultural Finance (GV AgFin). A reward system in the form of a reduction in the repayment rate for punctual payment in the first year provides an additional incentive for lessees to avoid default. In cooperation with the German-Zambian Agricultural Knowledge and Training Centre (AKTC), the Martin Richenhagen Future Farm (MRFF) and the machine dealers, the customers are also trained in the proper handling and maintenance of the machines.



Currently, AgLeaseCo is the only company in Zambia that offers leasing specifically for the agricultural sector and thus financing especially for medium and larger smallholder farms without credit histories and/or formal land titles. In addition, the group of smallholders who cultivate less than 5 ha of land is also reached. By providing agricultural services with their leased machinery, AgLeaseCo customers also give these smallholder farmers access to mechanisation. AgLeaseCo itself is also currently discussing offering its own fee-for-service scheme in addition to lease financing (Ag Services). To this end, the company wants to acquire its own agricultural machinery and hire machine operators.

Project impacts achieved so far

The documentation of the project impacts achieved is firstly based on reports by KfW Development Bank and on the other hand on business figures provided by Ag-LeaseCo. Secondly, this good practice booklet is based on the results of our own qualitative field research, which was conducted in March 2023 in the capital Lusaka and in four districts (Nyimba, Petauke, Katete, Chipata) of Eastern Province. In Nyimba and Petauke, interviews were conducted with three lessees and three chiefs, and three focus group discussions (FGDs) were held with smallholder farmers who use agricultural services. In Katete and Chipata, Selected District

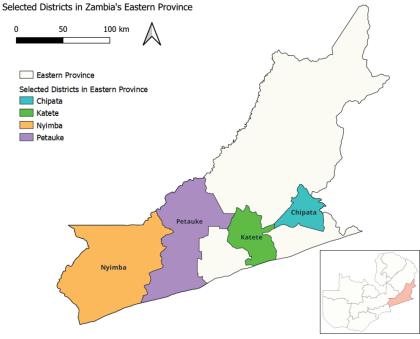
farmers who are not AgLeaseCo clients were

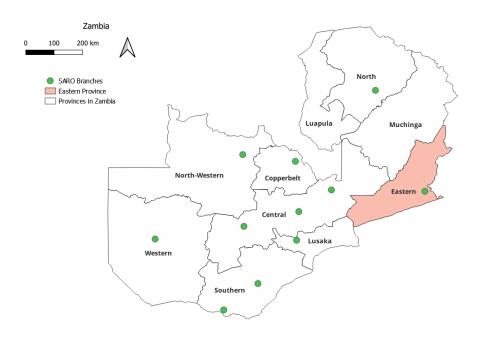
interviewed about mechanisation.

The survey of farmers in Eastern Province shows that modernisation of cultivation methods through mechanisation is desired throughout, but that smallholders in particular lack the financial means to purchase agricultural equipment. Consequently, most farms still cultivate their fields by hand hoe or ox plough. Occasionally, they hire a tractor with driver and plough or ripper (which just rips a line in the soil where seed is placed) from neighbouring farmers, but the use of such services is rather the exception due to the high costs (about 600 ZMW/ha). The leasing financing provided by AgLeaseCo for the purchase of their own equipment is therefore met with great interest by the farmers surveyed. Some FGD participants

report that they have already been informed about the benefits of mechanising their farming methods through the local farmers' association, the CFU or the EU-funded Sustainable Intensification of Smallholder Farming Systems in Zambia (SIFAZ) project, and at the same time they also learned about AgLeaseCo's leasing model.

AgLeaseCo's rapidly growing leasing portfolio, which currently stands at USD 5 million (as of 05/2023), reflects the strong demand for affordable financing options for mechanisation. AgLeaseCo now operates in all ten provinces of Zambia, with clients still concentrated in the Copperbelt and Central Province. A focus was initially placed on these regions: As the main crop-growing areas of Zambia, not only were the most customers to be expected here, but also the machinery dealers were most strongly represented with branches. The latter have meanwhile expanded their branch network nationwide with the regional expansion of the AgLeaseCo customer base (see SARO branches in Fig. 7, among others). But AgLeaseCo has also recently been able to expand its customer base in other parts of the country, as the example of the study region shows. While the company recorded only 56 lessees in Eastern Province in May 2022, by June 2023 the number had risen to 92.





According to AgLeaseCo and SARO, 4-wheel tractors are the main piece of equipment leased. As mobile machines, these are particularly popular because, in addition to being used for work on customers' own fields, they can easily be used for income-generating services in other people's fields. In addition, machines for the further processing of field crops, such as oil presses, maize shellers or mills, as well as trailers, spraying and sowing machines are in demand. After successfully leasing a first machine, many AgLeaseCo customers purchase further equipment, often again via lease financing. The company has so far recorded only 21 genuine defaults (i.e. payment arrears of more than 30 days), but 18 of these have been able to resume payments. Common causes of non-payment are income losses due to seasonal price drops, problems with crop storage and transport, and crop failures due to droughts or floods. For three lessees, there was a final default and thus a repossession of the leased machine. Due to the continued high demand for agricultural equipment, including on the second-hand market, no losses have so far been incurred by AgLeaseCo and the machinery dealers from the resales. Sometimes it is even possible to resell the repossessed leased asset at a profit, notes SARO.

According to AgLeaseCo, 355 of the total of 1,071 lessees (as of 05/2023) are smallholder farmers who cultivate an

area of between 5 ha and 20 ha. 257 clients cultivate less than 5 ha of land. AgLeaseCo does not have exact land area figures of 43 lessees. Slightly more than a third of the farms mechanised by AgLeaseCo can be classified as medium-sized. The farms of between 49 ha and 57 ha of the three lessees interviewed in the course of the qualitative study also fell into this category. In Eastern Province, AgLeaseCo customers mainly grow maize, soybeans, peanuts and sunflowers. Additionally, they often raise cattle, sheep, goats and chickens. In addition, Ag-LeaseCo clients often supplement their household income through horticulture and other income-generating activities, such as agricultural services

and transport services for neighbouring smallholders in particular. Farmers arrange these in different ways: While some farmers alternate between working their own fields and serving only their immediate neighbours, others send their machines and machinists for services up to 50 km away for a longer period of time (about two weeks). Prices also vary and depend either on the labour time spent (e.g. 400-600 ZMW/hour for ripping, ploughing or sowing) or on the area worked (500-600 ZMW/ha). Transport services, which are increasingly in demand, are also offered and charged either per truckload or per bag (e.g. 10 ZMW per bag of maize). In some cases, farmers offer transport to the mill or oil press free of charge, but in return they keep the waste (e.g. oil press cake), which they then sell on as animal feed, for example. For their services, but also to support them in their field work, farmers using mechanisation usually employ both seasonal and permanent labour, and occasionally also day labourers.

Compared to the financing options of commercial banks, which are often difficult to access, AgLeaseCo's leasing model, which does not require collateral, offers small-holder farmers in particular low-threshold access to mechanisation. For them, AgLeaseCo's leasing model is often the only financing option for agricultural equipment. The situation is different for the medium-sized farms

surveyed, which consistently welcome lease financing and are happy to use it, but also draw on cash or loans from commercial banks for the purchase of machinery. AgLeaseCo's application and review process, which is comparatively fast and unbureaucratic, was rated very positively by the respondents. The leasing conditions are also praised as very transparent. At the same time, the farmers appreciate AgLeaseCo's eye-to-eye contact, whereas with commercial banks they often feel like supplicants ("You beg for money. [...]. You feel inferior."). Even in the case of payment difficulties, AgLeaseCo tries to accommodate the lessees through a certain degree of flexibility, according to the experience of one farmer. However, the financing option of leasing has so far been taken up predominantly by men. Currently, only 19% of AgLeaseCo customers are female (as of 05/2023). In order to explicitly enable women to access mechanisation, AgLeaseCo, in cooperation with SARO and the Zambian NGO MUSIKA, subsidised leasing contracts for hand tractors (so-called 2-wheel tractors or walking tractors) at an interest rate of 0% from 2020 to 2021. The programme met with great interest. A total of 102 female farmers



received a machine within this scheme, which increased the proportion of female lessees to around 35% during the funding period. Due to the continued high demand, AgLeaseCo is currently in talks with FAO about a follow-up programme for the specific promotion of women.



The impact of mechanisation on the productivity of medium and smallholder farms can be described as significant. The interviewed lessees report a reduction in the amount of time they have to spend on work as well as the dependence on available labour or the performance of the draft animals. This not only reduces their workload, but sometimes also allows them to expand the areas they farm. Moreover, tillage and sowing can be done not only more efficiently, but also more punctually, which leads to better harvests. In addition, mechanisation allows them to react more flexibly to rain that comes too early or too late, which partly mitigates unpredictable climate risks. The increase in annual household income of 60% on average (as of 10/2022) according to the project progress reports was confirmed by the qualitative study, at least with regard to the trend. The farmers all reported a significant increase in income as a result of mechanisation. This, in turn, was reported to have allowed them to reinvest in their farms, e.g. purchase more machinery, and buy assets such as land, vehicles and household items. According to SARO staff, AgLeaseCo thus contributes significantly to the creditworthiness of farmers with commercial banks and thus opens up further financing channels for them. At the same time, renting out the leased machine for an average fee of about 600 ZMW per hectare creates an additional source of income that is used, among other things, to refinance the monthly leasing payment.

According to AgLeaseCo, approximately 3,000 smallholders (as of 06/2023) who cultivate less than 5 ha of land also benefit from the use of the mechanical agricultural services offered by 541 AgLeaseCo customers. The fact that the leased machines benefit a wider group of people than just the owner was confirmed both in the interviews with the local chiefs and in the FGDs. For example, in addition to working the fields with ox teams or hand hoes, the smallholder farms surveyed have mechanised farmers carry out the ripping and ploughing of their main crops, maize and soya. This allows them to sow more punctually



and subsequently leads to better harvests. In addition, they take up the offers for maize shelling and grinding. They also use transport services to get their crops from the field to the processing and sales sites more quickly. They apparently prefer mechanised farmers as service providers, as they usually charge better prices than other providers, such as prisons or cooperatives. The increase in productivity and income as a result of a reduction in the workload, expansion of the area and increase in yield made possible by (partial) mechanisation is thus also considerable for this group. In addition to increased household income, for some respondents this has also meant that they have now been able to lease machines themselves through AgLeaseCo.

Challenges and conditions for success

▶ Besides the generally low level of financial literacy, leasing in particular is still a little-known product among smallholder farmers. For this reason, it is important that AgLeaseCo carefully informs its customers about the leasing conditions and procedures. In addition, it should be investigated, together with GIZ, to what extent leasing as a financial product can be more strongly integrated into the training content of AgBAIT or the Farmer's Financial Cycle.

► The maintenance and repair of agricultural machinery is a problem that cannot be neglected. Thus, failure of the agricultural machine and the very time-consuming procurement of spare parts, especially in remote regions, can significantly delay agricultural activities. Although some spare parts can be ordered and paid for by mobile phone and sent by bus, this does not solve the problem of professional installation on site. One or more decentralised mobile mechanic teams with easy access to spare parts could provide a quick solution to the problem raised by many AgLeaseCo customers. In parallel, more attention should be paid to expanding training opportunities to promote maintenance and light repairs being carried by the farmers themselves. This should be complemented by systematic follow-up training on the proper use of agricultural machinery. Although the farmers receive an introduction to the use of the machine when it is handed over, according to SARO, damage due to improper use is still a major problem. Both training contents could be combined well and could, for example, take place as group training sessions directly conducted by the machinery dealers on a regular basis at provincial level, or even better at district level.



▶ Irrigation is a way for smallholder farmers to free themselves from the dependence on rain-fed agriculture and to earn an income, for example, by growing vegetables outside the normal harvesting seasons. However, the drip irrigation equipment provided by SARO is too expensive for smallholder farms. An affordable solution here could be mechanical pedal pumps or possibly solar pumps, which should be promoted more strongly by AgLeaseCo or the machinery dealers. In this area, there are good experiences from Ethiopia that have been documented by the AVE team (cf. Gaesing 2018; Gaesing/Gutema 2019).

- ▶ Some AgLeaseCo customers emphasise that animal husbandry is a very important industry for them. There is also a trend away from extensive grazing towards zero grazing. They would like to see more appropriate offers in this area, e.g. for cutting grass and drying and baling hay.
- ► Through the use of agricultural services, poorer farmers who cannot (yet) afford their own machines also gain access to mechanisation. In this way, smallholder farms in particular can benefit from more productive farming methods and the associated increase in income. However, participants in the FGDs also emphasise that the very high demand for agricultural services is currently far from being met. Not only are there apparently still too few mechanised farmers providing agricultural services, but these farmers also always give priority to their own fields. As a result, services can often only be accessed by smallholders for part of their cultivated area. They also always have to adapt based on the availability of the farmers who offer them. In addition, the services offered are often limited to soil cultivation, while services in the area of sowing, pest control and further processing (e.g. a milling service) are hardly available, but are equally in demand. Agricultural



services offered by AgLeaseCo in cooperation with the machinery suppliers (Ag Services) have the potential to enable more farmers to access (partial) mechanisation of their farming methods by expanding the range of services offered. At the same time, this would enable AgLeaseCo to integrate smallholder farmers who cultivate less than 5 ha of land more strongly into its business activities and thus also reach the poorer rural population. However, it should be ensured that Ag Services does not compete with farmers offering agricultural services, but rather complements their offerings in a needs-oriented manner. Therefore, it is advisable to design the concrete service offer in close dialogue with smallholder farmers.

► At SARO and other machinery dealers, agricultural equipment must be paid for in US dollars, even though the Zambian national currency is the kwacha. This obligation should be questioned.



Conclusions for development cooperation in general

▶ The leasing financing for agricultural machinery provided by AgLeaseCo enables small and medium-sized farms in particular to modernise their cultivation methods and thus contribute towards increasing agricultural productivity and improving the living conditions of smallholders. But small farmers who cannot (yet) afford to lease themselves also benefit, insofar as they can rent the leased machinery for agricultural services. Thus, the leasing model opens up low-threshold and affordable access to mechanisation

compared to financing options offered by commercial banks. However, the example studied also shows that training in the proper use and maintenance of equipment, as well as the reliable and rapid availability of spare parts and repair services, are of great importance and must always be considered when designing (lease-financed) mechanisation programmes.

- ▶ The project studied in Zambia illustrates that mechanisation should not be limited to the use of tractors. For example, promoting affordable irrigation systems is important for reducing dependence on rain-fed agriculture. Furthermore, in order to mitigate marketing difficulties for agricultural commodities and to create income prospects for the rural population, greater value creation of agricultural products at the producer level is of central importance. Consequently, it is important to think of mechanisation along the entire value chain and, in particular, to provide financing options for equipment for further processing, such as mills or oil presses. What is of equally central importance is the promotion of means of transport such as trucks, pickups, three-wheelers or trailers with which the harvest can be brought to the sales markets and processing sites.
- ▶ For women in particular, who still perform a significant proportion of agricultural activities, mechanisation can reduce the workload by easing heavy physical work and reducing the amount of time spent working. Nevertheless, women farmers are at a particular disadvantage in accessing finance for agricultural machinery (World Bank Group 2019: 28). This also seems to be confirmed with regard to lease financing, given the low proportion of women among AgLeaseCo customers. Thus there is a need for specific support programmes for mechanisation for women as well as agricultural machinery which is appropriate for their usage requirements. The hand tractor supplemented by SARO with a seat trailer can be mentioned here as an innovative example to make it easier for women to operate the heavy agricultural machine (see Fig. 12).
- As in the case of AgLeaseCo, lease financing has so far mainly been offered as an individualised financial product, i.e. the lease contract is only in the name of one farmer. Contrary to the wishes of many respondents, cooperatives or associations of neighbouring farmers, for example, are generally not accepted as lessees. In this context, cooperative leasing models could make mechanisation possible, especially for poorer smallholders who often cannot afford the high down payment alone. Nevertheless, a higher risk

- of failure comes from the fact that these associations often only exist seasonally, as well as the fact that the sense of individual duty may be reduced. Moreover, collective ownership requires clearly defined, fair rules of use to avoid conflicts. Nevertheless, cooperative leasing models should not be excluded in principle, insofar as formalised groups characterised by social cohesion and trust in each other may well qualify as lessees. However, it is essential to take into account the socio-cultural conditions, which can vary greatly from region to region.
- ▶ The documented good practice example illustrates that fixed leasing rates are of great importance. They allow lessees a certain degree of financial planning certainty and thus reduce the likelihood of defaults. However, this requires that additional costs resulting from exchange rate fluctuations must be cushioned by leasing providers. Appropriate financial reserves should be planned for when designing leasing models. Furthermore, the model studied in Zambia shows that leasing payments, which are usually monthly, follow a different pattern than earnings gained from selling crops once per year. The promotion of horticulture and livestock farming can reduce this dependence on one-off income per year. By opening up the possibility to choose from different payment plans as well as a down payment in instalments, the income situation of the lessee can also be taken into account more.

Sources

FAO. Food and Agricultural Organization of the United Nations (2022): World Food and Agriculture – Statistical Yearbook 2022. URL: https://www.fao.org/documents/card/en/c/cc2211en [06/2023].

Gaesing, Karin (2018): ETHIOPIA: Livelihoods for Transformation (LIFT) in der Oromiya Region. Good Practice Series 11/2018. Duisburg: Institute for Development and Peace (INEF).

Gaesing, Karin / Gutema, Tamene Hailegiorgis (2019): Bodenfruchtbarkeit und Ernährungssicherheit in der Amhara Region in Äthiopien. AVE Study 13/2019. Duisburg: Institute for Development and Peace (INEF).

IAPRI. Indaba Agricultural Policy Research Institute

(2016): Rural Agricultural Livelihoods Survey: 2015 Survey Report. URL: https://agriprofocus.com/upload/post/RALS_2015_Survey_Report__Finalv-_edited1456827249. pdf [06/2023].

MFNP. Ministry of Finance and National Planning (2022): Eighth National Development Plan 2022-2026: Socio-Economic Transformation for Improved Livelihoods. URL: https://www.mofnp.gov.zm/?wpdmpro=8ndp-2022-2026 [06/2023].

World Bank Group (2019): Agriculture Finance Diagnostic – Zambia. URL: http://documents.worldbank.org/curated/en/241301582041593315/Agriculture-Finance-Diagnostic-Zambia [06/2023].

World Bank Group (2023): The World Bank in Zambia. Overview. URL: https://www.worldbank.org/en/country/zambia/overview [06/2023].

ZSA. Zambia Statistics Agency (2022): 2022 Census of Population and Housing – Preliminary Report. URL: https://www.zamstats.gov.zm/2022-census/reports/ [06/2023].

Images

Cover photo: AgLeaseCo customers with their leased tractor, 1. Agricultural landscape in Eastern Province, 2. Trailer for use with draft animals, 3. Chieftainess of Petauke, 4. Tractor, 5. Hammer mill on display at a SARO branch, 6. Map of the Eastern Province of Zambia with study region, 7. Map of Zambia with provinces and SARO branches, 8. Focus group discussion, 9. Promotional poster for the women's mechanisation programme implemented from 2020 to 2021, 10. AgLeaseCo customer with her leased tractor with ripper, 11. Selling vegetables at the market in Petauke, 12. Hand tractor with seat trailer on display at a SARO branch, 13. Selling maize flour by the roadside

Fig. 6 and 7 (maps) created by Nadia Noor

Fig. 10 by AgLeaseCo; all other photos by Carolin Rosenberg

Project characteristics*

B5 - Intensity of research team involvement

G1 - Gender index

P2 - Participation

A7 – Target group index

 For an explanation see Good Practice handout or www.uni-due.de/inef/inef_projektreihen.php

Previously published in the Good Practice Series:

- AVE Handreichung zur Good-Practice-Reihe
- 12 Benin: Wiederherstellung der Bodenfruchtbarkeit im Norden Benins
- 13 Benin: Das Beispiel Soja. Die Förderung einer Wertschöpfungskette in Benin
- 14 Äthiopien: Nachhaltiges Management natürlicher Ressourcen reduziert Armut und Vulnerabilität
- 15 Benin: "Positive Abweichung": Arme Haushalte und trotzdem gesunde Kinder. Bekämpfung der Mangelernährung
- 16 Tschad: Trinkwasserversorgung in Eigenregie der Bevölkerung
- 17 Äthiopien: Soziale Sicherung in Dürregebieten. Das Productive Safety Net Programme
- 18 Burkina Faso: Bodenverbesserung durch den Bau von Steinwällen
- 19 Burkina Faso: The Building Resilience and Adaptation to Climate Extremes and Disasters Programme (BRACED)
- 20 Burkina Faso: Gut organisierte Frauenverbände zur Karitéverarbeitung
- 21 Burkina Faso: Förderung von Wertschöpfungsketten
- 22 Ethiopia: The R4 Initiative as a Comprehensive Disaster Risk Management Strategy to Build Rural Resilience in Tigray
- 23 Vietnam: Forstprogramm Vietnam. Ressourcenschutz in enger Verbindung mit nachhaltiger Armutsbekämpfung
- 24 Madagaskar: Ganzheitliche Landwirtschaftsförderung im Rahmen Technischer Zusammenarbeit
- 24b Malgache: Promotion holistique de l'agriculture dans le cadre de la Coopération Technique
- 25 Kambodschka: Landwirtschaftliche Genossenschaften und Agrarfinanzierung
- 26 Usbekistan: Ländliche Finanzierung
- 27 Äthiopien: Nutzung von Landtiteln als Sicherheit zur Erlangung von Krediten im ländlichen Raum
- 27b Ethiopia: Use of Land Titles as Collateral to Obtain Credit in Rural Areas
- 28 Sambia: Förderung der Agrarfinanzierung
- 28b Zambia: Promotion of Agricultural Finance
- 29 Sambia: Klimarisikoversicherungen
- 29b Zambia: Climate Risk Insurances
- 30 Sambia: Förderung der Mechanisierung

INEF - Research Project

The research project aims to develop recommendations for state development cooperation. The aim is to identify measures that can better reach poor, vulnerable and food insecure population groups and efficiently support them in improving their living situation in a sustainable way.

We examine the interdependencies of poverty, vulnerability and food insecurity in order to identify both blockages and success factors for development cooperation.

Based on literature analyses and surveys of professional organisations at home or abroad, successfully practised

approaches ("good practices") are to be identified and intensively analysed within the framework of field research. In addition to a socio-cultural contextualisation, the gender dimension is consistently taken into account throughout. The local investigations focus on the participation of the affected population in order to capture their perception of the problems and ideas for solution.

The project is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) under the special initiative "One World – No Hunger".

Authors of the series

Prof. Dr. Frank Bliss
Prof. Dr. sc. pol. Tobias Debiel
Dr. rer. pol. Karin Gaesing
Dr. rer. pol. Jana Herold
Anika Mahla, M.A.
Carolin Rosenberg, M.A.
Mika Ache, B.A.

Editor

Institut für Entwicklung und Frieden (INEF) Universität Duisburg-Essen

Gestaltung

cMore.MEDIA Katrin Kämpf

© Institut für Entwicklung und Frieden 2023

Lotharstr. 53 – D-47057 Duisburg Tel: +49 203 379-4420 – Fax: +49 203 379-4425

inef-sek@uni-due.de www.uni-due.de/inef ISSN: 2512-4552